California State Board of Pharmacy
1625 N. Market Blvd, N219, Sacramento, CA 95834
Phone: (916) 574-7900
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www.pharmacy.ca.gov

BUSINESS, CONSUMER SERVICES AND HOUSING AGENCY
DEPARTMENT OF CONSUMER AFFAIRS
GOVERNOR EDMUND G. BROWN JR.

September 10, 2013

To: Members, Enforcement Committee

Subject: Agenda Item I (a): Proposed Statutory Provisions to Prevent a Wholesaler from Purchasing Prescription Medication from a Pharmacy When the Pharmacy Did Not Initially Purchase the Medication from the Wholesaler

Background:

This item will not be discussed at this meeting.

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BUSINESS, CONSUMER SERVICES AND HOUSING AGENCY
DEPARTMENT OF CONSUMER AFFAIRS
GOVERNOR EDMUND G. BROWN JR.

September 10, 2013

To: Members, Enforcement and Compounding Committee

RE: Walgreens New Model for Pharmacies

Walgreens has developed a new model for its community pharmacies where a pharmacist is located outside the normal pharmacy licensed area, so as to be more accessible to patients. This model is being rolled out nationally.

During the January 31 and February 1, 2012 Board meeting Al Carter, Pharm.D, Manager of Pharmacy Affairs for Walgreens made a presentation to the board on Walgreens new pharmacy design called "Well Experience." Dr. Carter indicated the new format, which has been implemented in several states, is designed to enhance the patient's interaction with the pharmacist.

During his 2012 presentation, Dr. Carter reviewed the following features of the new model:

- An open, redesigned layout with no view into the dispensing area. Pharmacists will monitor the dispensing area and activity with video surveillance.
- A pharmacist desk area in front of the pharmacy counter to provide greater accessibility for consultation about medications and to provide additional clinical services. Pharmacists will verify each prescription digitally before it is dispensed to the patient.
- Confidential consultation areas for patient consultation and other services such as immunizations, blood pressure, blood glucose testing, etc.

Dr. Carter discussed that the new environment is more comfortable, less stressful and improves patient access to the pharmacist. Dr. Carter indicated patient counseling had been increased by 40 percent since the new model had been implemented in 100 Walgreens pharmacies throughout the country.

Following this presentation, the board asked for the board's inspectors' assessment of the model. An excerpt of the minutes of this meeting is provided on the following page.

During the week 8/12/13 the following Walgreens pharmacies were inspected:

Walgreens #15108 (PHY-50944) 201 Front Street, Santa Cruz, CA 95060
Walgreens #15278 (PHY-51118) 1501 Vine Street, Los Angeles, CA 90028
Walgreens #15003 (PHY-50924) 1990 Monument Blvd., Concord, CA 94520
Walgreens #00890 (PHY-51436) 135 Powell Street, San Francisco, CA 94102
Walgreens #15398 (PHY-43413) 660 W. March Lane, Stockton, CA 95207
(the San Francisco and Stockton locations were identified as part of the Concord inspection)

Of the five pharmacies inspected only two were fully operational (new configurations and technology)
Walgreens #15278, Hollywood, CA
Walgreens #15398, Stockton, CA

During the Enforcement and Compounding Meeting, a presentation on the board's inspections will be provided.

Excerpt of the Minutes of the Board of Pharmacy Meeting held January 31 – February 1, 2012.

IX. DEMONSTRATION OF WALGREEN'S NEW PHARMACY DESIGN MODEL TO PROMOTE PATIENT ACCESS TO PHARMACISTS

Al Carter presented a demonstration of Walgreen's new pharmacy design. He indicated that the new format, which has been implemented in several states, is designed to enhance the patient's interaction with the pharmacist.

Mr. Carter reviewed the following features of this new model:

- An open, redesigned layout with no view in the dispensing area. Pharmacists will monitor the dispensing area and activity with video surveillance.
- A pharmacist desk area in front of the pharmacy counter to provide greater accessibility for consultation about medications and to provide additional clinical services. Pharmacists will verify each prescription digitally before it is dispensed to the patient.
- Confidential consultation areas for patient consultation and other services such as immunizations, blood pressure and blood glucose testing, etc.
- A designated Health Guide – a Walgreens employee who is available to answer product and service questions.
- A centralized data entry and data review call center.

Mr. Carter discussed that the new environment is more comfortable, less stressful, and improves patient access to the pharmacist. He stated that patient counseling has increased by 40 percent since its implementation in 100 stores throughout the country.

Mr. Carter provided that Walgreens would like to implement this new model in 60 stores in California by May 2012. He asked whether approval by the board is needed for this implementation.

Ms. Herold expressed concern regarding the lack of direct pharmacist supervision of the dispensing area and the impact this may have on potential risks for diversion. She stated that this model needs further evaluation by the board and its inspectors.

Mr. Carter provided that the pharmacists will remain in the dispensing area until approval is given by the board.

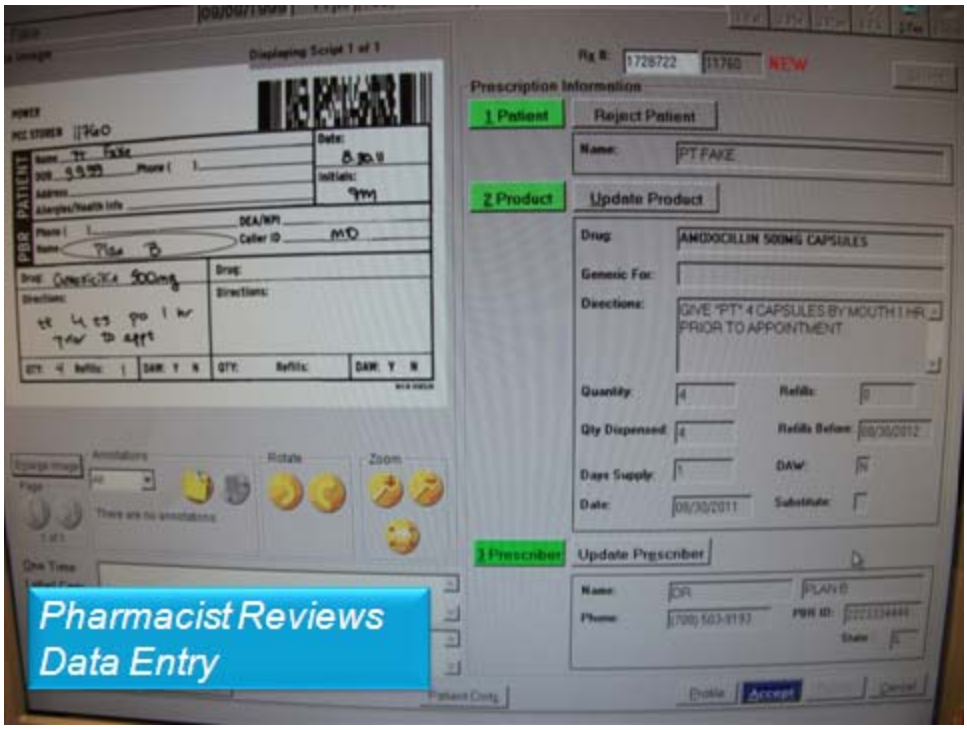
Provided below are materials provided by Walgreens about their new system.

The other three pharmacies had the new pharmacy configuration but were not using the staffing model or technology. The reason given for not being operational was the pharmacies had not achieved the required prescription volume. In these three pharmacies the pharmacist(s) remained in the dispensing area and would consult as required from the pharmacist desk in the front area of the pharmacy. The prescription filling process (new prescriptions) was as follows:

- Prescription received and scanned
- Label generated using scanned prescription image
- Pharmacist performs drug utilization review and verifies label is accurate
- Prescription filled by technician
- Pharmacist performs final verification for accuracy of product dispensed
- Prescription bagged with necessary information
- Patient counseled

The other two pharmacies (Hollywood and Stockton) were fully operational with the new model. The prescription filling process (new prescription) was as follows:

- Prescription received and scanned



- Scan of leaflet barcode generates prescription label

- Prescription filled by TCH using Yuyama counting/dispensing/video technology
    - Prescription label affixed to prescription vial/container
    - Drug stock container manually retrieved from stock
    - Prescription label bar code scanned (drug and quantity)
    - Drug stock container scanned (if incorrect system will not let prescription be filled)
    - Tablets/capsules placed into Yuyama counting device
    - Video image capture of tablets/capsules in Yuyama device

- Prescribed quantity of tablets/capsules from Yuyama into prescription vial
- Prescription vial capped
- If excess tablets/capsules are remaining in Yuyama device
    - Drug stock container scanned (if incorrect system will not release excess)
    - Excess tablets/capsules from Yuyama back into stock container
- Drug information sheet, prescription container placed in area for video image capture

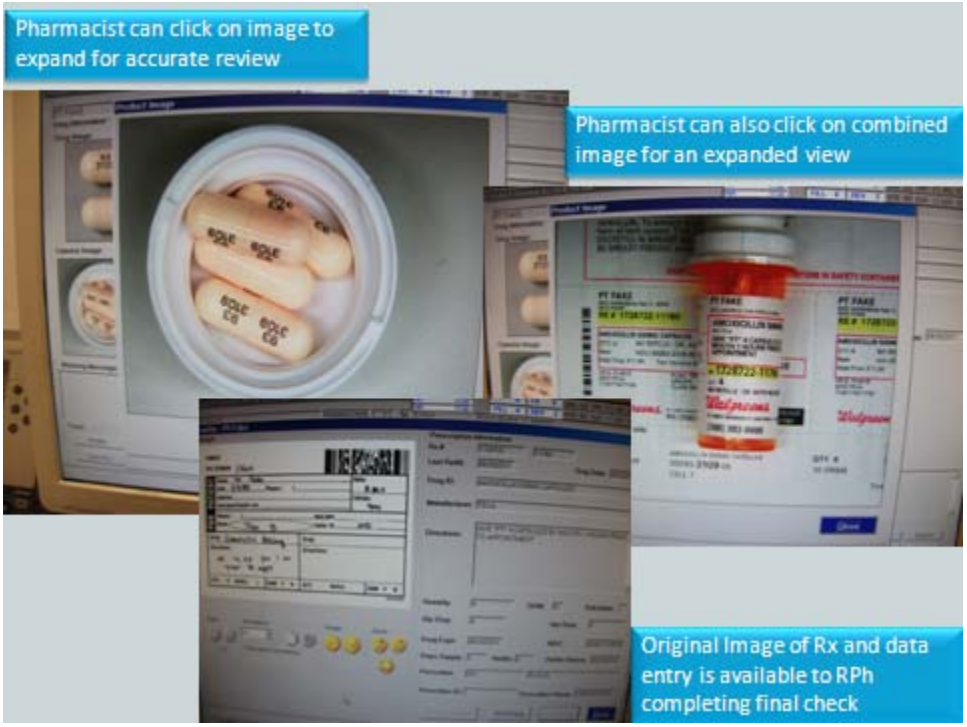
New version of Yuyama shows tablets or capsules that were in counting device rather than lid with tablets or capsules.

- Filled prescription bagged and may be sent to will-call

- Pharmacist reviews scanned prescription, label, video image captures and does prescription verification (system documents all personnel involved with dispensing process)
  - Prescription review

- Correct medication – drug, strength, quantity, directions, refills (video capture image shows image of Yuyama counting device with tablets/capsule in counting area with image of what tablet/capsule should be based on scan of stock bottle. Pharmacist can, if needed, enlarge tablet/capsule image in counting device to view imprints). Video image of filled prescription container with data information sheet.

New version of Yuyama shows tablets or capsules that were in counting device rather than lid with tablets or capsules.



- Adds any notes for consultation purposes
- Prescription released for furnishing to patient

- Prescriptions for liquids are processed in same manner as oral tablets and capsules. However, a video image of stock bottle is captured in conjunction with the filled prescription container and medication information sheet.

In the two pharmacies where the new model was fully operational the overall feedback from the inspectors was the technology was impressive and leaves little room for errors to occur.

The Yuyama counting/video capture device coupled with Walgreens procedure seemed to provide for an efficient prescription filling and verification process. The Yuyama device appeared to provide an accurate fill quantity and the scan/verify system provided the necessary quality assurance checks to prevent misfills.

Walgreens procedure was to fill and bag one prescription at a time. After filling and bagging the completed prescription is moved to the will call area. The will call area contained filled prescriptions that had and had not been verified by the pharmacist. All prescriptions, irrespective of type of payment (cash, third party insurance, Medi-Cal), are processed through the pharmacy's cash register system. Any attempt to furnish an unverified prescription to a patient will result in a "hard halt" of the register system. The "hard halt" requires intervention by the pharmacist who must clear the "hard halt" by verifying the prescription.

The perceived benefit with the pharmacist located where they are is more interaction between the patient and the pharmacist with hopefully increase compliance with consultation. The consultation area is immediately adjacent to the drop off/pick up area. The pharmacist must use care in consulting so protected healthcare information is not disclosed. The use of the “sound masking” system should minimize this risk. Also, immediately adjacent to the pharmacist’s desk is a small room that is used for more private consultations as well as immunizations.

Security and supervision of ancillary staff in the dispensing area may be an area of potential concern. If only one pharmacist is working in a fully functional “new model” there may be no line of sight supervision of technicians in the dispensing area. One pharmacist-in-charge said it was his practice when working alone he reverted to a more traditional model and would be in the dispensing area except when needed for consultations. Video surveillance appears to be available from the monitor on the pharmacist’s desk in the front area. However, one pharmacist-in-charge was unaware of this feature and another indicated the need to “toggle” from the verification screen to the security screen. The recommendation would be to add an additional screen terminal dedicate solely to security of the dispensing area.

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DEPARTMENT OF CONSUMER AFFAIRS
GOVERNOR EDMUND G. BROWN JR.

September 10, 2013

To: Members, Enforcement Committee

Subject: Agenda Item I (c): Presentation From the California Product Stewardship Council on Take Back Programs for Prescription Medications in California

Request:

Heidi Sanborn, of the California Product Stewardship Council, requested the opportunity to share information about their bin collection program "Don't Rush to Flush, Meds in the Bin, We All Win." Additional information can be found on the Council's website at http://dontrushtoflush.org. Ms. Sanborn will attend this meeting to discuss this program and drug take-back programs in general.

On a related note, a recent decision in U.S. District Court upheld an Alameda County ordinance which requires pharmaceutical manufacturers that sell drugs in Alameda County to fund and operate a county-wide medicine take-back program. The Pharmaceutical Research and Manufacturers Association of America, the Generic Pharmaceutical Association, and the Biotechnology Industry Organization filed suit against Alameda County claiming the ordinance violated the Commerce Clause of the U.S. Constitution. In his ruling, the U.S. District Judge said the relatively modest compliance costs did not unduly burden interstate commerce and that "the ordinance serves a legitimate public health and safety interest . . . ." The Alameda County ordinance, regarded as the first of its kind in the nation, will go into effect in November 2013. (see following article)

In 2009, California developed model guidelines for drug take-back programs. These guidelines, developed over a period of months by the then California Integrated Waste Management Board working with several other state agencies including this board, were disseminated in a February 2010 The Script article (also following this memorandum) to board licensees.

Earlier in 2013, this board provided comments to the federal Drug Enforcement Administration (DEA) in its efforts to develop parameters for drug take-back programs that can include controlled substances. A copy of these comments is provided in this section.

In general, the board has supported drug take-back collection bins that:

1) Are voluntary for the pharmacy to establish
2) Require patients to personally deposit the drugs into the receptacles – no pharmacy staff assistance in sorting or depositing the drugs
3) Require two-key locks – one key with the pharmacy and the other with the waste hauler, to serve as a double check

In the board's comments to the DEA is one additional component – attach a shredding device to the bin to pulverize contents (like coffee grinders in grocery stores).

From: CalRecycle: Sharps and Medication Disposal Listserv [mailto:pharmasharps@calrecycle.ca.gov]
Sent: Friday, August 30, 2013 10:10 AM
To: Herold, Virginia@DCA
Subject: Federal Court Rules in Favor of Alameda County EPR Ordinance

U.S. District court ruled against the pharmaceutical industry in their case against Alameda County allowing the County's "first in the nation" pharmaceutical extended producer responsibility (EPR) ordinance to go into effect in November of this year.

Alameda County's Safe Drug Disposal ordinance passed in July 2012 and requires pharmaceutical manufacturers and producers selling drugs in Alameda County to fund and operate a county-wide medicine take-back program. In December 2012, the Pharmaceutical Research and Manufacturers Association of America (PhRMA), the Generic Pharmaceutical Association (GPhA), and the Biotechnology Industry Organization (BIO) filed suit against Alameda County. The suit claimed the ordinance violated the dormant Commerce Clause of the U.S. Constitution, which forbids state and local governments from enacting regulations that "unduly interfere with interstate commerce."

U.S. District Judge Richard Seeborg wrote in his ruling on August 28 that the ordinance "does not discriminate against out-of-state actors in favor of local persons or entities, and does not otherwise impermissibly burden interstate commerce." The judge also noted that "the ordinance serves a legitimate public health and safety interest, and that the relatively modest compliance costs producers will incur should they choose to sell their products in the county do not unduly burden interstate commerce."

To unsubscribe from the Medication Disposal: Sharps and Medication listserv, please go to http://www.calrecycle.ca.gov/listservs/Unsubscribe.aspx?ListID=73.

Development of Model Guidelines for "Take Back" Programs for Unwanted Drug Disposal by Patients

For a number of years, patients have asked how they should dispose of their unwanted medication. Regulatory agencies, including the Board of Pharmacy, sometimes advised making the medicine unpalatable (e.g., mixing with kitty litter) and disposing of it in the trash. Some patients were advised to flush it down the toilet. Other patients were advised to ask pharmacies to take the drugs back for disposal. Controlled drugs always had to be returned only to law enforcement agencies.

However, today patients are increasingly seeking an environmentally friendly alternative to tossing drugs in the trash or flushing down the toilet.

Two years ago, Senate Bill 966 (Simitian, Chapter 542, Statutes of 2007) directed the California Integrated Waste Management Board (CIWMB) to develop guidelines for model programs for the collection from consumers and proper disposal of unused or expired home-generated pharmaceuticals. Home-generated pharmaceuticals in this context refer to prescription and over-the-counter pills, liquids, and inhalers that are no longer wanted or needed by the consumer. It does not include "sharps" (e.g., hypodermic needles and syringes).

The guidelines subsequently were developed by CIWMB in consultation with a pharmaceutical working group (staff from CIWMB, Board of Pharmacy, California Department of Public Health, Department of Toxic Substances Control, and the State Water Resources Board) that provided parameters for the model programs through which the public may return unused or expired drugs. The model programs include parameters for both permanent and occasional take-back event collection sites, and there is a "mail back" component as an alternative to onsite collection.

In February 2009, the CIWMB adopted the required model programs' guidelines for providing consumers with the ability to dispose of unwanted prescription and over-the-counter drugs—but NOT controlled substances, which must be returned only to law enforcement—without flushing them down the toilet or tossing them in the garbage.

> The Board expects all pharmacies to use the CIWMB guidelines for any "Take Back" program they offer the public.

The model guidelines identify pharmacies as one of the authorized permanent collection sites. The general concept is that pharmacies can (1) use postage pre-paid envelopes so that consumers can return unwanted drugs to licensed waste disposal facilities, away from pharmacies where health care is provided, or (2) establish a collection bin for ongoing collection at pharmacies.

The model guidelines, "Criteria and Procedures for Model Home-Generated Pharmaceutical Waste Collection and Disposal Programs," can be viewed at: ***www.ciwmb.ca.gov/hhw/pharmwaste/modelprogram/criteria.pdf***.

Offering a "Take Back" program is voluntary, not mandatory. However, CIWMB's guidelines are those that the Board expects pharmacists to use if they choose to offer options to the public for the return of drugs. In particular, the following guidelines should be observed:

- Drugs should not be reviewed personally by staff at a collection site (whether a pharmacy or community event) before being deposited into a secured collection bin. The patient or patient's agent should deposit the drugs themselves, thereby preventing staff from knowing what is being returned.
- Drugs that are collected should be separated from their containers by patients or their agents before being placed in the collection bin, reducing the disposal costs because the containers will not be part of the pharmaceutical waste.
- There should be two separate locks on the secured collection bin: one key should be in the possession of the pharmacy, the other key in the possession of the licensed integrated waste hauler who will pick up what is now classified as "hazardous household waste." This dual lock ensures that the pharmacy cannot open the collection bin without the presence of the integrated waste hauler, and vice versa.

It is also important to note that on January 21, 2009, the Drug Enforcement Administration published its intent to examine consumer disposal options for controlled substances (Federal Register/ Vol. 74, No. 12/ Wednesday, January 21, 2009, Proposed Rules). However, at the current time, there is no new policy from the DEA.

The Board of Pharmacy looks forward to continuing to work on developing these programs so that they provide the public with the options they seek and the safety and accountability needed to protect our prescription drug supply.

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STATE AND CONSUMER SERVICES AGENCY
DEPARTMENT OF CONSUMER AFFAIRS
GOVERNOR EDMUND G. BROWN JR.

February 19, 2013

Drug Enforcement Administration

Docket No. DEA-316

Submitted electronically to http:www.regulations.gov

Dear Drug Enforcement Administration:

The California State Board State Board of Pharmacy is grateful for this opportunity to provide comments to the Drug Enforcement Administration on its proposal to establish parameters for the take back and destruction of unwanted controlled substances that have been dispensed to patients. We recognize the complexity of the task before the DEA in developing these regulations and we look forward to the enactment of the proposals, we hope with the several modifications we suggest below.

The California State Board of Pharmacy regulates nearly 140,000 licensees who dispense, store and ship prescription drugs and devices throughout, from and into California. This includes both individuals and firms including pharmacies, clinics, wholesalers, pharmacists and the designated representatives who are the licensed staff who work in wholesaler facilities. Under the general category of wholesaler, the board specifically licenses reverse distributors and brokers (who do not take possession but arrange for the sale of prescription medication).

California is the largest board of pharmacy in the US, and we work feverishly to secure our statutory mandate of consumer protection. In pursuit of this mandate, the board regulates the quality of the pharmaceutical products dispensed as well as the pharmacy services provided to patients. For a number of years, the appropriate disposal of prescription medication, coupled with escalating drug diversion and the growing prescription drug abuse problems have commanded the board's enforcement and educational efforts.

California is also at the forefront of issues surrounding the health of patients and possible jeopardy posed by unscrupulous "entrepreneurs," who buy and sell prescription drugs illegally and damage the state's (and nation's) drug supply. Patients and practitioners are ignorant of the potential for and presence of counterfeit or adulterated medication in the US pharmaceutical supply chain, and simply change therapy when a prescribed drug regimen no longer works.

Over the last decade, the board has aggressively undertaken innovative approaches to secure the quality of pharmaceuticals that are dispensed to patients in California. This includes:

- E-pedigree requirements to establish a comprehensive tracking system for the sale of each container of prescription medication dispensed to California patients, tracking and certifying ownership from the manufacturer, to the wholesaler, to the pharmacy or practitioner. Beginning in 2015 when the requirements become effective over a 2.5 year basis, e-pedigree requirements will permit the identification (and thus enable better investigation and prosecution) of suspect medication at the point it enters the pharmaceutical supply chain.

- Aggressive enforcement of financial sanctions for entities purchasing prescription medication from unlicensed sources ($5,000 per invoice, resulting in fines of hundreds of thousands of dollars).
- Issuance of fines to pharmacies filling internet prescriptions illegally where there is no legitimate prescription for the transaction ($25,000 per "prescription" dispensed, resulting of fines up to $100 million).
- Identification and discipline of pharmacies purchasing drugs not for dispensing to patients but exclusively for resale to wholesalers. Despite a specific prohibition in California enacted in 2004 to prevent a pharmacy from reselling medication to any wholesaler except for returns to the wholesaler that sold the pharmacy the medication initially, the board continues to identify new pharmacy practices involving such sales. Often these sales transactions involve medication in short supply, for which desperate providers and patients will pay high amounts. Such manipulation by pharmacies and wholesalers documented by the board has resulted in price increases to patients exceeding 6,000 percent.
- Hosting educational forums, jointly with the Drug Enforcement Administration, to educate pharmacists about the dangers of prescription drug abuse, drug diversion issues, corresponding responsibility and pharmacy robberies.
- Cooperative joint investigations of board licensees with the Drug Enforcement Administration and other law enforcement agencies to identify and prosecute criminal drug diversion, particularly involving controlled substances.

California has a considerable stake in addressing the disposal of prescription medication. With over 12 percent of the nation's population, 650 million prescriptions were dispensed to patients in California in 2011 out of the total of 4 billion prescriptions dispensed nationally that year. Not all of these medications would have been consumed -- leaving California with likely the largest unwanted drug disposal problems and issues in the country.

Today, there is a considerable illegal movement of prescription medication, including controlled substances, that has been dispensed to patients but ends up being returned/resold to pharmacies and wholesalers. These entities refill manufacturers' containers, and then resell these drugs into the drug supply where they are re-dispensed to unknowing patients. In recent years, the board has encountered multiple cases of this "recycling" in multiple California pharmacies. Often these drugs are obtained from skilled nursing facilities, where the facility and patients no longer have use for them, and destruction would cost the facility money. Instead pharmacies take these drugs back, remove them from blister packs and redispense or resell them.

We have disciplined multiple pharmacies for doing this, but are certain we have not discovered all pharmacies performing such activities. Obtaining drugs from such sources is considerably cheaper than purchasing drugs from legitimate sources. However, identifying such practices is quite difficult for a regulator. In the last two years, the FDA and other law enforcement agencies have identified at least three large scale "recycling" operations, where patients and others have resold dispensed medication back to brokers who repackage into manufacturers' containers and resell the products to wholesalers and pharmacies. We know that two of these three cases involve prescription drugs in California. Specifically:

- $250m worth of HIV medications in New York, some of which were likely shipped to and dispensed in California by a pharmacy linked in ownership with the New York pharmacies indicted

- $500m worth of HIV medications also in New York discovered by the NY AG's Office
- $498m worth of prescription drugs collected from California patients in a federal indictment filed in late 2012.

In 2008, pursuant to legislation enacted in California, guidelines for drug take back programs were developed by several state agencies, including this board. These policies could not be mandated until the Drug Enforcement Administration completed its work on the take back and destruction of controlled substances. In many ways, the Drug Enforcement Administration's proposed federal regulations for destruction of previously dispensed controlled substances support these California guidelines for drug take back programs, which encourage voluntary ongoing collection programs, special event collection, and mail back programs.

Our recommendations are in the form of general comments:

1. **We generally support the framework for the return and destruction of controlled substances as provided for in these proposed regulations. The growing prescription drug abuse and diversion issues in the US require action and such a regulatory framework.**
2. **We find no reference to brokering within the proposed regulations and believe that the proposed regulations do not permit brokering of previously dispensed controlled substances. However, we respectfully request that the DEA prohibit this activity specifically in these regulations. We believe that if left unchecked, the activities of brokers will complicate attempts to document and identify the activities of those entities handle the destruction of unwanted medication.**
3. **The board strongly supports the "commingling, do not sort" provisions of the proposed regulations. The sorting of pharmaceuticals collected in a drug take back program, when done by a pharmacy, reverse distributor or any entity poses a huge opportunity for diversion. In fact, we cannot envision another reason for sorting drugs except to secure a cache of specific drugs.**
4. **Regarding the non-retrievable method of destruction described in the general comments of the regulation package: we fully support commingling of prescription drugs with controlled drugs and even over the counter drugs at collection sites. We strongly support the prohibition against opening the collection devices and container linings, or sorting of collected pharmaceuticals.**

   However, the board now believes that the safest and surest way to ensure previously dispensed medication does not reenter the supply chain as a commercial product is to render the returned medication unusable: specifically to grind it up at the collection bin so that returned pharmaceuticals are nonsalable. As long as the medication can be differentiated as individual pills, it poses potential for being sorted and reintroduced into the supply chain. Grinders (like a coffee grinder or garbage disposal) could readily be added to collection bins at minimal expense to ensure no subsequent "recycling" occurs of the donation -- and in a manner that does not permit fingers to enter the grinding device.

   With implementation of such grinders, regulators can be less concerned that the collected drugs will again become part of the nation's drug supply, permitting redirection of limited enforcement staff to other diversion activities.

5. **We strongly urge that any pharmacy that agrees to accept drugs from nursing homes be required to similarly destroy and grind the medication at the time it is identified by the facility**

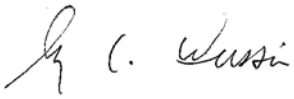
as unwanted waste. The attached photos taken during board investigations document issues we have discovered with drugs being returned to pharmacies where they are recycled to unknowing nursing home patients and other patients, principally from the large volume of medication targeted for destruction in these facilities.

Once a secure disposal system is developed, it could be made available to residential assisted living homes, where there is often no medical staff onsite, but drug disposal problems also exist.

Prescription drug abuse is a serious and growing problem in the US. We share the Drug Enforcement Administration's proposed requirements that reverse distributors, mail back programs, and collection programs offer the public options to dispose of unwanted pharmaceuticals, specifically the unique challenges of controlled substances. Yet from years of experience regulating pharmacies, wholesalers and reverse distributors, we do not want to see additional compromise in the quality of the state's and US pharmaceutical supply caused by opportunists who may pose as pharmacists, pharmacies, reverse distributors or others. The regulations proposed by the Drug Enforcement Administration are a good start. However, we respectfully assert that all drug take back programs involving previously dispensed medication should ensure the pulverization of medication returned so the remnants are worthless.

Thank you for this opportunity to comments on these important requirements. Please do not hesitate to contact the executive officer with questions.

Sincerely,



STAN WEISSER
President

Sincerely,

VIRGINIA HEROLD
Executive Officer

cc: Photos

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GOVERNOR EDMUND G. BROWN JR.

September 10, 2013

To: Members, Enforcement Committee

Subject: Agenda Item I (d): Request From DaVita Rx for Discussion Regarding Prescription Drugs Dispensed to Renal Clinics for Administration to Patients

Request:

In the attached letter to the Board dated June 4, 2013, Ned Milenkovich, representing DaVita Rx, requested the opportunity to appear before the Enforcement Committee to discuss their proposal to return and reuse unused medications for renal patients that are transported and stored in accordance with state and federal laws and standards.

Representatives of DaVita will attend this meeting to make their presentation in person.

McDonald Hopkins
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Chicago, IL 60654

P 1.312.280.0111
F 1.312.280.8232

June 4, 2013

VIA ELECTRONIC MAIL &
VIA CERTIFIED MAIL DELIVERY
RETURN RECEIPT REQUESTED

Ms. Virginia Herold
Executive Officer
California State Board of Pharmacy
1625 N. Market Blvd., Suite N-219
Sacramento, California 95834

Re: DaVita Rx Request For Appearance before California State Board of Pharmacy

Dear Ms.Herold:

I trust this letter finds you well. Thank you for the opportunity to discuss DaVita Rx's return/reuse concerns earlier last month. I appreciate your taking the time to discuss these matters.

As you know, I am outside legal counsel to DaVita Rx, a national full service pharmacy specializing in renal care. Per your request during our meeting last month, I am resending the attached letter that I sent to you back in October 2012. As we discussed, DaVita Rx is requesting an opportunity to present before an appropriate committee of the California State Board of Pharmacy ("Board"). The summarized purpose of the appearance is set forth in the contents of the attached October 2012 letter. However, a more detailed presentation is intended to be provided before the Board's relevant committee.

I note that the attached letter from October 2012 requests an appearance before the Enforcement Committee on December 4, 2012. However, as we discussed, DaVita Rx is now specifically requesting to be considered for placement on the September 10, 2013 agenda at this time and in light of our recent discussions.

I look forward to your response and the opportunity to discuss this matter before the Board.

Sincerely,

Ned Milenkovich, PharmD, JD

NMM:km

cc: Mr. Jeffrey Sinko, General Counsel of DaVita Rx

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Direct Dial: 312.642.1480
E-mail: nmilenkovich@mcdonaldhopkins.com

October 11, 2012

VIA ELECTRONIC MAIL &
VIA CERTIFIED MAIL DELIVERY
RETURN RECEIPT REQUESTED

Ms. Virginia Herold
Executive Officer
California State Board of Pharmacy
1625 N. Market Blvd., Suite N-219
Sacramento, California 95834

Re: DaVita Rx Request For Appearance before California State Board of Pharmacy

Dear Ms. Herold:

As you may know, I am outside legal counsel to DaVita Rx LLC ("DaVita Rx"). In this regard, I assist DaVita Rx with respect to various legal issues, including, addressing various pharmacy practice issues. I thank you in advance for this opportunity to correspond.

DaVita Rx is a full service pharmacy specializing in renal care. DaVita Rx provides medication support to renal dialysis patients of DaVita Dialysis Centers and other patient renal dialysis centers. All medications are transported by DaVita Rx in secure, tamper-evident packaging by way of established common carriers to renal dialysis centers with the intention of the medication being administered or delivered to patients by a licensed healthcare professional at each renal dialysis center. The medications are stored in a locked, temperature controlled 'lock box' under the control of a Da Vita Rx agent at all times. However, in some cases, after the medications have been delivered to the renal dialysis centers, the medications are never administered or received by patients for a variety reasons. For example, a patient may be transferred to another dialysis center; may be admitted to a hospital; or in some cases may expire. Under current practices, these medications are ultimately not used by renal dialysis centers and are wasted by being disposed of in accordance with current laws and regulations. DaVita Rx believes that if certain criteria are met, these medications can be safely returned and reused for future patients.

DaVita Rx ensures the integrity and pedigree of the unused medications through each step of the medication delivery process from DaVita Rx to the renal dialysis centers. This occurs through a myriad of steps, including but not limited to common carrier tracking numbers, proper packaging

while in transit and safe storage techniques which comply with federal and state laws. Additionally, when the medications are at the renal dialysis centers, they are handled in accordance with federal and state laws by licensed healthcare professionals.

It is my understanding that various sections of the State of California Health and Safety Code may currently allow, in limited circumstances, the return and reprocessing of unused, unadulterated medications that are stored under conditions in compliance with the United States Pharmacopoeia ("USP"), but this is not clear. DaVita Rx believes that the unused medications which the renal dialysis centers would return to DaVita Rx comply with and even surpass the current standards set by the State of California's Health and Safety Code. The integrity and pedigree of the medications is closely monitored at all stages. As a result, the medication will not be adulterated, misbranded, or stored under conditions contrary to standards set by USP or the product manufacturer. The unused medications will never have been in the possession of a patient and will be handled only by licensed healthcare professionals at all times. It is intended that the medications will only be returned and reprocessed if unopened in tamper-evident packaging or containers which meet USP standards.

By way of this correspondence, DaVita Rx would like to request an opportunity to be heard by the designated Enforcement Committee of the California State Board of Pharmacy (the "Board") to present facts and analysis regarding the return and reprocessing of unused, properly handled medications to DaVita Rx by renal dialysis centers in order to prevent the unnecessary waste of such medications.

In summary, DaVita Rx (which is regulated by the Board), believes that it has the requisite infrastructure and trained pharmacists to ensure that all of the above standards are met regarding unused, returned medications. After a brief presentation by DaVita Rx, the Board may decide to support the return and reprocessing of unused medications for renal dialysis center patients.

DaVita Rx's management team would welcome the opportunity to provide additional details regarding this request to present before the Board's Enforcement Committee on December 4, 2012. Please feel free to respond to me directly at (312) 642-1480 to discuss further the possibility of granting DaVita Rx the opportunity to address the Enforcement Committee. Alternatively, I would be pleased to put you in direct contact with DaVita Rx.

Sincerely,

Ned Milenkovich, PharmD, JD

NMM:sc

cc: Mr. Jeffrey Sinko, General Counsel of DaVita Rx

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BUSINESS, CONSUMER SERVICES AND HOUSING AGENCY
DEPARTMENT OF CONSUMER AFFAIRS
GOVERNOR EDMUND G. BROWN JR.

September 10, 2013

To: Members, Enforcement Committee

Subject: Agenda Item I (e): Review and Discussion of a Federal Government Accountability Office Report on the Difficulties of Regulating Internet Pharmacies

The Federal Government Accountability Office (GAO) issued a report on July 8, 2013 which focused on the difficulties of regulating rogue internet pharmacies that are often complex, global operations composed of thousands of related websites. The report found that, despite challenges, state and federal agencies have taken actions to combat and disrupt internet pharmacy operations through convictions, asset seizure and public education.

This board has been active in using California's Business and Professions Code sanctions of assessing fines of up to $5,000 per prescription for pharmacies that fill prescriptions for internet operators where there is no underlying prescriber – patient relationship (e.g., where a prescriber prescribes a drug over the internet based on a patient's answers to a questionnaire and no exam has taken place).

This practice was identified in the early 2010s by board investigations, and more than 20 pharmacies were fined large amounts for filling such prescriptions. In the last few months, the board has again identified several pharmacies filling such prescriptions from internet pharmacies.

In an attempt to combat these sites, the National Association of Boards of Pharmacy (NABP) sought formal approval last year to be able to approve anyone using the general top level domain (gTLD) of .pharmacy. Generic top level domains are the suffix part of a Web site address (e.g., .com, .org, .edu). According to NABP, which monitors Web sites selling prescription drugs among its various programs, 97 percent of the 10,300 Internet drug outlets it has reviewed are out of compliance with U.S. pharmacy laws and practice standards established to protect patients. Earlier this year, an international group of experts were convened by the NABP to develop parameters for anyone that would be able to use the .pharmacy gTLD. The intent is to have the parameters for the .pharmacy gTLD in place by the end of 2013.

A copy of the GAO report is provided as an attachment.

The report can also be found on the GAO website at: http://www.gao.gov/assets/660/655751.pdf

United States Government Accountability Office

Report to Congressional Committees

July 2013

INTERNET PHARMACIES

Federal Agencies and States Face Challenges Combating Rogue Sites, Particularly Those Abroad

GAO-13-560

GAO Highlights

Highlights of GAO-13-560, a report to congressional committees

July 2013

INTERNET PHARMACIES

Federal Agencies and States Face Challenges Combating Rogue Sites, Particularly Those Abroad

Why GAO Did This Study

The Internet offers consumers a convenient method for purchasing drugs that is sometimes cheaper than buying from traditional brick-and-mortar pharmacies. According to a recent FDA survey, nearly 1 in 4 adult U.S. Internet consumers have purchased prescription drugs online. However, many Internet pharmacies are fraudulent enterprises that offer prescription drugs without a prescription and are not appropriately licensed. These rogue Internet pharmacies may sell drugs that are expired, improperly labeled, or are counterfeits of other drugs. A number of federal and state agencies share responsibility for administering and enforcing laws related to Internet pharmacies, including state boards of pharmacy, FDA, DOJ, CBP, and ICE.

The Food and Drug Administration Safety and Innovation Act directed GAO to report on problems with Internet pharmacies. This report identifies (1) how rogue sites violate federal and state laws, (2) challenges federal agencies face in investigating and prosecuting operators, (3) efforts to combat rogue Internet pharmacies, and (4) efforts to educate consumers about the risks of purchasing prescription drugs online. To conduct this work, GAO interviewed officials from FDA, DOJ, CBP, ICE, and other federal agencies, reviewed federal laws and regulations, and examined agency data and documents. GAO also interviewed officials from five state boards of pharmacy with varied approaches to regulating Internet pharmacies, and stakeholders including NABP, drug manufacturers, and companies that provide services to Internet businesses, such as payment processors.

View GAO-13-560. For more information, contact Marcia Crosse at (202) 512-7114 or CrosseM@gao.gov.

What GAO Found

Rogue Internet pharmacies violate a variety of federal and state laws. Most operate from abroad, and many illegally ship prescription drugs into the United States that have not been approved by the Food and Drug Administration (FDA), an agency within the Department of Health and Human Services (HHS), that is responsible for ensuring the safety and effectiveness of prescription drugs. Many also illegally sell prescription drugs without a prescription that meets federal and state requirements. Rogue sites also often violate other laws, including those related to fraud, money laundering, and intellectual property rights.

Rogue Internet pharmacies are often complex, global operations, and federal agencies face substantial challenges investigating and prosecuting those involved. According to federal agency officials, piecing together rogue Internet pharmacy operations can be difficult because they may be composed of thousands of related websites, and operators take steps to disguise their identities. Officials also face challenges investigating and prosecuting operators because they are often located abroad. The Department of Justice (DOJ) may not prosecute such cases due to competing priorities, the complexity of these operations, and challenges related to bringing charges under some federal laws.

Despite these challenges, federal and state agencies as well as stakeholders have taken actions to combat rogue Internet pharmacies. Federal agencies have conducted investigations that have led to convictions, fines, and asset seizures from rogue Internet pharmacies as well as from companies that provide services to them. FDA and other federal agencies have also collaborated with law enforcement agencies around the world to disrupt rogue Internet pharmacy operations. The Department of Homeland Security's (DHS) U.S. Customs and Border Protection (CBP) and U.S. Immigration and Customs Enforcement (ICE), which are responsible for enforcing laws related to the importation of goods such as prescription drugs, have also worked with other agencies, including FDA, to interdict rogue Internet pharmacy shipments at the border. Given that most rogue Internet pharmacies operate from abroad, states have faced challenges combating them, and generally focus their oversight on licensed in-state entities that fulfill orders for rogue Internet pharmacies. Companies that provide services to Internet-based businesses, such as search engines and payment processors, have also taken action—primarily by blocking services to them.

FDA and others have taken steps to educate consumers about the dangers of buying prescription drugs from rogue Internet pharmacies. FDA recently launched a national campaign to raise public awareness about the risks of purchasing drugs online, and the National Association of Boards of Pharmacy (NABP) posts information on its website about how to safely purchase drugs online. However, rogue Internet pharmacies use sophisticated marketing methods to appear legitimate, making it hard for consumers to differentiate between legitimate and rogue sites.

HHS, DOJ, and DHS provided technical comments on a draft of this report, which GAO incorporated as appropriate.

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Abbreviations

CBP	U.S. Customs and Border Protection
CSA	Controlled Substances Act
CSIP	Center for Safe Internet Pharmacies
CTeL	Center for Telehealth and e-Health Law
DEA	Drug Enforcement Administration
DHS	Department of Homeland Security
DOJ	Department of Justice
FDA	Food and Drug Administration
FDCA	Federal Food, Drug, and Cosmetic Act
FSMB	Federation of State Medical Boards
FTC	Federal Trade Commission
IACC	International AntiCounterfeiting Coalition
ICE	U.S. Immigration and Customs Enforcement
IPEC	Intellectual Property Enforcement Coordinator
NABP	National Association of Boards of Pharmacy
USPIS	U.S. Postal Inspection Service
VIPPS	Verified Internet Pharmacy Practice Sites

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U.S. GOVERNMENT ACCOUNTABILITY OFFICE
441 G St. N.W.
Washington, DC 20548

July 8, 2013

The Honorable Tom Harkin
Chairman
The Honorable Lamar Alexander
Ranking Member
Committee on Health, Education, Labor, and Pensions
United States Senate

The Honorable Fred Upton
Chairman
The Honorable Henry A. Waxman
Ranking Member
Committee on Energy and Commerce
U.S. House of Representatives

The Internet offers consumers a convenient method for purchasing prescription drugs that is sometimes cheaper than traditional brick-and-mortar retail pharmacies. Some Internet pharmacies are legitimate businesses that offer a safe and cost-effective way for consumers to obtain medications. However, there is mounting concern that many online pharmacies are, in fact, fraudulent enterprises. Commonly known as "rogue" websites, these fraudulent Internet pharmacies may send unsolicited e-mails offering cheap drugs without a prescription, advertise deep discounts that may seem too good to be true, and are often not licensed in the United States.[1] Buying drugs on the Internet is not uncommon. According to a recent survey conducted by the Food and Drug Administration (FDA), an agency within the Department of Health and Human Services, nearly one in four adult U.S. Internet consumers surveyed reported purchasing prescription drugs online.[2] At the same

[1]We refer to each website that fulfills first-time orders of prescription drugs as an Internet pharmacy, regardless of whether the company that operates the website is licensed as a pharmacy. We did not include in our review mail-order pharmacies or brick-and-mortar pharmacies that allow customers to request prescription drug refills online. Throughout this report, we use the term drugs to refer to prescription drugs; some Internet pharmacies may also sell over-the-counter drugs.

[2]FDA, "BeSafeRx Survey Highlights," http://www.fda.gov/Drugs/ResourcesForYou/Consumers/BuyingUsingMedicineSafely/BuyingMedicinesOvertheInternet/BeSafeRxKnowYourOnlinePharmacy/ucm318497.htm, accessed May 7, 2013.

time, nearly 30 percent said that they lacked confidence about how to safely purchase medicine online. This is a matter of grave concern as rogue Internet pharmacies may sell products that, among other things, have expired; been labeled, stored, or shipped improperly; and may even be counterfeits—unauthorized versions—of other drugs.

Like brick-and-mortar pharmacies, Internet pharmacies are subject to federal and state statutes and regulations that are designed to ensure the safety, efficacy, and proper administration of medications. A number of federal and state agencies share responsibility for regulating prescription drugs that are marketed and sold to U.S. consumers, including by Internet pharmacies. For example, FDA is responsible for ensuring the safety and effectiveness of prescription drugs, and FDA approval is required prior to marketing prescription drugs in the United States. The Department of Homeland Security's (DHS) U.S. Customs and Border Protection (CBP) is responsible for enforcing laws prohibiting the illegal importation of goods into the United States, including prescription drugs that have not been approved for marketing in the United States by FDA, and its U.S. Immigration and Customs Enforcement (ICE) conducts investigations related to violations of these laws, including illegally importing prescription drugs and trafficking in counterfeit goods. The U.S. Postal Inspection Service (USPIS) conducts investigations related to the misuse of mail. The Department of Justice (DOJ) may investigate and prosecute an operator of an Internet pharmacy that is suspected of violating federal laws. State agencies regulate the practice of pharmacy through state boards of pharmacy and, similarly, the practice of medicine though state medical boards.

The proliferation and widespread patronage of rogue Internet pharmacies has prompted public officials to identify them as a continuing public health threat. The Food and Drug Administration Safety and Innovation Act enacted in 2012 required that we report on problems posed by rogue Internet pharmacies.[3] This report identifies (1) how rogue Internet pharmacies are selling prescription drugs in violation of federal or state law or established industry standards, (2) challenges associated with federal investigations and prosecutions of rogue Internet pharmacies, (3) efforts to combat rogue Internet pharmacies, and (4) efforts to educate

[3]Pub. L. No. 112-144, § 1127, 126 Stat. 993, 1117-18 (2012).

consumers about the risks of rogue Internet pharmacies and how to recognize legitimate online pharmacies.

To identify how rogue Internet pharmacies are selling prescription drugs in violation of federal or state laws or established industry standards, we interviewed officials from federal agencies such as FDA, CBP, ICE, USPIS, and DOJ, reviewed federal laws and regulations, and examined agency documents, including those that presented information about federal indictments and prosecutions related to Internet pharmacy crimes. To obtain additional information, we interviewed a variety of knowledgeable stakeholders, including the National Association of Boards of Pharmacy (NABP) and LegitScript, an online pharmacy verification service, both of which routinely review Internet pharmacy websites to determine compliance with federal and state laws, and reviewed stakeholders' publications on rogue Internet pharmacies. (See app. I for a complete list of agencies and stakeholders interviewed.) In addition, we interviewed officials from state boards of pharmacy and state attorneys general offices and reviewed relevant pharmacy and medical practice laws and regulations of five judgmentally selected states—California, Florida, Maine, Nevada, and Utah. We selected these states on the basis of variations in the states' approaches in regulating Internet pharmacies.[4]

To identify challenges involved in investigating and prosecuting rogue Internet pharmacies, as well as efforts to combat rogue Internet pharmacies, we interviewed officials from federal agencies such as FDA, CBP, ICE, and DOJ. We obtained data from several federal agencies that summarize their efforts to combat Internet pharmacies. We discussed these data with agency officials, reviewed them for reasonableness and consistency, and determined that they were sufficiently reliable for our purposes. We also interviewed officials from the five state medical boards, four of those states' Attorneys General offices, as well as

[4]For example, California law prohibits the dispensing of drugs on the Internet without a prescription issued pursuant to a good-faith in-person medical examination, and authorizes the state to fine those that dispense violative prescriptions to California residents up to $25,000 per prescription. See Cal. Bus. & Prof. Code § 4067. The California Board of Pharmacy has taken action against those that have violated this law, for example, by dispensing drugs to California residents on the basis of a prescription issued pursuant to an online questionnaire. In contrast, Utah law allows licensed Internet pharmacies to dispense prescriptions for certain medications, such as specified erectile dysfunction drugs, hormone-based contraceptives, and smoking cessation drugs, on the basis of a prescription issued pursuant to an online questionnaire. See Utah Code Ann. ch. 58-83; Utah Admin. Code R156-83-306.

stakeholders with knowledge of state oversight activities, such as NABP, Federation of State Medical Boards (FSMB), the National Association of Attorneys General, and its Intellectual Property Committee. In addition, we interviewed officials from stakeholders involved in combating rogue Internet pharmacies, including the Alliance for Safe Online Pharmacies, Center for Safe Internet Pharmacies (CSIP), Pharmaceutical Security Institute, International AntiCounterfeiting Coalition (IACC), and the National Cyber-Forensics and Training Alliance. Stakeholders we also spoke with included officials from five drug manufacturers—Eli Lilly and Company; Merck & Co., Inc.; Pfizer; Purdue Pharma L.P.; and Takeda Pharmaceuticals U.S.A., Inc.—as well as several private companies that provide services to Internet-based companies, including the Internet registrar Go Daddy; search engines Microsoft and Google Inc. (Google); payment processors MasterCard International, Incorporated (MasterCard), Visa, Inc. (Visa), and PayPal; and the shipping companies FedEx and UPS. Finally, we reviewed published reports on rogue Internet pharmacy operations.

To identify efforts to educate consumers about the risks of rogue Internet pharmacies and how to recognize legitimate online pharmacies, we interviewed officials from federal agencies, as well as officials from stakeholders including NABP, FSMB, LegitScript, and the five manufacturers listed above to discuss their consumer education efforts. We also reviewed available educational campaign materials.

We conducted this performance audit from October 2012 to June 2013 in accordance with generally accepted government auditing standards. Those standards require that we plan and perform the audit to obtain sufficient, appropriate evidence to provide a reasonable basis for our findings and conclusions based on our audit objectives. We believe that the evidence obtained provides a reasonable basis for our findings and conclusions based on our audit objectives.

Background

The federal government plays a role in overseeing Internet pharmacy activity to the extent that these entities engage in interstate commerce or violate federal laws. However, states have traditionally regulated the practice of pharmacy and the practice of medicine. State boards of pharmacy license pharmacists and pharmacies, and state medical boards license physicians and set standards to ensure appropriate care, including standards for writing prescriptions. By violating federal and state laws, rogue Internet pharmacies threaten the public health.

Federal Role in Overseeing Internet Pharmacy Activity

No one federal agency is designated as the lead in combating rogue Internet pharmacy activity. Instead, several federal agencies, including FDA, CBP, and ICE, have separate and distinct roles and often work together.

Under the Federal Food, Drug, and Cosmetic Act (FDCA), FDA is responsible for ensuring the safety, effectiveness, and quality of domestic and imported prescription drugs that are marketed to U.S. consumers. The FDCA requires that certain drugs be dispensed pursuant to a prescription that is issued by a licensed practitioner.[5] The act also requires drug manufacturers to obtain FDA's approval before marketing their drugs in the United States.[6] To obtain FDA's approval, manufacturers must demonstrate to the agency that their drug is safe and effective for its intended use, and meet other statutory and regulatory standards relating to drug purity, labeling, manufacturing, and packaging.[7] Drugs that are manufactured in foreign countries for the U.S. market, including those sold over the Internet, are subject to the same requirements as those manufactured domestically. That is, all prescription drugs offered for import must meet the requirements of the FDCA, including requirements for obtaining FDA approval.[8] Drugs that are unapproved, or do not meet other provisions of the FDCA, such as those listed below, may be subject to enforcement action.

- Misbranded drugs include those that are sold without a prescription that meets applicable requirements, as well as those whose labeling or container is misleading or does not include required information, such as the name of the drug, adequate directions for use, and cautionary statements.[9]

[5]See 21 U.S.C. § 353(b). The FDCA, however, does not define how this requirement is to be met. Instead, each state's pharmacy and medical practice laws and regulations define what constitutes a valid prescription in that state.

[6]See 21 U.S.C. § 355(a).

[7]See, e.g., 21 U.S.C. § 355(d); 21 C.F.R. pts. 201, 210.

[8]See, e.g., 21 U.S.C. §§ 381, 384. In addition, drugs that are controlled substances also must meet the requirements of the Controlled Substances Import and Export Act. See 21 U.S.C. §§ 951-971.

[9]21 U.S.C. §§ 331(a), (b), 352, 353(b).

- Adulterated drugs include those that differ in strength, quality, or purity from approved products, as well as those that are not manufactured in conformity with good manufacturing practices.[10]

- Counterfeit drugs include those sold under a product name without proper authorization—where the drug is mislabeled in a way that suggests that it is the authentic and approved product—as well as unauthorized generic versions of FDA-approved drugs that mimic trademarked elements of such drugs.[11]

Drugs that do not appear to be in compliance with these provisions may be denied entry into the United States. In addition, those—including Internet pharmacy operators—that cause drugs to be misbranded, adulterated, or counterfeited, as well as those that sell such drugs, violate the FDCA and are subject to enforcement action.[12] Counterfeiting and trafficking or selling counterfeit drugs also violate laws that protect intellectual property rights.[13]

DOJ's Drug Enforcement Administration (DEA) is responsible for enforcing the Controlled Substances Act (CSA), which regulates the possession, manufacture, distribution, and dispensing of controlled substances, such as narcotic pain relievers.[14] DEA is also responsible for enforcing provisions and investigating violations of the Ryan Haight Online Pharmacy Consumer Protection Act of 2008, which amended the CSA to regulate the distribution and dispensing of controlled substances

[10]21 U.S.C. §§ 331(a), (b), 351.

[11]18 U.S.C. § 2320 prohibits trafficking in counterfeit drugs that mimic a trademarked drug through the use of a mark identical with or substantially indistinguishable from that of a trademarked drug, such as when a counterfeit drug uses the logo of a trademarked drug. See 18 U.S.C. § 2320(f)(6). 21 U.S.C. § 331(i)(3) prohibits any act that causes a drug to be a counterfeit drug, the sale or dispensing of a counterfeit drug, and the holding for sale or dispensing of a counterfeit drug. This provision applies regardless of whether the counterfeit product uses a logo, packaging, or other features identical to those of a trademarked drug. See 21 U.S.C. § 321(g)(2).

[12]See 21 U.S.C. §§ 331(a), (b), (c), (i), (k), 334(a).

[13]Intellectual property is any innovation, commercial or artistic, or any unique name, symbol, logo, or design used commercially. Intellectual property rights protect the economic interests of the creators of these works by giving them property rights over their creations. Generally, individual countries grant and enforce these rights.

[14]21 U.S.C. ch. 13.

on the Internet.[15] The act requires all entities that sell, or facilitate the sale, of controlled substances online to register and be authorized by the DEA to do so.[16] Entities based in foreign countries are not eligible for registration; it is illegal for consumers to import controlled substances. The act also defines what constitutes a valid prescription for controlled substances, and requires that such a prescription be issued for controlled substances dispensed over the Internet.[17]

CBP is responsible for enforcing laws prohibiting the illegal importation of goods into the United States, including prescription drugs that have not been approved by the FDA for the U.S. market, as well as those that are counterfeit or misbranded.[18] Additionally, the importation of prescription drugs by individuals for personal use is illegal, but FDA may exercise its regulatory discretion in determining whether to take enforcement action against such importation.[19] CBP coordinates with FDA to conduct inspections of products presented for import at the border. CBP interdicts and turns suspicious prescription drug shipments over to FDA for

[15]21 U.S.C. §§ 802(50)-(56), 829(e), 841(h) (amended by Pub. L. No. 110-425, 122 Stat. 4820 (2008)).

[16]21 U.S.C. §§ 823(f), 841(h).

[17]See 21 U.S.C. § 829(e). A valid prescription for a controlled substance is defined as one issued for a legitimate medical purpose in the usual course of professional practice by a practitioner who has conducted at least one in-person medical evaluation of the patient, or a covering practitioner (who conducts a medical evaluation at the request of a temporarily unavailable practitioner who had conducted an in-person medical evaluation of the patient within the past 24 months). Certain telemedicine practices are permitted in place of an in-person medical evaluation.

[18]19 U.S.C. § 1595a provides for seizure and forfeiture of merchandise offered for import contrary to law. 18 U.S.C. § 545 provides for criminal penalties for fraudulently or knowingly importing merchandise contrary to law as well as receiving, selling, or transporting merchandise known to have been imported contrary to law.

[19]FDA has established a policy that allows for the importation of noncontrolled prescription drugs for personal use under specified conditions, such as importing a small quantity (not more than a 90-day supply) of a drug that treats a serious condition and is not available domestically.

examination, and may seize and destroy certain shipments that are deemed to be in violation of applicable laws.[20]

ICE is responsible for, among other things, investigating violations of customs and trade laws, including those related to trafficking in counterfeit goods. ICE also operates the National Intellectual Property Rights Coordination Center, the mission of which is to share information across 17 federal government agencies and four foreign regulatory agencies, coordinate enforcement actions, and conduct investigations related to intellectual property theft—including those that occur through rogue Internet pharmacies.

USPIS helps prevent the illegal importation of prescription drugs by providing CBP with information about suspicious mail packages entering the United States. USPIS also investigates issues related to the misuse of mail.[21]

Other federal agencies are also sometimes involved in investigating rogue Internet pharmacy activity, to the extent that their jurisdiction relates to illicit activities conducted by these entities.

- The Internal Revenue Service investigates instances of money laundering, which is the act of disguising or concealing illicit funds to make them appear legitimate.[22]

[20]Shipments of prescription drugs that are seized by CBP are referred to ICE for investigation, and may also be referred to other federal law enforcement agencies for further investigation. In the absence of further investigation, CBP can take steps to destroy illegally imported controlled substances and counterfeit drugs. Under the FDCA, drugs that appear to be misbranded or adulterated are detained and importers have 90 days to overcome the appearance of an importation violation. If they choose not to do so or are unsuccessful, the importer can export the drugs out of the country, or they will be destroyed. See 21 U.S.C. § 381(a), (b). In 2012, the Food and Drug Administration Safety and Innovation Act provided FDA with authority to destroy without opportunity for export all imported drugs valued under $2,500 that are refused admission into the United States and do not overcome the appearance of an importation violation. See Pub. L. No. 112-144, § 708, 126 Stat. 993, 1068-69 (2012) (amending 21 U.S.C. § 381(a)). According to FDA officials, the agency is planning to implement this authority once it issues final regulations, which it is required to do by July 2014.

[21]For example, 18 U.S.C. § 1341 prohibits mail fraud.

[22]See 18 U.S.C § 1956.

- The Federal Trade Commission (FTC) may investigate rogue Internet pharmacies to the extent that their websites make false or misleading statements about how they collect and use medical information about consumers, which constitute violations of the Federal Trade Commission Act.[23] In addition, FTC may investigate potential violations of the CAN-SPAM Act of 2003, which imposes limitations and penalties on the transmission of certain unsolicited commercial e-mail, such as those with misleading information in the line identifying the person who sent the message.[24]

- DOJ's Federal Bureau of Investigation may investigate rogue Internet pharmacies if their activities defraud health care benefit programs or present a clear public health or safety threat.

DOJ prosecutes rogue Internet pharmacies through U.S. Attorneys' Offices located in 94 federal judicial districts throughout the nation, and through DOJ's Civil and Criminal Divisions, located in Washington, DC. U.S. Attorneys are the chief federal law enforcement officers for each federal district, and they serve as the nation's principal litigators under the direction of the Attorney General, working with officials from appropriate federal, state, local, and foreign agencies to prosecute rogue Internet pharmacy cases in their districts. DOJ's Civil and Criminal Divisions also prosecute such cases, coordinating closely with U.S. Attorneys, particularly in cases spanning multiple districts or international borders. DOJ's Civil Division has expertise in prosecuting cases involving FDCA violations, and DOJ's Criminal Division has expertise in prosecuting cases related to trafficking in counterfeit goods and offenses such as money laundering and fraud that are often integral to these criminal operations, as well as expertise in working with foreign law enforcement to obtain evidence or secure the extradition of defendants from other countries.

Other federal agencies have also undertaken efforts related to rogue Internet pharmacies, including by funding research related to how they operate, and by combating pharmaceutical counterfeiting.

[23]15 U.S.C. § 45 prohibits unfair or deceptive acts or practices that affect commerce. 15 U.S.C. § 52 prohibits the dissemination of false advertisements for the purpose of inducing the purchase of drugs and defines this conduct as an unfair or deceptive act or practice that affects commerce.

[24]15 U.S.C. §§ 7701-7713 (added by Pub. L. No. 108-187, 117 Stat. 2699 (2003)).

- The National Science Foundation has funded academic research that has demonstrated how rogue Internet pharmacies operate.

- The Intellectual Property Enforcement Coordinator (IPEC), within the Office of Management and Budget, has worked with federal agencies to develop strategies to combat pharmaceutical counterfeiting. It established an interagency working group on counterfeit pharmaceuticals, which, among other things, identified steps that the administration will take to combat the illicit sale of counterfeit drugs on the Internet. IPEC also issued a white paper to Congress which included legislative recommendations on how this goal could be achieved.[25] (For a summary of recent proposals related to combating rogue Internet pharmacies, see app. II.)

State Oversight of Pharmacies

In the United States, prescription drugs must be prescribed and dispensed by licensed health care professionals, who can help ensure proper dosing and administration and provide patients with important information on the drug's use. To legally dispense a prescription drug, a pharmacist licensed by the state and working in a pharmacy licensed by the state must be presented a valid prescription from a licensed health care professional. In addition, most states require pharmacies located outside their state to obtain a nonresident pharmacy permit prior to dispensing prescription drugs to customers located in that state. Some states regulate Internet pharmacies according to the same standards that apply to nonresident pharmacies. Others require pharmacies to obtain a special license in order to dispense prescription drugs ordered online.

The regulation of the practice of pharmacy is rooted in state pharmacy practice acts and regulations enforced by state boards of pharmacy. The state boards of pharmacy also are responsible for routinely inspecting pharmacies, ensuring that pharmacists and pharmacies comply with applicable state and federal laws, and investigating and disciplining those that fail to comply.

States also are responsible for regulating the practice of medicine. All states require that physicians practicing in the state be licensed to do so. State medical practice laws generally outline standards for the practice of

[25]See *Counterfeit Pharmaceutical Inter-Agency Working Group Report to the Vice President of the United States and to Congress* (Washington, D.C.: March 2011).

medicine and delegate the responsibility of regulating physicians to state medical boards. Each state's medical board also defines the elements of a valid patient—provider relationship, and grants prescribing privileges to physicians and other health care professionals. In addition, state medical boards investigate complaints and impose sanctions for violations of state medical practice laws.

Because regulation of the practices of pharmacy and medicine occurs at the state level, definitions and other requirements related to these practices differ from state to state. As a result, there is no uniform, national definition of the term "prescription" that applies to noncontrolled substances. Thus, certain activities, such as prescribing drugs without performing an in-person examination, may be explicitly illegal in one state while another state may not specifically address its legality.

Organizations such as NABP and FSMB have established and promoted uniform national standards related to Internet pharmacies for the consideration of state pharmacy and medical boards, as well as for consumers.

- NABP established the Verified Internet Pharmacy Practice Sites (VIPPS) program to provide a means for the public to identify legitimate Internet pharmacies. This accreditation program identifies those online pharmacies that are appropriately licensed, are legitimately operating via the Internet, and have successfully completed a review and inspection by NABP.[26]

- FSMB has developed model guidelines regarding the appropriate use of the Internet in medical practice. According to these guidelines, electronic technology should supplement and enhance, but not replace, the crucial interpersonal interactions that are the basis of the physician—patient relationship.[27] These professional standards, however, are not legally enforceable in the absence of state laws establishing such requirements.

[26]In reviewing websites for inclusion on its VIPPS list, NABP assesses compliance with the association's 11 Internet pharmacy standards, which include appropriate state licensure, lack of recent disciplinary action, and having operations that are based in the United States. NABP's VIPPS website can be accessed at http://vipps.nabp.net.

[27]Federation of State Medical Boards, *Model Guidelines for the Appropriate Use of the Internet in Medical Practice* (2002).

- The Center for Telehealth and e-Health Law (CTeL), an organization that works to overcome legal and regulatory barriers to telemedicine, issued guidance in February 2013 regarding how telemedicine, using two-way audio-video communications, can be used to establish a bona fide physician—patient relationship when prescribing noncontrolled substances.[28] Specifically, the guidance notes that an appropriate examination of the patient by the practitioner must occur prior to the issuance of a prescription, and that audio-only telephone conversations and e-mails cannot be used as a basis for establishing a bona fide practitioner—patient relationship.[29]

Public Health Risks Associated with Purchasing Prescription Drugs from Rogue Internet Pharmacies

Rogue Internet pharmacies often sell unapproved prescription drugs—including those that are substandard, counterfeit, and have no therapeutic value or are harmful to consumers.[30] These drugs may be manufactured under conditions that do not meet FDA standards, including unsanitary and unsterile conditions. The drugs sold by rogue Internet pharmacies have been found to contain too much, too little, or no active pharmaceutical ingredient, or the wrong active ingredient. They have also been found to contain dangerous contaminants, such as toxic yellow highway paint, heavy metals, and rat poison.[31]

Consumers who have taken prescription drugs purchased from rogue Internet pharmacies have experienced health problems, required

[28]Telemedicine is the use of electronic information and telecommunications technologies to support long-distance clinical health care, patient and professional health-related education, public health, and health administration through technologies such as videoconferencing.

[29]Center for Telehealth & e-Health Law, *Electronic Examination for Telemedicine Prescribing* (Washington, D.C.: Feb. 7, 2013).

[30]We previously reported on the safety risks that consumers face when purchasing drugs online. For example, we identified several problems associated with the handling, FDA approval status, and authenticity of drugs that we purchased from Internet pharmacies. See GAO, *Internet Pharmacies: Some Pose Safety Risks for Consumers*, GAO-04-820 (Washington, D.C.: June 17, 2004).

[31]See, for example, Partnership for Safe Medicines, "Hidden Poisons in Counterfeit Medicines," http://www.safemedicines.org/2012/03/no-drugs-at-all-.html, accessed June 12, 2013.

emergency treatments, and have died.[32] Because many rogue pharmacies sell prescription drugs without legitimate medical oversight, consumers may be harmed by ingesting drugs that are contraindicated for them, or have interactions with other medications that they are taking. However, adverse events caused by prescription drugs purchased from rogue Internet pharmacies are difficult to detect and quantify. Consumers may purchase drugs from rogue Internet pharmacies because of privacy concerns or to circumvent normal processes for obtaining prescription drugs. As a result, they may be reluctant to report health problems that they experience. Further, it can be difficult to determine whether adverse events are caused by substandard drugs. The role played by drugs from rogue Internet pharmacies may even go unnoticed. For example, when consumers take drugs that have no therapeutic value to treat their diseases, they may not experience adverse events to the drugs themselves, but they derive no benefit. Persistent symptoms may be attributed to their diseases, as opposed to ineffective treatments.

Rogue Internet Pharmacies Violate a Variety of Federal and State Laws

Rogue Internet pharmacies violate a variety of federal and state laws. Many ship unapproved drugs into the United States and sell drugs to consumers without a prescription that meets federal and state requirements. Rogue Internet pharmacies also violate other federal and state laws, such as those related to fraud and money laundering, in addition to not complying with industry standards.

[32]See, for example, FDA, "Buying Drugs Online: It's Convenient and Private, but Beware of 'Rogue Sites'," http://www.fda.gov/Drugs/EmergencyPreparedness/BioterrorismandDrugPreparedness/ucm137269.htm, accessed June 12, 2013; FDA, "FDA Alerts Consumers to Unsafe, Misrepresented Drugs Purchased Over the Internet," http://www.fda.gov/NewsEvents/Newsroom/PressAnnouncements/2007/ucm108846.htm, accessed June 12, 2013; and The Alliance for Safe Online Pharmacies, "Alliance for Safe Online Pharmacies' Response to the U.S. Intellectual Property Enforcement Coordinator's Request for Public Comment on the Development of the Joint Strategic Plan on Intellectual Property Enforcement" (Washington, D.C.: August 2012).

Most Rogue Internet Pharmacies Operate from Abroad, and Many Illegally Ship Unapproved Drugs into the United States and Sell Drugs without Requiring Valid Prescriptions

Although the exact number of rogue Internet pharmacies is unknown, most operate from abroad. According to LegitScript, an online pharmacy verification service that applies NABP standards to assess the legitimacy of Internet pharmacies, there were over 34,000 active rogue Internet pharmacies as of April 2013. Federal officials and other stakeholders we interviewed consistently told us that most rogue Internet pharmacies operate from abroad, and many have shipped drugs into the United States that are not approved by FDA. In doing so, they violate FDCA provisions that require FDA approval prior to marketing prescription drugs to U.S. consumers, as well as customs laws that prohibit the unlawful importation of goods, including unapproved drugs.[33] The prescription drugs that rogue Internet pharmacies sell have included counterfeit, misbranded, and adulterated drugs. Certain rogue Internet pharmacies have also sold dietary supplements that contain prescription drug ingredients, in violation of the FDCA. In addition, some, particularly those abroad, have sold controlled substances to customers located in the United States.[34] As no Internet pharmacies have been approved by DEA to dispense controlled substances to customers in the United States as of May 3, 2013, doing so violates the CSA.[35]

[33]See, e.g., 21 U.S.C. § 355(a); 18 U.S.C. § 545.

[34]For example, we purchased anabolic steroids, a controlled substance, from rogue Internet pharmacies as part of work conducted for a prior report. See GAO, *Anabolic Steroids Are Easily Purchased Without a Prescription and Present Significant Challenges to Law Enforcement Officials,* GAO-06-243R (Washington, D.C.: Nov. 3, 2005). More recently, in March 2013, nine individuals based in the United States were sentenced in the Northern District of California for their involvement in operating rogue Internet pharmacies that dispensed controlled substances to U.S.-based consumers from 2003 through 2007. See DOJ, "Nine Sentenced for Illegally Distributing Controlled Substances Over the Internet," http://www.justice.gov/usao/can/news/2013/2013_03_27_nine.sentenced.press.html, accessed June 14, 2013.

[35]See 21 U.S.C. § 952. In order to import controlled substances into the United States, a permit application must first be submitted to, and approved by DEA. See 21 C.F.R. §§ 1312.12-.13.

Example of a Foreign Rogue Internet Pharmacy Indicted for Illegally Selling Drugs to U.S. Customers

In 2012, two operators of a rogue Internet pharmacy based abroad were indicted for allegedly shipping unapproved prescription drugs into the United States, in violation of the FDCA. The shipments allegedly included controlled substances, and the pharmacy owners were also charged with importing controlled substances without authorization, in violation of the CSA. According to DOJ's indictment, some of the imported drugs were misbranded because the packages did not include adequate directions for the drugs, some of the drugs offered for sale were listed under a different name, and the company fulfilled orders without ensuring that customers had a prescription. The indictment also noted that the operators packaged drug shipments to evade scrutiny by customs officials. For example, drugs were allegedly wrapped with carbon paper and black plastic bags, and packages included false return addresses.

Source: *United States v. Ul Haq et al.*, No. 12-CR-240 (D.D.C. filed Nov. 6, 2012).

To sell drugs to their U.S. customers, foreign rogue Internet pharmacies use sophisticated methods to evade scrutiny by customs officials and smuggle their drugs into the country. For example, they have used intermediary shippers to help disguise the actual source of their shipments, which, according to CBP officials, may increase the likelihood that the shipments get through customs unnoticed. FDA and ICE officials told us that rogue Internet pharmacies have also misdeclared the contents of packages sent via express courier services or cargo shipments, in violation of customs laws.[36] Federal agencies use importation declarations to identify potentially illicit shipments for further examination; as such, misdeclaring the contents of such packages can result in illicit shipments evading additional scrutiny at the border. Further, rogue Internet pharmacies have disguised or hidden their drugs in various types of packaging; for example, CBP has found drugs in bottles of lotion and in tubes of toothpaste.[37]

[36]See, e.g., 18 U.S.C. §§ 542, 545.

[37]For a prior report, we purchased drugs from Internet pharmacies and received drugs that were also shipped in unconventional packaging, including in a plastic compact disc case and in a sealed aluminum can that was mislabeled. See GAO-04-820, 17.

Example of a Licensed Brick-and-Mortar Pharmacy Selling Misbranded Drugs

In 2011 and 2012, the owners of a U.S.-based brick-and-mortar pharmacy were convicted of several charges related to selling misbranded prescription drugs for rogue Internet pharmacies. The pharmacy was paid by multiple foreign rogue Internet pharmacies to fill prescriptions that did not meet state medical board requirements for a valid prescription and were sold and distributed in violation of the CSA. The rogue Internet pharmacies paid doctors, or in some cases, lay persons, to review brief online medical questionnaires and authorize the orders. The pharmacy filled orders for drugs, including controlled substances, and shipped them to customers who were usually located in a different state than the pharmacy. Because the drugs were sold without a valid prescription, they were considered misbranded, in violation of the FDCA.

Source: *United States v. Ihenacho et al.*, No. 08-CR-10337 (D. Mass. 2012).

Rogue Internet pharmacies also often sell drugs to consumers without a prescription, in violation of FDCA and state requirements, or with a prescription that does not satisfy FDCA and state requirements.[38] According to federal officials, they have done this by advertising that no prescription is necessary or by allowing consumers to purchase drugs after completing a brief online questionnaire that does not meet their state's requirements for a valid prescription. In some cases, rogue Internet pharmacies have ignored information from these questionnaires and have allowed consumers to make a purchase, regardless of the information disclosed. These actions violate the FDCA requirement that certain drugs be dispensed only with a prescription that is written by a licensed practitioner. In addition, some rogue Internet pharmacies operating from abroad have recruited doctors and pharmacies based and licensed in the United States to fulfill online prescription drug orders in exchange for payment, according to officials from federal agencies and stakeholders. Often, they have targeted doctors and pharmacies that are struggling financially, and have compensated them according to the number of prescriptions they authorize and fill, respectively. In these circumstances, the doctors violate state laws or medical board regulations as well as industry standards, such as those issued by FSMB and CTeL, which require valid patient—provider relationships prior to the issuance of a prescription. Likewise, the pharmacists violate state laws or pharmacy board regulations by selling drugs without ensuring that there is a prescription that meets state requirements. Drugs sold in this manner are considered misbranded, and are subject to enforcement under the FDCA.

Rogue Internet Pharmacies Violate a Variety of Other Federal and State Laws and Industry Standards

Rogue Internet pharmacies violate a variety of federal laws, including those related to fraud, money laundering, and intellectual property rights, according to officials from several federal agencies and stakeholders we interviewed. For example, rogue Internet pharmacies have engaged in mail fraud by using the mail to facilitate their illegal transactions.[39] In addition, some rogue Internet pharmacies have engaged in money laundering.[40] Specifically, to use the proceeds generated from rogue Internet pharmacies, operators have created a shell—or fake—company

[38]See 21 U.S.C. § 353(b).

[39]See 18 U.S.C. § 1341.

[40]See 18 U.S.C. § 1956.

to disguise the nature of their business, or have misstated the nature of their business to banks that process their credit card transactions, according to stakeholders we interviewed. To appear more legitimate to their consumers, rogue Internet pharmacies have also violated intellectual property laws by fraudulently displaying trademarks on their websites. For example, rogue Internet pharmacies have fraudulently displayed the VIPPS accreditation logo as well as the logos for payment processors such as Visa, MasterCard, or PayPal, without having obtained permission.[41] Rogue Internet pharmacies have violated a range of other federal laws, such as those related to making false or misleading statements, as well as by engaging in other deceptive and unfair acts or practices. For example, rogue Internet pharmacies have violated the CAN-SPAM Act by sending e-mails that list false information in the subject line or otherwise hide the message's origin.[42]

Rogue Internet pharmacies also violate state laws, including those related to operating without an appropriate license. Rogue Internet pharmacies have violated state laws by not obtaining pharmacy licenses from the states where their customers reside. In addition, licensed brick-and-mortar pharmacies recruited to fulfill prescription drug orders for rogue Internet pharmacies have violated state laws when they perform activities not authorized under their license or when they ship drugs to out-of-state customers. According to officials from state boards of pharmacy we interviewed, brick-and-mortar pharmacies have fulfilled online prescription drug orders, including to residents of another state without obtaining a nonresident pharmacy license in the state where those customers reside or without ensuring the prescriptions are valid.[43] When fulfilling such orders for out-of-state customers, brick-and-mortar pharmacies have also violated valid prescription requirements of the state where their customers live. For example, the California Board of Pharmacy identified an Internet pharmacy based in Utah that was violating California pharmacy laws,

[41]See 15 U.S.C. § 1114. According to one payment processor we interviewed, rogue Internet pharmacies that fraudulently display such trademarks may direct consumers to other websites, including those of their shell companies, to process such payments.

[42]See 15 U.S.C. § 7704.

[43]For example, Nevada requires out-of-state pharmacies that fill prescriptions placed over the Internet to be licensed in Nevada. See Nev. Rev. Stat. 639.2328, 639.23288. Officials from Nevada's Board of Pharmacy told us that a pharmacy would violate Nevada state law by shipping prescription drugs to Nevada residents without being licensed as a non-resident pharmacy.

which require that prescription drugs be dispensed through the Internet only with a prescription issued after a good-faith medical examination from a physician licensed in the state. According to the California Board of Pharmacy, the Utah pharmacy was selling prescription drugs to Californians based on prescriptions that it knew or should have known were not based on good-faith medical exams and were written by physicians who were not licensed in California, in violation of California law.[44] However, according to Utah Board of Pharmacy officials, the pharmacy was complying with Utah's laws, which allow certain licensed Internet pharmacies to dispense specified types of prescription drugs—such as certain erectile dysfunction drugs and hormone-based contraception—solely on the basis of an online questionnaire.[45]

Rogue Internet pharmacies do not comply with industry standards for legitimate Internet pharmacies. For example, officials from federal agencies and stakeholders told us that rogue Internet pharmacies have not provided accurate or complete information to domain name registrars when registering a website and have not adequately protected customer privacy.[46] In addition, rogue Internet pharmacies have not displayed identifying information on their website, such as a business address and telephone number.[47]

[44]See Cal. Bus. & Prof. Code § 4067(a).

[45]See Utah Code Ann. ch. 58-83; Utah Admin. Code R156-83-306.

[46]Domain name registrars are companies that sell domain name registration services to individuals and organizations so that they can use a specific website domain name, such as "www.gao.gov." We previously examined the extent to which individuals provide false information to domain name registrars when registering websites. See GAO, *Internet Management: Prevalence of False Contact Information for Registered Domain Names*, GAO-06-165 (Washington, D.C.: Nov. 4, 2005).

[47]In a prior report, we found that Internet pharmacies do not routinely disclose identifying information, and we suggested that Congress consider requiring Internet pharmacies to disclose such information. See GAO, *Internet Pharmacies: Adding Disclosure Requirements Would Aid State and Federal Oversight*, GAO-01-69 (Washington, D.C.: Oct. 19, 2000).

The Complex and Global Nature of Rogue Internet Pharmacies Poses Substantial Challenges for Federal Investigators and Prosecutors

Rogue Internet pharmacies are often complex, global operations, and as a result, federal agencies face substantial challenges investigating and prosecuting their operators.[48] Officials from federal agencies and stakeholders we interviewed told us that piecing together these operations can be difficult because rogue Internet pharmacies can be composed of thousands of related websites.[49] Although a small number of individuals own the majority of rogue Internet pharmacies operating across the world, they may contract with hundreds or thousands of individuals to set up, run, and advertise their websites—primarily by sending out unsolicited spam e-mails.[50] The ease with which operators can set up and take down websites also makes it difficult for agencies to identify, track, and monitor rogue websites and their activities, as websites can be created, modified, and deleted in a matter of minutes.

Additionally, rogue Internet pharmacies frequently locate different components of their operations in different countries, further complicating efforts to unravel the entirety of a rogue Internet pharmacy operation. For example, one rogue Internet pharmacy registered its domain name in Russia, used website servers[51] located in China and Brazil, processed payments through a bank in Azerbaijan, and shipped its prescription drugs from India.[52] (See fig. 1.)

[48]The challenges faced by federal investigators and prosecutors are not specific to rogue Internet pharmacies, but apply broadly to Internet crimes. In 2007, we reported that agencies face difficulties investigating and prosecuting cybercrimes and exercising jurisdiction over cybercriminals. GAO, *Cybercrime: Public and Private Entities Face Challenges in Addressing Cyber Threats*, GAO-07-705 (Washington, D.C.: June 22, 2007).

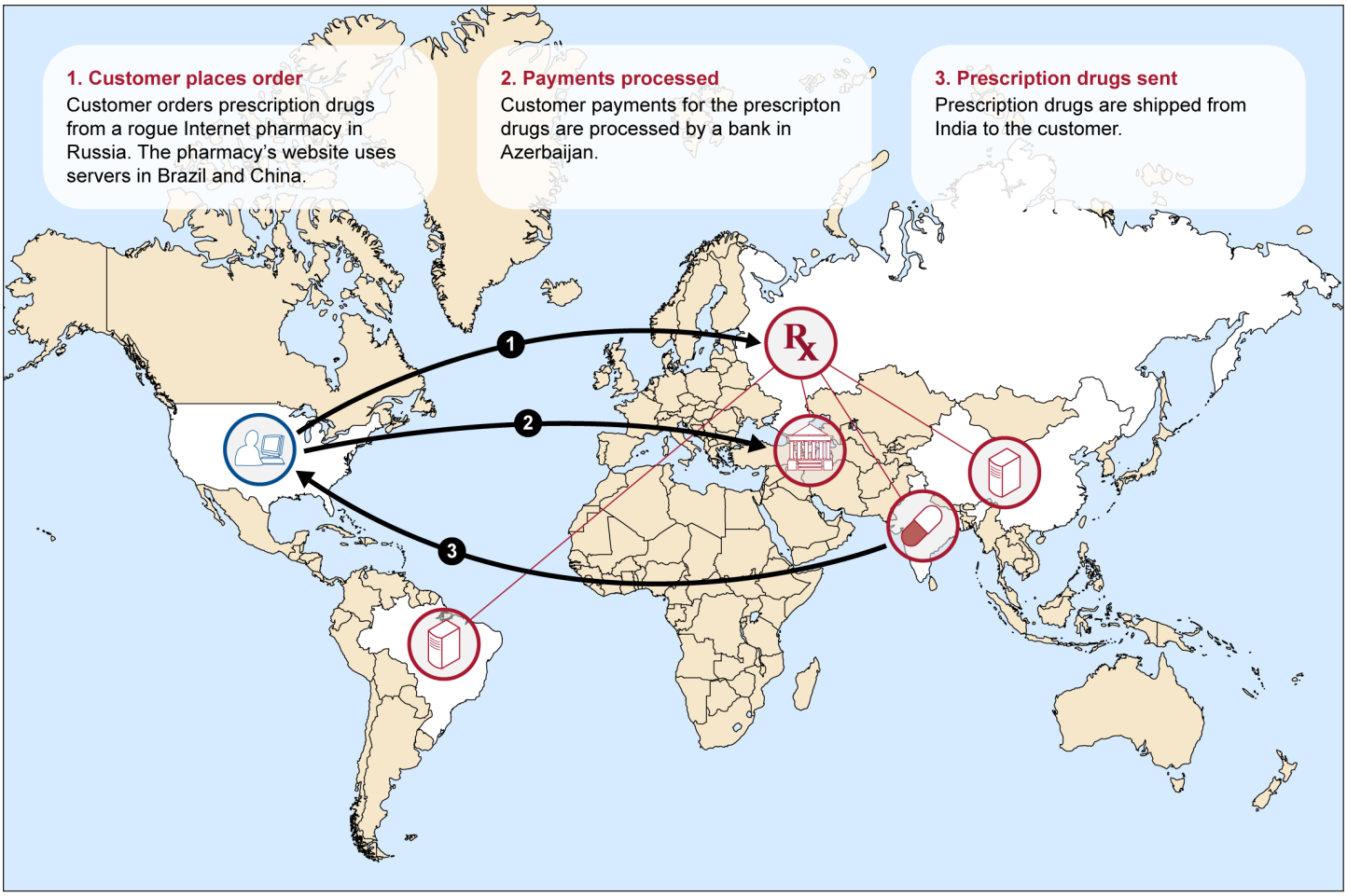
[49]For example, in 2012, FDA identified an Internet pharmacy operation that was composed of over 3,700 websites.

[50]Damon McCoy, et al., "PharmaLeaks: Understanding the Business of Online Pharmaceutical Affiliate Programs" (paper presented at the USENIX Security Symposium, Bellevue, WA, Aug. 8-10, 2012), accessed Oct. 1, 2012, http://www.cs.gmu.edu/~mccoy/papers/pharmaleaks.pdf. This study was funded in part by grants from the National Science Foundation.

[51]Website servers host and maintain the files of websites.

[52]Kirill Levchenko et al., "Click Trajectories: End-to-End Analysis of the Spam Value Chain" (paper presented at the Institute of Electrical and Electronics Engineers Symposium on Security and Privacy, Oakland, CA, May 22-25, 2011), accessed Oct. 1, 2012, http://cseweb.ucsd.edu/~savage/papers/Oakland11.pdf. This study was funded in part by grants from the National Science Foundation.

Figure 1: Map of a Rogue Internet Pharmacy Operation



Source: Christian Kreibich, © 2011 Institute of Electrical and Electronics Engineers (data); Map Resources (map).

Notes: This figure is based on a figure that was published in Kirill Levchenko et al., "Click Trajectories: End-to-End Analysis of the Spam Value Chain" (paper presented at the Institute of Electrical and Electronics Engineers Symposium on Security and Privacy, Oakland, CA, May 22-25, 2011), accessed October 1, 2012, http://cseweb.ucsd.edu/~savage/papers/Oakland11.pdf. The study was funded in part by grants from the National Science Foundation.

Identifying rogue Internet pharmacy operators for investigation and possible prosecution can be challenging as they take steps to remain anonymous. According to officials from multiple federal agencies, rogue Internet pharmacy operators generally provide inaccurate contact information to domain name registrars and often use technological and other means to disguise their identities, physical locations, and affiliations

with rogue Internet pharmacies. For example, rogue Internet pharmacies have often disguised their computer's Internet protocol address.[53]

Even when federal agencies are able to identify rogue Internet pharmacy operators, agency officials told us that they face jurisdictional challenges investigating and prosecuting them. Given the global nature of rogue Internet pharmacy operations, agencies may need assistance from foreign regulators or law enforcement in order to obtain information and gather evidence. However, rogue Internet pharmacies often deliberately and strategically locate components of their operations in countries that are unable or unwilling to aid U.S. agencies. In some instances, foreign regulators or law enforcement may be unwilling to take any action unless rogue Internet pharmacies are violating their country's laws. For example, certain countries' intellectual property rights laws are less stringent than those in the United States, and according to officials from federal agencies we interviewed, these countries' regulatory agencies have not always aided U.S. agencies with investigations into suspected prescription drug counterfeiters that have supplied rogue pharmacies. Additionally, some rogue Internet pharmacy operators may have political or other ties with foreign regulators or law enforcement, and requests by U.S. agencies for assistance would likely tip off operators and jeopardize investigations. In other cases, operators are located in countries that will not extradite them. Even when foreign law enforcement authorities are willing to aid investigations, they can be slow in responding to requests for help, according to officials from several federal agencies.

As a result of competing priorities and the complexity of rogue Internet pharmacies, federal prosecutors may not always prosecute these cases. In determining whether to pursue cases, U.S. Attorneys consider a number of factors, including the federal government's jurisdiction over the crime, the type and seriousness of the offense, the number and location of victims, the sufficiency of the evidence, as well as the district's prosecutorial priorities and resources. According to officials from multiple federal agencies, prosecutors may not be inclined to pursue rogue Internet pharmacy cases. Operators are often located outside the jurisdiction of U.S. courts, the number and location of victims is frequently unknown, and pursuing these cases is resource intensive as they often

[53]An Internet protocol address is a sequence of numbers that provides a description of the location of networked computers and distinguishes one computer from another on the Internet, similar to a physical street address.

involve the application of specialized investigative techniques, such as undercover work and Internet forensics. Further, U.S. Attorneys' Offices will also often prioritize cases for prosecution by applying minimum thresholds associated with illicit activities, in order to focus their limited resources on the most serious crimes. For example, when determining whether to pursue rogue Internet pharmacy cases, certain U.S. Attorneys' Offices may impose thresholds related to the quantity or monetary value of illicitly sold prescription drugs. According to officials at a number of agencies, the agencies may not pursue investigations of cases that they believe do not meet the minimum thresholds established by the U.S. Attorneys for their districts, and similarly, the U.S. Attorneys' Offices may not pursue cases for the same reason.

Basing a prosecution on violations of the FDCA can also be challenging, which may contribute to prosecutors declining to pursue rogue Internet pharmacy cases. Though rogue Internet pharmacy activity clearly violates the FDCA, proving violations of the act's misbranding and counterfeiting provisions can be difficult, according to a DOJ official.[54] In addition, violations of these provisions of the FDCA are subject to relatively light criminal penalties, which may limit prosecutors' interest. When federal prosecutors pursue charges against rogue Internet pharmacy operators, they often charge them for violating other laws, such as smuggling, mail fraud, wire fraud, or money laundering, since such violations can be less onerous to prove and carry stronger penalties.[55]

[54]For example, to federally prosecute rogue Internet pharmacies for misbranding violations as a result of dispensing drugs without a prescription that meets FDCA requirements, prosecutors need to prove that the pharmacies violated specific state laws that outline requirements for valid prescriptions. According to a DOJ official, identifying the state laws that best match the circumstances of each case can be a time-consuming process.

[55]See, e.g., 18 U.S.C. §§ 545 (smuggling), 1341 (mail fraud), 1343 (wire fraud), 1956 (money laundering). These crimes are subject to penalties of up to 20-30 years in jail or fines ranging from $500,000 to $1 million, or both. Violations of FDCA misbranding and counterfeiting provisions are subject to maximum penalties of 3 years in jail or a fine of $10,000, or both, under 21 U.S.C. § 333, and 18 U.S.C. § 3571 provides for a $250,000 fine or twice the gross gain or loss for individual defendants for all felony violations, including FDCA felony violations.

Federal Agencies, States, and Stakeholders Have Taken a Variety of Steps to Combat Rogue Internet Pharmacies

Federal agencies, states, and stakeholders have investigated and prosecuted operators, prevented illicit shipments of pharmaceuticals from entering the United States, and blocked rogue Internet pharmacies' ability to market and sell their products.

Federal Agencies Have Investigated and Prosecuted Rogue Internet Pharmacy Operators and Prevented Some Illegal Shipments

Despite facing substantial challenges, several federal agencies—including FDA, ICE, and USPIS—have investigated and prosecuted rogue Internet pharmacy operators that have violated federal laws. (See fig. 2 for a screenshot of a rogue Internet pharmacy that FDA recently investigated, which led to a conviction in 2011.) Agencies have investigated rogue Internet pharmacies independently and conducted collaborative investigations with other federal agencies through ICE's National Intellectual Property Rights Coordination Center. In certain instances, agencies have collaborated with international law enforcement agencies. Agency investigations have resulted in the conviction of operators, fines, and asset seizures. Specifically, according to agency officials, from fiscal years 2010 through 2012,

- FDA opened 227 rogue Internet pharmacy investigations and its investigations led to the conviction of 219 individuals and more than $76 million in fines and restitution;[56]
- ICE initiated 138 investigations and its investigations led to 56 convictions and the seizure of nearly $7 million;[57]
- USPIS worked on 392 investigations and arrested 560 individuals;

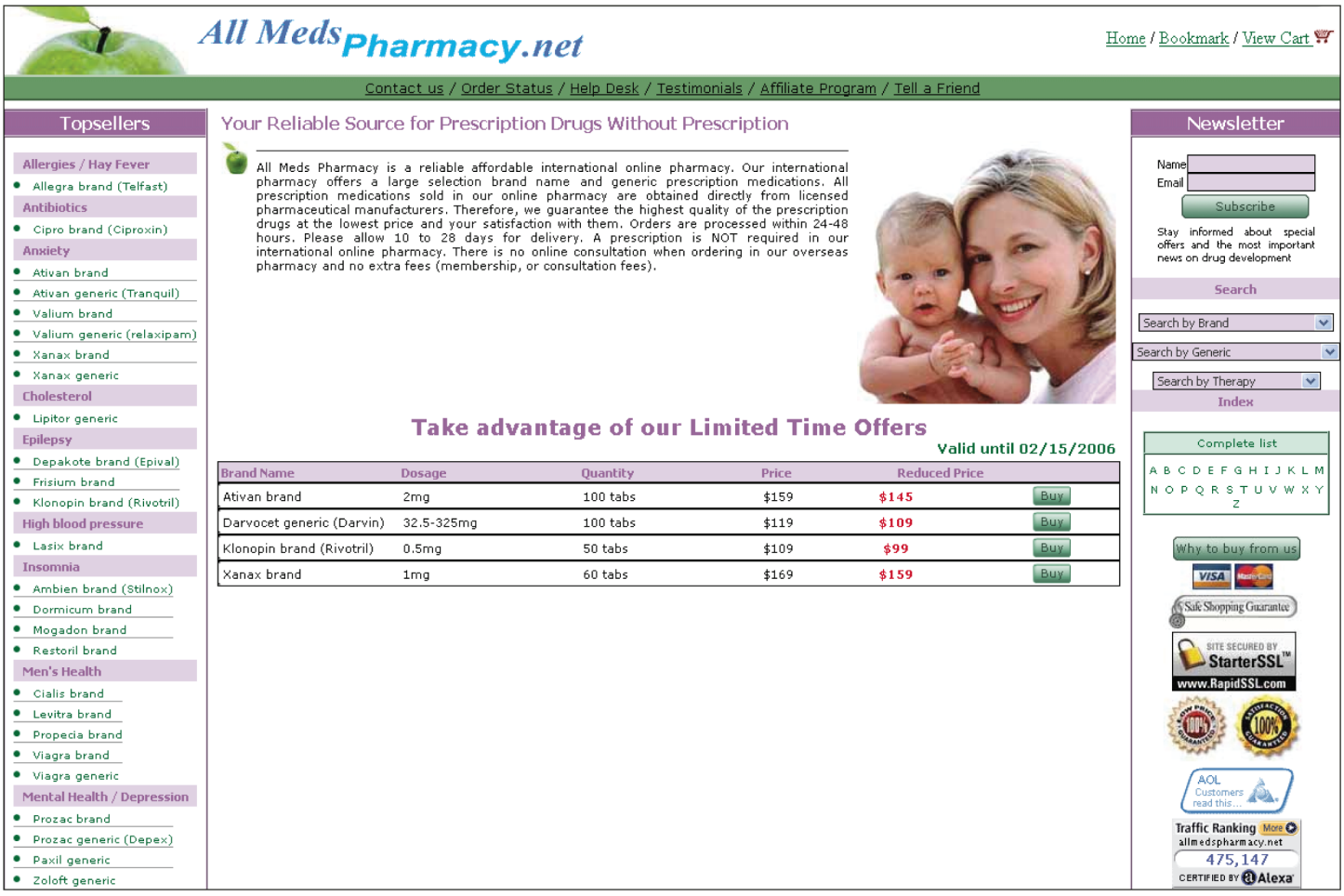
[56]Data on FDA investigations represent the agency's Internet-related investigations into the illicit distribution of prescription drugs, drug ingredients, medical devices, and dietary supplements that are tainted with prescription drug ingredients and include investigations into companies that aid and abet rogue pharmacy operations.

[57]Data on ICE investigations represent all agency investigations into the illicit importation of prescription drugs. ICE officials estimate that more than half of these investigations involve rogue Internet pharmacies.

- IRS conducted 22 investigations and its investigations led to the conviction of 5 individuals; and
- DEA conducted 49 investigations into rogue Internet pharmacies and seized more than $1 million.[58]

[58]The data provided by individual agencies includes investigations that were conducted in collaboration with other federal agencies, and, accordingly, cannot be totaled. Since rogue online pharmacies may be prosecuted under a variety of federal statutes, including mail fraud, trafficking in counterfeit goods, and customs violations, or violations of the FDCA or CSA, we were unable to obtain data on the number of prosecutions of rogue Internet pharmacy operators.

Figure 2: Screenshot of a Rogue Internet Pharmacy Website That Sold Counterfeit and Misbranded Drugs, 2006



Source: Internet Archive.

Notes: The Food and Drug Administration conducted an investigation into www.allmedspharmacy.net, and discovered that this website sold counterfeit and misbranded drugs, including controlled substances. We reviewed agency press releases, the indictment, and the court's judgment related to this investigation. One of the website's operators was located in Costa Rica and drugs were shipped into the United States from Pakistan. The operator also maintained a customer service call center in the Philippines and received payments from customers via payment processors located in the Netherlands. In conducting this investigation, FDA collaborated with Costa Rica law enforcement officials as well as Interpol. The operator was extradited to the United States and pled guilty to charges of conspiracy to defraud the United States through the sale of misbranded and counterfeit drugs and conspiracy to traffic in controlled substances. The operator was sentenced in June 2011 to 4 years in federal prison and ordered to forfeit $850,829.60. The second operator is a citizen of Canada and remained a fugitive as of January 2011. *United States v. Calvelo et al.*, No. 08-CR-20167 (D. Kan. 2011).

The image displayed is a screenshot of the www.allmedspharmacy.net website as of February 3, 2006, as retrieved from http://web.archive.org/web/20060203035725/http://www.allmedspharmacy.net/home/default.aspx on June 5, 2013.

In addition to investigating rogue Internet pharmacy operators, federal agencies have investigated companies for providing services to rogue Internet pharmacies. In 2011, a DOJ and FDA investigation led to a settlement under which Google agreed to forfeit $500 million for allowing certain rogue Internet pharmacies to place sponsored advertisements in its search engine results from calendar years 2003 through 2009.[59] In March 2013, a DOJ investigation led to a settlement under which UPS agreed to forfeit $40 million for transporting and distributing prescription drugs, including controlled substances, from certain rogue Internet pharmacies to U.S. consumers from calendar years 2003 through 2010.[60] As part of their settlements with DOJ, both companies noted that they will stop serving rogue Internet pharmacies and create compliance programs to identify rogue actors, in exchange for not being prosecuted by the U.S. government for crimes related to this activity. In addition, according to FedEx documents, DOJ is investigating the company for potentially violating federal law by shipping prescription drugs from Internet pharmacies.

Federal agencies have also taken steps to shut down rogue Internet pharmacy websites. For example, FDA and other federal agencies have participated in Operation Pangea, an annual worldwide, week-long initiative in which regulatory and law enforcement agencies from around the world work together to combat rogue Internet pharmacies. In 2013, FDA took action against 1,677 rogue Internet pharmacy websites during Operation Pangea. In 2012, as part of the Operation, FDA informed domain name registrars that over 4,100 rogue Internet pharmacy websites were illegally selling prescription drugs online, in violation of the registrars' terms of service with their customers.[61] The agency informed the registrars of these violations in order to encourage them to shut down these violative websites. FDA officials told us that the effect of such

[59]Google forfeited the gross revenue it received as payment for such advertisements, along with the gross revenue made by the rogue Internet pharmacies from their sales to U.S. customers.

[60]UPS forfeited the gross revenue it received as payments from rogue Internet pharmacies for shipping their parcels.

[61]According to FDA and DEA officials, they do not have the authority under the FDCA or CSA to seize rogue Internet pharmacy websites and shut them down. FDA officials told us that they inform domain name registrars of websites engaged in illicit activity so that the registrars can voluntarily take action to cease providing services to them, or they may work with DOJ to take action.

shutdowns is primarily disruptive since rogue Internet pharmacies often reopen after their websites get shut down; officials from federal agencies and stakeholders we spoke with likened shutting down websites to taking a “whack-a-mole” approach. One stakeholder noted that rogue Internet pharmacies own and keep domain names in reserve so that they can redirect traffic to new websites and maintain operations if any of their websites get shut down. Rogue Internet pharmacies may also find new registrars to host their websites—figure 3 provides an example of a rogue Internet pharmacy website that was shut down during Pangea but that continued operations by switching to another domain name registrar. FDA has also issued warning letters to rogue Internet pharmacies to notify them that they are engaged in potentially illegal activity and direct them to cease their illegal activity.[62] From calendar years 2009 through 2012, FDA reported issuing about 30 warning letters to rogue Internet pharmacies. According to FDA officials, rogue Internet pharmacies often ignore the letters and continue with their illicit activity. However, in some cases, FDA’s warning letters have led to the removal of potentially dangerous products from certain websites.[63] FDA officials told us that they remain committed to combating rogue Internet pharmacies and in April 2013 they formed a new Cyber Crimes Investigation Unit that is devoted to this cause.

[62]When FDA determines that an entity has significantly violated the FDCA, the agency notifies the entity through a warning letter. The letter directs the entity to correct the problem within a specified time frame.

[63]For example, FDA issued warning letters in May 2012 to two Internet pharmacies that were offering alitretinoin for sale to U.S. consumers because FDA felt the websites presented a significant public health risk. Alitretinoin is an unapproved drug that is potentially dangerous because it has the potential to cause severe birth defects if taken by pregnant women. In response to the warning letters, the websites stopped offering the drug for sale.

Figure 3: Screenshot of a Rogue Internet Pharmacy Website That Received a Warning Letter from FDA in 2012 as Part of Operation Pangea

Source: Internet Archive.

Notes: In September 2012, the Food and Drug Administration (FDA) sent a warning letter to the operator of www.canadadrugs.com, notifying it that the agency had determined that this website and 3,712 others that the operator ran were supplying unapproved and misbranded prescription drugs for sale to consumers in the United States. We reviewed FDA's warning letter and spoke with agency

officials about its investigation. (FDA's warning letter can be found at http://www.fda.gov/ICECI/EnforcementActions/WarningLetters/2012/ucm321068.htm, accessed Apr.18, 2013.) As part of Operation Pangea, FDA informed the domain name registrar that these websites were illegally selling prescription drugs, and according to agency officials, the registrar shut down these sites in response. However, according to FDA officials, shortly after Pangea, the websites' operator registered its domain names with a new registrar, and as a result, the sites are operational as of April 2013.

The image displayed is a screenshot of the www.canadadrugs.com website as of September 19, 2012, as retrieved from http://web.archive.org/web/20120919225427/http://www.canadadrugs.com/ on June 5, 2013.

Federal agencies responsible for preventing illegal prescription drug imports have also interdicted rogue Internet pharmacy shipments. CBP coordinates with FDA to inspect and seize illicit mail, express courier, and cargo shipments of prescription drugs presented for import at the border on a daily basis. CBP also leads Operation Safeguard, a multiagency initiative to target illicit imports of prescription drugs. Once a month, CBP, along with FDA and ICE, targets a specific international mail or express courier facility and, according to agency officials, conducts extensive examinations and seizures of illicit prescription drug shipments for 3 days. In total, from fiscal years 2010 through 2012, FDA reported examining nearly 45,000 shipments and CBP reported seizing more than 14,000 illicit shipments of prescription drugs, with mail shipments constituting the majority of the shipments that were seized. In addition to seizures of shipments presented for import, according to USPIS, the agency seized more than 800 illicit shipments of controlled substances in the domestic mail system during fiscal year 2012. Despite these efforts, FDA officials told us that the sheer volume of inbound international mail shipments—which total nearly 1.2 million pieces every day, according to USPIS—makes it difficult to interdict all illicit prescription drug imports.[64]

Other federal agencies have also taken steps to combat rogue Internet pharmacies by sponsoring research and engaging stakeholders. The National Science Foundation has provided grants to researchers who have examined rogue Internet pharmacy operations and developed strategies for combating them. For example, researchers found that rogue Internet pharmacies may be vulnerable to efforts to limit their ability to

[64]Data represent the average daily number of inbound parcels from November 1, 2011, to October 31, 2012. We also previously reported that the large number of illicit prescription drug shipments imported through the mail prevents agencies from being able to interdict all incoming shipments of illicit drugs. See GAO, *Prescription Drugs: Strategic Framework Would Promote Accountability and Enhance Efforts to Enforce the Prohibitions on Personal Importation,* GAO-05-372 (Washington, D.C.: Sept. 8, 2005).

process online payments.[65] In addition, IPEC has worked with private companies to encourage them to limit services to rogue Internet pharmacies.

While DEA has investigated and taken actions to combat rogue Internet pharmacies that have violated the CSA, the agency has recently decreased the priority it places on combating them. According to agency officials, the criminal penalties associated with the Ryan Haight Act, which was implemented in 2009, have substantially reduced the extent to which controlled substances are sold online, as domestic pharmacies have stopped fulfilling orders on behalf of rogue Internet pharmacies.[66] In addition, agency officials told us that while rogue Internet pharmacies may still advertise the sale of controlled substances, they often do not actually sell them. DEA officials based this conclusion on the agency's 2011 assessment of 10 rogue Internet pharmacies that advertised the sale of controlled substances, through which it found that 4 of the 10 sold such substances.[67] Further, according to DEA officials, foreign rogue Internet pharmacies that sell controlled substances do not actually sell the most dangerous and addictive substances, and DEA has limited extraterritorial jurisdiction over the distribution of these types of drugs.[68] DEA officials also told us that results from their fieldwork support the

[65]Damon McCoy, et al., "Priceless: The Role of Payments in Abuse-advertised Goods" (paper presented at the ACM Conference on Computer and Communications Security, Raleigh, NC, Oct. 16-18, 2012), http://www.cs.gmu.edu/~mccoy/papers/CCS12Priceless.pdf, accessed Oct. 24, 2012. This study was funded in part by grants from the National Science Foundation.

[66]According to DEA officials, illicit pain clinics—brick-and-mortar operations where customers can obtain prescriptions for controlled substances without a legitimate medical need—have since emerged as the primary source of controlled substance diversion.

[67]DEA officials randomly selected websites to examine from a 2011 LegitScript report that included a sample list of 1,000 rogue Internet pharmacies that had advertised the sale of controlled substances. See LegitScript, *Drug Dealers on the Internet: Is the DEA enforcing the Ryan Haight Act?* (Portland, OR: June 2011).

[68]A controlled substance is classified on the basis of whether the drug has a currently accepted medical use in treatment in the United States and its relative abuse potential and likelihood of causing dependence. The classification system includes five schedules and their order reflects substances that are progressively less dangerous and addictive. See 21 U.S.C. § 812. DEA has extraterritorial jurisdiction over individuals that manufacture or distribute schedule I and II controlled substances—those that are the most dangerous and addictive—outside the territorial jurisdiction of the United States who intend to unlawfully import the substances or know that they will be unlawfully imported, but this extraterritorial jurisdiction does not apply to controlled substances on other schedules. See 21 U.S.C. § 959.

agency's conclusion that domestic and foreign rogue Internet pharmacies are generally not selling controlled substances. Furthermore, agency officials told us that they do not track data that could demonstrate a reduction in the sale of controlled substances online because they told us there is no reason to do so. DEA officials explained their rationale by saying that the agency does not collect data on threats that do not exist. However, DEA's 2011 assessment of Internet pharmacies that advertised the sale of controlled substances revealed that 40 percent were selling such substances. DEA has not gathered additional data to demonstrate the extent to which controlled substances are being diverted over the Internet.[69]

States Face Challenges Combating Rogue Internet Pharmacies, and Have Focused on Regulating the Activities of Licensed Pharmacies

States face challenges investigating rogue Internet pharmacies and have played a limited role in combating them. Given that most rogue Internet pharmacies operate from abroad, stakeholders including NABP, National Alliance for Model State Drug Laws, and National Association of Attorneys General, as well as officials from several state attorneys general offices told us that states do not have the authority, ability, or resources to investigate and prosecute them. These stakeholders told us that, as a result, states generally have not investigated rogue Internet pharmacies for violating their laws. In addition, officials from the five state boards of pharmacy we interviewed also told us that they do not proactively investigate unlicensed pharmacy activity, and most of the boards view the enforcement of unlicensed pharmacy activity as the responsibility of state law enforcement agencies, rather than themselves. Accordingly, they have not actively sought to identify or investigate rogue Internet pharmacies—either in-state or out-of-state—that sell prescription drugs to customers within their state, though they may look into rogue Internet pharmacies if they received complaints. Further, board officials told us that they face challenges enforcing laws outside of their own states. When rogue Internet pharmacies located in other states violate their state laws, board officials contact officials of state boards where the pharmacies are located, and it is then the responsibility of the contacted boards to take any appropriate investigative or enforcement actions. The boards may also send cease-and-desist letters or attempt to fine out-of-

[69]In 2011, we recommended that DEA take steps to better capture data on the agency's efforts to reduce the diversion of controlled substances. See GAO, *Prescription Drug Control: DEA Has Enhanced Efforts to Combat Diversion, but Could Better Assess and Report Program Results*, GAO-11-744 (Washington, D.C.: Aug. 26, 2011).

state pharmacies that violate their states' laws. However, the boards have no ability to ensure compliance with enforcement actions against pharmacies outside of their state that are not licensed in their state.

State boards of pharmacy focus on regulating licensed brick-and-mortar pharmacies located within their state. In regulating licensed pharmacies, officials from each of the five states told us that they have taken enforcement actions against licensed pharmacies in their states for fulfilling orders on behalf of rogue Internet pharmacies or illicitly selling prescription drugs over the Internet. For example, in 2010, the Nevada Board of Pharmacy revoked the license of a pharmacist for illegally shipping controlled substances to an out-of-state customer who placed an order through a rogue Internet pharmacy. In addition to actions taken by state pharmacy boards, state medical boards have also taken enforcement actions against physicians involved in illicitly writing prescriptions for rogue Internet pharmacies, according to FSMB officials.[70]

Stakeholders Have Blocked Services to Known Rogue Internet Pharmacies and Routinely Share Information with Federal Agencies

Stakeholders that provide services to Internet-based businesses have blocked rogue Internet pharmacies' ability to market and sell their products. These stakeholders have taken such actions on the basis of information that they learn about and share through various associations.

- CSIP has helped member companies that provide services to Internet businesses—such as Internet registrars, search engines, and payment processors—share information about rogue Internet pharmacies, and encourages its members to block services to them.[71] CSIP contracts with a third-party company that proactively searches the Internet to identify rogue Internet pharmacies and disseminates this information to its members. In addition, CSIP gathers information about rogue Internet pharmacies from member companies, as well as from other outside sources such as federal agencies. According to CSIP, from November 1, 2011, through December 1, 2012, its members took more than 3 million actions against rogue Internet

[70]In addition to the limited role played by states, state officials and stakeholders that we spoke with were generally unaware of any efforts by local governments to combat rogue Internet pharmacies.

[71]IPEC worked with CSIP's member companies to encourage and help facilitate the creation of the association.

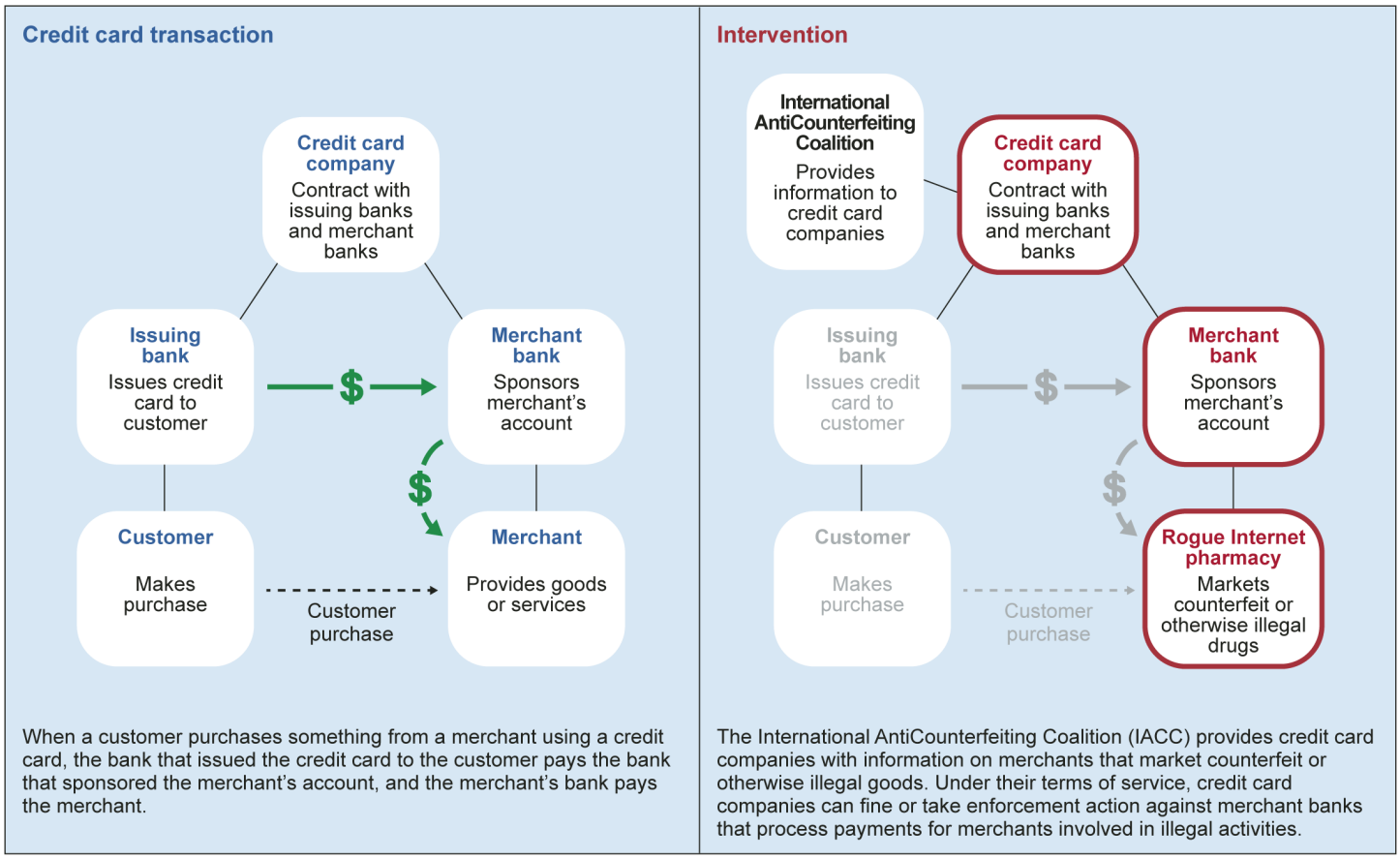
pharmacies. For example, Internet registrars shut down rogue Internet pharmacy websites, search engines prevented them from placing advertisements, and credit card companies prevented payments from being processed.[72]

- IACC has also taken action to combat rogue Internet pharmacies by, among other things, working with credit card companies to discourage banks from processing payments for rogue Internet pharmacies.[73] IACC officials told us that they collect information on websites that market counterfeit and otherwise illegal products from trademark and copyright holders, including four brand-name prescription drug manufacturers. IACC then provides this information to credit card companies so that they can take action against banks that process payments for these rogue Internet pharmacies. (See fig. 4.) Under their terms of service, credit card companies can fine or take other enforcement actions against banks that process payments for merchants involved in illegal activities.

[72]The 3 million actions taken by CSIP members may include actions taken by multiple members against a single rogue Internet pharmacy.

[73]Certain credit card companies contract with banks to issue credit cards and to authorize merchants to accept those cards.

Figure 4: Payment Processing Interventions Used to Combat Rogue Internet Pharmacies



Source: GAO.

In addition to private efforts to block services to rogue Internet pharmacies, drug manufacturers maintain surveillance programs to identify and investigate the marketing of counterfeit versions of their brand-name prescription drugs and share their findings with federal agencies. In doing so, they monitor web activity to identify rogue Internet pharmacies, and employ investigators to gather evidence against rogue operators. On the basis of their investigations, these manufacturers provide federal agencies, such as ICE and FDA, with investigative leads and information that may support existing investigations. In addition, manufacturers have also provided CBP with information to better target

illicit drug imports and with brochures to help CBP officials differentiate between legitimate and counterfeit prescription drugs.[74]

Several stakeholders also help facilitate information sharing between drug manufacturers and federal agencies on rogue Internet pharmacies. The Pharmaceutical Security Institute, an association of 26 drug manufacturers focused on sharing information related to counterfeit prescription drugs, collects and analyzes surveillance information from its members and, according to an official from the institute, helps them share information with federal agencies about the illicit marketing of counterfeit prescription drugs by rogue Internet pharmacies. The National Cyber-Forensics & Training Alliance—an organization that facilitates public-private information sharing on cybercrime—also works with drug manufacturers to share information with federal agencies. Officials said that the alliance collects information from the manufacturers and performs additional intelligence gathering to provide agencies with actionable investigative leads, such as the identities and locations of operators.

FDA and Stakeholders Have Taken Steps to Educate Consumers about the Risks of Purchasing Prescription Drugs from Internet Pharmacies, but Challenges Remain

FDA and stakeholders have taken steps to educate consumers about the dangers of buying prescription drugs from rogue Internet pharmacies and how to identify legitimate ones; however, these efforts face challenges. In September 2012, FDA launched a national campaign called “BeSafeRx: Know Your Online Pharmacy” to raise public awareness and educate consumers about the risks associated with purchasing prescription drugs on the Internet. The campaign provides information about the dangers of purchasing drugs from rogue Internet pharmacies, how to identify the signs of rogue Internet pharmacies, as well as how to find safe Internet pharmacies. FDA officials told us that the agency plans to direct the same messages to health care professionals and assess the campaign’s effectiveness in the future.

Some federal agencies and stakeholders have also taken steps to educate consumers about the risks of purchasing prescription drugs online and provide tools to help consumers identify legitimate and rogue Internet pharmacies. For example, CBP, DEA, and FTC post information on their websites regarding the dangers of purchasing drugs online.

[74]CBP has obtained this information through its Pharmaceuticals, Health & Chemicals Center of Excellence and Expertise—a program established in 2011 to better coordinate its activities with health industry stakeholders.

NABP publicly releases the results of its review of Internet pharmacies quarterly, which most recently showed that 97 percent of the over 10,000 Internet pharmacies that it reviewed were out of compliance with federal or state laws or industry standards.[75] NABP also warns consumers not to buy from websites that are on its publicly available list of rogue Internet pharmacies, and posts information on its website to educate consumers about how to safely buy medicine online.[76] The association directs consumers to purchase medicines from legitimate Internet pharmacies that it has accredited through its VIPPS program; as of May 1, 2013, NABP's website listed 32 VIPPS-accredited Internet pharmacies. To assist consumers in more readily identifying legitimate online pharmacies, NABP also plans to launch a new top-level domain name called *.pharmacy* by the end of 2013.[77] The association intends to grant this domain name to appropriately licensed, legitimate Internet pharmacies operating in compliance with regulatory standards—including pharmacy licensure, drug authenticity, and prescription requirements—in every jurisdiction that the pharmacy does business.

LegitScript also helps consumers to differentiate between legitimate and rogue Internet pharmacies. It regularly scans the Internet and, using NABP's standards, classifies Internet pharmacies into one of four categories: (1) legitimate, (2) not recommended, (3) rogue, or (4) pending review. When visiting their publicly available website, consumers can enter the website address of any Internet pharmacy and immediately find LegitScript's classification.[78] As of May 1, 2013, LegitScript had classified

[75]National Association of Boards of Pharmacy, *Internet Drug Outlet Identification Program, Progress Report for State and Federal Regulators: April 2013* (Mount Prospect, IL: Apr. 26, 2013).

[76]See http://www.nabp.net/programs/consumer-protection/buying-medicine-online/recommended-sites.

[77]A top-level domain name is the highest level of organizational structure on the Internet. Other top-level domain names include *.com*, *.net*, and *.gov*.

[78]See http://www.legitscript.com.

259 Internet pharmacies as legitimate and therefore safe for U.S. consumers, on the basis of NABP standards.[79]

Despite the actions of agencies and stakeholders, consumer education efforts face many challenges. Many rogue Internet pharmacies use sophisticated marketing methods to appear professional and legitimate, making it challenging for even well-informed consumers and health care professionals to differentiate between legal and illegal Internet pharmacies. For example, some rogue Internet pharmacies advertise that customers need a prescription in order to purchase drugs, but allow customers to meet this requirement by completing an online questionnaire at the time of sale. Other Internet pharmacies may fraudulently display a VIPPS-accreditation logo on their website, despite not having earned the accreditation, or may fraudulently display Visa, MasterCard, PayPal, or other logos on their website despite not holding active accounts with these companies or being able to process such payments. Figure 5 displays a screenshot of a rogue Internet pharmacy website that may appear to be legitimate to consumers, but whose operators pled guilty to multiple federal offenses, including smuggling counterfeit and misbranded drugs into the United States.

[79]The difference between NABP's count of 32 VIPPS-accredited Internet pharmacies and LegitScript's count of 259 legitimate Internet pharmacies, which are based on an application of the same criteria, may be attributed to the fact that pharmacies have to apply and send payment of fees to NABP for VIPPS accreditation, whereas they do not apply or send fees to LegitScript for classification. The VIPPS accreditation process requires an application fee and an annual participation fee that varies based on the type of pharmacy; application fees range from $5,000 to $8,000 and annual participation fees range from $1,000 to $7,000.

Figure 5: Screenshot of a Rogue Internet Pharmacy Website Whose Operators Pled Guilty to Multiple Federal Offenses, 2007

Source: Internet Archive.

Notes: The Food and Drug Administration, U.S. Immigration and Customs Enforcement, and the U.S. Postal Inspection Service conducted a joint investigation into this rogue Internet pharmacy, and in April 2012, its two operators pled guilty to smuggling counterfeit and misbranded drugs into the United States. We reviewed agency press releases, the indictments, and the court's judgments related to this investigation. The operators were prosecuted after federal agents conducted a series of

undercover purchases from several of the operators' Internet pharmacies, including www.newpharm.net. Federal agents were able to purchase prescription medications without providing a valid prescription. Drugs were typically shipped to the United States from China and India, and exterior packaging typically falsely described the contents of the shipments as "gifts" that had "no commercial value". The Internet pharmacy's website operators were located in Israel, customer service was located in the Philippines, and banking and money laundering were conducted in Cyprus and the Seychelles. Federal agents collaborated with law enforcement authorities in Hong Kong and Israel as part of the investigation. Laboratory results of drug samples purchased by federal agents revealed that the drugs were not genuine versions of the approved drugs that they purported to be. As part of their sentences, the operators were fined a total of $45,000 and forfeited a total of $65,000 as well as the domain names of their rogue Internet pharmacy websites. One of the operators was sentenced to 10 months of imprisonment, and the other was sentenced to 1 year of probation. *United States v. Carmi*, No. 11-CR-205 (E.D. Mo. 2012); *United States v. Dahan*, No. 11-CR-206 (E.D. Mo. 2012).

The image displayed is a screenshot of the www.newpharm.net website at as of June 25, 2007, as retrieved from http://web.archive.org/web/20070625062436/http://www.newpharm.net/ on June 5, 2013.

Some rogue Internet pharmacies seek to assure consumers of the safety of their drugs by purporting to be "Canadian." Canadian pharmacies have come to be perceived as a safe and economical alternative to pharmacies in the United States. Over the last 10 years, several local governments and consumer organizations have organized bus trips to Canada so that U.S. residents can purchase prescription drugs at Canadian brick-and-mortar pharmacies at prices lower than those in the United States. More recently, some state and local governments implemented programs that provided residents or employees and retirees with access to prescription drugs from Canadian Internet pharmacies.[80] Despite FDA warnings to consumers that the agency could not ensure the safety of drugs not approved for sale in the United States that are purchased from other countries, the prevalence of such programs may have contributed to a perception among U.S. consumers that they can readily save money and obtain safe prescription drugs by purchasing them from Canada. Many rogue Internet pharmacies seek to take advantage of this perception by purporting to be located in Canada, or sell drugs manufactured or approved for sale in Canada, when they are actually located elsewhere or selling drugs sourced from other countries.[81]

[80]For example, Maine recently enacted a law that allows licensed retail pharmacies located in Canada, the United Kingdom, Australia, and New Zealand to export prescription drugs to Maine residents for personal use without obtaining a license from the state. See 2013 Me. Legis. Serv. Ch. 373 (S.P. 60) (L.D. 171).

[81]A 2005 FDA study of drugs ordered from so-called "Canadian" Internet pharmacies found that 85 percent were from 27 other countries around the globe, and a number of these were counterfeit medicines.

Educational efforts also need to overcome issues related to consumer demand for these drugs. Many consumers mistakenly believe that if a drug may be prescribed for medical use, it is safe to consume regardless of whether they have a prescription for that particular drug.[82] In addition, other pressures, including consumers' desire to self-medicate, their wish for privacy related to obtaining lifestyle medications (such as drugs for sexual dysfunction), and relatively high out-of-pocket costs for brand-name drugs may fuel a demand among consumers to purchase prescription drugs from rogue Internet pharmacies. While educational efforts attempt to overcome these challenges, their success thus far is unknown—in part, because the volume of drugs purchased from rogue Internet pharmacies is unknown, making it difficult to assess whether educational efforts have been effective at reducing such purchases.

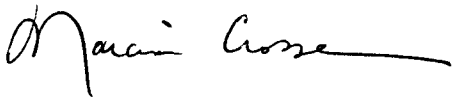
Agency Comments

We provided a draft of this report for comment to HHS, DOJ, and DHS, and we provided excerpts of this report for comment to USPIS and NSF. We received technical comments from HHS, DOJ, and DHS, which we incorporated as appropriate.

We are sending copies of this report to the Department of Commerce, the Department of Health and Human Services, the Department of Homeland Security, the Department of Justice, the Department of State, the Federal Trade Commission, the Internal Revenue Service, the National Science Foundation, the Office of Management and Budget, and the United States Postal Inspection Service, as well as other interested parties. In addition, the report is available at no charge on the GAO website at http://www.gao.gov.

[82]In addition to FDA's finding that nearly one in four Internet consumers residing in the United States have purchased prescription drugs online, the results of a recent survey suggest that 36 million—1 in every 6—Americans are estimated to have purchased at least one prescription drug online without a valid prescription. The Partnership at Drugfree.org, *Thirty-Six Million Americans Have Bought Medications Online Without a Doctor's Prescription* (Washington, D.C.: Dec. 14, 2010).

If you or your staff have any questions about this report, please contact me at (202) 512-7114 or crossem@gao.gov. Contact points for our Offices of Congressional Relations and Public Affairs may be found on the last page of this report. Other key contributors to this report are listed in appendix III.



Marcia Crosse
Director, Health Care

Appendix I: List of Organizations Interviewed

Federal Agencies

1. Department of Commerce, International Trade Administration
2. Department of Commerce, National Telecommunications and Information Administration
3. Department of Commerce, United States Patent and Trademark Office
4. Department of Health and Human Services, Food and Drug Administration
5. Department of Homeland Security, U.S. Customs and Border Protection
6. Department of Homeland Security, U.S. Immigration and Customs Enforcement
7. Department of Justice, Civil Division
8. Department of Justice, Criminal Division
9. Department of Justice, Drug Enforcement Administration
10. Department of Justice, Executive Office for United States Attorneys
11. Department of Justice, Federal Bureau of Investigation
12. Department of State, Bureau of Economic and Business Affairs
13. Department of State, Bureau of International Narcotics and Law Enforcement
14. Federal Trade Commission
15. Internal Revenue Service
16. National Science Foundation
17. Office of Management and Budget, Intellectual Property Enforcement Coordinator
18. U.S. Postal Inspection Service

Selected State Boards of Pharmacy and Offices of Attorneys General

1. California
2. Florida
3. Maine
4. Nevada
5. Utah

Stakeholder Groups

1. AARP
2. Alliance for Safe Online Pharmacies
3. American Medical Association
4. American Well
5. Center for Safe Internet Pharmacies
6. Center for Telehealth and e-Health Law
7. Eli Lilly and Company
8. Federation of State Medical Boards
9. FedEx
10. Generic Pharmaceutical Association
11. Go Daddy
12. Google Inc.
13. International AntiCounterfeiting Coalition
14. Internet Crime Complaint Center
15. LegitScript
16. MasterCard International, Incorporated
17. Merck & Co., Inc.
18. Microsoft
19. National Alliance for Model State Drug Laws
20. National Association of Attorneys General
21. National Association of Boards of Pharmacy
22. National Association of Chain Drug Stores
23. National Community Pharmacists Association
24. National Cyber-Forensics & Training Alliance
25. National Science Foundation grant recipient Damon McCoy, Assistant Professor, George Mason University Computer Science Department
26. Partnership for Safe Medicines
27. PayPal
28. Pfizer
29. Pharmaceutical Security Institute

30. Pharmaceutical Research and Manufacturers of America
31. Purdue Pharma L.P.
32. Takeda Pharmaceuticals U.S.A., Inc.
33. UPS
34. Visa, Inc.
35. WellPoint, Inc.

Appendix II: Summary of Recent Proposals to Combat Rogue Internet Pharmacies

Members of Congress have sponsored bills and other stakeholders have endorsed proposals to enhance regulators' ability to both combat rogue Internet pharmacies and enhance the public's ability to distinguish rogue Internet pharmacies from legitimate ones. This appendix provides a brief synopsis of federal legislation introduced in the 112th Congress, which ran from January 2011 to January 2013, and the 113th Congress, from January 2013 through June 2013, as well as proposals from stakeholders we interviewed. While some stakeholders broadly supported these proposals, others noted that because most rogue Internet pharmacies are operated from overseas, additional federal laws and authorities, such as those noted below, would have a limited effect on their ability to combat rogue Internet pharmacies.

Creating a Federal Definition of a Valid Prescription. Some Members of Congress and other stakeholders have proposed creating a federal definition of a valid prescription that applies to all prescription drugs.[1] Currently, the only federal definition of a valid prescription applies solely to prescriptions for controlled substances.[2] Although the Federal Food, Drug, and Cosmetic Act (FDCA) requires certain drugs to be dispensed upon a prescription of a licensed practitioner, it does not define how this requirement is to be met. Instead, each state's pharmacy and medical practice acts define what constitutes a valid prescription. As such, when federal prosecutors pursue charges against operators of rogue Internet pharmacies that sell drugs without prescriptions that meet the FDCA's prescription requirement, they must research the laws of each relevant state to determine which ones apply to their case.

[1]For example, in the 112th Congress, Members of Congress introduced H.R. 4095 and S. 2002. Both bills were referred to as "The Online Pharmacy Safety Act." In addition to these bills, other stakeholders have recommended adopting a federal definition for a valid prescription, including the Intellectual Property Enforcement Coordinator as part of its work to coordinate federal efforts to combat pharmaceutical counterfeiting.

[2]The Ryan Haight Online Pharmacy Consumer Protection Act of 2008 instituted a federal definition of a valid prescription that applies to controlled substances, such as narcotic pain relievers. The act defines a valid prescription as one that is issued for a legitimate medical purpose in the usual course of professional practice, by a practitioner who has conducted at least one in-person medical evaluation of the patient, or a covering practitioner (who conducts a medical evaluation at the request of a temporarily unavailable practitioner who had conducted an in-person medical evaluation of the patient within the past 24 months). Certain telemedicine practices are permitted in place of an in-person medical evaluation. 21 U.S.C. § 829(e).

Proponents of a federal definition contend that such a definition would make it easier and less resource-intensive for federal and state investigators and prosecutors to gather evidence and build a case against rogue Internet pharmacy operators who sell drugs without valid prescriptions. Some contend, however, that such a definition would be of limited value. They note that, because rogue Internet pharmacy operations have increasingly moved components of their business abroad, they are beyond the boundaries of where such a law could be readily enforced. Additionally, those interested in promoting telemedicine have raised concerns that these proposals have too narrowly defined the circumstances for which prescriptions could be issued on the basis of legitimate medical examinations conducted via telemedicine.

Developing a Comprehensive List of Legitimate Internet Pharmacies. Members of Congress have introduced legislation that would have required the establishment of a comprehensive list of legitimate Internet pharmacies.[3] Other stakeholders, such as the Alliance for Safe Online Pharmacies, have also supported this proposal. Members of Congress and stakeholders have proposed that the Food and Drug Administration (FDA) would be responsible for establishing and maintaining the list.

Proponents of a comprehensive list contend that it would help consumers, stakeholders, and federal and state agencies distinguish between legitimate and rogue Internet pharmacies. Although the National Association of Boards of Pharmacy (NABP) and LegitScript have tools on their websites that enable consumers to identify legitimate Internet pharmacies, some maintain that FDA management of the list is critical, and could help to inspire public confidence in the list. Others stated that a list created by a third party would be helpful, as long as it is endorsed by the FDA. However, FDA officials and other stakeholders have raised concerns about the agency's ability to maintain such a list, given the large volume of new Internet pharmacies launched and modified every day. Additionally, FDA does not regulate the practice of pharmacy, which has long been regulated by the states. Finally, according to officials we interviewed from two stakeholders that provide services to Internet businesses, such a list is not necessary as their companies' policies and procedures allow them to immediately suspend customer accounts once

[3]The Online Pharmacy Safety Act (H.R. 4095 and S. 2002), introduced in the 112th Congress, included a provision for the establishment of a comprehensive list of legitimate Internet pharmacies.

they become aware that such customers are violating their policies and procedures.

Establishing a Safe Harbor for Companies That Provide Services to Internet-Based Businesses. Members of Congress have introduced legislation to provide legal immunity to companies—such as Internet registrars, search engines, and credit card processors—that ceased or refused to provide services to rogue Internet pharmacies when acting in good faith.[4] Proponents state that protection from liability would encourage companies to block services to rogue Internet pharmacies. In addition, some told us that such immunity would allow them to more readily take action against suspected rogue Internet pharmacies. However, others doubted the necessity of such legislation. Officials from two companies we interviewed explained that their companies already have the right to refuse service to rogue Internet pharmacies and do not open themselves up to liability by doing so.

Granting FDA New Subpoena and Seizure Authorities. Members of Congress have introduced legislation to grant new subpoena and seizure authorities to FDA. Agency officials stated the authorities would enable them to more rapidly investigate and take action against rogue Internet pharmacies.[5] Subpoena authority proposed under this legislation would have enabled FDA to compel the attendance and testimony of witnesses and the production of records and other items for the purposes of any hearing, investigation, or other proceeding related to a suspected FDCA violation. Further, seizure authority proposed under this legislation would have provided FDA with the authority to take noncompliant drugs out of the supply chain. At present, FDA must obtain approval from the Department of Justice (DOJ) in order to issue a subpoena or to seize goods. According to FDA officials, the DOJ approval process can delay investigations and enforcement actions. Such delays may lead to the

[4]In the 112th Congress, members of Congress introduced H.R. 3261, the Stop Online Piracy Act, and S. 968, the PROTECT IP Act of 2011, which contained similar safe-harbor provisions. The Online Pharmacy Safety Act (H.R. 4095 and S. 2002) also proposed a safe harbor and linked the provision to the establishment of a comprehensive list of legitimate Internet pharmacies. Companies would have been provided immunity for ceasing or refusing to provide services to Internet pharmacies not included on the list.

[5]The Drug Safety Enhancement Act of 2011, introduced in the 112th Congress as H.R. 1483, included provisions for subpoena authority (§ 404) and seizure authority (§ 205). The Drug Safety and Accountability Act of 2011, introduced in the 112th Congress as S. 1584, also included provisions for subpoena authority (§ 3).

distribution of noncompliant drugs further into the supply chain and may make such products more difficult to locate and seize.

Adopting a Track-and-Trace System for Prescription Drug Supply Chain. Members of Congress have introduced, and stakeholders such as the Intellectual Property Enforcement Coordinator have supported, legislation that would require FDA to implement a system to track, trace, and verify prescription drugs throughout the drug supply chain.[6] In 2007, Congress required FDA to develop standards that would apply to such a system, as well as to develop a standardized numerical identifier that could be applied to prescription drugs during manufacturing and repackaging.[7] In response, FDA issued guidance for industry, and hosted a public workshop on the topic. However, a nationwide track-and-trace system has not yet been implemented. Supporters of a nationwide track-and-trace system contend that it would enable federal agencies to more readily identify counterfeit or adulterated prescription drugs, as well as reduce the potential for counterfeit drugs to enter the supply chain, including through Internet pharmacies. FDA officials told us that while a track-and-trace system would benefit multiple stakeholders, it would likely not directly affect the operations of rogue Internet pharmacies because such enterprises sell counterfeit and adulterated drugs directly to consumers, which is not a distribution method that would be covered by a track-and-trace system.

[6]In the 113th Congress, members of Congress introduced H.R. 1919, the Safeguarding America's Pharmaceuticals Act of 2013, and S. 957, the Drug Supply Chain Security Act. Both bills would amend the FDCA to require that prescription drugs be tracked, traced, and verified throughout the supply chain. H.R. 1919 was passed by the House of Representatives on June 3, 2013, and was referred to the Senate Committee on Health, Education, Labor, and Pensions on June 4, 2013. The text of S. 957 was incorporated into S. 959 by the Senate Committee on Health, Education, Labor, and Pensions, and that bill was approved by the committee on May 22, 2013. The bill is pending consideration by the Senate as of June 17, 2013.

[7]See 21 U.S.C. § 355e (added by Pub. L. No. 110-85, § 913, 121 Stat. 823, 952 (2007)).

Appendix III: GAO Contact and Staff Acknowledgments

GAO Contact

Marcia Crosse, (202) 512-7114, crossem@gao.gov.

Staff Acknowledgments

In addition to the contact named above, Geri Redican-Bigott, Assistant Director; Michael Erhardt; Cathleen Hamann; Jason Kelly; Lisa Motley; Patricia Roy; and Lillian Shields made key contributions to this report.

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BUSINESS, CONSUMER SERVICES AND HOUSING AGENCY
DEPARTMENT OF CONSUMER AFFAIRS
GOVERNOR EDMUND G. BROWN JR.

September 10, 2013

To: Members, Enforcement Committee

Subject: Agenda Item I (f): Role of a Pharmacist's Corresponding Responsibility on Dispensing Controlled Substances

Federal and state law both require a pharmacist to use corresponding responsibility when dispensing a prescription. Specifically:

- California Business and Professions Code section 4306.5 provides:

  4306.5.

  Unprofessional conduct for a pharmacist may include any of the following:

  (a) Acts or omissions that involve, in whole or in part, the inappropriate exercise of his or her education, training, or experience as a pharmacist, whether or not the act or omission arises in the course of the practice of pharmacy or the ownership, management, administration, or operation of a pharmacy or other entity licensed by the board.

  (b) Acts or omissions that involve, in whole or in part, the failure to exercise or implement his or her best professional judgment or corresponding responsibility with regard to the dispensing or furnishing of controlled substances, dangerous drugs, or dangerous devices, or with regard to the provision of services.

  (c) Acts or omissions that involve, in whole or in part, the failure to consult appropriate patient, prescription, and other records pertaining to the performance of any pharmacy function.

  (d) Acts or omissions that involve, in whole or in part, the failure to fully maintain and retain appropriate patient-specific information pertaining to the performance of any pharmacy function.

  (Amended by Stats. 2006, Ch. 777, Sec. 11. Effective January 1, 2007.)

- And California Health and Safety Code section 11153 provides:

  11153.

  (a) A prescription for a controlled substance shall only be issued for a legitimate medical purpose by an individual practitioner acting in the usual course of his or her professional practice. The responsibility for the proper prescribing and dispensing of controlled substances is upon the prescribing practitioner, but a corresponding responsibility rests with the pharmacist who fills the prescription. Except as authorized by this division, the following are not legal prescriptions: (1) an order purporting to be a prescription which is issued not in

the usual course of professional treatment or in legitimate and authorized research; or (2) an order for an addict or habitual user of controlled substances, which is issued not in the course of professional treatment or as part of an authorized narcotic treatment program, for the purpose of providing the user with controlled substances, sufficient to keep him or her comfortable by maintaining customary use.

(b) Any person who knowingly violates this section shall be punished by imprisonment pursuant to subdivision (h) of Section 1170 of the Penal Code, or in a county jail not exceeding one year, or by a fine not exceeding twenty thousand dollars ($20,000), or by both that fine and imprisonment.

(c) No provision of the amendments to this section enacted during the second year of the 1981–82 Regular Session shall be construed as expanding the scope of practice of a pharmacist.

(Amended by Stats. 2011, Ch. 15, Sec. 148. Effective April 4, 2011. Operative October 1, 2011, by Sec. 636 of Ch. 15, as amended by Stats. 2011, Ch. 39, Sec. 68.)

Recently the board adopted a precedential decision involving a pharmacist's corresponding responsibility. This decision follows this memorandum.

Meanwhile the board has co-hosted since June six one-day sessions on a pharmacist's role in dispensing controlled substances and using corresponding responsibility.

Collaboration with California's Medical Board will resume September 23 with the first prescribing task force meeting. President Weisser has also formed a similar subcommittee for the board which will meet October 7.

The board strongly encourages pharmacists to learn possible factors that can indicate a prescription, particularly for a controlled substance, may be problematic and how checking CURES can aid them in ascertaining whether a particular patient may be a "doctor" or "pharmacy" shopper.

BEFORE THE
BOARD OF PHARMACY
DEPARTMENT OF CONSUMER AFFAIRS
STATE OF CALIFORNIA

In the Matter of the Accusation Against**:** **PACIFICA PHARMACY CORP.;** **THANG TRAN** Respondents.	Case No. 3802 OAH No. 2011010644 PRECEDENTIAL DECISION NO. 2013-01

PRECEDENTIAL DECISION

(Government Code Section 11425.60(b))

The Board of Pharmacy, Department of Consumer Affairs, hereby designates as precedential the Decision, in its entirety, in the Matter of the Accusation Against Pacifica Pharmacy Corp. and Thang Tran (Board of Pharmacy Case No. 3802).

This precedential decision shall become effective on August 9, 2013.

DATED: August 5, 2013.

BOARD OF PHARMACY
DEPARTMENT OF CONSUMER AFFAIRS
STATE OF CALIFORNIA

By _____
STANLEY C. WEISSER
Board President

BEFORE THE
BOARD OF PHARMACY
DEPARTMENT OF CONSUMER AFFAIRS
STATE OF CALIFORNIA

In the Matter of the Accusation Against: **PACIFICA PHARMACY CORP** Original Pharmacy Permit PHY 46715 And **THANG Q. TRAN** Original Pharmacist License RPH 41172 Respondent.	Case No. 3802 OAH No. 2011010644

ORDER DENYING RECONSIDERATION

The Board of Pharmacy having read and considered respondent's petition for reconsideration of the board's decision effective June 3, 2012. NOW THEREFORE IT IS ORDERED that the petition for reconsideration is denied. The Board of Pharmacy's Decision and Order initially effective May 4, 2012 and thereafter stayed to June 3, 2012 is the Board of Pharmacy's final decision in this matter.

Date: May 31, 2012

BOARD OF PHARMACY
DEPARTMENT OF CONSUMER AFFAIRS
STATE OF CALIFORNIA

By _____
STANLEY C. WEISSER
Board President

BEFORE THE
BOARD OF PHARMACY
DEPARTMENT OF CONSUMER AFFAIRS
STATE OF CALIFORNIA

In the Matter of the Accusation Against: **PACIFICA PHARMACY CORP** Original Pharmacy Permit PHY 46715 And **THANG Q. TRAN** Original Pharmacist License RPH 41172 Respondent.	Case No. 3802 OAH No. 2011010644 ORDER GRANTING 30-DAY STAY OF EFFECTIVE DATE OF DECISION AND ORDER

The Board of Pharmacy's Decision in the above-entitled matter was issued on April 4, 2012 to become effective on May 4, 2012. On April 10, 2012, the Board received Respondent's request for a 30-day stay to file a petition for reconsideration of the Board's Decision adopting the Proposed Decision issued by James Ahler, Administrative Law Judge.

In accordance with the provisions of Section 11521(a) of the Government Code, for the sole purpose of permitting the respondent to file a petition for reconsideration and good cause appearing therefor,

IT IS HEREBY ORDERED that the effective date of the Decision and Order in the above-entitled matter be stayed until June 3, 2012.

BOARD OF PHARMACY
DEPARTMENT OF CONSUMER AFFAIRS
STATE OF CALIFORNIA

By _____
STANLEY C. WEISSER
Board President

BEFORE THE
BOARD OF PHARMACY
DEPARTMENT OF CONSUMER AFFAIRS
STATE OF CALIFORNIA

In the Matter of the Accusation Against: **PACIFICA PHARMACY CORP** Original Pharmacy Permit PHY 46715 And **THANG Q. TRAN** Original Pharmacist License No. RPH 41172 Respondent.	Case No. 3802 OAH NO.: 2011010644

DECISION AND ORDER

The attached Proposed Decision of the Administrative Law Judge is hereby adopted by the Board of Pharmacy, Department of Consumer Affairs, as its Decision in this matter.

This decision shall become effective on May 4, 2012.

It is so ORDERED on April 4, 2012.

BOARD OF PHARMACY
DEPARTMENT OF CONSUMER AFFAIRS
STATE OF CALIFORNIA

By

STANLEY C. WEISSER
Board President

BEFORE THE
BOARD OF PHARMACY
DEPARTMENT OF CONSUMER AFFAIRS
STATE OF CALIFORNIA

In the Matter of the Accusation Against: **PACIFICA PHARMACY CORP** Original Pharmacy Permit PHY 46715 and **THANG Q. TRAN,** Original Pharmacist License No. RPH 41172, Respondents.	Case No. 3802 OAH No. 2011010644

PROPOSED DECISION

James Ahler, Administrative Law Judge, Office of Administrative Hearings, State of California, heard this matter on January 23, 24, 25 and 31, and on February 1, 2012, in San Diego, California.

Marichelle S. Tahimic, Deputy Attorney General, Department of Justice, State of California, represented Complainant Virginia K. Herold, Executive Officer, Board of Pharmacy, Department of Consumer Affairs, State of California.

Armond Marcarian, Attorney at Law, represented Respondents Pacifica Pharmacy Corp and Thang Q. Tran. Respondent Tran was present each day of the disciplinary hearing.

PRELIMINARY STATEMENT

Thang Q. Tran has been licensed as a pharmacist in California since 1988. Since August 2004 Pharmacist Tran has owned and operated Pacifica Pharmacy, a community retail pharmacy in Huntington Beach.

Complainant asserted that the inspection of Pacifica Pharmacy disclosed expired drugs in its inventory, missing information on pre-filled medication containers, and a discrepancy in the inventory. Complainant also asserted that Respondents Pacifica Pharmacy

and Pharmacist Tran dispensed numerous prescriptions for controlled substances without determining whether any prescription was written for a legitimate medical purpose.

Pacifica Pharmacy and Pharmacist Tran denied the allegations. Pacifica Pharmacy asserted that a pharmacy cannot be liable under the corresponding responsibility statute because that statute applies only to a "pharmacist who fills the prescription." Pacifica Pharmacy claimed that the remaining allegations against are *de minimis* and unworthy of discipline. Respondents argued that the clear and convincing evidence did not establish that that Pharmacist Tran *knowingly* violated the corresponding responsibility statute, or that Pacifica Pharmacy dispensed any controlled substance for anything other than a legitimate medical purpose, or that Pharmacist Tran personally filled any of the prescriptions at issue. Furthermore, Respondents asserted that Pharmacist Tran and Pacifica Pharmacy stopped filling the prescriptions that Dr. T. wrote when notice was given that the prescriptions might not be for a legitimate medical purpose and promptly took other effective corrective action.

The many red flags surrounding the prescriptions written for OxyContin, Opana, Dilaudid, and Alprazolam by Dr. T., an osteopath whose medical office was located many miles away from Pacifica Pharmacy, required Pharmacist Tran and Pacifica Pharmacy to make some inquiry into whether the prescriptions had been written for legitimate medical purposes. The clear and convincing evidence established that Pharmacist Tran and Pacifica Pharmacy made no inquiry of Dr. T. or her patients before dispensing controlled substances. Respondents produced no compelling evidence in explanation, mitigation, or rehabilitation.

On this record, the only measure of discipline that will protect the public is the outright revocation of Pharmacist Tran's pharmacist license and Pacifica Pharmacy's pharmacy permit.

FACTUAL FINDINGS

Jurisdictional Matters

1. On January 3, 2012, Complainant Patricia F. Harris, the Board of Pharmacy's Executive Officer, signed the Second Amended Accusation in Case No. 3892, which was served thereafter on Respondent Pacifica Pharmacy Corp (Pacifica Pharmacy), Respondent Thang Q. Tran (Pharmacist Tran), and their attorney. New allegations were deemed controverted by Government Code section 11507.

The record in the disciplinary hearing was opened on January 23, 2012; the parties stipulated that the record in this disciplinary proceeding should be sealed; rulings were issued on several motions in limine; and an opening statement was given on Complainant's behalf. On January 23, 24, 25 and 31, 2012, official notice was taken; sworn testimony was received; and documentary evidence was produced. On February 1, 2012, closing arguments were given; the record was closed; and the matter was submitted.

The Parties' Contentions

2. The Second Amended Accusation alleged that Pacifica Pharmacy and Pharmacist Tran failed to comply with corresponding responsibility requirements (first cause for discipline); that Pacifica Pharmacy failed to maintain a current inventory (second cause for discipline); that Pacifica Pharmacy failed to provide a description of some medications as required by law (third cause for discipline); that Pacifica Pharmacy maintained expired drugs in its inventory (fourth cause for discipline); that Pacifica Pharmacy and Pharmacist Tran excessively furnished controlled substances from March 2008 through January 2010 (fifth cause for discipline); that Pharmacist Tran's dispensing practices involved gross negligence (sixth cause for discipline); that Pharmacist Tran's dispensing practices involved negligence (seventh cause for discipline); and that Pharmacist Tran engaged in general unprofessional conduct (eighth cause for discipline). Complainant sought the revocation of Pacifica Pharmacy's permit and Pharmacist Tran's license.

3. Respondents denied all allegations. Respondents asserted numerous factual and legal defenses, but at the heart of their argument was their assertion that Complainant had the obligation to establish that any prescription for any controlled substances at issue was not written for a legitimate medical purpose and failed to present one shred of evidence to establish that any prescription for a controlled substance was written for anything other than a legitimate medical purpose. Pacifica Pharmacy asserted the right to a dismissal. Pharmacist Tran argued that if discipline was imposed, nothing more than a letter of public reprimand should be issued.

Pacifica Pharmacy

4. On August 17, 2004, the Board of Pharmacy issued Original Permit No. PHY 46715 to Pacifica Pharmacy Corp. Thang Tran, RPH 41172, is Pacifica Pharmacy's President, Vice President, and Secretary. Pharmacist Tran has been Pacifica Pharmacy's Pharmacist-in-Charge since August 17, 2004.

There is no history of any prior discipline having been sought against Pacifica Pharmacy's permit.

5. Pacifica Pharmacy is a community pharmacy situated on Beach Boulevard in Huntington Beach. There are many other community pharmacies in Pacifica's trade area, some of which are small pharmacies, like Pacifica Pharmacy, and some of which are large chain drug stores. About 75 percent of Pacifica Pharmacy's customers are Vietnamese. Delivery service is provided to some of Pacifica Pharmacy's customers, and Pharmacist Tran personally provides delivery service after Pacifica Pharmacy's normal business hours.

Pacifica Pharmacy is approximately 500 square feet. It occupies a ground floor suite of a small office complex. A parking lot surrounds the complex where Pacifica Pharmacy is located, but only the parking lot area immediately in front of the pharmacy is visible from inside the pharmacy. Pacifica Pharmacy's interior includes a customer waiting area, which is

separated by a partition from a back area where prescriptions are processed and filled and where drugs and medications are stored.

Besides Pharmacist Tran, Pacifica Pharmacy employs four or five other persons, including a substitute pharmacist. Pacifica Pharmacy primarily sells directly to customers, but it also mails or ships some prescriptions to customers living outside Pacifica Pharmacy's immediate trade area.

Thang Q. Tran

6. On March 17, 1988, the Board issued Original Pharmacist License No. RPH 41172 to Thang Q. Tran.

There is no history of any prior discipline having been sought against Pharmacist Tran's license.

7. Pharmacist Tran has been licensed for more than 23 years. He has operated Pacifica Pharmacy for the past seven years. Pharmacist Tran is married to Khue Quan, D.D.S., a licensed dentist who is employed on a part-time basis by her mother, also a licensed dentist. Pharmacist Tran is a loving father to his 17-year-old stepdaughter (Ms. Quan's child from a previous relationship) and his and his wife's eight-year-old daughter.

8. Pharmacist Tran is well respected by his wife and employees. Dr. Quan described Pharmacist Tran as a generous, kind and loyal husband who is fair and honest. Dr. Quan mentioned that her husband does not understand others very well and does not express himself well. According to Dr. Quan, the disciplinary process has been very stressful on Pharmacist Tran and has resulted in many family problems.

A Pacifica Pharmacy employee, Dzung Cleary, described Pharmacist Tran as a good person who is very concerned about his staff and customers. Pharmacist Tran is well respected by his customers, some of whom travel many miles to trade at Pacifica Pharmacy. To show their gratitude and respect for the exemplary professional care they are given, many customers bring baked goods and desserts to the pharmacy during the holiday season.

The Citizen Complaint

9. BS is a concerned citizen who has no law enforcement experience. BS is a financial planner who maintains an upstairs office in the Beach Boulevard office complex where Pacifica Pharmacy is located. BS has a view of a portion of the building complex's parking lot from his office.

In November and December 2009, BS heard vehicles entering and leaving the parking lot and loud voices. On more than one occasion, BS looked out his window and observed cars parked randomly about the parking lot. He saw individuals going from the parking lot into and out of the area where Pacifica Pharmacy was located. The persons moving about

the parking lot were relatively young – in their 20s and 30s – and they walked between the cars that were parked there. On one occasion, he observed cash spread across the dashboard of a vehicle below his office; a man sitting inside that vehicle interacted with others who approached the vehicle from other areas of the parking lot. The abnormal activity in the parking lot continued for weeks. On at least one occasion, BS saw money and prescriptions changing hands in the parking lot.

BS maintained a computer log in which he documented his observations. BS contacted the building complex manager and the Huntington Beach Police Department concerning the abnormal activity in the parking lot, but he did not contact Pacifica Pharmacy. When BS's concerns were not satisfactorily addressed by the building manager or local law enforcement, BS filed a complaint with the Board of Pharmacy.

The January 13, 2010, Inspection

10. On January 13, 2010, Joseph Wong, Pharm.D. (Inspector Wong), a Pharmacy Board Inspector, conducted an inspection of Pacifica Pharmacy. The inspection was the result of BS's complaint. Inspector Wong was accompanied on the inspection by three other Pharmacy Board inspectors.

11. Investigator Wong received a doctor of pharmacy degree from the University of the Pacific School of Pharmacy in 2000. The Board of Pharmacy licensed Inspector Wong as a pharmacist in 2001. Inspector Wong worked as a pharmacist intern and then as a staff pharmacist and a pharmacist-in-charge at Walgreens outlets in Sacramento, Roseville, and Rockland before he began his employment with Board in 2006.

Inspector Wong is currently assigned to the Board's drug diversion and fraud team, an assignment he has held for the past four years. Investigator Wong estimated that he has participated in over 300 inspections, a few of which involved corresponding responsibility issues.

12. Before the inspection at Pacifica Pharmacy, Investigator Wong requested a report from Controlled Substance Utilization Review and Evaluation System (CURES)[1], a database maintained by the Department of Justice. Investigator Wong believed that improper dispensing practices might be occurring at Pacifica Pharmacy based on an inference he drew from BS's complaint and information made known to him by the Drug Enforcement Agency (DEA), which was investigating Dr. T. Inspector Wong requested a CURES report for prescriptions dispensed[2] by Pacifica Pharmacy that had been written by Dr. T. and another physician.

Pacifica Pharmacy submitted the data that was contained in the CURES report that Investigator Wong obtained and reviewed, and nothing established that Pacifica Pharmacy improperly submitted that data or that the CURES report that was provided to Inspector Wong contained any data that had not been provided by Pacifica Pharmacy.

Through the CURES report, Inspector Wong learned that Pacifica Pharmacy dispensed 1,844 prescriptions written by Dr. T. from January 1, 2009, through January 5,

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[1] Notice is taken that California doctors and pharmacies must report to the California Department of Justice every schedule II, III and IV drug prescription that is written or dispensed within seven days. Pharmacies are required to do so under Health and Safety Code section 11165, subdivision (d). The information provided establishes the CURES database, which includes information about the drug dispensed, drug quantity and strength, patient name, address, prescriber name, and prescriber authorization number including DEA number and prescription number.

The Attorney General's Office provides authorized persons and agencies with Patient Activity Reports that reflect all controlled substances dispensed to an individual. These reports may be sued by doctors and pharmacies to identify persons attempting to collect multiple narcotics prescriptions from many different doctors. There was no real-time retrieval system before 2011, and pharmacies and others seeking information maintained by CURES before 2011 received data that was usually one to two weeks old.

[2] The term "dispense" is defined in Health and Safety Code section 11010 as follows:

> "Dispense" means to deliver a controlled substance to an ultimate user . . . pursuant to the lawful order of a practitioner, including the prescribing, furnishing, packaging, labeling, or compounding necessary to prepare the substance for that delivery.

2010.[3] The prescriptions were written for a variety of drugs including, but not limited to, OxyContin[4], Opana[5], Hydromorphone (Dilaudid)[6], and Alprazolam.[7] According to Inspector

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[3] Notice is taken that Dr. T maintained medical offices in Rowland Heights, California, an unincorporated area in Los Angeles County. The distance from Dr. T's office in Rowland Heights to the Pacifica Pharmacy in Huntington Beach was about 24 miles, passing by or through the cities of Diamond Bar, La Habra, Fullerton, Anaheim, Orange, Santa Ana and Fountain Valley along the way.

[4] OxyContin is a brand name for oxycodone, a Schedule II controlled substance under Health and Safety Code section 11055 and a dangerous drug under Business and Professions Code section 4022. OxyContin is used to treat moderate to severe pain that is expected to last for an extended period of time. OxyContin is available in 10 mg, 20 mg, 40 mg, and 80 mg tablets. Some individuals abuse OxyContin for the euphoric effect it produces - an effect that is said to be similar to that associated with heroin use.

[5] Opana is a brand name for oxycodone, a Schedule II controlled substance and a dangerous drug. Opana is used to treat moderate to severe pain that is not expected to last for an extended period of time and to treat breakthrough pain. Opana is available as 5 mg and 10 mg tablets.

Opana ER is an extended-release form of oxycodone that is available in tablets in strengths of 5 mg, 10 mg, 20 mg, 30 mg, and 40 mg. Opana ER is prescribed for pain that is expected to last for an extended period of time.

[6] Hydromorphone, sold under the brand name Dilaudid, is a Schedule II controlled substance under Health and Safety Code section 11055 and a dangerous drug under Business and Professions Code section 4022. Hydromorphone is used as an alternative to morphine to treat moderate to severe pain and as a second- or third-line narcotic cough suppressant. Dilaudid comes in 8 mg tablets.

[7] Alprazolam, sold under the brand name Xanax, is a Schedule IV controlled substance under Health and Safety Code section 11057 and a dangerous drug under Business and Professions Code section 4022. Alprazolam is used to treat anxiety disorders and panic disorder. Alprazolam is in a class of medications called benzodiazepines. Alprazolam comes as a tablet, an extended-release tablet, and an orally disintegrating tablet. The tablet and orally disintegrating table usually are taken two to four times a day. The extended-release tablet is taken once daily, usually in the morning. Alprazolam may heighten the euphoric effect resulting from the use of an oxycodone.

Wong, OxyContin 80 mg, Norco[8], and Alprazolam are popular in the drug culture and are diverted and abused. According to Investigator Wong, OxyContin has a value of $1 per mg on the black market, so that the cost of an OxyContin 80 mg tablet on the street is $80.

Before the January 13, 2010, inspection, Investigator Wong decided to investigate the OxyContin 80 mg prescriptions written by Dr. T. and that had been dispensed by Pacifica Pharmacy. Investigator Wong did not advise Pharmacist Tran about the focus of his investigation when he conducted the inspection on January 13, 2010.

13. On January 13, 2010, the Board of Pharmacy investigators arrived at Pacifica Pharmacy shortly after it opened. The investigators spent most of the day at the pharmacy. They reviewed pharmacy records, CURES data, examined the prescription drugs on back shelves, looked at medication containers, conducted a drug inventory, and evaluated security. Investigator Wong spoke with Pharmacist Tran, the pharmacist-in-charge.

At the conclusion of the inspection, Investigator Wong requested that Pacifica Pharmacy provide further documentation including the original prescriptions for brand and generic OxyContin 80 mg from March 25, 2008, through January 13, 2010; drug utilization review reports for OxyContin 80 mg; drug utilization reports for several prescribers including Dr. T; patient profiles for 18 patients that Investigator Wong selected not at random; various invoices; and a summary for all dangerous drugs/controlled substances that were dispensed by Pacifica Pharmacy from March 25, 2008, to January 13, 2010.

14. During the inspection, investigators determined that there were some expired drugs on inventory shelves. Pre-filled containers were found that did not include the drug name, lot number, expiration date, or the name of the drug manufacturer. Investigators believed these matters were in violation of Business and Professions Code section 4342 and Business and Professions Code section 4976. In addition, Pacifica Pharmacy failed to maintain a current inventory and the pharmacy could not account for an overage of approximately 782 dosage units of OxyContin 80 mg and 93 dosage units of Oxycodone 80 mg for the period extending from March 25, 2008, to January 13, 2010, in violation of Business and Professions Code section 4301, subdivision (j), in conjunction with Business and Professions Code section 4081, subdivision (a) and California Code of Regulations, title 16, section 17189.

15. Inspector Wong and Investigator Venegas spoke with Pharmacist Tran at the conclusion of the inspection. According to Investigator Wong, as he corroborated in his report of inspection, Pharmacist Tran represented that he obtained a driver's license of

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[8] Norco is a schedule II controlled substance under Health and Safety Code section 11055 and a dangerous drug under Business and Professions Code section 4022. Norco contains a combination of acetaminophen and hydrocodone, a narcotic pain reliever. Acetaminophen is a less potent pain reliever that increases the effects of hydrocodone. Norco is used to relieve moderate to severe pain.

individuals who dropped off prescriptions; that he sometimes checked doctor's licenses and National Provider Identifier numbers; that he sometimes contacted a prescriber to verify the prescription; that he evaluated pain patients by observing the diagnosis written on some of the prescriptions; that he documented early refills in patient profiles; that his "understanding of legitimate rxs was limited to verifying rx with md" and "no further evaluation of patient and history to determine legitimate"; that he stopped filling prescriptions written by Dr. F[ ] and Dr. G[ ] the month before the inspection because he believed that their prescriptions might not be written for legitimate medical purposes; that he "does not understand exactly what corresponding responsibility is"; that he "does not understand the prescribing practices of Dr. T[ ] (have not spoken personally with MD) or Dr F[ ], etc."; that he did not ask about patient diagnosis or other medical information unless that information was volunteered by the patient; that he felt that asking for additional information from patients infringed upon patient privacy; that he did not know about the use of CURES reports for the purpose of evaluating patient therapy and that he was aware only of his responsibility to transmit data; that he did not have issues filling prescriptions for patients who lived some distance from the pharmacy; that he did not have issues filling prescriptions written by physicians whose offices were located some distance from the pharmacy; that he did not have issues filling prescriptions for patients who lived some distance from the physician who prescribed controlled substances; that approximately 5 percent of the prescriptions Pacifica Pharmacy filled were written for OxyContin; and that Pacifica Pharmacy's primary source of record-keeping data was the computer.

During Inspector Wong and Inspector Venegas' interview with Pharmacist Tran, Pharmacist Tran did not claim that any other pharmacist at Pacifica Pharmacy filled Dr. T.'s prescriptions, or that Dr. T.'s patients did not pick up the prescriptions for controlled substances that were filled at Pacifica Pharmacy, or that the expired drugs found on the back shelves were being stored there and were not for sale, or that there was some good reason that auxiliary labels, known as backers, were not affixed to containers with medications.

16. Investigators took several photographs that depicted expired medications found on the back shelves where inventory was maintained and several photographs of unlabelled and/or improperly labeled containers of medications.

17. Inspector Wong prepared an Inspection Report that related to the January 13, 2010, inspection. That report contained the name and address of the pharmacy, the pharmacy permit number, the hours the pharmacy was open, and the date of the most recent DEA inventory. The report contained a summary of the conversation with Pharmacist Tran as set forth in Factual Finding 15. Investigator Wong provided Pharmacist Tran with a notice of non-compliance that directed Pacifica Pharmacy to take certain corrective action:

1. Required tablet descriptions were to be affixed to prescription labels, and auxiliary labels containing required information were to be affixed to prescription containers;

2. Pharmacist-in-charge Tran was directed to review and remove all outdated drug stock and dispose of expired drug stock in an appropriate manner.

Inspector Wong's Evaluation of Data

18. Inspector Wong evaluated the data contained in various CURES reports and the materials and data provided by Pacifica Pharmacy. His review of that data established:

A. Drug Usage Reports for OxyContin 80 from 2008 to January 2010 revealed that the majority of the prescriptions filled by Pacifica Pharmacy were for 80 mg strength and that several prescribers, including Dr. T., wrote those prescriptions.

B. From January 1, 2009, to January 6, 2010, Dr. T. wrote 11,486 controlled substance prescriptions, 917 of which were for OxyContin 80 mg, 654 of which were for Opana ER 40 mg, and 2,671 of which were for Alprazolam 2 mg.

C. Pacifica Pharmacy filled 1,844 of Dr. T.'s 11,486 controlled substance prescriptions, about three times more than the next highest number filled in Pacifica Pharmacy's trade area.

D. From March 25, 2008 to January 13, 2010, Pacifica Pharmacy dispensed more than 81,000 prescriptions. Controlled substances accounted for 14,063, or 17 percent of the prescriptions; OxyContin 80 mg accounted for 42 percent of all Schedule II controlled substance prescriptions. Pacifica Pharmacy filled more OxyContin 80 mg prescriptions than were filled by surrounding pharmacies – 803 OxyContin 80 mg prescriptions were filled by Pacifica Pharmacy; 389 were filled by Medical Towers Pharmacy; 281 were filled by Walgreens #5771; 129 were filled by CVS #8850; 38 were filled by CVS #6782, 21 were filled by Sav On #6124, and even fewer were filled by other pharmacies.

E. Of the 18 Pacifica Pharmacy patients that Inspector Wong selected for review because he observed that those patients presented OxyContin 80 mg prescriptions written by Dr. T., 15 patients had traveled 35 or more miles from

their home to see Dr. T. and 15 of them lived 20 miles or more from Pacifica Pharmacy.

F. Dr. T.'s prescribing practices, based on a review of some prescriptions filled by Pacifica Pharmacy, showed duplication in therapy (e.g., OxyContin 80 mg. and Opana ER were prescribed in combination and were to be taken at the same time) and a combination of several drugs was often prescribed (e.g., the combination of Alprazolam and Opana or the combination of Alprazolam, hydromorphone and OxyContin).

G. Many of Dr. T.'s patients to whom OxyContin was dispensed paid in cash.

Joseph Wong's Expert Testimony

19. Based upon his education, training, experience, investigations, conversation with Dr. Tran, and review of the CURES reports and other data, Investigator Wong expressed several expert opinions.

Standards of Care

20. The standard of care requires a pharmacist to use professional judgment when dispensing controlled substances, a duty that entails more than filling a prescription. A pharmacist must evaluate the prescription to make certain it is valid; once it is concluded that the prescription is legitimate on its face, the pharmacist must evaluate the patient, the prescriber, and the medication therapy. If the patient is unknown, the pharmacist may insist that the patient produce valid identification. The pharmacist should be cognizant of the patient's age, demeanor, and the distance from the patient's home to the prescriber's office and to the pharmacy. With respect to the prescriber, the pharmacist should determine whether the prescriber is licensed by the DEA and whether the prescriber holds a medical specialty. In evaluating the medication therapy, the pharmacist should determine whether the medications prescribed correlate to the patient's diagnosis, as well as observing the length of the therapy, whether there are any adverse drug combinations, and whether there are any contraindications for use.

In meeting the corresponding responsibility obligation, a pharmacist is to be alert for "warning signs" or "red flags" that indicate that the prescription may not have been issued for a legitimate medical purpose. These warning signs include irregularities on the face of the prescription itself, nervous patient demeanor, cash payments, traveling long distances from the patient's home to the prescriber's office or pharmacy, irregularities in the prescriber's qualifications in relation to the medication(s) prescribed, prescriptions that are written outside of the prescriber's medical specialty, and the prescribing of medications that have no logical connection to the patient's diagnosis or course of treatment.

Whenever a pharmacist believes that a prescription may not have been written for a legitimate medical purpose, the pharmacist must inquire; when the results of a reasonable inquiry do not overcome the pharmacist's concern about a prescription having been written for a legitimate medical purpose, the pharmacist must not fill the prescription.

Pacifica Pharmacy and Pharmacist Tran's Deviations from the Standard of Care

21. Pacifica Pharmacy and Pharmacist Tran failed to meet the standard of care in that Pharmacist Tran never once contacted Dr. T. to determine if her prescriptions were written for legitimate medical purposes. There were a sufficient number of red flags surrounding to Dr. T.'s prescribing practices, particularly related to OxyContin 80 mg, and a sufficient number of red flags related to the patients who presented the OxyContin 80 mg prescriptions written by Dr. T. (patient youth, cash payment, the distance they lived from Dr. T.'s office and the pharmacy, a number of patients lived at the same address, and the request for early refills) that it was unreasonable for Pacifica Pharmacy and Pharmacist Tran to fill all of the prescriptions that were presented. Pharmacist Tran did not make any inquiry on his own behalf or in his role as pharmacist-in-charge.

22. On cross-examination, Inspector Wong conceded that he had investigated only two or three other corresponding responsibility cases before this one; that this case was the first corresponding responsibility case in which he testified; that CURES did not provide pharmacists with real-time information during the period covered by the Second Amended Accusation; that he never spoke with Dr. T. to find out why she prescribed the medications that she had prescribed; that he did not make any effort to determine if Dr. T. had a medical specialty; that he had no idea whether Dr. T. was a pain management specialist; that he did not speak with the DEA agents who were investigating Dr. T.; that prescribing OxyContin and Dilaudid in combination was not against the law; that no community pharmacist ever sees the patient chart that is maintained by a prescriber; that prescribers may be difficult to contact; that he was not aware of any prescription Pacifica Pharmacy filled that was invalid on its face; that the overage of OxyContin 80 tablets discovered during the inventory was less than one-half of a one percent; that an interim suspension order was not issued against either Pacifica Pharmacy or Pharmacist Tran following his investigation; and that pharmacists are required to fill valid prescriptions.

The cross-examination established that Inspector Wong's investigation could have been more thorough, as is always the case. The cross-examination did not establish that Inspector Wong's testimony about the standard of care and the conclusions he reached was unclear or less than convincing.

Dr. Fujimoto's Expert Testimony

23. Darlene Fujimoto, Pharm.D., described herself as a regulatory/compliance pharmacist. She received her doctorate of pharmacy degree from the University of Southern California. She became licensed as a pharmacist in California in 1984. Dr. Fujimoto

subsequently completed a residency in Administrative/Ambulatory Care Pharmacy Practice at the University of California, Irvine.

Dr. Fujimoto was employed by PharMerica as a consultant from July 1986 through October 1998; as Director of Medical Liaisons from November 1998 through April 2000; by Purdue Pharma[9] from 1998 through 2003, where she worked and trained others in the areas of pain management, anesthesiology and the use of controlled substances; by Biogen Idec Pharmaceuticals from 2003 through 2008, where she managed a grant program and served on an Oncology Medical Product Review Committee; and as Assistant Chief, Pharmacy Regulatory/Compliance & Accreditation, Pharmacy Department, UCSD Health Systems, from 2009 to the present. Dr. Fujimoto has an interest in pain management and in the use of opioids. She serves on a safe medication practices committee. Dr. Fujimoto has provided professional education to dispensing pharmacists in the areas of appropriate pain medication and the use of opioids.

Dr. Fujimoto was a member of the California Board of Pharmacy from 1992 through 2001; she served as Board of Pharmacy President from 1996 through 1997. In her 25-plus year career in pharmacy, Dr. Fujimoto spent no more than seven years actually dispensing medications. Dr. Fujimoto had never worked as a pharmacist in a retail setting. Her interaction with patients has been very limited.

Dr. Fujimoto testified that as a result of her education, training, community rotation, and vocational experiences, she knew that commonly diverted prescription drugs included OxyContin, Opana, Dilaudid, benzodiazepines, and muscle relaxants.

Despite her relative inexperience as a dispensing pharmacist, Dr. Fujimoto's education, continuing education, training, employment history and service with the Board of Pharmacy established that she was qualified to provide expert testimony regarding various standards of care incumbent upon dispensing pharmacists in community pharmacies during the period referred to in the Second Amended Accusation.

24. Complainant contacted Dr. Fujimoto in early December 2011 to obtain expert opinion regarding whether Pharmacist Tran met applicable standards of care. Dr. Fujimoto defined the phrase "standard of care" as being what a reasonable and prudent pharmacist would do under the same or similar circumstances that existed at Pacifica Pharmacy during the period referred to in the Second Amended Accusation. In reaching her opinions, Dr. Fujimoto reviewed the Second Amended Accusation, Investigator Wong's reports, CURES data, patient drug history data, and copies of the prescriptions.

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[9] Purdue Pharma is a privately held pharmaceutical company that produces, among other medications, Dilaudid and OxyContin. According to Dr. Fujimoto, OxyContin is currently available in 10, 20, 40 and 80 mg tablets. A 160 mg OxyContin tablet was once available, but it was removed it from the market due to its potential for abuse.

25. With regard to the prescription of OxyContin 80 mg, Dr. Fujimoto testified that 80 mg was not "a startup dose" and that OxyContin 80 mg should not be prescribed for use by an opioid naïve patient. A patient who was prescribed OxyContin for the first time should not be prescribed more than one OxyContin 10 mg tablet every 12 hours. A patient who becomes tolerant of OxyContin may be prescribed much higher doses, and there is no upper limit. Dr. Fujimoto implied that when a new patient presents with a prescription for OxyContin 80mg, some inquiry should be made to determine if that is an appropriate dosage.

26. A prescription that calls for a patient to take a combination of OxyContin and Opana ER (extended release) at the same time is very concerning because each medication is a form of oxycodone whose effects are designed to last for an extended period of time; these are potentially dangerous, habit forming drug; these are drugs that are diverted and abused. A prescription that directs that both medications be taken at the same time may involve a duplication of medication therapy and there is a potential for diversion that requires inquiry.

Standards of Care

27. While the responsibility for the proper prescribing of a controlled substance is upon the prescriber, a corresponding responsibility rests with the pharmacist who dispenses a prescription; in other words, a pharmacist does not meet the standard of care simply by selecting the proper pharmaceutical product, accurately labeling that product for use, and counseling the patient. Reasonable inquiry is required.

When a pharmacist is presented with a prescription, the pharmacist must first look at the four corners of the prescription to determine whether the prescription is valid. The prescription must be on security paper; it must be complete; and it must be signed. Nothing should appear on the face of the prescription that makes it questionable. If something appears wrong with the prescription, a pharmacist must call the prescriber to verify that the prescriber has issued the prescription as set forth on the face of the prescription.

After the pharmacist determines that the prescription is valid on its face, the pharmacist should verify that the person presenting the prescription is the patient or the patient's legitimate representative. If the patient is new to the pharmacy, the standard of care requires that some evidence be produced to show that the person picking up the prescription is the patient or is entitled to do so on the patient's behalf. It is helpful for the pharmacist at this point to observe where the patient lives and where the prescriber's office is located, as these matters may be red flags that indicate that a prescription may not have been issued for a legitimate medical purpose. It is also helpful to determine the patient's age, because some medications may not be age appropriate and because a patient's relative youth may suggest the possibility of misuse or diversion.

Before dispensing the medication, a pharmacist or a staff member should find out whether the patient is taking other medications to ensure that there is no allergy to the new medication and that there will not be an adverse drug interaction. With an established patient, the relevant information is probably in the patient profile maintained by the

pharmacy. Direct inquiry may be required of a new patient. The contact with the patient or the patient's representative may be helpful in determining the patient's diagnosis and/or the condition for which the prescription was written.

The pharmacist should evaluate whether the drug therapy is appropriate. In some instances, especially where large amounts of narcotics are being prescribed, the pharmacist should know something about the prescriber's medical practice; the pharmacist should make inquiry about that if the prescriber is unknown. The pharmacist must look at the number and kinds of medications that have been prescribed to determine whether additional inquiry is required to make the determination that the prescription is for a legitimate medical purpose. There should be some logical relationship between the drugs that have been prescribed and the condition that is being treated.

There are a number of warning signs – red flags – that should put a reasonable and prudent dispensing pharmacist on notice that a prescription may not have been issued for a legitimate medical purpose. For example, there may be missing information on the script (e.g. a DEA number); the script may be written for an unusually large quantity of drugs; the script(s) may be written for medications that address the same medical problem and appear unreasonably duplicative; the same combination of drugs may be written by the same prescriber for a number of different patients; concern exists when a prescriber starts a patient on OxyContin 80 mg because that is not a usual starting dose; the prescriber's office or the pharmacy may be located a long distance from the patient's home; patients living at the same address who present prescriptions for the same drugs is a cause of concern; young patients presenting prescriptions for chronic pain medications without any explanation raises cause for concern; large cash payments is a red flag; and patients who requests early refills without any good reason is problematic.

The standard of care requires a pharmacist to consider these matters before dispensing a controlled substance. At some point, when reasonable concerns reach a critical mass, the pharmacist must not fill the prescription without making inquiry and resolving those matters.

28. A dispensing pharmacist must verify every suspicious prescription. A pharmacist meets this duty when he or she contacts the prescriber and confirms that the prescription has been written for a legitimate medical purpose; however, accomplishing that mission is often easier said than done. Physicians are busy; they can be difficult to locate; some prescribers do not regard pharmacist verifications as high priority tasks; and physicians can be defensive when confronted with questions about their prescribing practices. The duty of verification may be met in some instances by making inquiry of the patient, who may be able to explain the underlying medical history, the diagnosis, what the patient was told by the prescriber, and/or other relevant matters. The duty of verification in the face of numerous red flags is not met by doing nothing.

Pharmacist Tran's Violations from the Standard of Care

29. Dr. Fujimoto concluded that the evidence she reviewed established that Pharmacist Tran violated the corresponding responsibility statute and engaged in gross negligence during the period in question. She believed that Pharmacist Tran ignored many red flags including Dr. T.'s frequent prescription of OxyContin 80; Dr. T. prescribing OxyContin 80 and Opana ER in combination at the same time; Dr. T. prescribing the same combination of drugs for a number of different patients, including identical prescriptions written for two siblings who were two years apart and living at the same address (chronic pain patients have prescriptions that are usually unique); the relative youth of the patients who presented the OxyContin 80 and other opioid prescriptions; the cash payments for controlled substances in many instances; the distance the patients lived from Dr. T.'s office and from Pacifica Pharmacy; Pharmacist Tran's unfamiliarity with Dr. T.'s prescribing practices; and Pharmacist Tran's failure to contact Dr. T.

30. On cross-examination, Dr. Fujimoto conceded, among other matters, that a prescriber may deviate from a box warning related to a medication when the prescriber determines that doing so is appropriate; that high daily dosages of OxyContin may be required to control chronic pain, and there is no ceiling on such dosages; that it is not uncommon for a prescriber to issue a 30-day supply of sleeping pills; and that the standard of care does not require a pharmacist to contact a prescriber in every instance a controlled substance is prescribed. The cross-examination did not establish that Dr. Fujimoto's testimony concerning the standards of care and the deviations she found was unclear or less than convincing.

Pharmacist Bobby Ho's Testimony

31. Respondents called Bobby Ho, a registered pharmacist who works at a Walgreens pharmacy. Pharmacist Ho has been licensed as a pharmacist for 14 years. The Walgreens pharmacy where Pharmacist Ho works is located about one-quarter mile from Pacifica Pharmacy.

Pharmacist Ho responded to a letter written by Investigator Wong in May 2010 that inquired about Walgreens' prescribing practices and requested the production of certain records. The letter contained a hypothetical question that asked whether a prescription would be filled that was written for 60 tablets of OxyContin 80 mg by a doctor with offices in Los Angeles for a patient who lived in Orange County. Pharmacist Ho, with the assistance of Walgreens' general counsel, wrote:

> All prescriptions are filled in compliance with California and Federal regulations to ensure medications dispensed are pursuant to a valid prescription where in the professional judgment and good faith dispensing practices there is a true doctor-patient relationship. In addition, if the patient is "not known" to the pharmacy,

> the ID of the patient would be checked to help ensure there is no fraud – forgery – diversion.

The written answer Pharmacist Ho provided to the survey question focused on the existence of a "true doctor-patient relationship" as the touchstone for determining whether a prescription was written for a legitimate medical purpose.

Pharmacist Ho's testimony about what actually happened at Walgreens was far more enlightening. Pharmacist Ho testified that it was his practice and his outlet's practice to verify a prescription for OxyContin 80 mg by calling the prescriber's office, even if a patient diagnosis was set forth on the prescription itself. If a group of patients came in at the same time with prescriptions written for the same medications, Pharmacist Ho would call the prescriber's office to verify that each prescription was issued for a legitimate purpose.

With regard to Dr. T., Pharmacist Ho said that he became very wary of her prescribing practices and that he and his Walgreens pharmacy colleagues stopped filling prescriptions that Dr. T. wrote because of the relative youth of the patients who presented those prescriptions and because the prescriptions for OxyContin 80 were written in combination for other drugs that raised too many questions about whether the prescriptions were written for legitimate medical purposes.

Dr. Johnson's Expert Testimony

32. Shannon John Johnson, Pharm.D., received his doctor of pharmacy degree from the University of Pacific School of Pharmacy in 1998. He became licensed by the Board of Pharmacy in 1998. He became a certified geriatric pharmacist in 2005.

Dr. Johnson was called to testify by Respondents. He has been the recipient of many professional honors and awards. Dr. Johnson has been an expert witness in the area of pharmacy practices, and he has consulted in the area of pain management. Dr. Johnson is an active participant in multidisciplinary team/patient oriented care.

Dr. Johnson was a per diem staff pharmacist from 1997 through 1998; a clinical staff pharmacist at Sharp Chula Vista Medical Center from 1998-2000; a medication safety pharmacist and clinical staff pharmacist at Sharp Healthcare from 2000-2005; and has been the Director of Pharmacy, Sharp Healthcare, from 2005 to the present. Dr. Johnson does not dispense medications on a routine basis.

Dr. Johnson's education, continuing education, training, experience, employment history, and consulting service established that he was sufficiently qualified to provide expert opinion on some of the issues raised by the Second Amended Accusation.

Testimony Concerning the Standard of Care

33. Dr. Johnson testified that a dispensing pharmacist in a community pharmacy works in a busy environment that requires the pharmacist to have contact with many patients, to respond to numerous telephone calls from physicians, and to engage in constant interaction with technicians and other staff. The dispensing physician must resolve insurance concerns, obtain the right product for a patient, and provide appropriate patient consultation and counseling. Since a technician usually inputs patient data on a pharmacy label, the pharmacist may not know where the patient lives.

Dr. Johnson testified that a pharmacist must contact the prescriber whenever a prescription is illegible or incomplete. A pharmacist does not need to call a prescriber simply because multiple prescriptions are written and the same script, e.g., for OxyContin, Soma and Xanax. The only other time a pharmacist must contact a prescriber is when the pharmacist has reasonable cause to believe that a prescription may not be legitimate or has cause to believe that it may not have been written for a legitimate medical purpose.

Testimony Concerning Deviations from the Standard of Care

34. Dr. Johnson reviewed documentation that caused him to believe that Pharmacist Tran sometimes called a prescriber.[10] Real-time CURES reports were not available to Pacifica Pharmacy or to Pharmacist Tran during the period of time alleged in the Second Amended Accusation. Dr. Johnson testified that the Board of Pharmacy does not alert pharmacists concerning "red flags" or of the identity of dangerous prescribers through the Board's e-mail communications. Dr. Johnson conceded that while it might be argued that there were red flags in Dr. T.'s prescribing practices in hindsight, there was nothing that would have appeared out of the ordinary to a reasonable and prudent pharmacist when the prescriptions at issue were presented. The overage of OxyContin found during the audit was less than one-half of one percent, which was not a significant. Dr. Johnson was not provided with any Pacifica Pharmacy signature logs for review, and for that reason he was unable to determine who filled the prescriptions at issue or whether a patient actually picked up a prescription after it was filled.

35. Dr. Johnson could not reach any conclusions about whether Pharmacist Tran met his corresponding responsibility duty because he found no evidence that established that Pharmacist Tran actually dispensed any prescription and he found no evidence suggesting that any prescription for a controlled substance was provided for anything other than a legitimate medical purpose. Dr. Johnson testified that the evidence he reviewed did not establish that Pharmacist Tran filled the prescriptions at issue or that the prescriptions were picked up by patients.

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[10] Paragraph 22 of the Second Amended Accusation stated: "Occasionally, Respondent Tran would check the status of the prescribing physician's license or would contact the prescriber to verify the prescription. . . ." This allegation was supported by the evidence.

36. On cross-examination, Dr. Johnson conceded that certain matters - early refills, excessive quantities of narcotic medications, cash payments, excessive distances from the patient's home to the prescriber's office, and the filling prescriptions for several patients with the same address - could be "red flags" that might alert a pharmacist of the possibility that a prescription was not written for a legitimate purpose. He agreed that the corresponding responsibility duty required a pharmacist exercise reasonable professional judgment and to investigate questionable prescriptions.

Dr. Wallace's Expert Testimony

37. Mark S. Wallace, M.D., received his medical degree from Creighton University School of Medicine in 1987. He completed a one-year internship at the Washington Hospital Center in 1988, a two-year residency in Anesthesiology at the University of Maryland Hospital in 1991, and a two-year fellowship in Pain Medicine at the UCSD School of Medicine in 1994. Dr. Wallace has served as a Clinical Professor of Medicine at the University of Maryland Medical School and at the UCSD School of Medicine. Since 1996, Dr. Wallace has been the Program Director at the Center for Pain and Palliative Medicine at UCSD. Dr. Wallace holds board-certification in Anesthesiology, with added qualifications in Pain Management, and he is also board certified in Pain Medicine. Dr. Wallace has received numerous professional honors and awards, and he is a member of many professional organizations. He has published peer reviewed articles, primarily in the field of pain management.

38. Dr. Wallace provided many insights in the area of acute and chronic pain management.

Opioids have been used in the treatment of pain since the 1980s. There was an initial reluctance to treat pain with opioids, but the medical profession ultimately recognized that pain was undertreated, that opioids were effective in its treatment, that there was no justification for unnecessary pain, and that there were social and economic consequences related to untreated and undertreated pain. The pendulum swung from the under treatment of pain and a reluctance to prescribe opioids in the management of acute and chronic pain to the excessive prescribing of opioids - the result was that primary care physician and pharmacists "were caught in the middle." It was not until 2009 that national guidelines for the prescription and use of opioid medications were first adopted and published.

Because of problems associated with prescribing opioid medications and in caring for patients suffering from acute and chronic pain, many physicians do not undertake the care of these very difficult patients. These patients migrate to other physicians who will accept and care for them, even though a physician who ultimately provides pain management may not be formally educated or trained in that field. It is not uncommon for pain patients to travel some distance from their homes to obtain treatment.

The standard of care in treating acute and chronic pain permits a long-acting drug, such as OxyContin, to be prescribed in combination with a short-acting drug, such as Opana.

OxyContin is typically prescribed for a patient with acute or chronic pain within the 60 to 120 mg per day range; however, it was not established that was the starting dose. OxyContin may be prescribed as a PRN (as needed) medication in appropriate circumstances, and Dr. Wallace has prescribed it in that manner. About 40 percent of the patients diagnosed with acute or chronic pain take more medication than has been prescribed due to inadequate pain control, and early prescription refills are not necessarily a matter for concern or evidence of drug diversion.

Dr. Wallace rarely has had a dispensing pharmacist call him to inquire about the validity of a prescription he has written; this may be, in part, because he works in a pain clinic where staff pharmacists know his prescribing practices. Dr. Wallace has never shared a patient chart with a dispensing pharmacist.

Dr. Wallace looked at some of the prescriptions at issue; he could not state, without knowing more about the patient and the patient's medical situation, whether the prescriptions were written for a legitimate medical purpose; in order to reach that conclusion, he would need to review the patient's medical chart and records.

39. Dr. Wallace admitted that he holds no expertise concerning the standard of care that might be incumbent upon a dispensing pharmacist. He did not speak with Dr. T., and he did not consult with Pacifica Pharmacy or Pharmacist Tran.

Respondents' Evidence

40. Respondents cross-examined Complainant's witnesses and called Pharmacist Ho, Dr. Johnson, and Dr. Wallace to testify. In addition, Respondents called Dr. Quan and Ms. Cleary. The relevant testimony from these persons was outlined in the preceding Factual Findings. What Respondents did not produce was an explanation for the expired drugs being maintained in inventory with fresh drugs that were for sale, why there were many containers containing prescription medications that did not have a backer attached as required by law, whether the many prescriptions for OxyContin 80 mg were prescribed for experienced opioid users or whether the patients were opioid naïve, and why so many of Dr. T.'s patients selected Pacifica Pharmacy as the retail outlet to have prescriptions for controlled substances filled. No testimony was provided concerning any inquiry made of any prescriber to determine whether a prescription was written for a legitimate medical purpose. Respondents were in the best position to produce evidence that Pharmacist Tran did not fill the prescriptions at issue and/or that the patients for whom the prescriptions were filled did not pick up the prescriptions from Pacifica Pharmacy. Respondents were in the best position to produce evidence that the information Pacifica Pharmacy submitted to the Department of Justice was inaccurate, or to establish that the CURES reports on which the experts based their opinions were not reliable.

Assessment

41. Investigator Wong's testimony concerning the inspection of Pacifica Pharmacy was credible. Investigator Wong and Dr. Fujimoto's testimony concerning applicable standards of care was credible. Their expert testimony established that sometime between March 2008 and January 2010, sufficient suspicious circumstances surrounded Dr. T.'s prescriptions for OxyContin 80 mg and other controlled substances to the extent that a reasonable and prudent pharmacist would have made some inquiry to determine whether many of the prescriptions she wrote for OxyContin 80 and other controlled substances were issued for legitimate medical purposes. Pharmacist Tran admitted to Investigator Wong that he was unfamiliar with Dr. T., that he was unfamiliar with her prescribing practices, that he was unfamiliar with the corresponding responsibility concept and that he failed to make any inquiry of Dr. T. or her patients concerning the prescriptions she wrote. The totality of the circumstances required that Pharmacist Tran make some inquiry. He failed to do so. The clear and convincing evidence established that Pharmacist Tran, in his personal capacity as a pharmacist and in his designated capacity as pharmacist-in-charge at Pacifica Pharmacy, was negligent, grossly negligent, violated the corresponding responsibility law, and acted in an unprofessional manner.

Complainant's Costs

42. Complainant submitted a certification of costs which stated that 88 hours were expended in the investigation of this matter, and that investigative costs were $102 per hour. The investigation was thorough and was relatively well documented. It was not established that the time spent in the investigation or the hourly rate charged for investigation was unreasonable. The Board's costs of investigation totaled $8,976.

43. This matter was factually complicated and was vigorously defended by experienced, highly competent trial counsel who explored numerous factual and legal issues. The deputy who prosecuted this matter was well prepared and very professional.

The deputy who prosecuted this matter submitted a declaration to which a billing statement was attached. The billing statement detailed the legal services provided by the Attorney General's Office in the prosecution of this matter. Through January 19, 2012, the Office of the Attorney General billed the Board $28,650 for legal services. The deputy who prosecuted this matter estimated that she would bill another 12 hours before the hearing began, with her time billed at the rate of $170 per hour.

It is found that the Board's total costs of enforcement in this matter total $30,690.

LEGAL CONCLUSIONS

The Regulation of Pharmacy

1. The Pharmacy Law governs the practice of pharmacy. Pharmacies must be licensed by the Board of Pharmacy, which has as its highest priority the protection of the public. Every pharmacy must have a "pharmacist-in-charge," an individual licensed by the Board who is responsible for a pharmacy's compliance with all state and federal laws. A pharmacist may be assisted by a pharmacy technician as specified in Business and Professions Code section 4115. (*Golden Drugs Co., Inc. v. Maxwell-Jolly* (2009) 179 Cal.App.4th 1455, 1458-1459.)

2. The Board of Pharmacy is guided by a statute that mandates that whenever the protection of the public is inconsistent with other interests sought to be promoted, protection of the public is paramount. (Bus. & Prof. Code, § 4001.1.)

The Purpose of Administrative Disciplinary Proceedings

3. A license revocation proceeding is civil in nature. Neither a criminal prosecution nor a malpractice action serves the purpose of a license revocation proceeding, which is not intended to punish the licensee but to afford protection to the public upon the rationale that public respect and confidence is merited by eliminating dishonest, immoral, disreputable or incompetent persons from the ranks of practitioners. (*Fahmy v. Medical Bd. of California* (1995) 38 Cal.App.4th 810, 817.)

The Burden and Standard of Proof

4. An individual who holds a license to practice a particular profession has a fundamental vested right to continue in that licensed activity. Procedural due process requires a regulatory board or agency seeking to suspend or revoke a professional license to prove the allegations of an accusation by clear and convincing evidence rather than proof by a preponderance of the evidence. (*Owen v. Sands* (2009) 176 Cal.App.4th 985, 991-992.)

5. Clear and convincing evidence requires a finding of high probability; the evidence must be so clear as to leave no substantial doubt; it must be sufficiently strong to command the unhesitating assent of every reasonable mind. This requirement presents a heavy burden, far in excess of the preponderance of evidence standard that is sufficient for most civil litigation. (*Christian Research Institute v. Alnor* (2007) 148 Cal.App.4th 71, 84.)

6. The terms "burden of proof" and "burden of persuasion" are synonymous. A party has the burden of proof as to each fact the existence or nonexistence of which is essential to the claim for relief or defense that he is asserting except as otherwise provided by law. To prevail, the party bearing the burden of proof must present evidence sufficient to establish in the mind of the trier of fact a requisite degree of belief. The burden of proof does not shift during trial - it remains with the party who originally bears it. Unlike the burden of

proof, the burden of producing evidence may shift throughout the trial. Initially, the burden of producing evidence as to a particular fact rests on the party with the burden of proof. When that party fails to produce sufficient evidence to make a prima facie case, that party risks an unfavorable determination. But once that party produces evidence sufficient to make its prima facie case, the burden of producing evidence shifts to the other party to refute the prima facie case. Even though the burden of producing evidence shifts, a party need not offer evidence in reply, but the failure to do so risks an adverse outcome. Once a prima facie showing is made, it is for the trier of fact to say whether or not the crucial and necessary facts have been established. (*Sargent Fletcher, Inc. v. Able Corp.* (2003) 110 Cal.App.4th 1658, 1667-1668.)

7. The burden of proof in this matter - the burden of persuasion - was on Complainant to establish the allegations in the second amended accusation by clear and convincing evidence.

The Second Amended Accusation Provided Due Process

8. Due process involves the opportunity to be heard at a meaningful time and in a meaningful manner. Due process is not a technical conception with a fixed content unrelated to time, place and circumstance. Rather, due process is flexible and calls for such procedural protections as the particular situation demands. (*Southern Cal. Underground Contractors, Inc. v. City of San Diego* (2003) 108 Cal.App.4th 533, 543.) So long as a party is informed of the substance of the charge and is afforded the basic, appropriate elements of procedural due process, that party cannot complain of a variance between administrative pleadings and proof. (*Stearns v. Fair Employment Practice Com.* (1971) 6 Cal.3d 205, 213.)

9. The Second Amended Accusation sought the revocation of Pharmacist Tran's pharmacist license on several grounds including his alleged failure to comply with the corresponding responsibility law, the excessive furnishing of controlled substances, gross negligence, negligence, and unprofessional conduct. Paragraph 3 of the Second Amended Accusation specifically alleges that Pharmacist Tran was Pacifica Pharmacy's "Pharmacist-in-Charge." But, the Second Amended Accusation also conveyed the impression that Pharmacist Tran personally filled prescriptions and dispensed the controlled substance at issue. (See, for example, Second Amended Accusation, paragraphs 22 and 23).

Pharmacist Tran did not claim a due process violation based on evidence establishing that he was Pacifica Pharmacy's pharmacist-in-charge. Instead, Respondents objected to the Second Amended Accusation because three new causes for discipline (gross negligence, negligence, and unprofessional conduct) were filed less than three weeks before the disciplinary hearing commenced.[11]

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[11] Respondent Tran evidently believed that these new disciplinary theories were alleged because they required a lesser standard of proof to establish the charges. (See, Respondents Pacifica Pharmacy Corp. and Thang Tran's Opposition to the Second Amended Accusation and Motion to Strike, p. 1, lines 24-27.) If so, that was a mistaken belief. Clear and

During the hearing, Complainant stressed Pharmacist Tran's status as pharmacist-in-charge and his responsibility for Pacifica Pharmacy's compliance with all state and federal laws. Respondents did not object to the evidence or argument in that regard. Instead, Respondents presented evidence to show that the prescribing of the medications at issue might have been for a legitimate medical purpose (Dr. Wallace) and argued that Complainant failed to establish that the filling and dispensing of the prescriptions for controlled substances was unreasonable (Dr. Johnson). During closing argument, Respondents downplayed Pharmacist Tran's role as pharmacist-in-charge, suggesting it was a titular position. Respondents' defense throughout this disciplinary proceeding was inconsistent with the due process violation identified in *Smith v. Board of Pharmacy* (1995) 37 Cal.App.4th 229.[12]

Where, as here, a licensee is charged with specific violations, where the licensee does not object to the evidence produced to establish the charges, and where the licensee does not assert that he would have presented additional evidence to rebut the charges had he known about them, there is no due process violation. (*Margarito v. State Athletic Com.* (2010) 189 Cal.App.4th 159, 170-171.)

The Corresponding Responsibility Law

10. At the heart of this disciplinary matter is the allegation that Pharmacist Tran and Pacifica Pharmacy violated the corresponding responsibility law. The corresponding responsibility law is both a standard of care and a duty recognized by statute.

The standard of care requires pharmacists and pharmacies to determine whether a prescription was issued for a legitimate medical purpose whenever the surrounding circumstances require such an inquiry. Inspector Wong and Pharmacist Fujimoto established the existence of this standard through their expert testimony. Pharmacist Ho confirmed the existence of this standard when he described his experience at Walgreens. Dr. Johnson

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convincing evidence was required to establish charges of gross negligence, negligence, and unprofessional conduct.

12 In *Smith v. Board of Pharmacy*, a pharmacist was informed that the Board was going to revoke his license for intentional acts of dispensing and furnishing controlled drugs. As it turned out, the evidence demonstrated, at most, the pharmacist's negligent supervision of others. The pharmacist advised the administrative law judge that the accusation did not allege that the Board was relying on a negligence theory and he complained that he would have called an expert witness to testify concerning the appropriate standard of care had he known the true charges. Following the disciplinary hearing, the Board of Pharmacy revoked the pharmacist's license. The revocation was upheld by the superior court. But on appeal it was determined that the pharmacist's due process rights had been violated at the disciplinary hearing because "it is clear that without adequate notice of the charge seeking to fix his responsibility for the acts of others on the basis of his capacity as pharmacist-in-charge, [the pharmacist] was left unprepared to contest this theory." (*Id.* at pp. 243-244.)

believed there was such a standard; he testified he was unable to reach any conclusion concerning Respondents' deviation from the corresponding responsibility standard without additional evidence; his testimony did not establish that a corresponding responsibility standard of care did not exist.

11. Health and Safety Code section 11153 expresses a corresponding responsibility standard of care. That statute provides in part:

> (a) A prescription for a controlled substance shall only be issued for a legitimate medical purpose by an individual practitioner acting in the usual course of his or her professional practice. The responsibility for the proper prescribing and dispensing of controlled substances is upon the prescribing practitioner, but a corresponding responsibility rests with the pharmacist who fills the prescription. Except as authorized by this division, the following are not legal prescriptions: (1) an order purporting to be a prescription which is issued not in the usual course of professional treatment or in legitimate and authorized research; or (2) an order for an addict or habitual user of controlled substances, which is issued not in the course of professional treatment or as part of an authorized narcotic treatment program, for the purpose of providing the user with controlled substances, sufficient to keep him or her comfortable by maintaining customary use.
>
> (b) Any person who knowingly violates this section shall be punished by imprisonment pursuant to subdivision (h) of Section 1170 of the Penal Code, or in a county jail not exceeding one year, or by a fine not exceeding twenty thousand dollars ($20,000), or by both that fine and imprisonment. . . .

Legislative History

The previous version of Health and Safety Code section 11153 was repealed and a new version was enacted in 1982. The new version mirrored Federal Regulations.[13] Supporters of the 1982 assembly bill (AB 3376) sought to bring Health and Safety Code section 11153 in line with parallel federal regulations to facilitate state prosecutions. The change was also prompted by concerns about the growing numbers of "prescription mills" through which medical practitioners issued prescriptions for large amounts of high abuse drugs that were filled at pharmacies willing to participate in a scheme that served to divert those drugs into the illegal street market. The newly enacted version of Health and Safety Code section 11153 clarified and strengthened the statute not only to reach practitioners who prescribed drugs for known addicts or habitual users, but also to target physicians and pharmacists who issued and filled high volume prescriptions for controlled substances with no legitimate medical purpose.

Health and Safety Code section 11153, subdivision (a), sets forth the statutory corresponding responsibility standard. Health and Safety Code section 115132, subdivision (b), sets forth the punishment that may be imposed upon "any person" who "knowingly" violates subdivision (a).

Appellate Interpretation

Health and Safety Code section 11153, subdivision (b), uses the unambiguous and all-inclusive term "any person." The term includes everyone, regardless of whether the person is licensed or unlicensed. The term is specific, free from ambiguity, and therefore is not

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13 Code of Federal Regulations, title 21, section 1306.04, subdivision (a), provides:

> (a) A prescription for a controlled substance to be effective must be issued for a legitimate medical purpose by an individual practitioner acting in the usual course of his professional practice. The responsibility for the proper prescribing and dispensing of controlled substances is upon the prescribing practitioner, but a corresponding responsibility rests with the pharmacist who fills the prescription. An order purporting to be a prescription issued not in the usual course of professional treatment or in legitimate and authorized research is not a prescription within the meaning and intent of section 309 of the Act (21 U.S.C. 829) and the person knowingly filling such a purported prescription, as well as the person issuing it, shall be subject to the penalties provided for violations of the provisions of law relating to controlled substances.

subject to any construction other than a literal one. (*People v. Gandotra* (1992) 11 Cal.App.4th 1355, 1363-1365 [holding that a licensed physician could not rely on medical appropriateness of unlicensed assistant's illegal prescription to escape liability for aiding and abetting unlawful furnishing of controlled substance; the statute does not require evidence establishing the medical inappropriateness of a drug to support a charge based upon unlicensed person's furnishing of controlled substance.].)

In reviewing Health and Safety Code section 11153, several matters are obvious.

First, Health and Safety Code section 11153 sets forth a "corresponding responsibility" on a prescribing practitioner and upon a pharmacist who fills a prescription for a controlled substance. Clear and convincing evidence is required in an administrative disciplinary proceeding alleging a violation of the statute, but proof beyond a reasonable doubt is not required. A disciplinary proceeding may be maintained even though the accused has been acquitted on criminal charges covering the same facts or has obtained a dismissal of such charges. (*Wong v. State Bar* (1975) 15 Cal.3d 528, 531.)

Second, subdivision (a) uses the term "corresponding responsibility," and not the term "identical responsibility." A pharmacist's role in filling a prescription corresponds to the prescriber's role in issuing a prescription, but it is not identical. The pharmacist's burden is to be alert, to make reasonable inquiry when circumstances require, and to refuse to fill a questionable prescription for a controlled substance when nothing establishes that the prescription at issue was issued for a legitimate medical purpose after engaging in due diligence. To paraphrase the decision in *Vermont & 100th Medical Arts Pharmacy v. Board of Pharmacy* (1981) 125 Cal.App.3d 19, 25, pharmacists, as reasonable professional persons, should obey the law, and they must refuse to dispense drugs when their suspicions are aroused by unexplained ambiguities in the prescriptions or the sheer volume of controlled substances prescribed by a single practitioner for a small number of persons.

Third, subdivision (b) imposes a "knowingly" requirement for criminal prosecution. But, the "knowingly" requirement does require a showing that a pharmacist actually knew that the prescription was not issued for a legitimate medical purpose. This is the case because a section 11153 is a general intent crime. To constitute general criminal intent, it is not necessary to prove the intent to violate the law. When a person intentionally does that which the law declares to be a crime, he is acts with general criminal intent, even though he may not know that his act is unlawful. The requirement of acting "knowingly" is satisfied when the person committing the act has knowledge of the facts. "Knowingly" does not require knowledge of the unlawfulness of the act itself. The word "knowing" imports only an awareness of the facts that bring the act within the terms of the statute. (*People v. Lonergan* (1990) 219 Cal.App.3d 82, 95 [defining "knowingly" within the context of Health and Safety Code section 11153, subdivision (b), as indicated].)

The Parties' Arguments

Complainant asserted that a pharmacist has the duty to verify that a prescription written for controlled substances was issued for a legitimate medical purpose under existing standards of care and under the corresponding responsibility law as expressed in Health and Safety Code section 11153. To support this position, Complainant cited *Vermont & 110th Medial Arts Pharmacy v. Board of Pharmacy* (1981) 125 Cal.App.3d 19.[14] In *Vermont* the appellate court concluded:

> The statutory scheme plainly calls upon pharmacists to use their common sense and professional judgment. When their suspicions are aroused as reasonable professional persons by either ambiguities in the prescriptions, the sheer volume of controlled substances prescribed by a single practitioner for a small number of persons or, as in this case, when the control inherent in the prescription process is blatantly mocked by its obvious abuse as a means to dispense inordinate and incredible large amounts of drugs under the color and protection of law, pharmacists are called upon to obey the law and refuse to dispense. To fail to do so is either gross incompetence, gross negligence or moral turpitude. . .
>
> A profession is a vocation or occupation requiring special and advanced education and skill predominately of an intellectual nature. The practice of pharmacy, like the practice of medicine, is a profession.
>
> For this reason, society entrusts to persons in these professions the responsibility for control over a force

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[14] In *Vermont*, a pharmacy filled 10,000 prescriptions over a 45-day period which were written by a small group of doctors for four controlled substances that were popular in the illicit market. There were irregular circumstances surrounding the presentation of the prescriptions including 247 prescriptions being written on one day by an licensed practitioner, prescriptions written for patients with the same names but at different addresses, and prescriptions written for persons with such questionable names as "Henry Ford," "Wells Fargo," and "Pearl Harbor." All of the prescriptions were for controlled substances. In this situation, the Board of Pharmacy claimed that the pharmacists should have noticed the suspicious nature of the prescriptions being presented and should have concluded that the prescriptions could not have been made for legitimate medical purposes. In *Vermont* Respondents asserted that there were no guidelines setting forth their duties and which should have caused them to question the validity of a facially valid prescription.

> which, when properly used, has great benefit for mankind, but when abused is a force for evil and human destruction.
>
> It follows that society cannot tolerate the presence of individuals within these professions who abdicate their professional responsibility and permit themselves to be used as a conduit by which these controlled substances reach the illicit market and become that force of evil to which we allude.
>
> More importantly, for this case, such prostitutors of their profession will not be heard to explain their dereliction by the juvenile-like complaint "Nobody told me it was wrong." A true professional does not have to be told such things. (*Vermont & 100th Medical Arts Pharmacy v. Board of Pharmacy, supra*, pp. 25-26.)

Complainant observed that the decision in *Vermont & 100th Medical Arts Pharmacy v. Board of Pharmacy* specifically involved the Board's revocation of a permit to operate a pharmacy for, among other matters, the pharmacy's violations of Business and Professions Code section 11153. On this basis, Complainant argued that the statute has been interpreted to extend beyond a pharmacist who filled the prescriptions in a disciplinary proceeding.

Respondents made several assertions. First, the language of subdivision (a) does not extend by its very terms beyond "the pharmacist who fills the prescription." Second, Respondents asserted that no evidence was produced to establish that that Pharmacist Tran *knowingly* violated the corresponding responsibility statute. Third, Respondents claimed that no competent evidence established that Pharmacist Tran or Pacifica Pharmacy dispensed any controlled substance for anything other than a legitimate medical purpose, that Complainant failed to meet its burden of proof. Respondents asserted that the prescriptions at issue were valid on their face; there was a duty on Pacifica Pharmacy to dispense these prescriptions

under Business and Professions Code section 733.[15] Respondents asserted that the "red flags" mentioned by Investigator Wong and Dr. Fujimoto, as well as the arithmetic data, were "red herrings," nothing more than irrelevant items designed to distract the trier of fact from the real issue before the Board, i.e., whether the prescriptions at issue were written for legitimate medical purposes. Fourth, Respondents provided a variety of innocent explanations for the existence of the "red flags." Fifth, Respondents argued that the characterizing of innocent matters as "red flags" merely reflected Complainant's experts' inexperience in dispensing medications at the retail level. Sixth, while many other pharmacies and pharmacists in Pacifica Pharmacy's trade area also filled Dr. T.'s prescriptions for controlled substances, no other pharmacy or pharmacist doing so was charged with unprofessional conduct. They argued that Complainant's selective prosecution undermined the claim that there was a bright line, and that the Board's investigation was nothing more than a kneejerk response to a citizen's complaint.

Conclusions Regarding Corresponding Responsibility

The corresponding responsibility law is both a standard of care and a duty imposed by statute. In both cases, pharmacists and pharmacies must determine whether a prescription for a controlled substance was issued for a legitimate medical purpose whenever the surrounding circumstances require such an inquiry. The misconduct that gives rise to this professional duty need not be as egregious as that described in *Vermont & 100th Medical Arts Pharmacy v. Board of Pharmacy*. Reasonable judgment is all that is expected, but professional judgment must be exercised when required. Within the administrative disciplinary context, Health and Safety Code section 11153 applies to pharmacists, pharmacists-in-charge, and

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[15] Business and Professions Code section 733 provides in part:

> (a) No licentiate shall obstruct a patient in obtaining a prescription drug . . . that has been legally prescribed or ordered for that patient. A violation of this section constitutes unprofessional conduct by the licentiate and shall subject the licentiate to disciplinary or administrative action by his or her licensing agency.
>
> (b) Notwithstanding any other provision of law, a licentiate shall dispense drugs . . . pursuant to a lawful order or prescription unless one of the following circumstances exists:
>
> (1) Based solely on the licentiate's professional training and judgment, dispensing pursuant to the order or the prescription is contrary to law, or the licentiate determines that the prescribed drug . . . would cause a harmful drug interaction or would otherwise adversely affect the patient's medical condition. . . .

pharmacies. This interpretation promotes the statute's beneficial purpose and is consistent with the outcome reached in *Vermont & 100th Medical Arts Pharmacy v. Board of Pharmacy* (1981) 125 Cal.App.3d 19.

To establish a violation of the corresponding responsibility standard, Complainant was not required to establish that a prescription for a controlled substance was in fact written by a prescriber for an illegitimate purpose; rather to establish a violation of the standard of care and a violation of the statute, Complainant was merely required to establish that circumstances were present that would cause a reasonable and prudent pharmacist to question whether a prescription for a controlled substance was issued for a legitimate medical purpose and to show that the pharmacist failed to make the required inquiry. It is concluded that requiring such an inquiry to be made before dispensing a controlled substance does not violate the language or the spirit of Business and Professions Code section 733. But, when a pharmacist does nothing in the face of circumstances that require that some positive action be taken, the pharmacist is guilty of negligence, unprofessional conduct, and violates the corresponding responsibility law when he does nothing.

Unprofessional Conduct, Negligence, Gross Negligence

12. Unprofessional Conduct: Business and Professions Code section 4031 specifically provides that "Unprofessional conduct includes, but is not limited to" certain conduct.

Unprofessional conduct includes the conduct specifically enumerated by statute as well as other misconduct; however, this does not mean that an overly broad connotation should to be given to the term "unprofessional conduct;" it must relate to conduct which indicates an unfitness to practice a profession. Unprofessional conduct is that conduct which breaches the rules or ethical code of a profession, or conduct which is unbecoming a member in good standing of a profession. (*Shea v. Board of Medical Examiners* (1978) 81 Cal.App.3d 564, 575.)

13. Negligence and Gross Negligence: Professionals must exercise that degree of skill, knowledge, and care ordinarily possessed and exercised by members of their profession under similar circumstances. (*Powell v. Kleinman* (2007) 151 Cal.App.4th 112, 122.)

Expert testimony is required to prove or disprove that a professional performed in accordance with the standard of care unless negligence is obvious to a layperson. Expert testimony must be based on such matters as may be reasonably relied upon by an expert in forming an opinion on the subject. With regard to a standard of care derived from a professional practice, the induction of a rule from practice necessarily requires the production of evidence of an ascertainable practice. (*Johnson v. Superior Court* (2006) 143 Cal.App.4th 297, 305.)

Ordinary or simple negligence – an unintentional tort – consists of a failure to exercise the degree of care in a given situation that a reasonable person under similar

circumstances would employ to protect others from harm. "Gross negligence" long has been defined in California and other jurisdictions as either a "want of even scant care" or "an extreme departure from the ordinary standard of conduct." (*City of Santa Barbara v. Superior Court* (2007) 41 Cal.4th 747, 753-754.)

Relevant Disciplinary Statutes and Regulation

14. Business and Professions Code section 4300 provides in part:

> (a) Every license issued may be suspended or revoked.
>
> (b) The board shall discipline the holder of any license issued by the board . . . whose case has been heard by the board and found guilty, by any of the following methods:
>
> (1) Suspending judgment.
>
> (2) Placing him or her upon probation.
>
> (3) Suspending his or her right to practice for a period not exceeding one year.
>
> (4) Revoking his or her license.
>
> (5) Taking any other action in relation to disciplining him or her as the board in its discretion may deem proper. . . .

15. Business and Professions Code section 4301 provides in part:

> The board shall take action against any holder of a license who is guilty of unprofessional conduct . . . Unprofessional conduct shall include, but is not limited to, any of the following:
>
> [¶] . . . [¶]
>
> (c) Gross negligence.
>
> (d) The clearly excessive furnishing of controlled substances in violation of subdivision (a) of Section 11153 of the Health and Safety Code.
>
> [¶] . . . [¶]

(j) The violation of any of the statutes of this state, of any other state, or of the United States regulating controlled substances and dangerous drugs. . . .

16. Business and Professions Code section 4036.5 provides:

"Pharmacist-in-charge" means a pharmacist proposed by a pharmacy and approved by the board as the supervisor or manager responsible for ensuring the pharmacy's compliance with all state and federal laws and regulations pertaining to the practice of pharmacy.[16]

17. Business and Professions Code section 4076 provides in part:

(a) A pharmacist shall not dispense any prescription except in a container that meets the requirements of state and federal law and is correctly labeled with all of the following:

[¶] . . . [¶]

(11)(A) Commencing January 1, 2006, the physical description of the dispensed medication, including its color, shape, and any identification code that appears on the tablets or capsules . . .

(B) This paragraph applies to outpatient pharmacies only.

(C) The information required by this paragraph may be printed on an auxiliary label that is affixed to the prescription container . . . .

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16 California Code of Regulations, title 16, section 10709.1 provides in part:

(a) The pharmacist-in-charge of a pharmacy shall be employed at that location and shall have responsibility for the daily operation of the pharmacy.

(b) The pharmacy owner shall vest the pharmacist-in-charge with adequate authority to assure compliance with the laws governing the operation of a pharmacy. . . .

18. Business and Professions Code section 4081 provides in part:

> (a) All records of . . . acquisition, or disposition of dangerous drugs . . . shall be at all times during business hours open to inspection by authorized officers of the law, and shall be preserved for at least three years from the date of making. A current inventory shall be kept by every . . . pharmacy . . . who maintains a stock of dangerous drugs or dangerous devices.[17]
>
> (b) The owner, officer, and partner of a pharmacy . . . shall be jointly responsible, with the pharmacist-in-charge or designated representative-in-charge, for maintaining the records and inventory described in this section.
>
> (c) The pharmacist-in-charge . . . shall not be criminally responsible for acts of the owner, officer, partner, or employee that violate this section and of which the pharmacist-in-charge or designated representative-in-charge had no knowledge, or in which he or she did not knowingly participate.

19. Business and Professions Code section 4342 provides in part:

> (a) The board may institute any action . . . as may be provided by law and that, in its discretion, are necessary, to prevent the sale of pharmaceutical preparations and drugs that do not conform to the standard and tests as to quality and strength, provided in the latest edition of the United States Pharmacopoeia or the National Formulary,

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[17] California Administrative Code, title 16, section 1718 provides:

> "Current Inventory" as used in Sections 4081 and 4332 of the Business and Professions Code shall be considered to include complete accountability for all dangerous drugs handled by every licensee enumerated in Sections 4081 and 4332.
>
> The controlled substances inventories required by Title 21, CFR, Section 1304 shall be available for inspection upon request for at least 3 years after the date of the inventory.

or that violate any provision of the Sherman Food, Drug and Cosmetic Law . . .

20. California Code of Regulations, title 16, section 17189 provides:

> "Current Inventory" as used in Sections 4081 and 4332 of the Business and Professions Code shall be considered to include complete accountability for all dangerous drugs handled by every licensee enumerated in Sections 4081 and 4332.
>
> The controlled substances inventories required by Title 21, CFR, Section 1304 shall be available for inspection upon request for at least 3 years after the date of the inventory.

21. Health and Safety Code section 11153 was cited and discussed in Legal Conclusion 11.

Cause Exists to Impose Discipline Against Pacifica Pharmacy's Permit

22. First Cause for Discipline: The clear and convincing evidence established that the permit issued to Pacifica Pharmacy is subject to discipline under Business and Professions Code section 4031, subdivision (j), in conjunction with Health and Safety Code section 1153, subdivision (a). Pacifica Pharmacy failed to comply with the corresponding responsibility law. From March 8, 2008, through January 13, 2010, Pacifica Pharmacy, through its licensed personnel, had the duty to determine whether certain prescriptions for controlled substances were issued for legitimate medical purposes. The totality of suspicious circumstances surrounding Dr. T.'s prescriptions for OxyContin 80 mg and other controlled substances imposed a burden on Pacifica Pharmacy and its personnel to make reasonable inquiry into the purpose of one or more of the prescriptions for OxyContin 80 mg written by Dr. T. The Board was not required to establish that any particular prescription for a controlled substance was written for an illegitimate purpose given the nature and extent of the red flags that were established. Once Complainant produced sufficient evidence to support Pacifica Pharmacy's duty to make inquiry, the burden of producing evidence shifted to Pacifica Pharmacy to explain why no inquiry was made. Respondents' effort to explain away the "red flags" was insufficient to justify the failure to make any inquiry.

Pacifica Pharmacy's failure to meet its corresponding responsibility in the face of extensive and unmistakable evidence that required inquiry extended for nearly two years. In the absence any evidence in explanation or mitigation, and given the insignificant evidence of rehabilitation (all of which Pacifica Pharmacy had the burden to produce), it is concluded that only the outright revocation of Pacifica Pharmacy's permit will protect the public.

23. Second Cause for Discipline: The clear and convincing evidence established that the permit issued to Pacifica Pharmacy is subject to discipline under Business and Professions Code section 4301, subdivision (j), in conjunction with Business and Professions Code section 4081, subdivision (a) and California Code of Regulations, title 16, section 17189, in that Pacifica Pharmacy failed to maintain a current inventory and could not account for an overage of approximately 782 dosage units of OxyContin 80 mg and 93 dosage units of Oxycodone 80 mg for the period from March 25, 2008, to January 13, 2010. Pacifica Pharmacy did not offer any explanation for the overage, other than to establish that a discrepancy in the current inventory is not unusual and the amount of the overage at Pacifica Pharmacy was not extreme.

24. Third Cause for Discipline: The clear and convincing evidence established that the permit issued to Pacifica Pharmacy is subject to discipline under Business and Professions Code section 4301, subdivision (j), in conjunction with Business and Professions Code section 4076, subdivision (a)(11), in that Pacifica Pharmacy failed to have a physical description of the dispensed medication from the auxiliary label affixed to the prescription container on dispensed prescriptions. Respondents had the burden of establishing that an exemption or exception to this general rule existed, and they failed establish any exemption or exception to the rule.

25. Fourth Cause for Discipline: The clear and convincing evidence established that the permit issued to Pacifica Pharmacy is subject to discipline under Business and Professions Code section 4342, which prohibits the sale of pharmaceutical drugs lacking quality and strength, in that on January 13, 2010, Pacifica Pharmacy had in its inventory expired drugs and repacked drugs that lacked appropriate labeling. Respondent offered no explanation for the reason expired medications were comingled with medications in inventory that were for sale, or why some containers that were filled with medications did not have appropriate labels.

26. Fifth Cause for Discipline: The clear and convincing evidence established that the permit issued to Pacifica Pharmacy is subject to discipline under Business and Professions Code section 4301, subdivision (d), which provides that clearly excessive furnishing of controlled substances constitutes unprofessional conduct. Pacifica Pharmacy failed to comply with the corresponding responsibility law. The arithmetic data produced by Investigator Wong from his review of CURES data and the records produced by Pacifica Pharmacy established that Pacifica Pharmacy was the pharmacy of choice in Huntington Beach for the filling of controlled substance prescriptions written by Dr. T. Pacifica Pharmacy filled far more prescriptions for Schedule II controlled substances than any nearby pharmacy, including chain pharmacies. The patients' selection of Pacifica Pharmacy was not by accident. No questions were asked at Pacifica Pharmacy, and Dr. T.'s prescriptions for controlled substances were always filled so long as there was nothing unusual about the face of the prescription. To paraphrase *Vermont & 110th Medial Arts Pharmacy v. Board of Pharmacy* (1981) 125 Cal.App.3d 19, society cannot tolerate pharmacies which abdicate their professional responsibility and permit themselves to be used as a conduit by which controlled substances reach the illicit market and become a force of evil.

Pacifica Pharmacy clearly furnished excessive quantities of controlled substances without substantial justification for doing so. Public respect and confidence is merited by eliminating irresponsible and incompetent pharmacies. The outright revocation of Pacifica Pharmacy's permit will protect the public.

Cause Exists to Impose Discipline Against Pharmacist Tran's License

27. First Cause for Discipline: The clear and convincing evidence established that the license issued to Pharmacist Tran is subject to discipline under Business and Professions Code section 4031, subdivision (j), in conjunction with Health and Safety Code section 1153, subdivision (a). Pharmacist Tran, a licensed professional who was responsible for Pacifica Pharmacy's compliance with the law, was unfamiliar with the concept of corresponding responsibility. He made no inquiry of Dr. T. regarding her prescribing practices, which included numerous prescriptions for OxyContin 80 mg and other Schedule II controlled substances. He did not ask her patients why those drugs had been prescribed, erroneously claiming that a patient's right to privacy trumped any other consideration. From March 8, 2008, through January 13, 2010, Pharmacist Tran owned and operated Pacifica Pharmacy; he was the pharmacist-in-charge; given the size of the pharmacy, it is far more likely than not that he was the primary dispensing pharmacist. Complainant presented evidence sufficient to establish a requisite degree of belief that Pharmacist Tran filled most of the controlled substance prescriptions at issue, and that he was the pharmacist-in-charge when all of those prescriptions were filled; the burden of producing evidence to the contrary shifted to Pharmacist Tran to refute Complainant's prima facie case. No evidence to the contrary was provided.

In his defense, Pharmacist Tran could have produced testimony from those who actually filled the prescriptions at issue; or he could have produced testimony from others who observed pharmacists other than Pharmacist Tran fill the prescriptions at issue; or Pharmacist Tran could have established through documentary evidence that someone else filled the prescriptions at issue. Pharmacist Tran failed to produce that kind of evidence when it was within his power to do so.

The totality of circumstances surrounding Dr. T.'s prescription for OxyContin 80 mg and other controlled substances imposed a burden on Pharmacist Tran – personally and in his capacity as pharmacist-in-charge - to make reasonable inquiry into one or more of the prescriptions for controlled substances written by Dr. T. The effort to explain away the red flags and arithmetic data, which went to the issue of notice, was insufficient to justify Pharmacist Tran's lack of inquiry.

Very little evidence was offered in explanation or mitigation. Slightly more evidence was offered in rehabilitation, but experiencing a difficult family life as a result of stress imposed by disciplinary proceedings, being a good husband and parent, being a good employer, and producing some forms to document contact with a prescriber is not compelling evidence of rehabilitation.

On this record, it is concluded that the only measure of discipline that will protect the public is the outright revocation of Pharmacist Tran's license.

28. Fifth Cause for Discipline: The clear and convincing evidence established that the license issued to Pharmacist Tran is subject to discipline under Business and Professions Code section 4301, subdivision (d), which provides that the clearly excessive furnishing of controlled substances constitutes unprofessional conduct. Pharmacist Tran failed to comply with the corresponding responsibility law. The arithmetic data produced by Investigator Wong from his review of CURES data and the records produced by Pacifica Pharmacy established that Pacifica Pharmacy was the pharmacy of choice in Huntington Beach for the filling of controlled substance prescriptions written by Dr. T. Pacifica Pharmacy filled far more prescriptions for Schedule II controlled substances than any nearby pharmacy, including chain pharmacies. The patients' selection of Pacifica Pharmacy was not by accident. No questions were asked at Pacifica Pharmacy, and Dr. T.'s prescriptions for controlled substances were always filled so long as there was nothing unusual about the face of the prescription. Pharmacist Tran was the pharmacist-in-charge and was responsible for Pacifica Pharmacy's compliance with federal and state law. He likely filled a majority of the prescriptions written by Dr. T.

Pharmacist Tran clearly furnished excessive quantities of controlled substances without substantial justification for doing so. Public respect and confidence is merited by eliminating irresponsible and incompetent pharmacists. The outright revocation of Pharmacist Tran's license will protect the public.

29. Sixth Cause and Eighth Cause for Discipline: The clear and convincing evidence established that the license issued to Pharmacist Tran is subject to discipline under Business and Professions Code section 4031. The expert testimony established the existence of a corresponding responsibility – a pharmacist's professional duty to determine whether a prescription for a controlled substance has been issued for a legitimate medical purpose when the circumstances require that inquiry. The expert testimony established that suspicious circumstances existed at Pacifica Pharmacy from March 2008 through January 2010 that required Pharmacist Tran to make such an inquiry. Pharmacist Tran was negligent and engaged in unprofessional conduct in carrying out his responsibilities as a licensed pharmacist, both personally and in his capacity as a pharmacist-in-charge. Pharmacist Tran was unfamiliar with the concept of corresponding responsibility. He caused prescriptions to be filled and he permitted prescriptions to be filled for controlled substances under suspicious circumstances without making required inquiry of the prescriber or the patient about the medical purpose for the medication he was responsible for dispensing.

On this record, it is concluded that the only measure of discipline that will protect the public is the outright revocation of Pharmacist Tran's license.

30. Seventh Cause for Discipline: The clear and convincing evidence established that the license issued to Pharmacist Tran is subject to discipline under Business and Professions Code section 4031, subdivision (c). Pharmacist Tran was grossly negligent in

meeting his responsibilities as a licensed pharmacist personally and in his capacity as a pharmacist-in-charge. He was unfamiliar with the concept of corresponding responsibility. He exercised scant care. His conduct in causing and permitting prescriptions to be filled for controlled substances under suspicious circumstances without making any inquiry was an extreme departure from the standard of care.

On this record, it is concluded that the only measure of discipline that will protect the public is the outright revocation of Pharmacist Tran's license.

Complainant's Costs

31. Business and Professions Code section 125.3 provides in part:

> (a) Except as otherwise provided by law, in any order issued in resolution of a disciplinary proceeding before any board within the department [of Consumer Affairs] . . . upon request of the entity bringing the proceeding, the administrative law judge may direct a licentiate found to have committed a violation or violations of the licensing act to pay a sum not to exceed the reasonable costs of the investigation and enforcement of the case.
>
> (b) In the case of a disciplined licentiate that is a corporation or a partnership, the order may be made against the licensed corporate entity or licensed partnership.
>
> (c) A certified copy of the actual costs, or a good faith estimate of costs where actual costs are not available, signed by the entity bringing the proceeding or its designated representative shall be prima facie evidence of reasonable costs of investigation and prosecution of the case.

32. The Board must exercise its discretion to reduce or eliminate cost awards in a manner that will ensure the award does not deter licensees with potentially meritorious claims or defenses from exercising their right to a hearing. (*Zuckerman v. State Board of Chiropractic Examiners* (2002) 29 Cal.App.4th 32, 45.)

It was not established that any of the Zukerman criteria applied in this matter.

33. It is concluded that the Board of Pharmacy's reasonable costs of investigation and enforcement total $39,666.

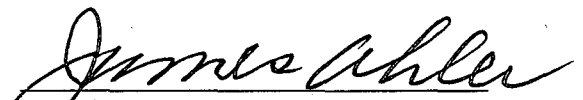
ORDERS

Original Permit No. PHY 46715 issued to Pacifica Pharmacy Corp is revoked.

Original Pharmacist License No. RPH 41172 issued to Thang Q. Tran is revoked.

Pacifica Pharmacy Corp and Thang Q. Tran shall pay to the Board of Pharmacy costs of investigation and enforcement in the total amount of $39,666.00.

DATED: February 29, 2012



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BEFORE THE
BOARD OF PHARMACY
DEPARTMENT OF CONSUMER AFFAIRS
STATE OF CALIFORNIA

In the Matter of the Second Amended Accusation Against: **PACIFICA PHARMACY CORP** 18682 Beach Blvd., #115 Huntington Beach, CA 92648 **Original Permit No. PHY 46715** and **THANG Q. TRAN** 18682 Beach Blvd., #115 Huntington Beach, CA 92648 **Original Pharmacist License No. RPH 41172** Respondents.	Case No. 3802 **SECOND AMENDED** **A C C U S A T I O N**

Complainant alleges:

PARTIES

1. Virginia Herold (Complainant) brings this Accusation solely in her official capacity as the Executive Officer of the Board of Pharmacy, Department of Consumer Affairs.

2. On or about August 17, 2004, the Board of Pharmacy issued Original Permit Number PHY 46715 to Respondent Pacifica Pharmacy Corp, Thang Tran, President, Vice President and

Secretary. The Original Permit was in full force and effect at all times relevant to the charges brought herein and will expire on August 1, 2012, unless renewed.

3. On March 17, 1988, the Board of Pharmacy issued Original Pharmacist License No. RPH 41172 to Respondent Thang Q. Tran, Pharmacist-In-Charge. The Original Pharmacist License was in full force and effect at all times relevant to the charges brought herein and will expire on August 31, 2013, unless renewed.

JURISDICTION

4. This Accusation is brought before the Board of Pharmacy (Board), Department of Consumer Affairs, under the authority of the following laws. All section references are to the Business and Professions Code unless otherwise indicated.

5. Section 4300 of the Code states:

> (a) Every license issued may be suspended or revoked.
>
> (b) The board shall discipline the holder of any license issued by the board, whose default has been entered or whose case has been heard by the board and found guilty, by any of the following methods:
>
> (1) Suspending judgment.
>
> (2) Placing him or her upon probation.
>
> (3) Suspending his or her right to practice for a period not exceeding one year.
>
> (4) Revoking his or her license.
>
> (5) Taking any other action in relation to disciplining him or her as the board in its discretion may deem proper.
>
> . . .
>
> (e) The proceedings under this article shall be conducted in accordance with Chapter 5 (commencing with Section 11500) of Part 1 of Division 3 of the Government Code, and the board shall have all the powers granted therein. The action shall be final, except that the propriety of the action is subject to review by the superior court pursuant to Section 1094.5 of the Code of Civil Procedure.

6. Section 118, subdivision (b), of the Code provides that the suspension, expiration, surrender, cancellation of a license shall not deprive the Board of jurisdiction to proceed with a disciplinary action during the period within which the license may be renewed, restored, reissued or reinstated.

STATUTORY AND REGULATORY PROVISIONS

7. Section 4076 of the Code states:

(a) A pharmacist shall not dispense any prescription except in a container that meets the requirements of state and federal law and is correctly labeled with all of the following:

...

(11)(A) Commencing January 1, 2006, the physical description of the dispensed medication, including its color, shape, and any identification code that appears on the tablets or capsules, except as follows:

(i) Prescriptions dispensed by a veterinarian.
(ii) An exemption from the requirements of this paragraph shall be granted to a new drug for the first 120 days that the drug is on the market and for the 90 days during which the national reference file has no description on file.
(iii) Dispensed medications for which no physical description exists in any commercially available database.

(B) This paragraph applies to outpatient pharmacies only.

(C) The information required by this paragraph may be printed on an auxiliary label that is affixed to the prescription container.

(D) This paragraph shall not become operative if the board, prior to January 1, 2006, adopts regulations that mandate the same labeling requirements set forth in this paragraph....

8. Section 4081 of the Code states:

(a) All records of manufacture and of sale, acquisition, or disposition of dangerous drugs or dangerous devices shall be at all times during business hours open to inspection by authorized officers of the law, and shall be preserved for at least three years from the date of making. A current inventory shall be kept by every manufacturer, wholesaler, pharmacy, veterinary food-animal drug retailer, physician, dentist, podiatrist, veterinarian, laboratory, clinic, hospital, institution, or establishment holding a currently valid and unrevoked certificate, license, permit, registration, or exemption under Division 2 (commencing with Section 1200) of the Health and Safety Code or under Part 4 (commencing with Section 16000) of Division 9 of the Welfare and Institutions Code who maintains a stock of dangerous drugs or dangerous devices.

(b) The owner, officer, and partner of any pharmacy, wholesaler, or veterinary food-animal drug retailer shall be jointly responsible, with the pharmacist-in-charge or designated representative-in-charge, for maintaining the records and inventory described in this section.

(c) The pharmacist-in-charge or designated representative-in-charge shall not be criminally responsible for acts of the owner, officer, partner, or employee that violate this section and of which the pharmacist-in-charge or designated representative-in-charge had no knowledge, or in which he or she did not knowingly participate.

9. Section 4301 of the Code states:

The board shall take action against any holder of a license who is guilty of unprofessional conduct or whose license has been procured by fraud or misrepresentation or issued by mistake. Unprofessional conduct shall include, but is not limited to, any of the following:

. . .

(c) Gross negligence.

(d) The clearly excessive furnishing of controlled substances in violation of subdivision (a) of Section 11153 of the Health and Safety Code.

. . .

(j) The violation of any of the statutes of this state, or any other state, or of the United States regulating controlled substances and dangerous drugs....

10. Section 4342 provides:

(a) The board may institute any action or actions as may be provided by law and that, in its discretion, are necessary, to prevent the sale of pharmaceutical preparations and drugs that do not conform to the standard and tests as to quality and strength, provided in the latest edition of the United States Pharmacopoeia or the National Formulary, or that violate any provision of the Sherman Food, Drug and Cosmetic Law (Part 5 (commencing with Section 109875) of Division 104 of the Health and Safety Code).

(b) Any knowing or willful violation of any regulation adopted pursuant to Section 4006 shall be subject to punishment in the same manner as is provided in Sections 4336 and 4321.

11. Section 1718 of title 16, California Code of Regulations provides:

"Current Inventory" as used in Sections 4081 and 4332 of the Business and Professions Code shall be considered to include complete accountability for all dangerous drugs handled by every licensee enumerated in Sections 4081 and 4332.

The controlled substances inventories required by Title 21, CFR, Section 1304 shall be available for inspection upon request for at least 3 years after the date of the inventory.

12. Section 11153 of the Healthy and Safety Code provides in part:

(a) A prescription for a controlled substance shall only be issued for a legitimate medical purpose by an individual practitioner acting in the usual course of his or her professional practice. The responsibility for the proper prescribing and dispensing of controlled substances is upon the prescribing practitioner, but a corresponding responsibility rests with the pharmacist who fills the prescription. Except as authorized by this division, the following are not legal prescriptions: (1) an order purporting to be a prescription which is issued not in the usual course of

professional treatment or in legitimate and authorized research; or (2) an order for an addict or habitual user of controlled substances, which is issued not in the course of professional treatment or as part of an authorized narcotic treatment program, for the purpose of providing the user with controlled substances, sufficient to keep him or her comfortable by maintaining customary use....

COST RECOVERY

13. Section 125.3 of the Code provides, in pertinent part, that the Board may request the administrative law judge to direct a licentiate found to have committed a violation or violations of the licensing act to pay a sum not to exceed the reasonable costs of the investigation and enforcement of the case.

DRUGS

14. Alprazolam, sold under the brand name Xanax, is a Schedule IV controlled substance as designated by Health and Safety Code section 11057(d)(1), and is a dangerous drug pursuant to Business and Professions Code section 4022. Alprazolam tablets are indicated for the management of anxiety disorder or the short-term relief of symptoms of anxiety.

15. Hydromorphone, sold under the brand name Dilaudid, is a Schedule II controlled substance as designated by Health and Safety Code Section 11055(b)(1)(K) and is a dangerous drug pursuant to Business and Professions Code section 4022. Dilaudid is a narcotic analgesic prescribed for the relief of moderate to severe pain.

16. Opana, a brand name for oxymorphone, is a Schedule II controlled substance as designated by Health and Safety Code section 11055, subdivision (b)(1)(O), and is a dangerous drug pursuant to Business and Professions Code section 4022.

17. Oxycontin, a brand name for oxycodone, is a Schedule II controlled substance as designated by Health and Safety Code section 11055, subdivision (b)(1)(N), and is a dangerous drug pursuant to Business and Professions Code section 4022.

FACTS

18. In or about December, 2009, the Board received a consumer complaint from B.S. regarding alleged suspicious activity at Pacifica Pharmacy Corp (hereinafter "Pacifica"). B.S. complained of abnormal activity in the parking lot of Pacifica over the course of several days,

including several occasions when groups of people entered and exited Pacifica at one time, or were dropped off by a vehicle in Pacifica's parking lot.

19. On January 13, 2010, Board inspectors conducted an inspection of Pacifica. Drug Usage Reports were requested from Pacifica and were reviewed, together with the pharmacy's drug inventory, DEA inventories, patient prescription profiles, acquisition records, and enrollment in the on-line Prescription Drug Monitoring Program, among other documents.

20. During the inspection, expired drug stock was found on inventory shelves. Pre-filled containers with medication lacked the drug name, lot number, expiration date and name of manufacturer. In addition, the dosage form descriptions on the prescription labels were auxiliary labels and were not affixed to the prescription container when the medication was dispensed.

21. During the inspection, Respondent Tran stated that he does not evaluate a patient's information with regard to drug diversion or addiction issues. He does not request CURES[1] reports to evaluate a patient's therapy. Respondent Tran stated that he was only aware of his responsibility to transmit controlled substance information and does not use any reports to determine drug diversion or addiction issues.

22. When filling a prescription for a controlled substance, Respondent Tran stated that Pacifica obtains and photocopies the driver's license of the individual presenting the prescription for their records. Occasionally, Respondent Tran would check the status of the prescribing physician's license or would contact the prescriber to verify the prescription. He evaluated patients' prescribed pain medication by review of the diagnosis written on some of the prescriptions. For those patients who were prescribed other controlled substances, he would document early refill authorizations or lost script issues on the patient's profile.

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[1] Controlled Substance Utilization Review and Evaluation System, C.U.R.E.S, is a database that contains over 100 million entries of controlled substance drugs that were dispensed in California. CURES is part of a program developed by the California Department of Justice, Bureau of Narcotic Enforcement, which allows access to the Prescription Drug Monitoring Program (PDMP) system. The PDMP allows pre-registered users including licensed healthcare prescribers eligible to prescribe controlled substances, pharmacists authorized to dispense controlled substances, law enforcement, and regulatory boards to access patient controlled substance history information. (http://ag.ca.gov/bne/cures.php)

23. In the days following the inspection, the Board continued to receive complaints from B.S. about suspicious activity in Pacifica's parking lot. On February 1, 2010, Board inspectors requested records from Pacifica showing controlled substances furnished after the Board's inspection on January 13, 2010. Those records showed the continued filling of controlled substance prescriptions from several of the physicians in question, including Dr. T. Specifically, Respondent Tran continued to dispense Oxycontin 80 mg to Dr. T's patients. When asked whether the prescribing pattern written by the same physician for the same drug for many of Pacifica's patients seemed reasonable, Respondent Tran stated that the majority of prescriptions for Dr. T were for controlled substances and that about 5 percent of Pacifica's prescriptions were for Oxycontin.

24. Drug Usage Reports of Oxycontin from 2008 to January 2010 revealed that the majority of Oxycontin prescriptions filled by Pacifica were for the 80 mg strength during the last two years and that these prescriptions were written by several recurring physicians, in particular, Dr. T.

25. From January 1, 2009 to January 6, 2010, Dr. T. prescribed about 11,486 controlled substance prescriptions. Of these 11,486 controlled substance prescriptions, the number of prescriptions written by Dr. T. for Oxycontin, Opana and Alprazolam are shown below:

Drug	No. of Prescriptions	No. of dosage units
Oxycontin 80 mg	917	46,727
Opana ER 40 mg	654	25,005
Alprazolam 2 mg	2,671	175,584

26. Of these 11,486 controlled substance prescriptions, Pacifica filled 1,844 prescriptions, about three times more than what was filled by the pharmacy with the next highest volume: Bolsa Medical Arts Pharmacy filled 101 prescriptions, Dial Drug filled 566, White Front Drug and Discount filled 663. Other pharmacies accounted for less than 100 prescriptions.

27. An overall review of the dispensing practice of Pacifica showed that it dispensed 81,066 prescriptions for dangerous drugs and controlled substances from March 25, 2008 to January 13, 2010. Controlled substance prescriptions accounted for 14,063 or 17% of all prescriptions. Oxycontin 80 mg prescriptions accounted for 42% of all Schedule II controlled substances. There were 5318 prescriptions for Schedule II controlled substances during this period of time. In comparison to other surrounding pharmacies, Pacifica filled an inordinately disproportionate number of Oxycontin 80 mg prescriptions: 803 prescriptions filled by Pacifica, 389 by Medical Towers Pharmacy, 281 by Walgreens No. 5771, 129 by CVS # 8850, 38 by CVS #6782, 21 by Sav On #6124, and even less by others.

28. Further investigation of Drug History Reports revealed questionable dispensing practices by Pacifica, such as early refills of controlled substance prescriptions, filling prescriptions for patients outside the normal trade area and prescriptions by prescribers whose offices were outside Pacifica's normal trade area. For example, Patient Drug History reports of 18 of Dr. T.'s patients showed that almost all had a home address outside of Pacifica's normal trade area and that nearly all of them traveled approximately 40 miles to see Dr. T. A comparison of other pharmacies surrounding Pacifica showed very few prescriptions filled for patients outside their normal trade area.

29. A review of information from sources available to Respondents, such as the Patient Drug History reports, would have revealed that several of these 18 patients had multiple prescribers for controlled substances, had multiple dispensing pharmacies and had early refilling of controlled substance prescriptions.

30. Furthermore, a review of Dr. T.'s prescribing practices for prescriptions filled by Pacifica showed duplication of therapy (e.g. Opana and Oxycontin were both prescribed or hydromorphone and Oxycontin were both prescribed) as well as combinations of drugs commonly prescribed together by Dr. T. (e.g. the combination of alprazolam and Opana or the combination of alprazolam, hydromorphone and Oxycontin).

31. Further review of Oxycontin prescription documents from the period March 28, 2008 to January 13, 2010 show a disproportionate number of Oxycontin prescriptions from Dr. T.,

whose patients also showed a disproportionate number of cash payments in relation to private insurance, a government payor or other form of payment. Many of the prescriptions filled were to addresses with multiple patients at the same address. In addition, there were discrepancies with the addresses on the prescription backer label, the prescription and/or the patient's driver's license/ID.

FIRST CAUSE FOR DISCIPLINE

AS TO PACIFICA PHARMACY AND THANG Q. TRAN

(Failure to Comply with Corresponding Responsibility for Legitimate Controlled Substance Prescriptions)

32. Respondents Pacifica Pharmacy and Thang Q. Tran are subject to discipline pursuant to Code section 4301, subdivision (j), in conjunction with Health and Safety Code section 11153(a) for unprofessional conduct in that Respondents failed to comply with their corresponding responsibility to ensure that controlled substances are dispensed for a legitimate medical purpose when Respondents failed to evaluate the totality of the circumstances (information from the patient, physician and other sources) to determine the prescription's legitimate medical purpose in light of information showing that prescriptions for controlled substances were filled early, there was duplication of therapy, the same drug combinations were repeatedly prescribed for multiple patients by the same prescriber, numerous patients had addresses outside of Pacifica's normal trade area, and certain prescribers wrote a disproportionate number of prescriptions for Oxycontin, among other things, as more fully set forth in paragraphs 18-31 above, and incorporated by this reference as though set forth in full herein.

SECOND CAUSE FOR DISCIPLINE

AS TO PACIFICA PHARMACY ONLY

(Failure to Maintain Current Inventory)

33. Respondent Pacifica Pharmacy is subject to discipline pursuant to Code section 4301, subdivision (j), in conjunction with Code section 4081(a) and title 16, California Code of Regulations section 1718, for unprofessional conduct in that Respondent Pacifica Pharmacy failed to maintain a current inventory in that it could not account for an overage of approximately

782 dosage units of Oxycontin 80 mg and 93 dosage units of Oxycodone 80 mg for the period March 25, 2008 to January 13, 2010.

THIRD CAUSE FOR DISCIPLINE

AS TO PACIFICA PHARMACY ONLY

(Incomplete Labeling)

34. Respondent Pacifica Pharmacy is subject to discipline pursuant to Code section 4301, subdivision (j), in conjunction with Code section 4076(a)(11) for unprofessional conduct in that on January 13, 2010, Respondent Pacifica Pharmacy failed to have the physical description of the dispensed medication from the auxiliary label affixed to the prescription container on dispensed prescriptions.

FOURTH CAUSE FOR DISCIPLINE

AS TO PACIFICA PHARMACY ONLY

(Expired Drugs)

35. Respondent Pacifica Pharmacy is subject to discipline pursuant to Code section 4342, which prohibits the sale of pharmaceutical drugs lacking quality and strength, in that on January 13, 2010, Respondent Pacifica Pharmacy maintained expired dangerous drugs and controlled substances as part of its drug stock on its inventory shelves. Additionally, repackaged (pre-counted or poured) drugs lacked appropriate labeling of name of drug, strength, dosage form, manufacturer's name and lot number, expiration date, and quantity per repackaged unit.

FIFTH CAUSE FOR DISCIPLINE

AS TO PACIFICA PHARMACY AND THANG Q. TRAN

(Excessive Furnishing of Controlled Substances)

36. Respondents Pacifica Pharmacy and Thang Q. Tran are subject to discipline pursuant to Code section 4301, subdivision (d), for unprofessional conduct in that Respondents clearly excessively furnished controlled substances during the period March 25, 2008 to January 13, 2010, as more fully set forth in paragraphs 18-31 above, and incorporated by this reference as though set forth in full herein.

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SIXTH CAUSE FOR DISCIPLINE

AS TO THANG Q. TRAN

(Unprofessional Conduct – Gross Negligence)

37. Respondent Thang Q. Tran is subject to discipline pursuant to Code section 4301, subdivision (c), for unprofessional conduct in that Respondent was grossly negligent in dispensing controlled substances during the period March 25, 2008 to January 13, 2010, in that Respondent knew or should have known that the controlled substances prescribed by Dr. T. were likely to be diverted or used for other than a legitimate medical purpose and that Respondent failed to take appropriate steps upon being presented with numerous prescriptions for the same controlled substances, including Oxycontin 80 mg, from a small group of prescribers, including but not limited to, contacting the prescribers, interviewing the patients and performing additional investigation to determine whether the prescriptions were issued for a legitimate medical purpose, as more fully set forth in paragraphs 18-31 above, and incorporated by this reference as though set forth in full herein.

SEVENTH CAUSE FOR DISCIPLINE

AS TO THANG Q. TRAN

(Unprofessional Conduct – Negligence)

38. Respondent Thang Q. Tran is subject to discipline pursuant to Code section 4301, for unprofessional conduct in that Respondent was negligent in dispensing controlled substances during the period March 25, 2008 to January 13, 2010, in that Respondent knew or should have known that the controlled substances prescribed by Dr. T. were likely to be diverted or used for other than a legitimate medical purpose and that Respondent failed to take appropriate steps upon being presented with numerous prescriptions for the same controlled substances, including Oxycontin 80 mg, from a small group of prescribers, including but not limited to, contacting the prescribers, interviewing the patients and performing additional investigation to determine whether the prescriptions were issued for a legitimate medical purpose, as more fully set forth in paragraphs 18-31 above, and incorporated by this reference as though set forth in full herein.

///

EIGHTH CAUSE FOR DISCIPLINE

AS TO THANG Q. TRAN

(Unprofessional Conduct)

39. Respondent Thang Q. Tran is subject to discipline pursuant to Code section 4301 for unprofessional conduct in that Respondent engaged in the activity described in paragraphs 18-31 above, and incorporated by this reference as though set forth in full herein.

PRAYER

WHEREFORE, Complainant requests that a hearing be held on the matters herein alleged, and that following the hearing, the Board of Pharmacy issue a decision:

1. Revoking or suspending Original Permit Number PHY 46715, issued to Pacifica Pharmacy Corp;

2. Revoking or suspending Original Pharmacist License Number RPH 41172, issued to Thang Q. Tran;

3. Ordering Pacifica Pharmacy Corp and Thang Tran, jointly and severally, to pay the Board of Pharmacy the reasonable costs of the investigation and enforcement of this case, pursuant to Business and Professions Code section 125.3;

4. Taking such other and further action as deemed necessary and proper.

DATED: 1/3/12

VIRGINIA HEROLD
Executive Officer
Board of Pharmacy
Department of Consumer Affairs
State of California
Complainant

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BUSINESS, CONSUMER SERVICES AND HOUSING AGENCY
DEPARTMENT OF CONSUMER AFFAIRS
GOVERNOR EDMUND G. BROWN JR.

September 10, 2013

To: Members, Enforcement and Compounding Committee

Subject: Agenda Item II (a) – Discussion Regarding Board of Pharmacy's Sponsored Legislation on Sterile Injectable Compounding, Senate Bill 294 (Emmerson) and Assembly Bill 1045 (Quirk-Silva)

There are two bills pending action in the California Legislature on sterile compounding.

The board drafted proposed legislation late last year following two large-scale public health emergencies in which contaminated products compounded by two out-of-state pharmacies were shipped nationwide. Senator Emmerson has authored Senate Bill 294 (SB 294) to carry the board-sponsored legislation.

Senate Bill 294 will strengthen the board's ability to regulate and monitor pharmacies that compound sterile drug products. This legislation would prohibit a pharmacy from compounding or dispensing, and a nonresident pharmacy from compounding for shipment into this state, sterile drug products for injection, administration into the eye, or inhalation, unless the pharmacy has obtained a sterile compounding pharmacy license – following a board-performed inspection – from this board. It will also eliminate accreditation by designated agencies as an alternative to licensure.

Assembly Member Quirk-Silva authored AB 1045 that would amend existing law to allow the board to suspend or revoke a nonresident pharmacy's license if its license is suspended or revoked in the pharmacy's home state. It would also require resident and nonresident pharmacies that issue a recall notice regarding a sterile compounded drug to contact the recipient pharmacy, prescriber or patient of the recalled drug and the Board within 24 hours of the recall notice if use of or exposure to the recalled drug may cause serious adverse health consequences or death and if the recalled drug was dispensed or is intended for use in this state.

Assembly Bill 1045 has been enrolled and is awaiting signature of the Governor. Senate Bill 294 is awaiting a floor vote in the Assembly.

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BUSINESS, CONSUMER SERVICES AND HOUSING AGENCY
DEPARTMENT OF CONSUMER AFFAIRS
GOVERNOR EDMUND G. BROWN JR.

August 20, 2013

The Honorable Mike Gatto
Chair, Assembly Appropriations
State Capitol, Room 2114
Sacramento, CA 95814

RE: Senate Bill 294 – Support

Dear Assembly Member Gatto:

Senate Bill 294 (Emmerson) will soon be before you in Assembly Appropriations, and the Board of Pharmacy respectfully requests your Aye vote.

The Board of Pharmacy regulates the entities and individuals who distribute dangerous drugs and dangerous devices in this state, and SB 294 is necessary to strengthen the board's ability to regulate specialized pharmacies within and outside California that compound sterile drug products to ensure the safety of Californians.

In 2001, the California Legislature first enacted provisions to strengthen state oversight of sterile drug compounding in pharmacies following the death of three people and multiple hospitalizations due to a pharmacy in California that compounded and distributed a cortisone-based injectable drug that was tainted with meningitis bacteria. That legislation resulted in pharmacies within California being required to obtain a specialty license if they performed sterile injectable compounding. Additional provisions required non-resident pharmacies that shipped sterile injectable drugs into California to also be licensed with this board, but the law carved out an exemption for obtaining the specialty license to compound sterile injectable drug products. Current law allows a California or non-resident pharmacy to avoid this specialty license if they are accredited or where, in the case of non-resident pharmacies, regulators (other than the Board of Pharmacy) have oversight. In light of recent events, this exemption is not protecting the health and lives of Californians.

Unfortunately, the tragic incidents that occurred over a decade ago have not ceased. In June of 2012, a licensed sterile injectable pharmacy located in Florida shipped contaminated products into California and patients here were injured. In September 2012, the New England Compounding Center based in Massachusetts shipped contaminated injectable drugs throughout the country, including California, resulting in the death of more than 50 people and in the illness of more than 700 patients. California was fortunate in that while our patients received products, no deaths or injuries have been reported as a result of these contaminated products. However, in both cases, because the board was unable to inspect these non-resident facilities, the board was not able to ensure that the operations met California's regulatory requirements.

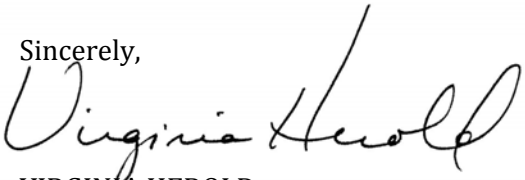
Senate Bill 294 will

- Require annual inspections by the board of pharmacy of specialty pharmacies that want to ship these products into California, to ensure that the operations comply with California's requirements for sterile compounding;
- Expand the types of medications for which a specialty license is required to also include other high-risk types of drugs, such as those administered into the eyes, or inhaled; and
- Ensure California standards are met and enforced for all pharmacies that ship these specialty compounded drug products into California, by requiring board inspections of those who hold a specialty license. In addition to the license fee, the non-resident Pharmacy will also be required to reimburse the board for reasonable / actual costs associated with an out-of-state inspection.

It is time to once again strengthen the state's oversight of pharmacies that compound sterile drug products so that Californians are protected. Senate Bill 294 will provide for such enhanced protection and will ensure that California's standards are enforced and patients are protected.

For these reasons, the Board of Pharmacy respectfully requests your Aye vote to pass SB 294.

Sincerely,



VIRGINIA HEROLD
Executive Officer

cc: The Honorable Bill Emmerson
Members, Assembly Appropriations

California State Board of Pharmacy
1625 N. Market Blvd, N219, Sacramento, CA 95834
Phone: (916) 574-7900
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www.pharmacy.ca.gov

STATE, CONSUMER SERVICES AND HOUSING AGENCY
DEPARTMENT OF CONSUMER AFFAIRS
GOVERNOR EDMUND G. BROWN JR.

August 26, 2013

The Honorable Edmund G. Brown Jr.
Governor
State of California
State Capitol
Sacramento, CA 95814

RE: AB 1045 (Quirk-Silva) – Signature Requested

Dear Governor Brown:

The California State Board of Pharmacy respectfully requests your signature on Assembly Bill 1045 when it comes before you for your consideration.

Assembly Bill 1045 contains several provisions of importance to the Board of Pharmacy that will strengthen California's Pharmacy Law. First, the bill would establish cancellation by operation of law of any California non-resident pharmacy license, whenever a non-resident pharmacy's home-state license has been revoked, suspended or canceled. The board believes this type of immediate cancellation will help protect California patients from pharmacies that lose their home state's pharmacy license, and may attempt to continue to do business in California without the home state's oversight. In addition, Assembly Bill 1045 provides that when a non-resident sterile compounding pharmacy issues a recall of one of its compounded drug products, that the board shall be notified immediately, thus ensuring that we can be certain patients receive notification and necessary medical oversight as soon as possible.

The board projects no fiscal impact on its operations to implement the provisions of Assembly Bill 1045, and respectfully requests your SIGNATURE on this important legislation.

Please do not hesitate to contact me at (916) 574-7911 with any questions.

Sincerely,

VIRGINIA HEROLD
Executive Officer

cc: The Honorable Sharon Quirk-Silva
Department of Consumer Affairs

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BUSINESS, CONSUMER SERVICES AND HOUSING AGENCY
DEPARTMENT OF CONSUMER AFFAIRS
GOVERNOR EDMUND G. BROWN JR.

September 10, 2013

To: Members, Enforcement and Compounding Committee

Subject: Agenda Item II (b) – Update on Proposed Federal Legislation on Compounding

---

I. Currently pending at the federal level is possible legislation that would establish stronger federal requirements for pharmacies that compound sterile medications, particularly for those pharmacies that compound medications in large quantities and without a patient-specific prescription. However, the status of enactment of such a proposal at this time is a bit uncertain.

The Senate has a draft proposal pending and the House is working on its own version of compounding provisions. The belief is that compounding legislation may be combined with requirements for national track and trace provisions for medications (possibly to preempt California's e-pedigree requirements). However, the House has already passed its own version of a track and trace system, without the corresponding piece. The Senate track and trace provisions do have a compounding piece but this bill has not yet been passed by the Senate.

If the Senate bill is passed by the Senate, both the House and the Senate bills will go to a conference committee to rectify the provisions into a single piece of legislation. This could occur in the fall.

II. In early August the GAO issued a report on compounding by pharmacies. The report is attached, and can also be accessed on the GAO's website at: http://www.gao.gov/assets/660/656388.pdf

From the Executive Summary is the following:

> *The authority of the Food and Drug Administration (FDA), an agency within the Department of Health and Human Services (HHS), to oversee drug compounding is unclear. Two federal circuit court decisions have resulted in differing FDA authority in different parts of the country. According to FDA officials, these inconsistent decisions and the agency's limited inspection authority over pharmacies have created challenges in FDA's ability to inspect and take enforcement action against entities engaging in drug compounding. For example, from 2002 through 2012, in order to inspect some facilities engaged in drug compounding, FDA officials said they had to obtain 11 warrants to gain access to drug compounders' facilities that had challenged FDA's inspection authority. GAO also found that while FDA and national pharmacy organization officials generally agreed that states regulate the practice of pharmacy and FDA regulates drug manufacturing, there was no consensus on whether compounding drugs in large quantities—in anticipation of individual prescriptions or without prescriptions—and selling those drugs across state lines falls within the practice of pharmacy or is a type of drug manufacturing that should be overseen by FDA. This lack of consensus and differing FDA authority to oversee compounded drugs across the country has resulted in gaps in oversight of drug compounding.*

FDA lacks timely and reliable information to oversee the entities that compound drugs, but has found problems through its limited oversight. Specifically, FDA's inspection database cannot identify all of the agency's inspections of compounding pharmacies, or the final classification of inspection results, for all of the inspections. Until 2013, FDA limited its inspections of compounding pharmacies to those conducted in response to complaints or adverse events. However, the agency recently inspected compounding pharmacies that it identified as posing a significant threat to public health from poor sterile drug production practices in the past and found problems, such as concerns about a lack of sterility, which resulted in recalls of compounded drugs. In addition, drug manufacturers are required to register with FDA and are subject to FDA's inspection and drug approval processes; pharmacies meeting certain requirements are generally exempt from registration. However, some compounding pharmacies may have registered with FDA to market themselves as "FDA-registered" which may lead some purchasers to assume that FDA has inspected or approved their compounded drugs; whereas, according to FDA officials, this is generally not the case.

The states GAO reviewed—California, Connecticut, Florida, and Iowa—have each taken actions to enhance their oversight of drug compounding. For example, Florida required all pharmacies—both those located in the state and out-of-state that sell drugs in Florida—to notify the board of their compounding activities. In addition, national pharmacy organizations have undertaken efforts to help states oversee drug compounding. For example, a national pharmacy organization is working with Iowa to inspect out-of-state pharmacies that ship drugs into the state. However, according to national pharmacy organizations and officials from state boards of pharmacy, some states do not have the resources to inspect pharmacies on a regular basis. Instead, these states inspect pharmacies only in response to a complaint or a reported adverse drug event.

United States Government Accountability Office

Report to Congressional Requesters

July 2013

DRUG COMPOUNDING

Clear Authority and More Reliable Data Needed to Strengthen FDA Oversight

GAO-13-702

July 2013

DRUG COMPOUNDING

Clear Authority and More Reliable Data Needed to Strengthen FDA Oversight

GAO Highlights

Highlights of GAO-13-702, a report to congressional requesters

Why GAO Did This Study

Drug compounding is the process by which a pharmacist combines, mixes, or alters ingredients to create a drug tailored to the medical needs of an individual. An outbreak of fungal meningitis in 2012 linked to contaminated compounded drugs has raised concerns about state and federal oversight of drug compounding. GAO was asked to update its 2003 testimony on drug compounding. Specifically, this report addresses (1) the status of FDA's authority to oversee drug compounding, and the gaps, if any, between state and federal authority; (2) how FDA has used its data and authority to oversee drug compounding; and (3) the actions taken or planned by states or national pharmacy organizations to improve oversight of drug compounding. GAO reviewed relevant statutes and guidance; reviewed FDA data; and interviewed officials from FDA, national pharmacy organizations, and four states with varied geography, population, and pharmacy regulations.

What GAO Recommends

To help ensure that the entities that compound drugs have appropriate oversight, Congress should consider clarifying FDA's authority to oversee drug compounding. In addition, FDA should ensure its databases collect reliable and timely data on inspections associated with compounded drugs, and differentiate drug compounders from manufacturers. HHS's comments support the need to clarify FDA's authority, and stated that the information in its inspection database could be improved and that it would consider whether it can differentiate compounding pharmacies from manufacturers.

View GAO-13-702. For more information, contact Marcia Crosse at (202) 512-7114 or crossem@gao.gov.

What GAO Found

The authority of the Food and Drug Administration (FDA), an agency within the Department of Health and Human Services (HHS), to oversee drug compounding is unclear. Two federal circuit court decisions have resulted in differing FDA authority in different parts of the country. According to FDA officials, these inconsistent decisions and the agency's limited inspection authority over pharmacies have created challenges in FDA's ability to inspect and take enforcement action against entities engaging in drug compounding. For example, from 2002 through 2012, in order to inspect some facilities engaged in drug compounding, FDA officials said they had to obtain 11 warrants to gain access to drug compounders' facilities that had challenged FDA's inspection authority. GAO also found that while FDA and national pharmacy organization officials generally agreed that states regulate the practice of pharmacy and FDA regulates drug manufacturing, there was no consensus on whether compounding drugs in large quantities—in anticipation of individual prescriptions or without prescriptions—and selling those drugs across state lines falls within the practice of pharmacy or is a type of drug manufacturing that should be overseen by FDA. This lack of consensus and differing FDA authority to oversee compounded drugs across the country has resulted in gaps in oversight of drug compounding.

FDA lacks timely and reliable information to oversee the entities that compound drugs, but has found problems through its limited oversight. Specifically, FDA's inspection database cannot identify all of the agency's inspections of compounding pharmacies, or the final classification of inspection results, for all of the inspections. Until 2013, FDA limited its inspections of compounding pharmacies to those conducted in response to complaints or adverse events. However, the agency recently inspected compounding pharmacies that it identified as posing a significant threat to public health from poor sterile drug production practices in the past and found problems, such as concerns about a lack of sterility, which resulted in recalls of compounded drugs. In addition, drug manufacturers are required to register with FDA and are subject to FDA's inspection and drug approval processes; pharmacies meeting certain requirements are generally exempt from registration. However, some compounding pharmacies may have registered with FDA to market themselves as "FDA-registered" which may lead some purchasers to assume that FDA has inspected or approved their compounded drugs; whereas, according to FDA officials, this is generally not the case.

The states GAO reviewed—California, Connecticut, Florida, and Iowa—have each taken actions to enhance their oversight of drug compounding. For example, Florida required all pharmacies—both those located in the state and out-of-state that sell drugs in Florida—to notify the board of their compounding activities. In addition, national pharmacy organizations have undertaken efforts to help states oversee drug compounding. For example, a national pharmacy organization is working with Iowa to inspect out-of-state pharmacies that ship drugs into the state. However, according to national pharmacy organizations and officials from state boards of pharmacy, some states do not have the resources to inspect pharmacies on a regular basis. Instead, these states inspect pharmacies only in response to a complaint or a reported adverse drug event.

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Abbreviations

FACTS	Field Accomplishments and Compliance Tracking System
FDA	Food and Drug Administration
FDAMA	Food and Drug Administration Modernization Act of 1997
FDCA	Federal Food, Drug, and Cosmetic Act
HHS	Department of Health and Human Services
NABP	National Association of Boards of Pharmacy
OIG	Office of Inspector General
PCAB	Pharmacy Compounding Accreditation Board
USP	The United States Pharmacopeial Convention

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U.S. GOVERNMENT ACCOUNTABILITY OFFICE
441 G St. N.W.
Washington, DC 20548

July 31, 2013

The Honorable Elijah Cummings
Ranking Member
Committee on Oversight and Government Reform
House of Representatives

The Honorable John Tierney
Ranking Member
Subcommittee on National Security
Committee on Oversight and Government Reform
House of Representatives

Drug compounding is the process by which a pharmacist or doctor combines, mixes, or alters ingredients to create a drug tailored to the medical needs of an individual patient. Compounding, a traditional component of the practice of pharmacy, is typically used to prepare drugs that are not commercially available, such as a drug for a patient who is allergic to an ingredient in a mass-produced pharmaceutical product.[1] Traditionally, state pharmacy regulatory bodies (e.g., boards of pharmacy) regulate pharmacy practice, including drug compounding activities, through state laws and regulations. The Food and Drug Administration (FDA) is the agency within the Department of Health and Human Services (HHS) responsible for assuring the safety and effectiveness of drugs marketed in the United States.[2] Under the Federal Food, Drug, and Cosmetic Act (FDCA), and its implementing regulations, FDA approves new drugs and regulates the manufacture, marketing, and distribution of pharmaceutical products.[3]

An outbreak of fungal meningitis in 2012 linked to contaminated compounded drugs—resulting in over 60 deaths and hundreds of people becoming ill—has led to questions about the safety and quality of

[1]While drug compounding is often referred to as "pharmacy compounding," physicians may compound drugs in certain instances. The focus of this review is drug compounding by pharmacies.

[2]FDA is responsible for assuring the safety and effectiveness of these drugs regardless of whether they are manufactured in the United States or abroad.

[3]21 U.S.C. §§ 301 *et seq.*

compounded drugs, and raised concerns about state and federal oversight of drug compounding.[4] Concerns have also been raised by FDA and others, including members of Congress and public health advocates, that some pharmacies are going beyond traditional drug compounding by producing large quantities of compounded drugs without prescriptions for individual patients, and selling those compounded drugs to facilities in multiple states. Many believe that these types of pharmacies are manufacturing drugs under the guise of compounding without meeting safety and other requirements with which drug manufacturers must comply.

You asked us to update our 2003 testimony on drug compounding.[5] Specifically, this report addresses (1) the status of FDA's authority to oversee drug compounding, and the gaps, if any, between state and federal authority to oversee drug compounding; (2) how FDA has used its data and authority to oversee drug compounding; and (3) the actions taken or planned by states or national pharmacy organizations to improve oversight of drug compounding.

To describe the status of FDA's authority to oversee drug compounding and any gaps between state and federal authority, we reviewed FDCA provisions pertaining to drug compounding and other relevant federal statutes, regulations, and guidance documents on federal oversight of drug compounding, including FDA's 2002 compliance policy guide on drug compounding. We also reviewed other relevant FDA documents, and interviewed FDA officials on any gaps or proposed actions to address gaps, or to clarify federal and state authority. We selected four states—California, Connecticut, Florida, and Iowa—and reviewed documents, and interviewed officials from state regulatory bodies in each of these states.[6] (App. I contains information on the four states.) In addition, we reviewed documents, and interviewed officials from national organizations

[4]The contaminated product was traced to a compounding pharmacy in Massachusetts, which had shipped approximately 17,000 vials of a contaminated injectable steroid to 23 states. According to the Centers for Disease Control and Prevention, as of July 1, 2013, 749 individuals who received the contaminated steroid injections became ill with fungal meningitis or other types of infections, and 61 of them have died.

[5]See GAO, *Prescription Drugs: State and Federal Oversight of Drug Compounding by Pharmacies,* GAO-04-195T (Washington, D.C.: Oct. 23, 2003).

[6]We selected four states based on variations in geography, population, organization of pharmacy regulatory bodies, and pharmacy compounding laws and regulations.

representing pharmacies and pharmacists—including the American Pharmacists Association, American Society of Health-System Pharmacists, International Academy of Compounding Pharmacists, and National Community Pharmacists Association—and other organizations, including the National Association of Boards of Pharmacy (NABP) and the United States Pharmacopeial Convention (USP).[7] We also reviewed reports and studies related to oversight of drug compounding, and interviewed officials involved in those studies, including those from the Congressional Research Service and the HHS Office of Inspector General (OIG).

To examine how FDA has used its data and authority to oversee drug compounding, we reviewed documents and interviewed FDA officials—including officials in the Center for Drug Evaluation and Research, Office of Regulatory Affairs, and Office of the Chief Counsel—regarding data FDA collects on compounded drugs, the entities that compound them, and FDA inspections of those entities. Specifically, we examined data related to drug compounding from (1) FDA's Drug Registration and Listing System on entities that compound drugs that registered with FDA in its drug manufacturer database, and (2) FDA's Field Accomplishments and Compliance Tracking System (FACTS) on inspections of entities that compound drugs. We also interviewed FDA officials on the availability and limitations of FDA's data on adverse events associated with compounded drugs. We compared FDA's data on compounded drugs and the entities that compound them, including FDA's inspections and outcomes of those inspections, to standards described in *Standards for Internal Control in the Federal Government*—which specifies that relevant, reliable, and timely information be available for management decision making and external reporting purposes.[8] We also reviewed

[7]NABP is a professional association that assists its member state boards of pharmacy and jurisdictions in developing, implementing, and enforcing uniform standards for the purpose of protecting the public health. USP is a scientific nonprofit organization that sets standards for the identity, strength, quality, and purity of medicines, food ingredients, and dietary supplements. For this report, we refer to these organizations, including those representing pharmacies and pharmacists, as national pharmacy organizations.

[8]These standards provide an overall framework for establishing and maintaining internal controls; and for identifying and addressing major performance and management challenges, and areas at greatest risk of fraud, waste, abuse, and mismanagement. See GAO, *Standards for Internal Control in the Federal Government*, GAO/AIMD-00-21.3.1 (Washington, D.C.: November 1999), and its supplemental guide, *Internal Control Management and Evaluation Tool*, GAO-01-1008G (Washington, D.C.: August 2001).

information on FDA's efforts in 2013 to conduct inspections of entities that, according to the agency, were known to have produced sterile compounded drugs in the past. To assess the reliability of the FDA data, we reviewed FDA guidance and related documentation; interviewed knowledgeable agency officials; and viewed data FDA made available from these databases on its website. We determined that the data were sufficiently reliable for purposes of our report.

To identify actions planned or taken by states or national pharmacy organizations, we reviewed state laws and regulations, and proposed changes to state laws and regulations, in the four states we selected. For each state, we reviewed documents and interviewed representatives of the states' pharmacy regulatory bodies regarding actions taken or planned relating to the oversight of drug compounding, the implications of existing and proposed state laws and regulations, and the challenges state regulatory bodies face in overseeing drug compounding. We also discussed the states' pharmacy inspection and enforcement activities, as well as state efforts to collect pharmacy data. In addition, we reviewed surveys of states—for example, results of surveys of states to determine the number requiring compliance with USP provisions for sterile compounding. We also reviewed documents and interviewed officials from national pharmacy organizations, including NABP, regarding the actions planned or taken by these national pharmacy organizations related to the oversight of drug compounding.

We conducted this performance audit from February 2013 to July 2013 in accordance with generally accepted government auditing standards. Those standards require that we plan and perform the audit to obtain sufficient, appropriate evidence to provide a reasonable basis for our findings and conclusions based on our audit objectives. We believe that the evidence obtained provides a reasonable basis for our findings and conclusions based on our audit objectives.

Background

Drug Compounding by Pharmacies

Traditionally, a drug is compounded, through the process of mixing, combining, or altering ingredients, to create a customized drug tailored to the medical needs of an individual patient upon receipt of a prescription. For example, a pharmacist may tailor a drug for a patient who is allergic to an ingredient in a manufactured drug or prepare a liquid formulation for a patient who has difficulty swallowing pills. Some pharmacies also

compound drugs in advance of receiving individual patient prescriptions in anticipation of receiving prescriptions based on historical prescribing patterns, a practice referred to as anticipatory compounding. Compounded drugs include nonsterile preparations, such as capsules, ointments, creams, gels, and suppositories; and sterile preparations, including intravenously administered fluids and injectable drugs. Compounded sterile drugs pose special risks of contamination if not made properly and require special safeguards to prevent injury or death to patients receiving them.

Drug compounding is an integral part of the pharmacy profession and is practiced in a variety of settings, including hospital pharmacies, community pharmacies, chain drug store pharmacies, and home infusion settings. The exact proportion of all prescriptions filled by compounded drugs is unknown. In 2003, we reported that estimates ranged from 1 percent to 10 percent.[9] More recently, in 2013, the International Academy of Compounding Pharmacists estimated that the compounding industry made up 1 to 3 percent of the U.S. prescription drug market.

The exact number of pharmacies that compound drugs is also unknown. In 2013, the International Academy of Compounding Pharmacists provided the following estimates:

- About 26,000 community-based pharmacies reported that they provide some sort of prescription compounding services, based on information from the National Council of Prescription Drug Program's database on pharmacies.
- Of those 26,000 community-based pharmacies, about 7,500 pharmacies specialize in compounding.
- Of those 7,500 community-based pharmacies that specialize in compounding, about 3,000 pharmacies compound both sterile and nonsterile preparations.
- In addition, there are about 8,200 hospital pharmacies in the United States, and all of them are likely conducting some sort of compounding, both sterile and nonsterile.

[9] GAO-04-195T.

A recent report indicates that there has been an increase in the outsourcing of drug compounding in the last decade, primarily by hospitals. In April 2013, the HHS-OIG reported that nearly all (92 percent) of surveyed hospitals that participated in Medicare reported using compounded sterile products, and that more than three-fourths of these hospitals (77 percent) purchased some of these compounded drugs from at least one outside pharmacy.[10] The HHS-OIG found factors that hospitals cited for outsourcing included the need to ensure a ready supply of products in the event of shortages and the need for products with extended shelf lives, which require sophisticated equipment and testing to prepare these products that may not be readily available on the hospital premises.

State Regulation of Pharmacy Practice

State pharmacy regulatory bodies are responsible for oversight of the practice of pharmacy. All 50 states describe drug compounding in their state laws and regulations on pharmacy practice, although specific statutes or regulations vary across states, according to NABP.

USP is involved in setting standards that affect compounding.[11] According to USP, compounding standards help practitioners adhere to widely acknowledged, scientifically sound procedures and best practices, and facilitate the delivery of consistent and good-quality prepared medicines to patients. Twenty-five state pharmacy regulatory bodies reported that

[10]Department of Health and Human Services, Office of Inspector General, *High-Risk Compounded Sterile Preparations and Outsourcing by Hospitals That Use Them* (Washington, D.C.: Apr. 10, 2013).

[11]USP's current suite of General Chapters for compounding includes: Chapter 797 Pharmaceutical Compounding—Sterile Preparations, which provides procedures and requirements for compounding sterile preparations; Chapter 795 Pharmaceutical Compounding—Nonsterile Preparations, which provides guidance on applying good compounding practices in the preparation of nonsterile compounded formulations for dispensing and/or administration to humans or animals; Chapter 1160—Pharmaceutical Calculations in Prescription Compounding; Chapter 1163—Quality Assurance in Pharmaceutical Compounding; and Chapter 1176—Prescription Balances and Volumetric Apparatus. According to USP officials, these compounding chapters reference an additional 48 USP chapters. In addition to setting standards that affect compounding, USP, through the *United States Pharmacopeia-National Formulary*, a compendium of public pharmacopeial standards, provides monographs for drug articles, including ingredients used in compounded preparations, and monographs for the compounded preparations themselves, comprising standards of identity, quality, purity, strength, packaging, and labeling.

they require compliance with USP's chapter on sterile compounding, according to the NABP's 2013 survey of pharmacy law.[12]

FDA Regulation of Drug Compounding

FDA considers compounded drugs to be "new drugs" subject to FDA oversight; however, the agency has acknowledged that it is not practicable for pharmacies to complete and obtain approval for a new drug application for each compounded drug prepared for an individual patient.[13] In 1992, FDA, through guidance, and, in 1997, Congress, through legislation, attempted to clarify when compounded drugs will be exempt from certain requirements of the FDCA, including new drug approval requirements. Specifically, the Food and Drug Administration Modernization Act of 1997 (FDAMA) enacted section 503A of the FDCA. This section exempted drug products compounded by a pharmacist or physician based on a valid prescription for a compounded product that is necessary for the identified patient from three key provisions of the FDCA that are otherwise applicable to drugs, provided the pharmacy had, among other conditions, not solicited prescriptions or advertised or promoted the compounded drugs.[14]

In 2001, however, the United States Court of Appeals for the Ninth Circuit struck down all of the advertising, promotion, and solicitation provisions of section 503A of the FDCA because those provisions violated the Free

[12]National Association of Boards of Pharmacy, *Survey of Pharmacy Law—2013* (Mount Prospect, IL: 2013). The pharmacy regulatory bodies of Guam and Puerto Rico also reported that they require compliance with USP's standards on sterile compounding.

[13]The FDCA defines "new drug" as "Any drug … the composition of which is such that such drug is not generally recognized, among experts qualified by scientific training and experience to evaluate the safety and effectiveness of drugs, as safe and effective for use under the conditions prescribed, recommended, or suggested in the labeling thereof. . . . ." 21 U.S.C. § 321(p)(1). Drug manufacturers submit new drug applications to FDA to seek approval to market and sell a new pharmaceutical drug product in the United States. In addition, abbreviated new drug applications are submitted to FDA to seek approval to market a generic version of a drug after the period of exclusivity and any patents for a brand-name drug expire. In fiscal year 2013, user fees for new drug applications ranged from $979,400 to $1,958,800, depending on whether or not the application required clinical data, and were $51,520 for abbreviated new drug applications.

[14]Pub. L. No. 105-115, § 127, 111 Stat. 2296, 2328 (Nov. 21, 1997). Compounded drug products that met these requirements did not have to comply with good manufacturing practices, label drugs with adequate directions for use, or have an FDA-approved new drug or abbreviated new drug application. References to section 503A in this report are to section 503A of the FDCA, as codified at 21 U.S.C. § 353a.

Speech Clause of the First Amendment. The court also held that, because these provisions could not be severed from the remainder of section 503A, all of section 503A was invalid. In 2002, the United States Supreme Court struck down the law's advertising, promotion, and solicitation restrictions without addressing whether the rest of section 503A remained law. As a result, FDA issued a revised version of its compliance policy guide on drug compounding in 2002, which provides guidance, in light of the Ninth Circuit and Supreme Court decisions, on the types of factors the agency will consider in determining whether to take enforcement action against drug compounders for violations of the FDCA. These factors include activities, such as offering compounded drug products at wholesale, that suggest a drug compounder is engaged in drug manufacturing, rather than drug compounding. Subsequently, in 2005, the United States Court of Appeals for the Fifth Circuit issued a decision holding that, although section 503A's advertising, promotion, and solicitation restrictions were invalid, these restrictions could be severed from the rest of section 503A and, therefore, the law's remaining drug compounding provisions remain valid. See appendix II for details about these developments and how they have affected FDA's authority to oversee drug compounding.

The FDCA provides FDA authority to inspect pharmacies that compound drugs; however, this authority is limited. Generally, FDA's inspection authority does not extend to a pharmacy's records if the pharmacy meets certain requirements.[15] While FDA has not routinely inspected compounding pharmacies, FDA has used its authority to conduct some inspections in recent years, generally in response to complaints. These inspections have resulted in FDA issuing inspection observation reports, which are called FDA form 483s, and, in some cases, warning letters.[16] FDA's FACTS database contains information on these inspections,

[15]A pharmacy's records are exempt from FDA's inspection authority if the pharmacy is in compliance with any applicable local laws regulating the practice of pharmacy and medicine, regularly engages in dispensing drugs upon a prescription from a licensed practitioner, and does not manufacture, prepare, or compound drugs for sale other than during the regular course of its business of dispensing or selling drugs at retail. 21 U.S.C. § 374(a)(2)(A).

[16]An FDA form 483 is an inspection observation report that lists objectionable conditions observed at the facilities. An FDA warning letter is a correspondence that notifies a responsible individual or firm that the agency considers one or more products, practices, processes, or other activities to be in violation of the FDCA, its implementing regulations, and other federal statutes.

including the type of inspection (e.g., routine or in response to a complaint).

Under the FDCA, drug manufacturers are required to register with FDA and list the drugs they manufacture.[17] The FDCA exempts from these registration and listing requirements those pharmacies that meet certain requirements.[18] FDA's Drug Registration and Listing System contains information on drug establishments that have registered with FDA to market their drugs in the United States. These establishments provide information, including company name and address, and identify the drugs they manufacture for commercial distribution in the United States.

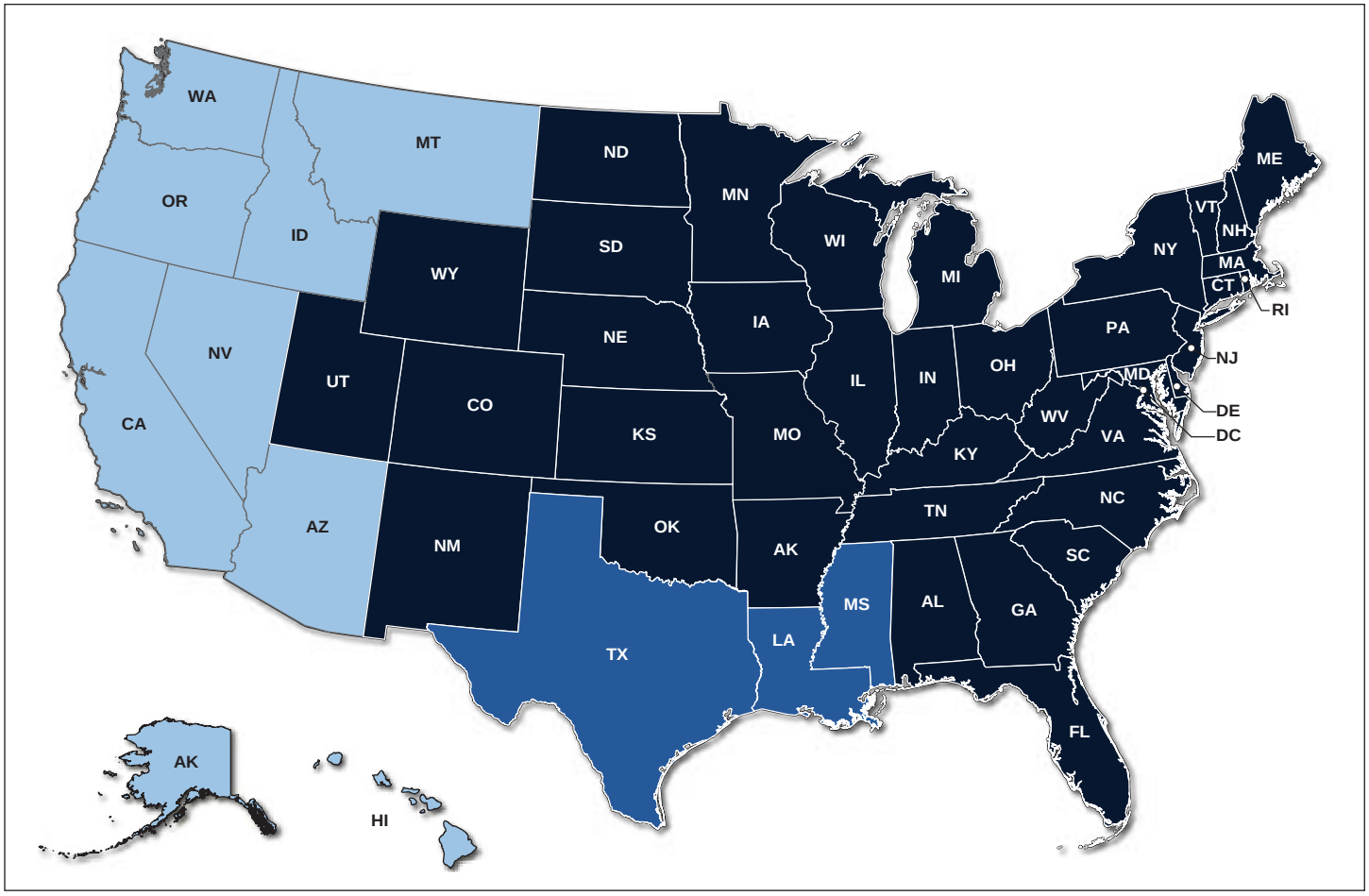
Unclear Federal Authority and Lack of Consensus on When Drug Compounding Becomes Manufacturing

Although FDAMA attempted to clarify FDA's authority to oversee drug compounding, subsequent court decisions have contributed to a lack of clarity regarding the legal standards FDA must apply to oversee drug compounding. Specifically, two federal circuit court decisions resulted in differing FDA authority over drug compounding in different parts of the country, which has affected FDA's ability to oversee drug compounding. Section 503A provisions exempting certain compounded drugs from the FDCA's good manufacturing practice, certain labeling, and new drug and abbreviated new drug application requirements are in effect in those states in the Fifth Circuit, in which the U.S. Court of Appeals has held that the law, other than its advertising, promotion, and solicitation provisions, is valid. However, FDA follows its 2002 compliance policy guide in states in the Ninth Circuit, in which the U.S. Court of Appeals has held all of the drug compounding provisions in section 503A are invalid. In states outside of the Fifth and Ninth Circuits, where federal courts have not considered the validity of these drug compounding provisions, FDA considers both section 503A's drug compounding provisions and its 2002 compliance policy guide to guide its oversight. Figure 1 shows how FDA generally conducts its oversight of drug compounding in different parts of the country based on the differing court decisions.

[17]21 U.S.C. § 360.

[18]A pharmacy is exempt from these registration and listing requirements if the pharmacy is in compliance with any applicable local laws regulating the practice of pharmacy and medicine, regularly engages in dispensing drugs upon a prescription from a licensed practitioner, and does not manufacture, prepare, or compound drugs for sale other than during the regular course of its business of dispensing or selling drugs at retail. 21 U.S.C. § 360(g)(1).

Figure 1: Food and Drug Administration (FDA) Oversight of Drug Compounding



Interactive instructions

Roll over the color legend to the right for information about FDA's authority to oversee drug compounding and how it approaches oversight of these drugs.

Area/Jurisdiction affected

Ninth Circuit **Fifth Circuit** **Remaining states**

Sources: GAO analysis of federal court decisions and interviews with FDA officials; Map Resources (map).

Furthermore, according to FDA officials, the agency's inconsistent authority to oversee drug compounding and the agency's limited inspection authority over pharmacies have led to legal challenges to FDA's authority to inspect entities engaging in drug compounding and to take appropriate enforcement actions against these entities. For example, from 2002 through 2012, FDA had to obtain 11 inspection warrants to gain access to drug compounders' facilities and records, representing nearly half of the 25 administrative warrants obtained by FDA for all FDA-regulated products in that same period, according to agency officials.[19] FDA officials said that these entities refused FDA access to their facilities or records, citing the provision of the FDCA that limits the agency's inspection authority over a pharmacy that is in compliance with state and local laws.[20] FDA officials added that if the agency is required to obtain a warrant before gaining access, the agency may be delayed in its efforts to curb an outbreak or take enforcement action and the entity may have time to clean up its facility or alter its records to avoid enforcement action. FDA officials also said that if the agency finds significant issues during an inspection of a drug compounder, to determine whether to take action against the compounder the agency must first consider its legal authority in the particular jurisdiction in which the compounder operates and whether any FDA action is likely to be challenged in court. According to FDA officials, engaging in this type of analysis may have resulted in a long lag time between the inspection and the issuance of a warning letter.

In addition, we found a lack of consensus regarding when drug compounding becomes drug manufacturing. Officials from FDA and national pharmacy organizations we interviewed generally agreed that traditional drug compounding involves a patient-specific prescription for a customized medication that is not otherwise commercially available, and there was agreement that this type of compounding is part of the practice of pharmacy and generally overseen by the states. Further, there was agreement that FDA has clear authority to oversee drug manufacturing and drug manufacturers. However, there was not agreement on whether compounding pharmacies that are engaged in large-scale drug

[19]According to FDA officials, the agency typically seeks inspection warrants when inspection has been refused completely or when refusals have been encountered in limited areas (e.g., when a firm has refused to allow FDA to take photographs or collect samples). FDA officials also reported having to obtain warrants to inspect 2 of 31 compounding pharmacies it inspected in 2013.

[20]21 U.S.C. § 374(a)(2)(A).

compounding, producing these drugs in anticipation of individual prescriptions or without prescriptions, and selling them across state lines, are engaged in the practice of pharmacy or are engaged in drug manufacturing. As a result, there is a lack of consensus regarding whether states should have primary responsibility for regulating these entities as pharmacies, or FDA should have primary responsibility to regulate them as manufacturers. This lack of consensus on who has primary responsibility to regulate entities engaged in these practices and differing FDA authority applicable to compounded drugs across the country has resulted in gaps in oversight of drug compounding.

Further, according to officials from FDA and most of the organizations we spoke with, the line is not clear when anticipatory compounding is part of the practice of pharmacy and when anticipatory compounding crosses into drug manufacturing. For example, officials from one national pharmacy organization said that if a certain number of patients come to a pharmacy every month for progesterone suppositories and the pharmacy makes enough for a month's supply in advance based on the history of these prescriptions, then a pharmacy's compounding of the drug in advance should be considered drug compounding and not manufacturing. However, these officials added that a pharmacy that makes 10,000 sterile compounded injectables in advance of a prescription and ships them across 18 states may be engaged in manufacturing.

Noting this lack of clarity regarding when drug compounding becomes manufacturing, FDA has been working on a proposal that would create a new category of "nontraditional compounding," which would be subject to FDA oversight. According to congressional testimony and public statements,[21] FDA's new category of "nontraditional drug compounders" would fall between traditional drug compounding and drug manufacturing. FDA officials said they believe this new category would subject entities with a higher potential to adversely affect a large number of patients to appropriate and effective FDA regulation and oversight. FDA's proposal describes an entity as engaging in nontraditional compounding if it produces sterile compounded products in advance of or without an individual patient prescription, and ships these sterile compounded products across state lines. Under FDA's proposal, state pharmacy

[21]For example, Statement of Janet Woodcock, M.D., Director, Center for Drug Evaluation and Research, FDA, before the Senate Committee on Health, Education, Labor, and Pensions, 113th Cong., May 9, 2013.

regulatory bodies would continue to have primary responsibility to oversee traditional drug compounding and FDA would have express statutory authority to oversee this new category of nontraditional drug compounding.[22]

Some national pharmacy organizations said that the creation of a new category of nontraditional drug compounding is not necessary because they believe drug compounding and drug manufacturing are already distinct. For example, officials from one national pharmacy organization we interviewed said the establishment of a new category of nontraditional drug compounding could create more confusion between drug compounding and manufacturing, unless this new category is carefully crafted. These officials said that states should regulate drug compounding and FDA should regulate drug manufacturing, and that once an entity crosses the line between drug compounding and manufacturing, there should be a seamless handoff from the state to FDA. However, other organizations we spoke with generally agreed with FDA's proposed tiered system and said that entities in this new category should be regulated by FDA, not by state pharmacy regulatory bodies.

FDA Lacks Reliable and Timely Data on Compounding Pharmacies, but Has Found Problems through Its Limited Oversight

FDA lacks reliable information on entities that compound drugs, the types of drugs being compounded, and adverse events related to compounded drugs. Until 2013, FDA limited its inspections of compounding pharmacies to those conducted in response to complaints or adverse events, called "for cause" inspections; however, the agency has recently conducted inspections of compounding pharmacies that were known to produce "high-risk" sterile compounded drugs, and identified serious problems.

[22]On June 19, 2013, the Senate Committee on Health, Education, Labor and Pensions reported out of committee a bill that would create a new category of "compounding manufacturer," which is similar in some respects to FDA's proposed category of "nontraditional drug compounder." Pharmaceutical Compounding Quality and Accountability Act, S. 959, 113th Cong. (1st Sess. 2013). In addition, on May 23, 2013, a bill was introduced in the House of Representatives, H.R. 2186, to strengthen federal oversight of drug compounding. VALID Compounding Act, H.R. 2186, 113th Cong. (1st. Sess. 2013).

FDA Has Not Collected Reliable and Timely Data on Compounded Drugs and the Entities That Prepare Them

FDA officials, including the FDA Commissioner, have stated that, under the FDCA, compounding pharmacies are generally not required to register with FDA or list their products, and therefore FDA does not know who they are and what they are compounding.[23] As a result, FDA has stated that one of the reasons it has not routinely inspected compounding pharmacies is because the agency does not know who they are.

Officials with some of the organizations we interviewed said there has been confusion regarding the extent to which FDA oversees the compounding pharmacies that registered with FDA as drug manufacturers. Although drug manufacturers are required to register with FDA by providing company information such as name, location, and the drugs the company manufactures, compounding pharmacies meeting the FDCA's registration exemption are not required to register. However, according to FDA officials, neither the law nor the agency precludes those compounding pharmacies that are exempt from registration from voluntarily doing so, and some compounding pharmacies have registered with FDA as manufacturers and marketed themselves as "FDA-registered." FDA officials told us that registering as a manufacturer does not necessarily result in the application of regulatory requirements that apply to manufacturers or in FDA inspection for compliance with these requirements. For example, a compounding pharmacy may voluntarily register with FDA; however, this registration does not by itself give FDA authority to require the pharmacy to comply with FDA's good manufacturing practices and other requirements that apply to drug manufacturers. Nonetheless, these pharmacies appear as registered manufacturers in FDA's registration database, the Drug Registration and Listing System.

When entities that compound drugs on a large scale register with FDA as manufacturers and market themselves as "FDA-registered," it may erroneously convey an endorsement by FDA. As a result, some state officials and purchasers may incorrectly assume FDA inspects the entities or has reviewed and approved their compounded drugs. Officials from one of the national pharmacy organizations told us that they recently

[23]Pharmacies are not required to register with FDA if they follow any applicable local laws regulating the practice of pharmacy and medicine, regularly engage in dispensing drugs upon a prescription from a licensed practitioner, and do not manufacture, prepare, or compound drugs for sale other than during the regular course of their business of dispensing or selling drugs at retail. 21 U.S.C. § 360(g)(1).

learned that a pharmacy can be registered with FDA as a drug establishment as well as with the state as a pharmacy. They added that healthcare professionals and the public may assume that if an entity registers with FDA then that means that FDA is in some way regulating that entity. In addition, NABP officials noted that they were aware of some entities engaged in drug compounding whose drug compounding activities are not subject to state oversight because they are registered as manufacturers with FDA and the states assume FDA is overseeing these activities. Yet, if a compounding pharmacy is voluntarily registered with FDA, the agency would not inspect it for compliance with good manufacturing practices because it does not manufacture FDA-approved drugs.

Further, FDA lacks reliable data to make decisions to prioritize its inspection workload and other follow-up and enforcement actions.[24] Under standards for internal control in the federal government, relevant, reliable, and timely information should be available for external reporting purposes and management decision making. According to FDA officials, although the agency's FACTS database has a code for inspections of compounding facilities, some compounding pharmacies could be inspected and coded as either manufacturers of human drugs or manufacturers of veterinary drugs, and the FACTS database would not identify them as inspections of compounding pharmacies. In addition, while FDA can manually look up the results of an individual inspection, the agency does not have ready access to all of the final classification of inspections for those compounding pharmacies it can identify in its FACTS database; in these instances, FACTS does not indicate the agency's final determination whether an official action was indicated, voluntary action was indicated, or if no action was indicated from the inspection results.[25] According to FDA officials, some of the final

[24]We have previously reported on weaknesses in the data FDA uses to prioritize its inspection workload, including FACTS. See, for example, GAO, *Drug Safety: Better Data Management and More Inspections Are Needed to Strengthen FDA's Foreign Drug Inspection Program*, GAO-08-970 (Washington, D.C.: Sept. 22, 2008).

[25]FDA classifies an inspection as "official action indicated" if objectionable conditions were found that warrant regulatory action by the agency. A classification of "voluntary action indicated" means that objectionable conditions were identified but any corrective actions are left to the establishment to take voluntarily. A classification of "no action indicated" means that no objectionable conditions or practices were found during the inspection (i.e., conditions or practices that violate current good manufacturing practices), or if the significance of the documented objectionable conditions found does not justify further FDA action.

decisions are in hard copy, and the database includes recommendations from the district office inspectors, which may differ from the final inspection classifications.[26] Without reliable, timely data on all inspections conducted and the actions required and taken following those inspections, FDA lacks ready access to key data to inform its decision making on its oversight priorities and to take appropriate action when problems are identified.

In addition, pharmacies are generally not required to report to FDA adverse events regarding compounded drugs they have produced, unlike drug manufacturers who are required to report to FDA if they become aware of adverse events associated with their products.[27] Therefore, adverse event data about compounded drugs consists of voluntary reports, and FDA officials said that the agency is only aware that an adverse event involves a compounded drug if the individual voluntarily reporting the adverse event specifies that a compounded drug was involved in the event. While FDA's adverse event data associated with compounded drugs is limited, a recent report by the Pew Charitable Trusts identified 20 pharmacy compounding errors associated with 1,022 adverse events, including 75 deaths, since 2001.[28] According to this report, contamination of sterile products was the most common compounding error, though some incidents were the result of

[26]According to FDA officials, the agency does not have ready access to all of the final inspection classifications as some of the records are in hard copy and it would be difficult and time consuming to review the inspection reports and any associated documentation to evaluate and determine why certain final decisions were made or not made. Agency officials told us that reasons why a final decision was not entered into its FACTS database include, but are not limited to, the difficulty of the agency to come to a final classification determination on an inspection due to the complexity of legal issues associated with the regulation of compounded drugs and compounding pharmacies or failure to enter the data.

[27]Generally, if a manufacturer receives drug- or certain device-related adverse event reports, it must send them to FDA. Health care professionals and consumers can voluntarily file adverse event reports with FDA and may also report these events to the products' manufacturers. User facilities (e.g., hospitals and nursing homes) must report certain device-related—but not drug-related—adverse events to FDA as well. 21 C.F.R. §§ 314.80(c), 803.30, 803.50.

[28]The Pew Charitable Trusts is an independent, nonprofit research and public policy organization. Pew Charitable Trusts, American Society of Health-System Pharmacists, American Hospital Association, *Pharmacy Sterile Compounding Summit: Summary of a Stakeholder Meeting* (Washington D.C.: Apr. 15, 2013).

pharmacists' and technicians' miscalculations and mistakes in filling prescriptions.

Oversight of Drug Compounders Has Been Limited, but FDA Has Recently Increased Its Efforts

Until 2013, FDA limited its inspections of compounding pharmacies to those conducted in response to complaints or adverse events, called "for cause" inspections;[29] however, the agency has recently conducted inspections of compounding pharmacies that FDA identified as known to produce "high-risk" sterile compounded drugs. From its available data, FDA identified 194 "for cause" inspections of compounding pharmacies the agency conducted from February 8, 2002, through May 11, 2012, under its pharmacy compounding assignment code for human drugs.[30] Of these 194 inspections, FDA issued 63 form 483 inspection observation reports outlining significant objectionable conditions identified during the inspections. FDA subsequently issued at least 31 warning letters to pharmacies as a result of these inspections for problems such as bacterial and fungal contamination found in sterile clean rooms and in finished product samples, improper hygiene and garbing procedures (e.g., putting on gowns, gloves, and shoe covers), failure to conduct appropriate laboratory testing on drug products, and inadequate ventilation. However, FDA has not taken any enforcement actions against the 31 entities where the agency found problems significant enough to send warning letters, according to FDA officials. Further, we found that 19 of the 194 compounding pharmacies were registered with FDA as drug manufacturers.

While FDA policy requires that the final inspection classification (which states whether official action, voluntary action, or no action was indicated based on the inspection findings) be entered into the agency's FACTS database, FDA officials said they could not readily provide the final

[29]FDA's inspection plan for fiscal year 2011 called for five full-time equivalent staff to inspect compounding pharmacies, and its plan for fiscal year 2012 called for two full-time equivalent investigator staff for these inspections.

[30]FDA officials noted that this is likely an incomplete list of inspections of compounding pharmacies. That is, they said that the agency could have conducted additional inspections of compounding pharmacies; but they could only identify 194 of them because of limitations in FDA's inspections database. According to FDA officials, additional inspections may have been coded as investigations rather than inspections (although they involved inspectional activity as part of the investigation) and some inspections of compounding pharmacies could have been coded as inspections of human drug manufacturers.

inspection classification for the 194 inspections of compounding pharmacies. The officials said that in some cases the database included FDA district officials' recommendations for inspection classification rather than the final inspection classification. As a result, we could not ascertain how many of the 194 inspections of compounding pharmacies found problems that were significant enough for FDA to determine that official action was indicated.

More recently, FDA began inspecting compounding pharmacies in February 2013 that, according to the agency, were known to produce "high-risk" sterile compounded drugs.[31] These inspections were not the for-cause inspections that FDA has typically done in the past when inspecting compounding pharmacies. Rather, FDA's objective was to determine whether certain pharmacies that were known to have produced high-risk sterile drug products in the past posed a significant threat to public health from poor production practices. According to FDA officials, the agency identified 31 compounding pharmacies to inspect using criteria that included whether a warning letter had been issued to the pharmacy in the past 10 years, whether the pharmacy compounded sterile injectable drugs, whether there were adverse drug events reported, or whether there were complaints received from the FDA district office or others. FDA officials said they also reviewed related congressional committee reports that mentioned specific pharmacies and reviewed pharmacy websites. In summarizing these efforts, FDA reported that pharmacies meeting at least two of FDA's criteria were included in the inspections.[32]

As of April 29, 2013, FDA had issued form 483 inspection observation reports to 30 of the 31 compounding pharmacies it inspected as part of its

[31]For FDA's summary describing these inspections, see Food and Drug Administration, *Summary: 2013 FDA Pharmacy Inspection Assignment*, accessed April 30, 2013, http://www.fda.gov/Drugs/GuidanceComplianceRegulatoryInformation/PharmacyCompounding/ucm347722.htm. FDA officials told us that to conduct these inspections of compounding pharmacies the agency had to take inspectors off other assignments.

[32]According to FDA officials, the agency used a risk-based model to identify the pharmacies and 15 of the 31 pharmacies had at least one reported death and, thus, were included in FDA's inspections regardless of whether they met any of the other criteria.

recent inspections.[33] FDA's observations included inappropriate or inadequate, or both, clothing for sterile processing, lack of appropriate air filtration systems, insufficient microbiological testing, and other practices that create risk of contamination.

As of May 21, 2013, 7 of the 31 compounding pharmacies had voluntarily recalled some or all of their sterile compounded products as a result of observations from these recent FDA inspections.[34] For example:

- FDA sampled a compounded sterile injectable solution during one of its inspections in March 2013 and found bacteria in the product, which resulted in the compounding pharmacy immediately announcing a nationwide recall of all of its sterile compounded products, which included over 50 sterile drug products.

- Another compounding pharmacy recalled its sterile drug products that had not yet reached the expiration date listed on the product because of a lack of sterility assurance. This recall included approximately 95 dosage units of various sterile compounded drugs that the pharmacy supplied to the offices of licensed medical professionals located within its state; however, some patients that received products from those medical professionals may live in other states.

Further, according to our analysis, 10 of the 31 high-risk compounding pharmacies that FDA inspected were also registered in FDA's drug manufacturer database. Even though these compounding pharmacies were registered with FDA, agency officials said the agency does not routinely inspect these pharmacies despite their registration because registration alone does not trigger a routine inspection. Additionally, 8 of the 10 were individual facilities of two different larger compounding

[33]According to FDA officials, 1 of the 31 pharmacies the agency inspected did not receive an FDA form 483, and this pharmacy was not compounding sterile drugs. Four of the 31 pharmacies were individual facilities of one pharmacy firm, and 4 others were individual facilities of another firm; however, FDA counted each facility as a separate compounding pharmacy.

[34]In addition, as of May 30, 2013, four other compounding pharmacies that were not part of the 31 pharmacies inspected by FDA initiated voluntary recalls of their sterile compounded products because of concerns of a lack of sterility assurance. FDA identified bacterial and fungal growth in samples of a sterile compounded drug in a subsequent inspection of one of these compounding pharmacies.

pharmacies, both of which had websites advertising they were FDA-registered.

States and National Organizations Have Taken Various Actions to Strengthen Oversight of Drug Compounding

The four states we reviewed—California, Connecticut, Florida, and Iowa—have each recently taken actions, such as working with national pharmacy organizations, to improve their oversight of drug compounding. In addition, national pharmacy organizations have undertaken efforts to help states oversee drug compounding. However, some states may lack the resources to provide the necessary oversight of drug compounding.

The Four States Reviewed Have Taken Actions, Including Increased Inspections, to Strengthen Oversight of Drug Compounding

All four of the states we reviewed recently took steps to potentially strengthen their oversight of drug compounding. These steps included developing an inspection program for sterile drug compounders that dispense drugs in the state, but are located outside of the state, and drafting new legislation to require the board of pharmacy to conduct on-site inspections prior to licensing a pharmacy. Examples of actions taken by each of the four states we reviewed follow:

California: On May 29, 2013, the California Senate passed legislation that would prohibit any pharmacy from compounding or dispensing, and any nonresident pharmacy from compounding for shipping into the state, sterile compounded drug products unless the pharmacy has obtained a sterile compounding pharmacy license from the California Board of Pharmacy; require inspection of resident and nonresident pharmacies by the board prior to licensure; require resident and nonresident pharmacies to report adverse events for compounded drugs to both the California State Board of Pharmacy and MedWatch, FDA's adverse event reporting system; and require resident and nonresident pharmacies to submit a list of all sterile medications compounded by the pharmacy during the prior 12 months before obtaining an annual renewal of the sterile compounding license, among other requirements. Currently, California law requires that a pharmacy that compounds sterile injectable drug products in California, or that ships sterile injectable products into California, obtain a special license issued by the board; however, the law exempts from this licensure requirement certain pharmacies that have current accreditation from a

private accreditation agency approved by the board.[35] California pharmacies that obtain licensure by the board are subject to prelicensure inspections, as well as annual inspections prior to renewal of the license. Nonresident pharmacies must provide a copy of a recent inspection report issued by the pharmacy's licensing agency, or a recent report from a private accrediting agency approved by the board, documenting the pharmacy's compliance with board regulations regarding the compounding of injectable sterile drug products. In describing the board's support of the proposed legislation, a California State Board of Pharmacy official told us that the board believed it important that all California and nonresident pharmacies compounding sterile injectable drugs be subject to state inspections, including those with an accreditation. As of June 14, 2013, the legislation was pending before a California State Assembly committee.

Connecticut: An official from Connecticut's Drug Control Division—which conducts inspections of pharmacies in the state and houses the Commission of Pharmacy Board Administrator, which oversees pharmacy licensing—told us that, as of April 2013, the state was working to tighten its regulations and implement inspection practices regarding in-state sterile drug compounders. For example, the state plans to begin conducting more thorough pharmacy inspections in which the inspectors consider additional attributes, such as compliance with USP standards on sterile compounding, the physical environment where the facility is located, and the number of sales representatives employed by the pharmacy. In addition, the Drug Control Division is working to propose new regulations to allow the state to better track and regulate the sale of compounded sterile medications produced by resident and nonresident

[35]Resident pharmacies operated by entities that are licensed by either the board or the California Department of Health and nonresident pharmacies operated by entities that are licensed as a hospital, home health agency, or a skilled nursing facility are eligible for such exemption. Cal. Bus. & Prof. Code §§ 4127.1, 4127.2. In contrast to current law, which imposes special licensure requirements only on pharmacies compounding injectable sterile drugs, the proposed legislation would require pharmacies compounding all types of sterile drugs to meet such requirements.

sterile drug compounders. However, the details of these proposed regulations were not available as of June 2013.[36]

Florida: On November 20, 2012, the Florida Board of Pharmacy issued an emergency rule requiring all resident pharmacies and nonresident pharmacies that ship drugs to Florida to immediately notify the board of their compounding activities.[37] More than half (55 percent) of the 8,193 responding pharmacies reported that they compound nonsterile products, such as ointments or tablets; and 12 percent reported that they compound sterile products, such as injectable and ophthalmic solutions. Florida found that about one-third (32 percent) of the 946 pharmacies that perform sterile compounding were nonresident pharmacies.[38] One goal of Florida's emergency rule was to determine the scope of sterile and nonsterile compounding within Florida's resident and nonresident licensed pharmacies. According to Florida Board of Pharmacy officials, prior to the emergency rule, the board did not know how many pharmacies compounded drugs, how many nonresident pharmacies shipped compounded drugs into the state, or whether they compounded nonsterile or sterile drugs. According to these officials, the board intends to use this newly acquired information to improve the board's oversight activities, such as to identify and inspect compounding pharmacies. As of May 2013, the Florida Board of Pharmacy was considering whether to

[36]In Connecticut, pharmacy licensure and pharmacy inspections are handled separately. The state's Commission of Pharmacy, which is administered by the Department of Consumer Protection, is responsible for approval of new licenses. The commission also adjudicates cases involving pharmacists, pharmacies, and pharmacy technicians brought before it. The Department of Consumer Protection's Licensing Division handles the clerical aspects of licensing pharmacists and pharmacies while the state's Department of Consumer Protection, Drug Control Division, conducts pharmacy inspections and implements enforcement actions. Connecticut has 10 drug control agents who conduct pharmacy inspections, all of whom are licensed pharmacists.

[37]Specifically, Florida's emergency rule required resident pharmacies with state pharmacy permits and nonresident pharmacies registered with the state to immediately notify the board of their sterile and nonsterile compounding activities, the types of drugs they compound, and whether they compound drugs in bulk. In addition, the emergency rule required Florida's board of pharmacy to use the information on compounding activities to place a high priority on inspecting high-risk pharmacies such as those that compound sterile drugs. The emergency rule also required all nonresident registered pharmacies to provide a copy of their last two inspection reports as provided by the state in which the pharmacies are physically located and licensed.

[38]Florida Department of Health, Division of Medical Quality Assurance, *Florida Board of Pharmacy Compounding Survey Report* (Tallahassee, FL: Jan. 23, 2013).

require pharmacies to complete an updated survey biennially in order to renew their pharmacy licenses.

Iowa: Iowa is inspecting drug compounders that are licensed by the state as nonresident pharmacies and dispensing compounded drugs in Iowa. Iowa established a consultancy services agreement with NABP in December 2012, and inspectors from NABP began inspecting the 581 nonresident pharmacies identified by the state at that time. The results of these inspections are expected to reveal whether the selected pharmacies are compounding drugs in compliance with state regulations. According to Iowa Board of Pharmacy officials, the state does not have information on the extent that Iowa's licensed nonresident pharmacies compound drugs, how many nonresident pharmacies ship compounded drugs into the state, or whether they compound nonsterile or sterile drugs. However, NABP's inspections have begun to provide some of this information. As of April 2013, Iowa's Board of Pharmacy had taken six formal disciplinary actions against five out-of-state compounding pharmacies following NABP inspections and, according to an Iowa Board of Pharmacy official, the board anticipates more disciplinary actions during the remainder of 2013 and early 2014. By the end of 2013 or early in 2014, an Iowa Board of Pharmacy official anticipates that NABP inspectors would visit all nonresident pharmacies licensed by the state.

States May Leverage National Organizations' Efforts to Enhance Oversight of Drug Compounding

At the national level, pharmacy organizations have undertaken a number of efforts to help states oversee drug compounding. For example, national pharmacy organizations have developed standards for compounded drugs that could be adopted by states. The following are examples of efforts undertaken by national pharmacy organizations.

The National Association of Boards of Pharmacy (NABP): NABP has initiated the Compounding Action Plan to identify and inspect compounding pharmacies. It includes continued collaboration on the Iowa nonresident inspection program, discussed above, and the sharing of inspection results and related actions. Through this plan, NABP intends to collect data on the number of compounding pharmacies, including their scope of operations, in all states, and inspect these pharmacies. NABP officials said they believe that many of the 581 nonresident pharmacies licensed and identified by the Iowa Board of Pharmacy also hold licenses with many, if not all, of the other states requiring nonresident licensure. Using the Iowa nonresident licensed pharmacy list as a starting point, NABP sent Iowa's list to each state to confirm information regarding these pharmacies, such as whether the pharmacy has been disciplined,

whether it is engaged in sterile compounding, or whether it is engaged in "nontraditional" compounding activities. In addition, NABP asked all states to identify any known or suspected compounding pharmacies in their state that are not on the Iowa nonresident pharmacy list. As a result, NABP officials told us that NABP added some additional pharmacies to Iowa's original inspection list. As of June 2013, NABP had inspected 215 pharmacies.[39] In addition to its Compounding Action Plan, NABP created and continues to maintain a Model State Pharmacy Act and Model Rules for states to use when developing new pharmacy laws and regulations, including rules specific to sterile compounding. According to NABP officials, each state has adopted aspects of NABP's model act and model rules.[40]

The Pharmacy Compounding Accreditation Board (PCAB): In 2006, eight national pharmacy organizations established the PCAB, a voluntary accrediting organization for sterile and nonsterile drug compounders.[41] According to an organization official, PCAB's national standards are based on the consensus of industry experts of those elements that should exist in a pharmacy that adheres to high quality standards. PCAB accreditation indicates that the staff involved in compounding have proper and ongoing training; that the pharmacy uses active pharmaceutical

[39]NABP will also assist the New Jersey Division of Consumer Affairs with inspections of New Jersey pharmacies engaged in the practice of compounding under a recently reached agreement with the New Jersey Division of Consumer Affairs and the state's Attorney General. New Jersey licenses approximately 40 retail pharmacies that perform sterile compounding and 109 hospital pharmacies that may compound sterile products. NABP inspectors will assist the division in performing field inspections at compounding pharmacies, detailed audits of their records, and in-depth analysis of inspection findings. In addition, NABP inspectors will assist with investigations into complaints about compounding pharmacies, and in bringing charges against any found to be noncompliant.

[40]NABP's Model State Pharmacy Act and Model Rules (Model Act) provide state boards of pharmacy with model language that may be used when developing state laws or board rules. The Model Act includes sections on the boards of pharmacy, licensing (pharmacists, technicians, and facilities), and discipline. NABP last updated the Model State Pharmacy Act and Model Rules in August 2012.

[41]The following national pharmacy organizations established PCAB and, with the exception of the National Association of Boards of Pharmacy, currently make up PCAB's Board of Directors: American College of Apothecaries, National Community Pharmacists Association, American Pharmacists Association, National Alliance of State Pharmacy Associations, International Academy of Compounding Pharmacists, National Home Infusion Association, National Association of Boards of Pharmacy, and the United States Pharmacopeial Convention.

ingredients and inactive materials from appropriate suppliers; that all compounding procedures are fully documented and carried out in conformance with established formulas; and USP standards for compounding. According to a PCAB official, as of June 26, 2013, 176 drug compounding pharmacies received PCAB accreditation, and 124 additional drug compounding pharmacies have applied for PCAB accreditation.[42]

Resource Constraints and Other Factors May Affect States' Ability to Oversee Drug Compounding

Some states may lack the fiscal or staff resources to provide the necessary oversight of drug compounding. A number of officials from state boards of pharmacy attending a December 2012 meeting conducted by FDA expressed confidence that their states had adequate resources to oversee drug compounders, but were concerned about resources in other states. They explained that, until recently, they depended on the states where the pharmacies were located to license and regulate those pharmacies. However, many state budgets have been cut and it is uncertain whether all states have the resources or qualified staff to inspect and otherwise appropriately oversee their licensed pharmacies. The effect of limited state resources may reach across state lines, and it may not be correct to assume that a pharmacy licensed by another state is being regulated adequately.

In addition, differences in pharmacy inspection practices among states may affect oversight of drug compounding in other states. For example, each of the four states we reviewed require licensure or registration of nonresident pharmacies that provide pharmacy services to users in the state, and they require nonresident pharmacies applying for a license or registration to have a current license, permit, or registration issued by the regulatory authority of their home state. The states in our review also have generally relied on the home states of the nonresident pharmacies to inspect these pharmacies on a regular basis. However, state officials and officials from national pharmacy organizations we interviewed told us that the frequency of pharmacy inspections and the qualifications of the pharmacy inspectors vary widely among states, and it is uncertain whether all nonresident pharmacies receive adequate oversight from their home states. Of the four states in our review, one required annual

[42]According to a PCAB official, as of June 24, 2013, 176 PCAB-accredited pharmacies were located in 41 states and no state or other entity required PCAB accreditation for a pharmacy to compound drugs.

inspections of all pharmacies located in the state and one required annual inspections of all sterile drug compounding pharmacies located in the state, while another required routine inspections of retail pharmacies in the state once every 4 years. In addition, three of the four states required all pharmacy inspectors to have a license to practice pharmacy in that state, while one state reported having some inspectors without pharmacist licenses.

Officials representing several national pharmacy organizations that we interviewed also expressed concerns regarding whether states have enough resources to regulate and inspect pharmacies on a timely basis. Instead, some states inspect pharmacies only in response to a problem they become aware of through a complaint or adverse drug event. Some of these officials also expressed concern regarding FDA's resources to oversee drug compounding. For example, officials from NABP told us that both FDA and the state boards of pharmacy need more resources for the oversight of drug compounding. Recognizing the need for additional resources to oversee drug compounders, the bill that the California legislature is considering—a bill that would require nonresident pharmacies shipping sterile compounded drugs into the state to have an on-site inspection by the California Board of Pharmacy prior to licensure—would also require those pharmacies to pay for inspection-related travel expenses.

Conclusions

To ensure that compounding pharmacies receive adequate oversight, it is essential to have clear roles for FDA and states regarding the regulation and oversight of drug compounding. The inconsistent federal circuit court decisions complicate FDA's ability to oversee drug compounding by requiring FDA to approach the regulation of drug compounding differently in different parts of the country. In addition, state approaches to the oversight of pharmacies, including compounding pharmacies, vary depending upon each state's regulations and the resources each state devotes to licensing and inspecting its pharmacies. Taken together, the different regulatory approaches FDA must take and the variation in how states oversee drug compounding, create gaps in oversight, which could lead to inadequate assurance that public health is protected.

To adequately carry out the oversight of compounded drugs, FDA must have data systems in place to produce timely, reliable information on inspections, the findings of those inspections, and enforcement actions taken related to compounded drugs. Without reliable, timely data, the agency will not have the information needed to intercede and protect

Americans from unnecessary harm when problems are identified. Recent FDA inspections of 31 entities that produce compounded drugs and the subsequent drug recalls highlight the potential risk to public health of failing to oversee these types of entities.

At the same time that FDA lacks complete information on inspections and enforcement actions taken related to compounded drugs, entities that compound drugs may register as manufacturers in the agency's registration database, and some advertise themselves as FDA-registered. As a result, states and purchasers may incorrectly assume that FDA has approved the products and inspected the facilities for compliance with good manufacturing practices.

Matter for Congressional Consideration

To help ensure appropriate oversight of the safety of products from the entities that prepare and distribute compounded drugs that have a high potential to adversely affect public health, Congress should consider clarifying FDA's authority to regulate entities that compound drugs.

Recommendations for Executive Action

We recommend that the Secretary of Health and Human Services direct the Commissioner of the FDA to

- take steps to consistently collect reliable and timely information in FDA's existing databases on inspections and enforcement actions associated with compounded drugs, and
- clearly differentiate in FDA's database, those manufacturers of FDA-approved drugs that FDA inspects for compliance with good manufacturing practices from those entities compounding drugs that are not FDA-approved and that FDA does not routinely inspect.

Agency Comments and Our Evaluation

We provided a draft of this report to HHS, which oversees FDA, for comment. HHS provided written comments, which are reprinted in appendix III, and technical comments, which we incorporated as appropriate. HHS stated that our report accurately details the limitations associated with FDA's current authority to oversee drug compounding. HHS's comments also support the Matter for Congressional Consideration that Congress should consider clarifying FDA's authority to oversee entities that compound drugs.

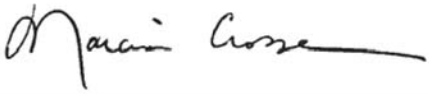
HHS neither agreed nor disagreed with our recommendations. Regarding our first recommendation to direct FDA to consistently collect reliable and timely information in FDA's existing databases on inspections and enforcement actions associated with compounded drugs, HHS stated that although FDA's FACTS database can be improved to better aggregate data and to facilitate evaluation of compounding pharmacy activities, these deficiencies do not materially impact FDA's ability to protect the public from harm when problems are identified. We understand that FDA has the ability to access the data associated with compounded drugs by searching under a company name or requesting information across FDA centers and offices; however, as our report notes, FDA lacks ready access to all of the data and lacks the ability to run queries or aggregate the data. For example, when we requested the final inspection classifications for 194 inspections of compounding pharmacies, FDA could not provide this information because, according to FDA officials, the FACTS database does not contain all of the final decisions and obtaining all of the final inspection classifications would require time-consuming manual searches of information maintained in hard copy. As a result, we could not ascertain how many of these inspections found problems that were significant enough for FDA to determine that official action was indicated. Therefore, we continue to believe that FDA should take steps to consistently collect reliable and timely information in its databases on inspections and enforcement actions associated with compounded drugs. Doing so would provide the agency with ready access to key data to inform its decision making on its oversight priorities and allow it to take appropriate action when problems are identified. In its comments, HHS stated that FDA will take steps to further improve its databases to ensure that inspections and actions regarding compounding going forward are coded consistently and are more readily identifiable through electronic searches, and that the final classification for inspections of drug compounders are entered into the FACTS database. These steps are consistent with our recommendation.

Regarding our second recommendation, HHS stated that FDA will consider whether it would be possible or appropriate to differentiate in its database those compounding pharmacies that register voluntarily from conventional manufacturers of FDA-approved drugs that are required to register. These conventional manufacturers are already subject to routine inspections by FDA and are required to list the FDA-approved products they manufacture. Therefore, these entities should already be known to FDA. HHS also commented that FDA will provide information to the public about what it means—and does not mean—to voluntarily register with FDA. HHS further stated that FDA has recommended that Congress

require pharmacies engaged in nontraditional compounding in the United States to register with FDA and list the drugs they are compounding, all of which is consistent with our recommendation.

As agreed with your offices, unless you publicly announce the contents of this report earlier, we plan no further distribution until 30 days from the report date. At that time, we will send copies of this report to the Secretary of Health and Human Services, appropriate congressional committees, and other interested parties. In addition, the report will be available at no charge on the GAO Web site at http://www.gao.gov.

If you or your staffs have any questions about this report, please contact me at (202) 512-7114 or crossem@gao.gov. Contact points for our Offices of Congressional Relations and Public Affairs are on the last page of this report. GAO staff who made major contributions to this report are listed in appendix IV.



Marcia Crosse
Director, Health Care

Appendix I: Information on Selection Criteria for Four States

To identify actions planned or taken by states, we interviewed representatives of the state pharmacy regulatory bodies from four states: California, Connecticut, Florida, and Iowa. We chose these states to provide insight into how a range of states approach the oversight of drug compounding; however, the approaches and experiences of these states are not generalizable to all 50 states.

We selected these states to reflect a range of characteristics, including census region, population, number of licensed pharmacies, and variation in compounding regulations. Table 1 lists select data for each selected state.

Table 1: Characteristics Considered in Selecting Four States for Inclusion in Review of State Oversight of Compounding Pharmacies

State	Census region[a]	2010 population (in millions)[b]	Number of compliance officers/ inspectors	Number of state licensed pharmacies	Number of pharmacy license categories[c]	Anticipatory compounding requirements[d]
California	West, Pacific	37.3	37[e]	7,352 (of which 482 are nonresident)[e]	6	May compound in advance of receipt of a patient-specific prescription based on a documented history of prescriptions for the individual patients in that patient population, but only in amounts necessary to ensure continuity of care for that patient population.
Connecticut	Northeast, New England	3.6	10 (8 inspectors and 2 supervisors)[e]	1,301 (of which 624 are nonresident)[e]	6	May compound in anticipation of prescriptions based on routine, regularly-observed prescribing patterns.
Florida	South, South Atlantic	18.8	20[f]	8,050 (of which 754 are nonresident)[f]	16	May compound in anticipation of prescriptions based on routine regularly-observed prescribing patterns.
Iowa	Midwest, West, North Central	3.0	7[f]	1,510 (of which 567 are nonresident)[f,g]	4	May compound drugs prior to receiving a valid prescription based on a history of receiving valid prescriptions generated solely within an established pharmacist/patient/ prescriber relationship.

Source: GAO analysis of U.S. Census Bureau, the National Association of Boards of Pharmacy, and state pharmacy law data.

[a]U.S. Census Bureau, Census Regions.

[b]U.S. Census Bureau, 2010 state demographic profiles.

[c]The National Association of Boards of Pharmacy 2013 Survey of Pharmacy Law.

[d]Analysis of state pharmacy laws and regulations.

[e]As of April 2013.

[f]As of May 2013.

[g]The number of licensed nonresident pharmacies varies over time as new pharmacies are licensed by the state and as licensed pharmacies go out of business or otherwise discontinue their licenses.

Appendix II: History of the Food and Drug Administration's (FDA) Authority over Drug Compounding and Approach to Oversight

Amendments to the Federal Food, Drug, and Cosmetic Act (FDCA) enacted in 1997, and a series of federal court decisions regarding the validity of those amendments, have resulted in several significant shifts in FDA's authority and approach to the regulation of drug compounding over the last two decades. Differences in these court decisions have resulted in inconsistent FDA authority to oversee drug compounding, which, according to the agency, has prompted it to apply three different regulatory approaches to compounded drugs depending upon the federal court jurisdiction in which the drugs are compounded. This appendix describes these legal developments.

1992-1997: Administrative Framework Established for Drug Compounding Oversight

In 1992, FDA issued a compliance policy guide that articulated the agency's approach to applying the FDCA's new drug, adulteration, and misbranding provisions to compounded drugs.[1] FDA noted its longstanding policy of deferring to state regulation of pharmacies engaged in traditional compounding activities, but that it was issuing the compliance policy guide to identify those circumstances under which the agency believed establishments with retail pharmacy licenses were engaged in "manufacturing, distributing, and promoting unapproved new drugs" in a manner outside the traditional pharmacy practice of compounding.[2] According to the 1992 compliance policy guide, the agency might exercise its enforcement discretion to take action against such establishments for violations of the FDCA's new drug approval, adulteration, and misbranding provisions.

[1]FDA, Compliance Policy Guides, § 460.200 Manufacture, Distribution, and Promotion of Adulterated, Misbranded, or Unapproved New Drugs for Human Use by State-Licensed Pharmacies (Mar. 16, 1992).

[2]The compliance policy guide describes such traditional compounding to include compounding of "reasonable quantities of drugs upon receipt of a valid prescription for an individually identified patient from a licensed practitioner."

1997-2001: Statutory Framework Established for Drug Compounding Oversight

In 1997, Congress passed and the President signed into law the Food and Drug Administration Modernization Act of 1997 (FDAMA) that, among other things, amended the FDCA to expressly permit drug compounding under certain conditions and to exempt compounded drugs meeting these conditions from certain provisions of the FDCA. In particular, under section 503A of the FDCA, as enacted by FDAMA, compounded drugs meeting these conditions were expressly exempt from the requirement that a drug be manufactured in conformity with current good manufacturing practice; that a drug's labeling carry adequate directions for use; and that the drug is the subject of an approved new drug application. To qualify for these exemptions, the pharmacist, physician, or pharmacy compounding the drug had to meet certain criteria, including refraining from advertising, promoting, or soliciting prescriptions for the compounding of any drug.

1999-2002: Judicial Developments in the Ninth Circuit

Shortly after FDAMA's enactment, a group of seven pharmacies challenged section 503A's advertising, promotion, and solicitation restrictions in federal district court, alleging that these restrictions violated the Free Speech Clause of the First Amendment. Agreeing with the plaintiffs, the U.S. District Court for the District of Nevada invalidated section 503A's advertising, promotion, and solicitation restrictions, severing these restrictions from the remainder of section 503A.[3] In 2001, the U.S. Court of Appeals for the Ninth Circuit affirmed the district court's First Amendment holding; however, the Ninth Circuit took the view that Congress would not have enacted section 503A without the advertising, promotion, and solicitation provisions and, therefore, the law's advertising, promotion, and solicitation provisions were not severable. As a result, it held that section 503A, in its entirety, was invalid.[4] In April 2002, the United States Supreme *Court in Thompson v. Western States Medical Cente*r affirmed the Ninth Circuit's ruling invalidating section 503A's advertising, promotion, and solicitation provisions.[5] Because neither the government nor the pharmacies appealed the Ninth Circuit's

[3]*W. States Med. Ctr. v. Shalala*, 69 F. Supp. 2d 1288 (D. Nev. Sept. 16, 1999).

[4]*W. States Med. Ctr. v. Shalala*, 238 F.3d 1090 (9th Cir. Feb. 6, 2001).

[5]*Thompson v. W. States Med. Ctr.*, 535 U.S. 357 (2002).

severability ruling, the Supreme Court declined to address the validity of the remaining nonadvertising portions of section 503A.[6]

2002: Revised Administrative Framework for Drug Compounding Oversight

One month after the Supreme Court's ruling in *Western States*, FDA revised its longstanding 1992 *Compliance Policy Guide* on pharmacy compounding to provide "immediate guidance on what types of compounding might be subject to enforcement action under current law."[7] In that guidance, FDA took the position based on the Ninth Circuit's and Supreme Court's *Western States Medical Center* decisions, that "all of section 503A is now invalid." Accordingly, the agency determined it was necessary to issue guidance outlining the factors the agency would consider in taking enforcement action against a compounding pharmacy for violations of the FDCA. In particular, the agency stated that it would continue to defer to state pharmacy authorities for "less significant" violations of the FDCA but that when a pharmacy's activities resemble those of a drug manufacturer it would consider enforcement action. The compliance policy guide provides a nonexhaustive list of such activities. The compliance policy guide reflected FDA's view that, even if a compounding pharmacy has not engaged in these activities, the drugs it compounded would be subject to all of the FDCA's requirements that apply to manufactured drugs; in the compliance policy guide FDA simply outlined those circumstances under which the agency would actually enforce these requirements against a compounding pharmacy.

2006-2008: Judicial Developments in the Fifth Circuit

Four years later, in 2006, a group of 10 pharmacies challenged FDA's authority to regulate compounded drugs. In that case, FDA asserted that compounded drugs fall within the FDCA's definition of "new drug" and, therefore, are subject to those provisions of the act that apply to such drugs.[8] The U.S. District Court for the Western District of Texas disagreed with the agency, holding that compounded drugs when created for an

[6]*Id*. at 360.

[7]FDA, Compliance Policy Guide § 460.200 Pharmacy Compounding (May 29, 2002).

[8]Section 201(p) of the FDCA defines "new drug" as "Any drug … the composition of which is such that such drug is not generally recognized, among experts qualified by scientific training and experience to evaluate the safety and effectiveness of drugs, as safe and effective for use under the conditions prescribed, recommended, or suggested in the labeling thereof." 21 U.S.C. § 321(p).

individual patient pursuant to a prescription from a licensed practitioner "are implicitly exempt" from the FDCA's new drug definition and the new drug approval process.[9] On appeal, the U.S. Court of Appeals for the Fifth Circuit reversed the district court's determination and held that compounded drugs are "new drugs" under the FDCA.[10] The court reasoned that Congress would not have enacted FDAMA's provisions exempting compounded drugs from certain of the FDCA's "new drug" requirements had these provisions not applied to compounded drugs in the first instance.[11] To reach this conclusion, the Fifth Circuit considered the severability of section 503A's nonadvertising provisions.[12] Disagreeing with the Ninth Circuit's *Western States* reasoning that Congress would not have enacted section 503A without the advertising provisions, the Fifth Circuit found that the FDCA contained a severability provision and that this provision applied to section 503A. Finding no strong evidence that Congress would not have enacted section 503A without the advertising provisions, the court ruled that the law's nonadvertising provisions were severable from its unconstitutional provisions.[13] The result of the Fifth Circuit's decision is that—at least in the Fifth Circuit—compounded drugs are, in fact, "new drugs" under the FDCA; however, these drugs are expressly exempt from certain requirements that apply to "new drugs"—namely, compliance with current good manufacturing practice, certain labeling requirements, and new drug approval requirements—if they comply with the nonadvertising conditions set forth in section 503A.[14]

[9]*Med. Ctr. Pharmacy v. Gonzales*, 451 F. Supp. 2d 854, 863, 865 (D.W.D. Tex. Aug. 30, 2006).

[10]The Fifth Circuit vacated the district court's judgment and remanded the case to the district court for further proceedings. *Med. Ctr. Pharmacy v. Mukasey*, 536 F.3d 383, 409 (5th Cir. Jul. 18, 2008).

[11]*Id.* at 400 ("In 1997, Congress enacted FDAMA as an amendment to the FDCA. That amendment provides considerable evidence that Congress sought to address pharmacy compounding directly and that it did so with the assumption that the 'new drug' provision applies to drugs created through pharmacy compounding.")

[12]*Id*. at 401 ("[T]o rely on FDAMA in construing the 'new drug' definition, we first must address FDAMA's validity.").

[13]*Id*. at 402, 404-05.

[14]*Id*. at 405.

2008-Present: FDA's Different Oversight Approaches Following a Circuit Split

The Ninth Circuit Court of Appeals' 2001 *Western States* decision invalidating all of section 503A and the Fifth Circuit Court of Appeals' 2008 *Medical Center Pharmacy* decision holding that all of section 503A other than the advertising, promotion, and solicitation restrictions is valid are directly at odds. As a result of these decisions, section 503A is invalid in those states in the Ninth Circuit (Alaska, Arizona, California, Hawaii, Idaho, Montana, Nevada, Oregon, and Washington) and in full force and effect in those states in the Fifth Circuit (Louisiana, Mississippi, and Texas). FDA officials described the agency's approach to regulating compounded drugs under this incongruous legal landscape as follows:

- In the Ninth Circuit, the agency takes the approach that all compounded drugs are "new drugs" under the FDCA, and the agency determines whether to consider taking enforcement action against a compounding pharmacy based on whether the pharmacy engages in any of the activities outlined in the agency's 2002 compliance policy guide on drug compounding. Even if a compounding pharmacy has not engaged in the activities outlined in the compliance policy guide, the drugs it compounds are, as a legal matter, subject to all of the FDCA requirements that apply to "new drugs"; the compliance policy guide simply outlines those circumstances under which the agency will consider enforcing these requirements against a compounding pharmacy.[15]

- In the Fifth Circuit, FDA determines whether a compounded drug meets section 503A's exemption from certain FDCA requirements that would preclude the agency from taking enforcement action against a drug compounder for noncompliance with these requirements.

- For compounding pharmacies outside of the Fifth and Ninth Circuits, which is the majority of the country, the agency applies the criteria in both section 503A and its 2002 compliance policy guide to determine whether to take enforcement action.

Table 2 identifies the criteria that a compounded drug must meet to qualify for the exemption under section 503A of the FDCA from certain of the law's requirements and the criteria in FDA's 2002 compliance policy

[15]The Ninth Circuit Court of Appeals decision also applies to FDA's authority over certain compounding pharmacies located in Colorado, New Jersey, Tennessee, Texas, and Wisconsin, as these pharmacies were party to the *Western States* lawsuit.

guide, which the agency considers in determining whether to take enforcement action against an entity engaged in drug compounding.

Table 2: Comparison of the Food and Drug Administration's (FDA) Authority and Oversight of Drug Compounding under Section 503A of the Federal Food, Drug, and Cosmetic Act (FDCA) and FDA's 2002 Compliance Policy Guide

Section 503A: A drug compounded according to each of the criteria is exempt from three key requirements under the FDCA.[a]	**2002 Compliance Policy Guide: In determining whether to initiate enforcement action against a compounding pharmacy, FDA considers whether the compounding pharmacy has engaged in any of these activities.**[b,c,d]
Compounds for an identified individual patient based on the receipt of a valid prescription order or a notation, approved by the prescribing practitioner, on the prescription order that a compounded drug is necessary for the patient. If compounding occurs in anticipation of a prescription, it is based on a history of valid prescription orders for the compounding of the drug product, which orders have been generated solely within an established relationship between the pharmacy and the prescriber or patient.	Compounding in anticipation of receiving prescriptions, except in very limited quantities in relation to the amounts of drugs compounded after receiving valid prescriptions.
Does not compound a drug product that appears on a list published by the Secretary of drug products withdrawn or removed from the market because such drug product or their components have been found to be unsafe or not effective	Compounding drugs withdrawn or removed from the market for safety reasons
Compounds using ingredients (other than bulk drug substances) that comply with an applicable monograph	Receiving, storing, or using drug components not meeting official compendia requirements
Compounds using bulk drug substances that comply with an applicable compendia monograph if one exists; if one does not exist, uses bulk drug substances that are components of FDA-approved drugs or that appear on a list developed by the agency[e]	Compounding finished drugs from certain bulk active ingredients that are not components of FDA approved drugs without an investigational new drug application
Compounds with bulk drug substances that were made in an FDA-registered facility, each of which is accompanied by valid certificates of analysis	Receiving, storing, or using drugs substances without obtaining assurance they were made in an FDA-registered facility
Compounds in a state that has entered into a memorandum of understanding with the Secretary that addresses the distribution of inordinate amounts of compounded drug products interstate and provides for appropriate investigation by a state agency of complaints relating to compounded drug products distributed outside of the state; in the alternative, less than 5 percent of the compounding individual's or entity's total prescription orders are for compounded products distributed out of the state	Compounding drugs for third parties who resell to individual patients or at wholesale to other persons or entities or using commercial scale manufacturing or testing equipment for compounding drug products
Does not compound regularly or in inordinate amounts (as defined by the Secretary) any drug products that are essentially copies of a commercially-available drug product[f]	Compounding drugs that are commercially available or that are essentially copies of commercially-available FDA-approved drug products, except in certain limited circumstances.
Does not compound any drug that is identified by the Secretary by regulation as a drug that presents demonstrable difficulties for compounding that reasonably demonstrate an adverse effect on the safety or effectiveness of that drug	*No comparable criterion*

Section 503A: A drug compounded according to each of the criteria is exempt from three key requirements under the FDCA.[a]	**2002 Compliance Policy Guide: In determining whether to initiate enforcement action against a compounding pharmacy, FDA considers whether the compounding pharmacy has engaged in any of these activities.**[b,c,d]
The compounding is performed by a licensed pharmacist in a state licensed pharmacy or by a licensed physician.	Failing to operate in conformance with applicable state pharmacy laws

Source: GAO analysis.

Notes: Data are from section 503A of the Federal Food, Drug, and Cosmetic Act and FDA's 2002 compliance policy guide on drug compounding.

Section 503A's advertising, promotion, and solicitation restrictions are not presented here, as the United States Supreme Court declared these provisions unconstitutional. *Thompson v. W. States Med. Ctr.*, 535 U.S. 357 (2002).

[a]FDA applies these criteria to drugs compounded in states other than those in the Ninth Circuit, where section 503A is invalid, to determine whether these drugs are exempt from certain FDCA requirements.

[b]FDA applies these criteria in states outside of the Fifth Circuit to determine whether to initiate enforcement action against a compounding pharmacy in such a state.

[c]For compounding pharmacies outside of the Fifth and Ninth Circuits, FDA applies the criteria in both section 503A and the 2002 compliance policy guide to determine whether to take enforcement action.

[d]In addition to the specific factors outlined in the 2002 compliance policy guide, according to FDA, the agency also considers whether a licensed practitioner has extemporaneously compounded a drug upon receipt of a valid prescription for an individually identified patient in considering whether to take enforcement action.

[e]FDA issued a proposed rule on January 7, 1999, containing a list of bulk drug substances that the agency proposed to permit for use in drug compounding. 64 Fed. Reg. 996 (Jan. 7, 1999). According to FDA, the agency never issued a final rule because of the Ninth Circuit's and Supreme Court's *Western States* decisions. Since the Fifth Circuit Court of Appeals' 2008 *Medical Center Pharmacy* decision, the agency has considered whether to maintain such a list.

[f]The term "essentially a copy of a commercially-available drug product" does not include a drug product in which there is a change, made for an identified individual patient, which produces for that patient a significant difference, as determined by the prescribing practitioner, between the compounded drug and the comparable commercially available drug product.

Appendix III: Comments from the Department of Health and Human Services

DEPARTMENT OF HEALTH & HUMAN SERVICES

OFFICE OF THE SECRETARY

Assistant Secretary for Legislation
Washington, DC 20201

JUL 12 2013

Marcia Crosse
Director, Health Care
U.S. Government Accountability Office
441 G Street NW
Washington, DC 20548

Dear Ms. Crosse:

Attached are comments on the U.S. Government Accountability Office's (GAO) report entitled, "DRUG COMPOUNDING: Clear Authority and More Reliable Data Needed to Strengthen FDA Oversight" (GAO 13-702).

The Department appreciates the opportunity to review this report prior to publication.

Sincerely,

Jim R. Esquea

Jim R. Esquea
Assistant Secretary for Legislation

Attachment

GENERAL COMMENTS OF THE DEPARTMENT OF HEALTH AND HUMAN SERVICES (HHS) ON THE GOVERNMENT ACCOUNTABILITY OFFICE'S (GAO) DRAFT REPORT ENTITLED, "DRUG COMPOUNDING: CLEAR AUTHORITY AND MORE RELIABLE DATA NEEDED TO STENGTHEN FDA OVERSIGHT" (GAO 13-702)

The Department appreciates the opportunity to review and comment on this draft report. The report accurately details the limitations associated with FDA's current authority. FDA's current authority does not provide the agency with the tools suited to effectively regulate certain drug compounding operations, and the findings in the report support the need for legislation to allow FDA to appropriately regulate this evolving industry.

As GAO notes, in 1997, section 503A of the Federal Food, Drug, and Cosmetic Act attempted to clarify the status of pharmacy compounding under federal law, but subsequent conflicting court decisions resulted in FDA applying different authorities in different parts of the country, and created uncertainty regarding how courts would rule on section 503A in other parts of the country. These court rulings, combined with the perceived limitations and ambiguities in the law, have made difficult and vulnerable to legal challenge FDA's attempts to apply its regulatory and inspectional authority over pharmacies that compound drugs. Similarly, the current patchwork of state laws that differ in prescription requirements and quality control rules also hamper the states' oversight of compounding pharmacies. As GAO notes, differences in inspection practices among states, such as inconsistent requirements regarding the frequency of pharmacy inspections and the qualifications of pharmacy inspectors, and in some cases the lack of fiscal and staff resources, indicate that states lack uniform, consistent, and national standards and adequate resources to provide the necessary oversight of drug compounding.

Since the 1990s, a new breed of specialty pharmacy compounding has evolved that has outgrown the law, and can pose a threat to the health of the public. These pharmacies produce medications in advance of or without obtaining a prescription and distribute them across the country. They make drug products that are intended to be sterile and must be made to exacting standards to prevent dangerous contamination. The magnitude and complexity of these operations have outpaced FDA's authorities, which are not the right fit for FDA to provide appropriate and efficient oversight of this growing industry.

The fungal meningitis outbreak of 2012 serves as a cautionary tale of the public health dangers posed by practices in compounding pharmacies. Tragically, this is only the latest major public health incident relating to pharmacy compounding. These incidents are emblematic of long-standing issues associated with the practice of compounding and highlight the need for appropriate authorities for FDA to effectively protect the public health.

Since the fungal meningitis outbreak, incidents related to unsafe pharmacy compounding practices, including observed contaminated products and patient injuries, recalls of sterile compounded products, and documentation of sterile processing concerns in numerous compounding pharmacies, demonstrate that action must be taken. As GAO notes, in response to this public health threat, FDA used its existing resources and authorities to conduct proactive inspections of 31 firms that are known to have produced sterile compounded drugs in the past. FDA identified these firms using a risk-based model that included factors such as serious adverse event reports, historical inspection data, and reports of product quality problems. The inspections specifically focused on each firm's processing of sterile drugs to identify firms that may pose a

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GENERAL COMMENTS OF THE DEPARTMENT OF HEALTH AND HUMAN SERVICES (HHS) ON THE GOVERNMENT ACCOUNTABILITY OFFICE'S (GAO) DRAFT REPORT ENTITLED, "DRUG COMPOUNDING: CLEAR AUTHORITY AND MORE RELIABLE DATA NEEDED TO STENGTHEN FDA OVERSIGHT" (GAO 13-702)

higher risk of producing contaminated sterile products. During these proactive inspections, as well as over 30 for-cause inspections conducted recently, FDA documented significant lapses in sterility practices, inappropriate conditions for sterile processing, and other practices that create risk of contamination. FDA has conducted 62 inspections so far in fiscal year 2013 and issued inspection observation reports (FDA Form 483s) on 52 of those that list objectionable conditions observed at the facilities. As noted on some of these 483s, select FDA observations during the inspections include: unidentified black particles floating in vials of supposedly sterile medicine; rust and mold in "clean rooms" where sterile injectable medications were produced; technicians handling supposedly sterile products with bare hands; and employees wearing non-sterile lab coats. In part, due to FDA's observations noted during the inspections, several firms have voluntarily recalled their products, and others temporarily suspended production of their products intended to be sterile while they correct deficiencies found by the investigators.

Even in light of the recent tragic events, some of these firms challenged FDA's authority to conduct these inspections. In at least six instances, firms delayed the inspections or denied FDA inspectors full access to records or observation of their sterile processing activities at some of these facilities. After some initial delay, and in some instances, discussion with the firms' legal counsels, these firms eventually provided the investigators the necessary access to inspect their facilities. In two other instances, FDA had to get administrative warrants from the courts, resulting in U.S. Marshals accompanying FDA inspectors back to the firms so FDA could complete the inspections.

The agency is currently evaluating the information obtained during the inspections and where applicable, will apply its existing legal authority to protect the public health, but it is unclear whether FDA will be successful in obtaining appropriate corrective actions in all cases.
The Administration is committed to working with Congress to address the threat to public health from limitations in authorities for effective oversight of certain compounding practices. To that end, FDA has developed a framework that could serve as the basis for the development of a risk-based program to protect the public health.

Risk-Based Framework

Recognizing the history of compounding practice, FDA supports the long-standing policy that all compounding should be performed in a licensed pharmacy by a licensed pharmacist (or a licensed physician), and that there must be a medical need for the compounded drug.
Further, we believe there should be a distinction between two categories of compounding: traditional and non-traditional. Traditional compounding would include the combining, mixing, or altering of ingredients to create a customized medication for an individual patient with an individualized medical need for the compounded product, in response to a valid patient-specific prescription or order from a licensed practitioner documenting such medical need. Traditional compounding, while posing some risk, plays an important role in the health care system, and should remain the subject of state regulation of the practice of pharmacy.

2

GENERAL COMMENTS OF THE DEPARTMENT OF HEALTH AND HUMAN SERVICES (HHS) ON THE GOVERNMENT ACCOUNTABILITY OFFICE'S (GAO) DRAFT REPORT ENTITLED, "DRUG COMPOUNDING: CLEAR AUTHORITY AND MORE RELIABLE DATA NEEDED TO STENGTHEN FDA OVERSIGHT" (GAO 13-702)

Non-traditional compounding would include certain types of compounding for which there is a medical need, but that pose higher risks. FDA proposes working with Congress to define non-traditional compounding based on factors that make the product higher risk, such as any sterile compounding in advance of or without receiving a prescription, where the drug is distributed out of the state in which it was produced. Non-traditional compounding would be subject to federal standards adequate to ensure that the compounding could be performed without putting patients at undue risk, and FDA would inspect against and enforce these federal standards. Such a definition focuses on the highest risk activities and offers a uniform degree of protection across all 50 states, for highest-risk compounding activities.

Non-traditional compounding should, because of the higher risk presented, be subject to a greater degree of oversight. Sterile products produced in advance of or without a prescription and shipped interstate should be subject to the highest level of controls, established by FDA and appropriate to the activity, similar to current Good Manufacturing Practice (cGMP) standards applicable to conventional drug manufacturers.

In addition, FDA believes that with noted exceptions, certain products are not appropriate for compounding under any circumstances. These products would include: 1) what are essentially copies of FDA-approved drugs, absent the drug appearing on FDA's shortage list; and 2) complex dosage forms such as extended release products; transdermal patches; liposomal products; most biologics; and other products as designated by FDA. Producing complex dosage forms would require an approved application and compliance with cGMP standards, along with other requirements applicable to manufactured drug products.

FDA believes that there are other authorities that would be important to support this new regulatory paradigm. For example, FDA should have clear ability to collect and test samples of compounded drugs and to examine and collect records in a compounding pharmacy, just as the agency does when inspecting other manufacturers. FDA should also have clear ability to examine records such as records of prescriptions received, products shipped, volume of operations, and operational records such as batch records, product quality test results, and stability testing results. Such inspections are necessary to determine when a pharmacy exceeds the bounds of traditional compounding, to respond to public health threats, and to enforce federal standards.

FDA also believes that an accurate inventory of pharmacies engaged in non-traditional compounding would facilitate appropriate oversight and coordination with state regulators. In addition, FDA looks forward to working with the Congress on potential improvements that may include label statements and adverse event reporting that have proven useful in other areas. A user-fee-funded regulatory program may be appropriate to support the inspections and other oversight activities outlined in this framework. We look forward to working with Congress to explore the appropriate funding mechanisms to support this work, which could include registration or other fees, as Congress has authorized and FDA has successfully implemented in other settings.

3

GENERAL COMMENTS OF THE DEPARTMENT OF HEALTH AND HUMAN SERVICES (HHS) ON THE GOVERNMENT ACCOUNTABILITY OFFICE'S (GAO) DRAFT REPORT ENTITLED, "DRUG COMPOUNDING: CLEAR AUTHORITY AND MORE RELIABLE DATA NEEDED TO STENGTHEN FDA OVERSIGHT" (GAO 13-702)

Response to GAO Conclusions and Recommendations

In this report, GAO raises concerns about FDA's inspection database, the Field Accomplishments and Compliance Tracking System (FACTS), and states that "FDA lacks reliable data to make decisions to prioritize its inspection workload and other follow-up and enforcement actions" with respect to compounding pharmacies. Specifically, GAO states that the coding of some inspections of compounding pharmacies as manufacturers or veterinary drug compounders and the absence of ready access in the FACTS database to all of the final inspection classification decisions, would have a significant impact on the agency's ability to "make decisions on its oversight priorities and to take appropriate action when problems are identified." GAO concludes that, because FDA does not have timely and reliable access to the data available in FACTS, the agency is unable to "intercede and protect Americans from unnecessary harm when problems are identified."

Although FDA recognizes that the FACTS database can be improved to better aggregate data and facilitate evaluation of compounding pharmacy activities across the limited universe of compounding pharmacies in the database, FDA maintains that the database deficiencies cited by GAO in this report do not materially impact the agency's ability to protect the public from harm when problems are identified. As GAO notes in its report, compounding pharmacies that meet certain criteria are generally not required to register with FDA or list their products, and, therefore, FDA does not know who they are and what they are compounding. FDA has recommended that Congress require pharmacies engaged in non-traditional compounding in the United States to register with FDA and list the drugs they are compounding so that FDA has information about who is doing this compounding and what they are producing. FDA would use this information to prioritize inspections using a risk based model so that it could appropriately focus its regulatory activities on the highest risk compounding. This would greatly enhance the agency's ability to provide appropriate oversight of non-traditional compounding practices and help to protect the public health.

Even with the database as it is currently configured, however, the agency is able to access the data it has gathered through its inspectional and investigational activities to inform its inspectional priorities and decision-making regarding compounding pharmacies. FDA employees can access the inspectional data in FACTS by searching the database using the firm name rather than a program assignment code, and the database will provide all of the inspectional data on that firm, regardless of whether an inspection was coded as involving a manufacturer, veterinary compounder or as an investigation. Additionally, the collaboration between FDA's Center for Drug Evaluation and Research (CDER) and its Office of Regulatory Affairs (ORA) for inspections and/or investigations of a compounding pharmacy, assures that all relevant data gathered by FDA is made available to the decision-makers. For example, CDER makes the final classification decision on inspections. If the final decision is not in the FACTS database, the investigator(s) can request that information from CDER as part of their pre-inspection review of the firm's compliance history, and CDER is able to provide that information from its files.

4

GENERAL COMMENTS OF THE DEPARTMENT OF HEALTH AND HUMAN SERVICES (HHS) ON THE GOVERNMENT ACCOUNTABILITY OFFICE'S (GAO) DRAFT REPORT ENTITLED, "DRUG COMPOUNDING: CLEAR AUTHORITY AND MORE RELIABLE DATA NEEDED TO STENGTHEN FDA OVERSIGHT" (GAO 13-702)

GAO specifically recommends that FDA take steps to consistently collect reliable information in its databases on inspections and enforcement actions, and that it differentiate in its databases those manufacturers of FDA-approved drugs that it inspects for compliance with good manufacturing practices from those manufacturers compounding drugs that are not FDA-approved and that FDA does not routinely inspect.

As noted above, FDA is working with Congress on legislation to require non-traditional compounders to register and list. In addition, FDA will take steps to further improve its databases to ensure that inspections and actions regarding compounding going forward are coded consistently and are more readily identifiable through electronic searches, and that the final classification for inspections of drug compounders are entered into the FACTS database. FDA also will consider whether it would be possible and appropriate to differentiate in its database those compounding pharmacies that register voluntarily from conventional manufacturers that are required to register, and will provide information to the public about what it means and does not mean to voluntarily register with the FDA.

5

Appendix IV: GAO Contact and Staff Acknowledgments

GAO Contact

Marcia Crosse, (202) 512-7114 or crossem@gao.gov

Staff Acknowledgments

In addition to the contact named above, Kim Yamane, Assistant Director; Matthew Byer; Sandra George; Drew Long; and Lisa A. Lusk made key contributions to this report.

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BUSINESS, CONSUMER SERVICES AND HOUSING AGENCY
DEPARTMENT OF CONSUMER AFFAIRS
GOVERNOR EDMUND G. BROWN JR.

September 10, 2013

To: Members, Enforcement and Compounding Committee

Subject: Agenda Item II (c) – Subcommittee Recommendations to Amend California's Compounding Regulations in 16 California Code of Regulations Sections 1735 et seq. and 1751 et seq.

As part of the board's efforts to strengthen the board's regulation and enforcement of pharmacies that compound sterile drug products, the board in 2012 established a Compounding Subcommittee for the purpose of conducting an in-depth review of the board's regulations of sterile compounding pharmacies. At the December 2012 Board Meeting, President Weisser appointed Dr. Gutierrez and Dr. Kajioka to serve on the committee.

The subcommittee first met in January 2013, which resulted in the subcommittee's request that staff prepare a comparison of the board's current regulations versus the compounding requirements of USP 797. This 'crosswalk' comparison was provided and discussed at the April 2013 Board Meeting and June 2013 Enforcement and Compounding meeting.

<u>At this meeting:</u>

Staff has worked with the subcommittee to identify draft changes to the board's regulations. Provided for the committee's discussion are draft recommended changes to the board's regulations, as compiled at an August 2013 meeting of the subcommittee.

The 'crosswalk' comparison is also provided for reference.

4.5 Compounding

1735. Compounding in Licensed Pharmacies

(a) "Compounding" means any of the following activities occurring in a licensed pharmacy, by or under the supervision of a licensed pharmacist, pursuant to a prescription:

(1) Altering the dosage form or delivery system of a drug

(2) Altering the strength of a drug

(3) Combining components or active ingredients

(4) Preparing a drug product from chemicals or bulk drug substances

(b) "Compounding" does not include reconstitution of a drug pursuant to a manufacturer's direction(s) for oral, rectal topical, or injectable administration, nor does it include tablet splitting or the addition of flavoring agent(s) to enhance palatability.

(c) "Compounding" does not include, except in small quantities under limited circumstances as justified by a specific, documented, medical need, preparation of a compounded drug product that is commercially available in the marketplace or that is essentially a copy of a drug product that is commercially available in the marketplace.

(d) The parameters and requirements stated by this Article 4.5 (Section 1735 et seq.) apply to all compounding practices. Additional parameters and requirements applicable solely to sterile ~~injectable~~ compounding are stated by Article 7(Section 1735 et seq.).

Authority cited: Sections 4005 and 4127, Business and Professions Code. Reference: Sections 4005, 4036, 4037, 4051, 4052, and 4127, Business and Professions Code.

1735.1. Compounding Definitions

(a) "Integrity" means retention of potency until the ~~expiration~~ **beyond use** date noted on the label.

(b) "Potency" means active ingredient strength within +/- 10% of the labeled amount.

(c) "Quality" means the absence of harmful levels of contaminants, including filth, putrid, or decomposed substances, and absence of active ingredients other than those noted on the label.

(d) "Strength" means amount of active ingredient per unit of a compounded drug product.

Authority cited: Sections 4005 and 4127, Business and Professions Code. Reference: Sections 4005, 4036, 4037, 4052, and 4127, Business and Professions Code.

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1735.2. Compounding Limitations and Requirements; Self-Assessment

(a) Except as specified in (b) and (c), no drug product shall be compounded prior to receipt by a pharmacy of a valid prescription for an individual patient where the prescriber has approved use of a compounded drug product either orally or in writing. Where approval is given orally, that approval shall be noted on the prescription prior to compounding.

(b) A pharmacy may prepare and store a limited quantity of a compounded drug product in advance of receipt of a patient-specific prescription where and solely in such quantity as is necessary to ensure continuity of care for an identified population of patients of the pharmacy based on a documented history of prescriptions for that patient population.

(c) Pursuant to Business and Professions Code section 4052(a)(1), a "reasonable quantity" of compounded drug product may be furnished to a prescriber for office use upon prescriber order, where "reasonable quantity" is that amount of compounded drug product that:

(1) is sufficient for administration or application to patients in the prescriber's office, or for distribution of not more than a 72-hour supply to the prescriber's patients, as estimated by the prescriber; and

(2) is reasonable considering the intended use of the compounded medication and the nature of the prescriber's practice; and (3) for any individual prescriber and for all prescribers taken as a whole, is an amount which the pharmacy is capable of compounding in compliance with pharmaceutical standards for integrity, potency, quality and strength of the compounded drug product.

(d) A drug product shall not be compounded until the pharmacy has first prepared a written master formula record that includes at least the following elements:

(1) Active ingredients to be used.

(2) Inactive ingredients to be used.

(3) Process and/or procedure used to prepare the drug.

(4) Quality reviews required at each step in preparation of the drug.

(5) Post-compounding process or procedures required, if any.

(6) ~~Expiration dating requirements~~. **Beyond use dating requirements.**

(e) Where a pharmacy does not routinely compound a particular drug product, the master formula record for that product may be recorded on the prescription document itself.

(f) The pharmacist performing or supervising compounding is responsible for the integrity, potency, quality, and labeled strength of a compounded drug product until it is dispensed.

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(g) All ~~chemicals, bulk drug substances~~, drug products, and other components used for drug compounding shall be stored and used according to compendial and other applicable requirements to maintain their integrity, potency, quality, and labeled strength.

(h) Every compounded drug product shall be given an ~~expiration date~~ **beyond use date** representing the date beyond which, in the professional judgment of the pharmacist performing or supervising the compounding, it should not be used. This "beyond use date" of the compounded drug product shall not exceed 180 days from preparation or the shortest expiration date of any component in the compounded drug product, unless a longer date is supported by stability studies of finished drugs or compounded drug products using the same components and packaging. Shorter dating than set forth in this subsection may be used if it is deemed appropriate in the professional judgment of the responsible pharmacist.

(i) The pharmacist performing or supervising compounding is responsible for the proper preparation, labeling, storage, and delivery of the compounded drug product.

(j) Prior to allowing any drug product to be compounded in a pharmacy, the pharmacist-in-charge shall complete a self-assessment form for compounding pharmacies developed by the board Form 17M-39 (Rev. 01/11). That form contains a first section applicable to all compounding, and a second section applicable to sterile ~~injectable~~ compounding. The first section must be completed by the pharmacist-in-charge before any compounding is performed in the pharmacy. The second section must be completed by the pharmacist-in-charge before any sterile ~~injectable~~ compounding is performed in the pharmacy. The applicable sections of the self-assessment shall subsequently be completed before July 1 of odd-numbered each year, within 30 days of the start of a new pharmacist-in-charge, and within 30 days of the issuance of a new pharmacy license. The primary purpose of the self-assessment is to promote compliance through self-examination and education.

Authority cited: Sections 4005 and 4127, Business and Professions Code. Reference: Sections 4005, 4036, 4037, 4051, 4052, and 4127, Business and Professions Code, Sections 1735, 1735.1.1735.8., and 1751.1.-1715.8 of Title 16 of the California Code of Regulations.

1735.3. Recordkeeping of Compounded Drug Product

(a) For each compounded drug product, the pharmacy records shall include:

(1) The master formula record.

(2) The date the drug product was compounded.

(3) The identity of the pharmacy personnel who compounded the drug product.

(4) The identity of the pharmacist reviewing the final drug product.

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(5) The quantity of each component used in compounding the drug product.

(6) The manufacturer and lot number of each component. If the manufacturer name is demonstrably unavailable, the name of the supplier may be substituted. Exempt from the requirements in this paragraph are sterile products compounded on a one-time basis for administration within twenty-four hours to an inpatient in a health care facility licensed under section 1250 of the Health and Safety Code.

(7) The equipment used in compounding the drug product.

(8) A pharmacy assigned reference or lot number for the compounded drug product.

(9) The ~~expiration~~ **beyond use** date of the final compounded drug product.

(10) The quantity or amount of drug product compounded.

(b) Pharmacies shall maintain records of the proper acquisition, storage, and destruction of chemicals, bulk drug substances, drug products, and components used in compounding.

(c) Chemicals, bulk drug substances, **and** drug products~~, and components~~ used to compound drug products shall be obtained from reliable **FDA-registered** suppliers. The pharmacy shall acquire and retain ~~any available~~ certificates of purity or analysis for chemicals, bulk drug substances, **and** drug products~~, and components~~ used in compounding. **Certificates of purity or analysis are to be validated by the purchaser.** ~~Certificates of purity or analysis are not required for products that are approved by the Food and Drug Administration.~~

(d) After receipt by the pharmacy, packages of ingredients that lack a supplier's expiration date cannot be used after one (1) year unless either appropriate inspection or testing indicates that the ingredient has retained its purity and quality for use in compounded sterile products.

~~(d)~~ **(e)** Pharmacies shall maintain and retain all records required by this article in the pharmacy in a readily retrievable form for at least three years from the date the record was created.

Authority cited: Sections 4005 and 4127, Business and Professions Code. Reference: Sections 4005, 4036, 4037, 4051, 4052, and 4127, Business and Professions Code.

1735.4. Labeling of Compounded Drug Products

(a) In addition to the labeling information required under Business and Professions Code section 4076, the label of a compounded drug product shall contain the generic name(s) of the principal active ingredient(s).

(b) A statement that the drug has been compounded by the pharmacy shall be included on the container or on the receipt provided to the patient.

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(c) Drug products compounded into unit-dose containers that are too small or otherwise impractical for full compliance with subdivisions (a) and (b) shall be labeled with at least the name(s) of the active ingredient(s), concentration of strength, volume or weight, pharmacy reference or lot number, and expiration date.

Authority cited: Sections 4005 and 4127, Business and Professions Code. Reference: Sections 4005, 4036, 4037, 4051, 4052, 4076 and 4127, Business and Professions Code.

1735.5. Compounding Policies and Procedures

(a) Any pharmacy engaged in compounding shall maintain a written policy and procedure manual for compounding that establishes procurement procedures, methodologies for the formulation and compounding of drugs, facilities and equipment cleaning, maintenance, operation, and other standard operating procedures related to compounding.

(b) The policy and procedure manual shall be reviewed on an annual basis by the pharmacist-in-charge and shall be updated whenever changes in processes are implemented.

(c) The policy and procedure manual shall include the following:

(1) Procedures for notifying staff assigned to compounding duties of any changes in processes or to the policy and procedure manual.

(2) Documentation of a plan for recall of a dispensed compounded drug product where subsequent verification demonstrates the potential for adverse effects with continued use of a compounded drug product.

(3) The procedures for maintaining, storing, calibrating, cleaning, and disinfecting equipment used in compounding, and for training on these procedures as part of the staff training and competency evaluation process.

(4) Documentation of the methodology used to test integrity, potency, quality, and labeled strength of compounded drug products.

(5) Documentation of the methodology used to determine appropriate ~~expiration~~ **beyond use** dates for compounded drug products.

Authority cited: Sections 4005 and 4127, Business and Professions Code. Reference: Sections 4005, 4036, 4037, 4051, 4052, and 4127, Business and Professions Code.

1735.6. Compounding Facilities and Equipment

(a) Any pharmacy engaged in compounding shall maintain written documentation regarding the facilities and equipment necessary for safe and accurate compounded drug products. Where applicable, this shall include records of certification(s) of facilities or equipment.

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(b) Any equipment used to compound drug products shall be stored, used, and maintained in accordance with manufacturers' specifications.

(c) Any equipment used to compound drug products for which calibration or adjustment is appropriate shall be calibrated prior to use to ensure accuracy. Documentation of each such calibration shall be recorded in writing and these records of calibration shall be maintained and retained in the pharmacy.

Authority cited: Sections 4005 and 4127, Business and Professions Code. Reference: Sections 4005, 4036, 4037, 4051, 4052, and 4127, Business and Professions Code.

1735.7. Training of Compounding Staff

(a) Any pharmacy engaged in compounding shall maintain written documentation sufficient to demonstrate that pharmacy personnel have the skills and training required to properly and accurately perform their assigned responsibilities relating to compounding.

(b) The pharmacy shall develop and maintain an on-going competency evaluation process for pharmacy personnel involved in compounding, and shall maintain documentation of any and all training related to compounding undertaken by pharmacy personnel.

(c) Pharmacy personnel assigned to compounding duties shall demonstrate knowledge about processes and procedures used in compounding any drug product.

Authority cited: Sections 4005 and 4127, Business and Professions Code. Reference: Sections 4005, 4036, 4037, 4051, 4052, and 4127, Business and Professions Code.

1735.8. Compounding Quality Assurance

(a) Any pharmacy engaged in compounding shall maintain, as part of its written policies and procedures, a written quality assurance plan designed to monitor and ensure the integrity, potency, quality, and labeled strength of compounded drug products.

(b) The quality assurance plan shall include written procedures for verification, monitoring, and review of the adequacy of the compounding processes and shall also include written documentation of review of those processes by qualified pharmacy personnel.

(c) The quality assurance plan shall include written standards for qualitative and quantitative integrity, potency, quality, and labeled strength analysis of compounded drug products. All qualitative and quantitative analysis reports for compounded drug products shall be retained by the pharmacy and collated with the compounding record and master formula.

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(d) The quality assurance plan shall include a written procedure for scheduled action in the event any compounded drug product is ever discovered to be below minimum standards for integrity, potency, quality, or labeled strength.

Authority cited: Sections 4005 and 4127, Business and Professions Code. Reference: Sections 4005, 4036, 4037, 4051, 4052, and 4127, Business and Professions Code.

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Title 16. Professional and Vocational Regulations
Division 17. California State Board of Pharmacy
Article 7. Sterile ~~Injectable~~ Compounding

§ 1751. Sterile ~~Injectable~~ Compounding; Compounding Area; Self-Assessment.

(a) Any pharmacy engaged in compounding sterile ~~injectable~~ drug products shall conform to the parameters and requirements stated by Article 4.5 (Section 1735 et seq.), applicable to all compounding, and shall also conform to the parameters and requirements stated by this Article 7 (Section 1751 et seq.), applicable solely to sterile ~~injectable~~ compounding.

(b) Any pharmacy compounding sterile ~~injectable~~ drug products shall have a designated area for the preparation of sterile ~~injectable~~ products which shall meet the following standards:

(1) Clean Room and Work Station Requirements~~,~~ shall be in accordance with Section 1250 of Title 24, Part 2, Chapter 12, of the California Code of Regulations.

(2) Walls, ceilings and floors shall be constructed in accordance with Section 1250 of Title 24, Part 2, Chapter 12, of the California Code of Regulations.

(3) Be ventilated in a manner in accordance with Section 505.12 of Title 24, Chapter 5 of the California Code of Regulations.

(4) Be certified ~~annually~~ at least every six months by a qualified technician who is familiar with the methods and procedures for certifying laminar air flow hoods and clean room requirements, in accordance with standards adopted by the United States General Services Administration and whenever the device or room is relocated, altered, or major service to the facility is performed. Certification records must be retained for at least 3 years.

(5) The pharmacy shall be arranged in accordance with Section 1250 of Title 24, Part 2, Chapter 12, of the California Code of Regulations. Items related to the compounding of

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sterile ~~injectable~~ products within the compounding area shall be stored in such a way as to maintain the integrity of an aseptic environment.

(6) A sink shall be included in accordance with Section 1250 of Title 24, Part 2, of the California Code of Regulations. Sinks and drains shall not be present in ISO Class 5 cleanrooms nor adjacent to the ISO Class 5 hood in a segregated compounding area.

(7) There shall be a refrigerator and/or freezer of sufficient capacity to meet the storage requirements for all material requiring refrigeration.

(c) Any pharmacy compounding a sterile ~~injectable~~ product from one or more non-sterile ingredients shall comply with Business and Professions Code section 4127.7.

Note: Authority cited: Sections 4005 and 4127, Business and Professions Code. Reference: Sections 4005, 4036, 4037, 4051, 4052, 4127 and 4127.7, Business and Professions Code; and Section 18944, Health and Safety Code.

§ 1751.1. Sterile ~~Injectable~~ Recordkeeping Requirements.

(a) Pharmacies compounding sterile ~~injectable~~ products for future use pursuant to section 1735.2 shall, in addition to those records required by section 1735.3, make and keep records indicating the name, lot number, amount, and date on which the products were provided to a prescriber.

(b) In addition to the records required by section 1735.3 and subdivision (a), for sterile products compounded from one or more non-sterile ingredients, the following records must be made and kept by the pharmacy:

(1) The training and competency evaluation of employees in sterile product procedures.

(2) Results of gloved fingertip testing and aseptic technique media fill assessments.

(3) Results of viable volumetric air and surface sampling.

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~~(2)~~ (4) Daily documentation of ~~Refrigerator~~ refrigerator and freezer temperatures appropriate for drug preparations to include: ~~.~~

(A) Controlled room temperature 20° to 25° C (68° to 88° F)
(B) Cool temperature 8° to 15° C (46° to 59° F)
(C) Controlled cold temperature 2° to 8° C (36° to 46° F)
(D) Freezer temperature -25° to -10° C (-13° to 14° F)

~~(3)~~ (5) Certification of the sterile compounding environment.

(6) Room pressure logs.

~~(4)~~ (7) Other facility quality control logs specific to the pharmacy's policies and procedures (e.g., cleaning logs for facilities and equipment).

~~(5)~~ (8) Inspection for expired or recalled pharmaceutical products or raw ingredients.

~~(6)~~ (9) Preparation records including the master work sheet, the preparation work sheet, and records of end-product evaluation results.

(c) Pharmacies shall maintain and retain all records required by this article in the pharmacy in a readily retrievable form for at least three years from the date the record was created.

Note: Authority cited: Sections 4005 and 4127, Business and Professions Code. Reference: Sections 4005, 4036, 4037, 4051, 4052 and 4127, Business and Professions Code.

§ 1751.15. Risk Level Compounding

Compounded sterile products shall be categorized into three risk levels.

(a) Low Risk.

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(1) Compounded with aseptic manipulations entirely within ISO Class 5 hood located in ISO Class 8 buffer room with ante area using only sterile ingredients, products, components, and devices.

(2) In the absence of passing a sterility test, the storage periods cannot exceed the following time periods; before administration, the compounded sterile products are properly stored and exposed for:

(A) Controlled room temperature for not more than 48 hours.
(B) Cold temperature for not more than 14 days.
(C) Freezer temperature -20° C (-4° F) for not more than 45 days.

(b) Medium Risk.

(1) Compounded with aseptic manipulations entirely within ISO Class 5 hood located in ISO Class 8 buffer room with ante area.

(2) Multiple individual or small doses of sterile products combined or pooled to prepare a compounded sterile product that will be administered either to multiple patients or to one patient on multiple occasions.

(3) In the absence of passing a sterility test, the storage periods cannot exceed the following time periods: before administration, the compounded sterile products are properly stored and exposed for:

(A) Controlled room temperature for not more than 30 hours.
(B) Cold temperature for not more than 7 days.
(C) Freezer temperature -20° C (-4° F) for not more than 45 days.

(c) High Risk:

(1) Compounded with aseptic manipulations entirely within ISO Class 5 hood located in ISO Class 8 buffer room with ante area.

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(2) Nonsterile ingredients, including manufactured products not intended for sterile routes of administration, are incorporated or a nonsterile device is employed before terminal sterilization; compounded sterile products that lack effective antimicrobial preservatives.

(3) For a sterilized high-risk level preparation, in the absence of passing a sterility test, the storage periods cannot exceed the following time periods; before administration, the compounded sterile products are properly stored and exposed for:

(A) Controlled room temperature for not more than 24 hours.
(B) Cold temperature for not more than 3 days.
(C) Freezer temperature -20° C (-4° F) for not more than 45 days.

§ 1751.2. Sterile ~~Injectable~~ Labeling Requirements.

In addition to the labeling information required under Business and Professions Code section 4076 and section 1735.4, a pharmacy which compounds sterile ~~injectable~~ products shall include the following information on the labels for those products:

(a) Telephone number of the pharmacy, except for sterile ~~injectable~~ products dispensed for inpatients of a hospital pharmacy.

(b) Name and concentrations of ingredients contained in the sterile ~~injectable~~ product.

(c) Instructions for storage and handling.

(d) All cytotoxic agents shall bear a special label which states “Chemotherapy - Dispose of Properly” or “Cytotoxic - Dispose of Properly.”

Note: Authority cited: Sections 4005 and 4127, Business and Professions Code. Reference: Sections 4005, 4036, 4037, 4051, 4052, 4076 and 4127, Business and Professions Code.

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§ 1751.3. Sterile ~~Injectable~~ Policies and Procedures.

(a) Any pharmacy engaged in compounding sterile ~~injectable~~ drug products shall maintain a written policy and procedure manual for compounding that includes, in addition to the elements required by section 1735.5, written policies and procedures regarding the following:

(1) Compounding, filling, and labeling of sterile ~~injectable~~ compounds.

(2) Labeling of the sterile ~~injectable~~ product based on the intended route of administration and recommended rate of administration.

(3) Equipment and supplies.

(4) Training of staff in the preparation of sterile ~~injectable~~ products.

(5) Training of staff in the cleaning and maintenance of ISO Class 5 hood.

(6) A viable and nonviable sampling plan.

(7) For barrier isolators, documentation of the manufacturer's recommended purge time.

~~(5)~~ (8) Procedures for handling cytotoxic agents.

~~(6)~~ (9) Quality assurance program.

~~(7)~~ (10) Record keeping requirements.

(b) The ingredients and the compounding process for each preparation must be determined in writing before compounding begins and must be reviewed by a pharmacist.

(c) Pharmacies compounding sterile ~~injectable~~ products shall have written policies and procedures for the disposal of infectious materials and/or materials containing cytotoxic

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residues. The written policies and procedures shall describe the pharmacy protocols for cleanups and spills in conformity with local health jurisdiction standards.

(d) Pharmacies compounding sterile ~~injectable~~ products from one or more ~~non-~~sterile ingredients must have written policies and procedures that comply with the following:

(1) All written policies and procedures shall be immediately available to all personnel involved in these activities and board inspectors.

(2) All personnel involved must read the policies and procedures before compounding sterile ~~injectable~~ products, and any additions, revisions, and deletions to the written policies and procedures must be communicated to all personnel involved in sterile compounding.

(3) Policies and procedures must address at least the following:

(A) Competency evaluation.

(B) Storage and handling of products and supplies.

(C) Storage and delivery of final products.

(D) Process validation.

(E) Personnel access and movement of materials into and near the controlled area.

(F) Use and maintenance of environmental control devices used to create the critical area for manipulation of sterile products (e.g., laminar-airflow workstations, biological safety cabinets, class 100 cleanrooms, and barrier isolator workstations).

(G) ~~Regular~~ Daily cleaning schedule for the controlled area and any equipment in the controlled area and the alternation of disinfectants. Pharmacies subject to an institutional infection control policy may follow that policy as it relates to cleaning schedules and the alternation of disinfectants in lieu of complying with this subdivision. Decontamination and disinfection shall occur when changing between different active

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pharmaceutical ingredients and when switching between cytotoxic and non-cytotoxic ingredients.

(H) Disposal of packaging materials, used syringes, containers, and needles to enhance sanitation and avoid accumulation in the controlled area.

(I) For sterile batch compounding, written policies and procedures must be established for the use of master formulas and work sheets and for appropriate documentation. documentation, and for sterility and bacterial endotoxin testing. A batch shall consist of more than one dose of a specific quantity of drug or other material that is intended to have uniform character and quality and is produced during the same continuous cycle of compounding.

(J) ~~Sterilization.~~ For non-sterile to sterile compounding.
(i) Sterilization.
(ii) End-product evaluation and testing.

~~(K) End-product evaluation and testing.~~

Note: Authority cited: Sections 4005 and 4127, Business and Professions Code. Reference: Sections 4005, 4036, 4037, 4051, 4052 and 4127, Business and Professions Code.

§ 1751.4. Facility and Equipment Standards for Sterile ~~Injectable~~ Compounding.

(a) No sterile ~~injectable~~ product shall be compounded if it is known, or reasonably should be known, that the compounding environment fails to meet criteria specified in the pharmacy's written policies and procedures for the safe compounding of sterile ~~injectable~~ drug products.

(b) During the preparation of sterile ~~injectable~~ products, access to the designated area or cleanroom must be limited to those individuals who are properly attired.

(c) All equipment used in the designated area or cleanroom must be made of a material that can be easily cleaned and disinfected.

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(d) Cleaning and disinfecting surfaces in the ISO Class 5 hood shall occur frequently and include at the beginning of each work shift prior to compounding, before each batch preparation is started, every 30 minutes during continuous compounding of individual compounded sterile products, when there are spills, and when surface contamination is known or suspected.

~~(d) Exterior workbench surfaces and other hard surfaces in the designated area, such as walls, floors, ceilings, shelves, tables, and stools, must be disinfected weekly and after any unanticipated event that could increase the risk of contamination.~~

(e) Counters, cleanable work surfaces and floors are to be cleaned daily. Walls, ceiling, storage shelving, tables and stools are to be cleaned weekly. Cleaning shall occur after any unanticipated event that could increase the risk of contamination.

~~(e)~~ (f) Pharmacies preparing ~~parenteral~~ sterile cytotoxic agents shall do so in accordance with Section 505.12.1 of Title 24, Chapter 5, of the California Code of Regulations, requiring a laminar air flow hood. The hood must be certified ~~annually~~ every six months by a qualified technician who is familiar with the methods and procedures for certifying laminar air flow hoods and clean room requirements, in accordance with National Sanitation Foundation Standard 49 for Class II (Laminar Flow) Biohazard Cabinetry, as revised May, 1983 (available from the National Sanitation Foundation, 3475 Plymouth Road, P.O. Box 1468, Ann Arbor, Michigan 48106, phone number (313) 769-8010) or manufacturer's specifications. Certification records must be retained for at least 3 years.

(g) Pharmacies preparing sterile cytotoxic agents shall require the use of a Biological Safety Cabinet or Compounding Aseptic Containment Isolator that provides an ISO Class 5 environment during dynamic compounding conditions is maintained in accordance with the manufacturer’s recommendations and which is certified every six months. The primary engineering control must be located in a segregated ISO Class 7 area that is not less than 0.01-inch water column negative pressure and 12 air changes per hour to adjacent positive pressure ISO Class 7 or better ante-areas. A pressure indicator shall be installed to readily monitor and log room pressurization.

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(h) Viable surface and volumetric air sampling by impaction shall occur at least every six months by a qualified technician who is familiar with the methods and procedures for surface testing and air sampling. Viable air sampling is to be performed under dynamic conditions that simulate actual production. Surface and volumetric air sampling action levels shall be consistent with national recommendations. Exceeded action levels shall prompt an immediate investigation of cleaning and compounding operations and facility management.

(i) Certification records must be retained for at least years

Note: Authority cited: Sections 4005 and 4127, Business and Professions Code. Reference: Sections 4005, 4036, 4037, 4051, 4052 and 4127, Business and Professions Code; and Section 18944, Health and Safety Code.

§ 1751.5. Sterile ~~Injectable~~ Compounding Attire.

~~(a) When preparing cytotoxic agents, gowns and gloves shall be worn.~~

~~(b)~~ (a) When compounding sterile products from one or more non-sterile ingredients the following standards must be met:

(1) Cleanroom garb consisting of a ~~low-shedding~~ non-shedding ~~coverall,~~ gown, head cover, face mask, and shoe covers must be worn inside the designated area at all times.

(2) Cleanroom garb must be donned and removed in an ante-area or outside the ~~designated~~ segregated compounding area.

(3) Personnel shall don personnel protective equipment in an order that proceeds from those activities considered the dirtiest to those considered the cleanest. The donning of shoe covers or dedicated shoes, head and facial hair covers and face masks shall be followed by the washing of hands and forearms up to the elbows for 30 seconds with soap and water and then the donning of a non-shedding gown. Cleansing with a persistently active alcohol-based product followed by the donning of sterile gloves must

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occur within the buffer area, not prior to entering. Gloves are to be routinely disinfected with sterile 70% isopropyl alcohol after contact with nonsterile objects.

~~(3)~~ (4) Hand, finger, and wrist jewelry must be eliminated. If jewelry cannot be removed then it must be thoroughly cleaned and covered with a sterile glove.

~~(4) Head and facial hair must be kept out of the critical area or be covered.~~

(5) Gloves made of low-shedding materials are required.

(6) When individuals are experiencing rashes, sunburn, weeping sores, conjunctivitis, active respiratory infections, as well as when they wear cosmetics shall be excluded from working in ISO Class 5 and ISO Class 7 compounding areas until their conditions are remedied.

~~(c) The requirements of subdivision (b) do not apply if a barrier isolator is used to compound~~ sterile ~~injectable products from one or more non-~~sterile ~~ingredients.~~

(b) When preparing cytotoxic agents, appropriate gowns and personnel protective equipment shall be worn when compounding in a biological safety cabinet or compounding aseptic containment isolator and when using closed-system vial-transfer devices. Personnel protective equipment shall include facemasks, eye protection, hair covers, shoe covers or dedicated shoes and double gloving with sterile chemo-type gloves.

Note: Authority cited: Sections 4005 and 4127, Business and Professions Code. Reference: Sections 4005, 4036, 4037, 4051, 4052 and 4127, Business and Professions Code.

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§ 1751.6. Training of Sterile ~~Injectable~~ Compounding Staff, Patient, and Caregiver.

(a) Consultation shall be available to the patient and/or primary caregiver concerning proper use of sterile ~~injectable~~ products and related supplies furnished by the pharmacy.

(b) The pharmacist-in-charge shall be responsible to ensure all pharmacy personnel engaging in compounding sterile ~~injectable~~ drug products shall have training and demonstrated competence in the safe handling and compounding of sterile ~~injectable~~ products, including cytotoxic agents if the pharmacy compounds products with cytotoxic agents.

(c) Records of training and demonstrated competence shall be available for each individual and shall be retained for three years beyond the period of employment.

(d) The pharmacist-in-charge shall be responsible to ensure the continuing competence of pharmacy personnel engaged in compounding sterile ~~injectable~~ products.

(e) Pharmacies that compound sterile products ~~from one or more non-~~sterile ~~ingredients~~ must comply with the following training requirements:

(1) The pharmacy must establish and follow a written program of training and performance evaluation designed to ensure that each person working in the designated area has the knowledge and skills necessary to perform their assigned tasks properly. This program of training and performance evaluation must address at least the following:

(A) Aseptic technique.

(B) Pharmaceutical calculations and terminology.

(C) Sterile product compounding documentation.

(D) Quality assurance procedures.

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(E) Aseptic preparation ~~procedures.~~ procedures using media fill tests which are as complicated as the most complex manipulations performed by staff and which contain the same amount of volume transferred.

(F) Proper gowning and gloving technique.

(G) General conduct in ~~he~~ the controlled area.

(H) Cleaning, sanitizing, and maintaining equipment used in the controlled area.

(I) ~~Sterilization techniques.~~ For non-sterile compounding sterilization techniques for compounding sterile drug products from one or more non-sterile ingredients.

(J) Container, equipment, and closure system selection.

(2) Each person assigned to the controlled area must successfully complete practical skills training in aspetic technique and aseptic area practices. Evaluation must include written testing and a written protocol of periodic routine performance checks involving adherence to aspetic area policies and procedures. Each person's proficiency and continuing training needs must be reassessed every 12 months. Results of these assessments must be documented and retained in the pharmacy for three years.

Note: Authority cited: Sections 4005 and 4127, Business and Professions Code. Reference: Sections 4005, 4036, 4037, 4051, 4052 and 4127, Business and Professions Code.

§ 1751.7. Sterile ~~Injectable~~ Compounding Quality Assurance and Process Validation.

(a) Any pharmacy engaged in compounding sterile ~~injectable~~ drug products shall maintain, as part of its written policies and procedures, a written quality assurance plan including, in addition to the elements required by section 1735.8, a documented, ongoing quality assurance program that monitors personnel performance, equipment, and facilities. The end product shall be examined on a periodic sampling basis as determined by the pharmacist-in-charge to assure that it meets required specifications. The Quality Assurance Program shall include at least the following:

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(1) Cleaning and sanitization of the ~~parenteral~~ medication preparation area.

(2) The storage of compounded sterile ~~injectable~~ products in the pharmacy and ~~periodic~~ daily documentation of refrigerator temperature.

(3) Actions to be taken in the event of a drug recall.

(4) Written justification of the chosen ~~expiration~~ beyond use dates for compounded sterile ~~injectable~~ products.

(b) Each individual involved in the preparation of sterile ~~injectable~~ products must first successfully complete a validation process on technique before being allowed to prepare sterile ~~injectable~~ products. The validation process shall be carried out in the same manner as normal production, except that an appropriate microbiological growth medium is used in place of the actual product used during sterile preparation. ~~The validation process shall be representative of all types of manipulations, products and batch sizes the individual is expected to prepare.~~ The validation process shall be as complicated as the most complex manipulations performed by staff and which contain the same amount of volume transferred. The same personnel, procedures, equipment, and materials must be involved. Completed medium samples must be incubated in a manner consistent with the manufacturer's recommendations and demonstrated to promote growth. If microbial growth is detected, then the sterile preparation process must be evaluated, corrective action taken, and the validation process repeated. Personnel competency must be revalidated at least every twelve months for sterile to sterile compounding and at least every six months for individuals compounding sterile products from non-sterile ingredients, whenever the quality assurance program yields an unacceptable result, when the compounding process changes, equipment used in the compounding of sterile ~~injectable~~ drug products is repaired or replaced, the facility is modified in a manner that affects airflow or traffic patterns, or whenever improper aseptic techniques are observed. Revalidation must be documented.

(c) A competency evaluation must be administered for all employees who perform sterile compounding.

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(d) All compounding personnel must successfully complete an initial competency evaluation and glove fingertip sampling procedure (zero colony forming units) no less than three times before initially being allowed to compound sterile products immediately following the hand hygiene and garbing procedure.

(e) Re-evaluation of garbing and gloving competency shall occur at least annually for personnel compounding products made from sterile ingredients and at least every six months for personnel compounding products from non-sterile ingredients.

~~(c)~~ (f) Batch-produced sterile ~~injectable~~ drug products compounded from one or more non-sterile ingredients shall be subject to documented end product testing for sterility in accordance with USP <71> and pyrogens in accordance with the methods of USP <85> and <151> and shall be quarantined until the end product testing confirms sterility and acceptable levels of pyrogens. A batch shall consist of more than one dose of a specific quantity of drug or other material that is intended ot have uniform character and quality and is produced during the same continuous cycle of compounding.

(1) Sterilization by filtration requires the use of a 0.2µm pore size sterile membranes that are chemically and physically compatible with the compounded product and which must be completed rapidly without filter replacement. The filter shall be subjected to the manufacturer's recommended integrity test after filtering compounded sterile products.

(2) Sterilization by steam required a 1.2µm or smaller filter. Live steam must contact all ingredients and surfaces to be sterilized and heated filtered air is to be evenly distributed. Dry heat shall only be used for those materials that cannot be sterilized by steam.

(3) Endotoxin challenge vials shall be used to verify the effectiveness of the dry heat depyrogenation cycle.

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(4) For non-sterile to sterile compounding products submitted for testing are to include from the beginning, middle, and end of each batch. For batch sizes less than 100 units sample 4 containers or 10% whichever is greater. For batch sizes over 100 units 17 percent of the total samples shall be tested. Confirmation of correct identity and/or strength of ingredients shall be conducted only for those products that are compounded from ingredients and not from repackaging.

(5) In the absence of passing a sterility test, storage limits shall not exceed the following period: 24 hours at controlled room temperature, not more than 3 days at cold temperature (less than 8°C [46 ^{o}F]), and 45 days in solid frozen state (-25° to -10°C [-13° to 14°F]).

~~(d)~~ (g) Batch-produced sterile to sterile transfers shall be subject to periodic testing through process validation for sterility as determined by the pharmacist-in-charge and described in the written policies and procedures. A batch shall consist of more than one dose of a specific quantity of drug or other material that is intended to have uniform character and quality and is produced during the same continuous cycle of compounding.

(h) Emergency dispensing of a high risk product may occur when necessary for immediate administration of the product and no alternative product is available and the prescriber is informed that the product is being dispensed prior to results of appropriate testing. Documentation of the dispensing of the product, the prescriber's approval for dispensing prior to the receipt of test results and the need for the emergency must appear within the prescription record. A separate authorization from the prescriber is required for each emergency dispensing. The patient shall also be informed of the emergency dispensing and the patient must sign an agreement to such effect.

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Note: Authority cited: Sections 4005 and 4127, Business and Professions Code. Reference: Sections 4005, 4036, 4037, 4051, 4052 and 4127, Business and Professions Code.

§ 1751.8. Sterile ~~Injectable~~ Compounding Reference Materials.

In any pharmacy engaged in compounding sterile ~~injectable~~ drug products, there shall be current and appropriate reference materials regarding the compounding of sterile ~~injectable~~ products located in or immediately available to the pharmacy.

Note: Authority cited: Sections 4005 and 4127, Business and Professions Code. Reference: Sections 4005, 4036, 4037, 4051, 4052 and 4127, Business and Professions Code.

REFERENCED TITLE 24, PART 2, CHAPTER 12, REGULATIONS

1250.4 <u>Sterile</u> Compounding **Area ~~for Parenteral Solutions~~.** The pharmacy shall have a designated area for the preparation of sterile products for dispensing which shall:

1. In accordance with Federal Standard 209(b), Clean Room and Work Station Requirements, Controlled Environment, as approved by the Commission, Federal Supply Service, General Services Administration meet standards for class 100 HEPA (high efficiency particulate air) filtered air such as laminar air flow hood or clean room.
2. Have non-porous and cleanable surfaces, walls, floors and floor coverings.
3. The pharmacy shall be arranged in such a manner that the laminar-flow hood is located in an area which is exposed to minimal traffic flow, and is separate from any area used for bulk storage of items not related to the compounding of ~~parenteral~~ solution. There shall be sufficient space, well separated from the laminar-flow hood area, for the storage of bulk materials, equipment and waste materials.
4. A sink with hot and cold running water must be ~~within the parenteral solution compounding area or adjacent to it~~ **<u>located adjacent to the sterile compounding</u>**

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area, however not inside the compounding location or segregated compounding area.

5. Any pharmacy that compounds sterile ~~injectable~~ products ~~from one or more nonsterile ingredients~~ **for non-immediate** use must compound the medication in one of the following environments:

5.1 An ISO class laminar airflow hood within an ISO class 7 cleanroom. The cleanroom must have a positive air pressure differential relative to adjacent areas.

5.2 An ISO class 5 cleanroom.

5.3 A barrier isolator that provides an ISO class 5 environment ~~for compounding.~~ **during dynamic operating conditions, including transferring ingredients, components and devices into and out of the isolator and during preparation of compounded sterile products.**

5.4 A barrier isolator that provides and ISO Class 5 environment for compounding with an ISO Class 7 cleanroom.

6. When compounding hazardous drugs, the surrounding environment must provide at least 0.01 water column negative air pressure and 12 air changes per hours.

Note: For additional pharmacy mechanical standard requirements, see Chapter 5, California Mechanical Code.

505.5 Pharmacies: Compounding Area for ~~Parenteral~~ Solutions. The pharmacy shall have a designated area for the preparation of sterile products for dispensing which shall:

1. Be ventilated in a manner not interfering with laminar air flow.

505.5.1 Pharmacies: Laminar Flow Biological Safety Cabinet. In all pharmacies preparing ~~parenteral~~ cytotoxic agents, all compounding shall be conducted within a certified Class II Type A or Class II Type B vertical laminar air flow hood with bag in-bag

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out design. The pharmacy must ensure that contaminated air plenums that are under positive air pressure are leak tight.

1751.10. Furnishing to ~~Parenteral~~ Patient at Home.

Subject to all provisions of this article, a pharmacist may carry and furnish to a patient at home dangerous drugs, other than controlled substances, and devices for ~~parenteral~~ therapy when the dangerous drug or device is one currently prescribed for the patient.

Note: Authority cited: Section 4005, Business and Professions Code. Reference: Section 4005, Business and Professions Code.

Article 2. Pharmacies

1718.1. Manufacturer's Expiration Date.

All ~~prescription~~ drugs not bearing a manufacturer's expiration date pursuant to Title 21, Code of Federal Regulations, section 211.137 are deemed to have expired and may not be manufactured, distributed, held for sale, or dispensed by any manufacturer, distributor, pharmacist, pharmacy or other persons authorized to dispense such drugs in California.

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Sterile Compounding Crosswalk: USP 797 vs. California State Law

USP 797 Information extracted from both USP Chapter 797 and Appendix 1: Principal Competencies, Conditions, Practices, and Quality Assurances that are Required (†"shall") and Recommended (‡"should") in USP Chapter <797>
California State Law extracted from 2013 California Law Book for Pharmacy

USP 797 Topic	USP 797 Description	California State Law
Compounding Personnel Responsibilities, Training, and Competencies		
Responsibility of Compounding Personnel	†Practices and quality assurances required to prepare, store, and transport CSPs that are sterile, and acceptably accurate, pure, and stable. Compounding personnel are responsible for ensuring that CSPs are accurately identified, measured, diluted, and mixed and are correctly purified, sterilized, packaged, sealed, labeled, stored, dispensed, and distributed. These performance responsibilities include maintaining appropriate cleanliness, conditions and providing labeling and supplementary instructions for the proper clinical administration of CSPs. All personnel who prepare CSPs shall be responsible for understanding these fundamental practices and precautions, for developing and implementing appropriate procedures, and for continually evaluating these procedures and the quality of final CSPs to prevent harm.	**1751. Sterile Injectable Compounding; Compounding Area; Self-Assessment** (a) Any pharmacy engaged in compounding sterile injectable drug products shall conform to the parameters and requirements stated by Article 4.5 (Section 1735 et seq.), applicable to all compounding, and shall also conform to the parameters and requirements stated by this Article 7 (Section 1751 et seq.), applicable solely to sterile injectable compounding. (c) Any pharmacy compounding a sterile injectable product from one or more non-sterile ingredients shall comply with Business and Professions Code section 4127.7.
Personnel Training and Evaluation in Aseptic Manipulations Skills	†Pass didactic, practical skill assessment and media-fill testing initially, followed by an annual assessment for a low- and medium-risk level compounding and semi-annual assessment for high-risk level compounding.	**Risk Levels are Not Specifically Defined in California State Law** **1735.7. Training of Compounding Staff** (a) Any pharmacy engaged in compounding shall maintain written documentation sufficient to demonstrate that pharmacy personnel have the skills and training required to properly and accurately perform their assigned responsibilities relating to compounding. (b) The pharmacy shall develop and maintain an on-going competency evaluation process for pharmacy personnel involved in compounding, and shall maintain documentation of any and all training related to compounding undertaken by pharmacy personnel. (c) Pharmacy personnel assigned to compounding duties shall demonstrate knowledge about processes and procedures used in compounding any drug product. **1751.3. Sterile Injectable Policies and Procedures.** (a) Any pharmacy engaged in compounding sterile injectable drug products shall

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		maintain a written policy and procedure manual for compounding that includes, in addition to the elements required by section 1735.5, written policies and procedures regarding the following: (4) Training of staff in the preparation of sterile injectable products. (d) Pharmacies compounding sterile injectable products from one or more non-sterile ingredients must have written policies and procedures that comply with the following: (2) All personnel involved must read the policies and procedures before compounding sterile injectable products, and any additions, revisions, and deletions to the written policies and procedures must be communicated to all personnel involved in sterile compounding. **1751.6 Training of Sterile Injectable Compounding Staff, Patient, and Caregiver** (a) Consultation shall be available to the patient and/or primary caregiver concerning proper use of sterile injectable products and related supplies furnished by the pharmacy. (b) The pharmacist-in-charge shall be responsible to ensure all pharmacy personnel engaging in compounding sterile injectable drug products shall have training and demonstrated competence in the safe handling and compounding of sterile injectable products, including cytotoxic agents if the pharmacy compounds products with cytotoxic agents. (d) The pharmacist-in-charge shall be responsible to ensure the continuing competence of pharmacy personnel engaged in compounding sterile injectable products. (e) Pharmacies that compound sterile products from one or more non-sterile ingredients must comply with the following training requirements: (1) The pharmacy must establish and follow a written program of training and performance evaluation designed to ensure that each person working in the designated area has the knowledge and skills necessary to perform their assigned tasks properly. This program of training and performance evaluation must address at least the following: (A) Aseptic technique. (B) Pharmaceutical calculations and terminology. (C) Sterile product compounding documentation. (D) Quality assurance procedures. (E) Aseptic preparation procedures. (F) Proper gowning and gloving technique. (G) General conduct in the controlled area. (H) Cleaning, sanitizing, and maintaining equipment used in the controlled area. (I) Sterilization techniques. (J) Container, equipment, and closure system selection. (2) Each person assigned to the controlled area must successfully complete practical skills training in aseptic technique and aseptic area practices. Evaluation must include written testing and a written protocol of periodic routine performance checks involving adherence to aseptic area policies and procedures. Each person's

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		proficiency and continuing training needs must be reassessed every 12 months. Results of these assessments must be documented and retained in the pharmacy for three years. **1751.7. Sterile Injectable Compounding Quality Assurance and Process Validation.** (b) Each individual involved in the preparation of sterile injectable products must first successfully complete a validation process on technique before being allowed to prepare sterile injectable products. The validation process shall be carried out in the same manner as normal production, except that an appropriate microbiological growth medium is used in place of the actual product used during sterile preparation. The validation process shall be representative of all types of manipulations, products and batch sizes the individual is expected to prepare. The same personnel, procedures, equipment, and materials must be involved. Completed medium samples must be incubated. If microbial growth is detected, then the sterile preparation process must be evaluated, corrective action taken, and the validation process repeated. Personnel competency must be revalidated at least every twelve months, whenever the quality assurance program yields an unacceptable result, when the compounding process changes, equipment used in the compounding of sterile injectable drug products is repaired or replaced, the facility is modified in a manner that affects airflow or traffic patterns, or whenever improper aseptic techniques are observed. Revalidation must be documented.
	† Compounding personnel who fail written tests, or whose media-fill test vials result in gross microbial colonization, shall be immediately reinstructed and re-evaluated by expert compounding personnel to ensure correction of all aseptic practice deficiencies.	**1735.8. (d)** The quality assurance plan shall include a written procedure for scheduled action in the event any compounded drug product is ever discovered to be below minimum standards for integrity, potency, quality, or labeled strength. **1751.7. Sterile Injectable Compounding Quality Assurance and Process Validation.** (b)...If microbial growth is detected, then the sterile preparation process must be evaluated, corrective action taken, and the validation process repeated.
PATIENT OR CAREGIVER TRAINING	† Multiple component formal training program to ensure patients and caregivers understand the proper storage, handling, use, and disposal of CSPs.	**State Law only addresses proper use. Storage, handling, and disposal are not addressed in California State Law.** **1751.6 Training of Sterile Injectable Compounding Staff, Patient, and Caregiver** (a) Consultation shall be available to the patient and/or primary caregiver concerning proper use of sterile injectable products and related supplies furnished by the pharmacy.

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Personnel Cleansing And Garbing	†Personnel shall also be thoroughly competent and highly motivated to perform flawless aseptic manipulations with ingredients, devices, and components of CSPs.	**1751.6 Training of Sterile Injectable Compounding Staff, Patient, and Caregiver** (b) The pharmacist-in-charge shall be responsible to ensure all pharmacy personnel engaging in compounding sterile injectable drug products shall have training and demonstrated competence in the safe handling and compounding of sterile injectable products, including cytotoxic agents if the pharmacy compounds products with cytotoxic agents. (d) The pharmacist-in-charge shall be responsible to ensure the continuing competence of pharmacy personnel engaged in compounding sterile injectable products. (e) Pharmacies that compound sterile products from one or more non-sterile ingredients must comply with the following training requirements: (1) The pharmacy must establish and follow a written program of training and performance evaluation designed to ensure that each person working in the designated area has the knowledge and skills necessary to perform their assigned tasks properly. This program of training and performance evaluation must address at least the following: (A) Aseptic technique. (E) Aseptic preparation procedures. (2) Each person assigned to the controlled area must successfully complete practical skills training in aseptic technique and aseptic area practices. **1751.7. Sterile Injectable Compounding Quality Assurance and Process Validation.** (b) Each individual involved in the preparation of sterile injectable products must first successfully complete a validation process on technique before being allowed to prepare sterile injectable products.
	†Personnel with rashes, sunburn, weeping sores, conjunctivitis, active respiratory infection, and cosmetics are prohibited from preparing CSPs.	**Not Specifically Addressed**
	†Compounding personnel remove personal outer garments; cosmetics; artificial nails; hand, wrist, and body jewelry that can interfere with the fit of gowns and gloves; and visible body piercing above the neck.	**State Law only addresses garbing requirements for sterile preparations made from one or more nonsterile ingredients and cytotoxic agents.**

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		1751.5. Sterile Injectable Compounding Attire. (a) When preparing cytotoxic agents, gowns and gloves shall be worn. (b) When compounding sterile products from one or more non-sterile ingredients the following standards must be met: 1. Cleanroom garb consisting of a low-shedding coverall, head cover, face mask, and shoe covers must be worn inside the designated area at all times. 2. Cleanroom garb must be donned and removed outside the designated area. 3. Hand, finger, and wrist jewelry must be eliminated. If jewelry cannot be removed then it must be thoroughly cleaned and covered with a sterile glove. 4. Head and facial hair must be kept out of the critical area or be covered. 5. Gloves made of low-shedding materials are required. (c) The requirements of subdivision (b) do not apply if a barrier isolator is used to compound sterile injectable products from one or more non-sterile ingredients.
	† Order of compounding garb and cleansing in ante-area: shoes or shoe covers, head and facial hair covers, face mask, fingernail cleansing, hand and forearm washing and drying; non-shedding gown.	**Not Specifically Addressed**
	† Order of cleansing and gloving in buffer room or area: hand cleansing with a persistently active alcohol-based product with persistent activity, allow hands to dry; don sterile gloves.	**Not Specifically Addressed**
	† Routinely disinfect gloves with sterile 70% IPA after contacting nonsterile objects.	**Not Specifically Addressed**
	† Inspect gloves for holes and replace when breaches are detected.	**Not Specifically Addressed**
	† Personnel repeat proper procedures after they are exposed to direct contact contamination or worse than ISO Class 8 air.	**Not Specifically Addressed**
	† These requirements are exempted only for immediate use CSPs and CAIs for which manufacturers provide written documentation based on validated testing that such personnel practices are not required to maintain sterility in CSPs.	**Not Specifically Addressed**
Personnel Training And Competency Evaluation Of Garbing, Aseptic Work Practices And Cleaning/Disinfection Procedures	† Personnel who prepare CSPs shall be trained conscientiously and skillfully by expert personnel, multi-media instructional sources, and professional publications in the theoretical principles and practical skills of garbing procedures, aseptic work practices, achieving and maintaining ISO Class 5 environmental conditions, and cleaning and disinfection procedures.	**1735.7. Training of Compounding Staff** (b) The pharmacy shall develop and maintain an on-going competency evaluation process for pharmacy personnel involved in compounding, and shall maintain documentation of any and all training related to compounding undertaken by pharmacy personnel. (c) Pharmacy personnel assigned to compounding duties shall demonstrate knowledge about processes and procedures used in compounding any drug product. **1751.3. Sterile Injectable Policies and Procedures.** (a) Any pharmacy engaged in compounding sterile injectable drug products shall

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		maintain a written policy and procedure manual for compounding that includes, in addition to the elements required by section 1735.5, written policies and procedures regarding the following: (4) Training of staff in the preparation of sterile injectable products. (d) Pharmacies compounding sterile injectable products from one or more non-sterile ingredients must have written policies and procedures that comply with the following: (2) All personnel involved must read the policies and procedures before compounding sterile injectable products, and any additions, revisions, and deletions to the written policies and procedures must be communicated to all personnel involved in sterile compounding. **1751.6 Training of Sterile Injectable Compounding Staff, Patient, and Caregiver** (b) The pharmacist-in-charge shall be responsible to ensure all pharmacy personnel engaging in compounding sterile injectable drug products shall have training and demonstrated competence in the safe handling and compounding of sterile injectable products, including cytotoxic agents if the pharmacy compounds products with cytotoxic agents. (d) The pharmacist-in-charge shall be responsible to ensure the continuing competence of pharmacy personnel engaged in compounding sterile injectable products. (e) Pharmacies that compound sterile products from one or more non-sterile ingredients must comply with the following training requirements: (1) The pharmacy must establish and follow a written program of training and performance evaluation designed to ensure that each person working in the designated area has the knowledge and skills necessary to perform their assigned tasks properly. This program of training and performance evaluation must address at least the following: (A) Aseptic technique. (B) Pharmaceutical calculations and terminology. (C) Sterile product compounding documentation. (D) Quality assurance procedures. (E) Aseptic preparation procedures. (F) Proper gowning and gloving technique. (G) General conduct in the controlled area. (H) Cleaning, sanitizing, and maintaining equipment used in the controlled area. (I) Sterilization techniques. (J) Container, equipment, and closure system selection. (2) Each person assigned to the controlled area must successfully complete practical skills training in aseptic technique and aseptic area practices. Evaluation must include written testing and a written protocol of periodic routine performance checks involving adherence to aseptic area policies and procedures. Each person's proficiency and continuing training needs must be reassessed every 12 months. Results of these assessments must be documented and retained in the pharmacy for three years.

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	† This training shall be completed and documented before any compounding personnel begin to prepare CSPs.	**1735.7. Training of Compounding Staff** (a) Any pharmacy engaged in compounding shall maintain written documentation sufficient to demonstrate that pharmacy personnel have the skills and training required to properly and accurately perform their assigned responsibilities relating to compounding. **1751.6 Training of Sterile Injectable Compounding Staff, Patient, and Caregiver** (b) The pharmacist-in-charge shall be responsible to ensure all pharmacy personnel engaging in compounding sterile injectable drug products shall have training and demonstrated competence in the safe handling and compounding of sterile injectable products, including cytotoxic agents if the pharmacy compounds products with cytotoxic agents. (c) Records of training and demonstrated competence shall be available for each individual and shall be retained for three years beyond the period of employment. (e) Pharmacies that compound sterile products from one or more non-sterile ingredients must comply with the following training requirements: (2) Each person assigned to the controlled area must successfully complete practical skills training in aseptic technique and aseptic area practices. Evaluation must include written testing and a written protocol of periodic routine performance checks involving adherence to aseptic area policies and procedures. Each person's proficiency and continuing training needs must be reassessed every 12 months. Results of these assessments must be documented and retained in the pharmacy for three years. **1751.7. Sterile Injectable Compounding Quality Assurance and Process Validation.** (b) Each individual involved in the preparation of sterile injectable products must first successfully complete a validation process on technique before being allowed to prepare sterile injectable products. The validation process shall be carried out in the same manner as normal production, except that an appropriate microbiological growth medium is used in place of the actual product used during sterile preparation. The validation process shall be representative of all types of manipulations, products and batch sizes the individual is expected to prepare. The same personnel, procedures, equipment, and materials must be involved. Completed medium samples must be incubated. If microbial growth is detected, then the sterile preparation process must be evaluated, corrective action taken, and the validation process repeated. Personnel competency must be revalidated at least every twelve months, whenever the quality assurance program yields an unacceptable result, when the compounding process changes, equipment used in the compounding of sterile injectable drug products is repaired or replaced, the facility is modified in a manner that affects airflow or traffic patterns, or whenever improper aseptic techniques are observed. Revalidation must be documented.
	† Compounding personnel shall complete didactic training, pass written competence assessments, undergo skill assessment using observational audit tools, and media-fill testing.	**1751.6 Training of Sterile Injectable Compounding Staff, Patient, and Caregiver** (e) Pharmacies that compound sterile products from one or more non-sterile ingredients must comply with the following training requirements: (2) Each person assigned to the controlled area must successfully

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		complete practical skills training in aseptic technique and aseptic area practices. Evaluation must include written testing and a written protocol of periodic routine performance checks involving adherence to aseptic area policies and procedures. Each person's proficiency and continuing training needs must be reassessed every 12 months. Results of these assessments must be documented and retained in the pharmacy for three years. **1751.7. Sterile Injectable Compounding Quality Assurance and Process Validation.** (b) Each individual involved in the preparation of sterile injectable products must first successfully complete a validation process on technique before being allowed to prepare sterile injectable products. The validation process shall be carried out in the same manner as normal production, except that an appropriate microbiological growth medium is used in place of the actual product used during sterile preparation. The validation process shall be representative of all types of manipulations, products and batch sizes the individual is expected to prepare. The same personnel, procedures, equipment, and materials must be involved. Completed medium samples must be incubated. If microbial growth is detected, then the sterile preparation process must be evaluated, corrective action taken, and the validation process repeated. Personnel competency must be revalidated at least every twelve months, whenever the quality assurance program yields an unacceptable result, when the compounding process changes, equipment used in the compounding of sterile injectable drug products is repaired or replaced, the facility is modified in a manner that affects airflow or traffic patterns, or whenever improper aseptic techniques are observed. Revalidation must be documented.
	†Media-fill testing of aseptic work skills shall be performed initially before beginning to prepare CSPs and at least annually thereafter for low- and medium-risk level compounding; and semiannually for high-risk level compounding.	**1751.6 Training of Sterile Injectable Compounding Staff, Patient, and Caregiver** (e) Pharmacies that compound sterile products from one or more non-sterile ingredients must comply with the following training requirements: (2) Each person assigned to the controlled area must successfully complete practical skills training in aseptic technique and aseptic area practices. Evaluation must include written testing and a written protocol of periodic routine performance checks involving adherence to aseptic area policies and procedures. Each person's proficiency and continuing training needs must be reassessed every 12 months. Results of these assessments must be documented and retained in the pharmacy for three years. **1751.7. Sterile Injectable Compounding Quality Assurance and Process Validation.** (b) Each individual involved in the preparation of sterile injectable products must first successfully complete a validation process on technique before being allowed to prepare sterile injectable products. The validation process shall be carried out in the same manner as normal production, except that an appropriate microbiological growth medium is used in place of the actual product used during sterile preparation. The validation process shall be representative of all types of manipulations, products and batch sizes the individual is expected to prepare. The same personnel, procedures, equipment, and materials must be involved. Completed medium samples must be incubated. If microbial growth is detected,

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		then the sterile preparation process must be evaluated, corrective action taken, and the validation process repeated. Personnel competency must be revalidated at least every twelve months, whenever the quality assurance program yields an unacceptable result, when the compounding process changes, equipment used in the compounding of sterile injectable drug products is repaired or replaced, the facility is modified in a manner that affects airflow or traffic patterns, or whenever improper aseptic techniques are observed. Revalidation must be documented.
	† Compounding personnel who fail written tests, observational audits, or whose media-fill test vials have one or more units showing visible microbial contamination, shall be reinstructed and re-evaluated by expert compounding personnel to ensure correction of all aseptic work practice deficiencies.	**1751.7. Sterile Injectable Compounding Quality Assurance and Process Validation.** (b)...If microbial growth is detected, then the sterile preparation process must be evaluated, corrective action taken, and the validation process repeated.
	† Compounding personnel shall pass all evaluations prior to resuming compounding of sterile preparations.	**1751.6 Training of Sterile Injectable Compounding Staff, Patient, and Caregiver** (b) The pharmacist-in-charge shall be responsible to ensure all pharmacy personnel engaging in compounding sterile injectable drug products shall have training and demonstrated competence in the safe handling and compounding of sterile injectable products, including cytotoxic agents if the pharmacy compounds products with cytotoxic agents. **1751.7. Sterile Injectable Compounding Quality Assurance and Process Validation.** (b)...If microbial growth is detected, then the sterile preparation process must be evaluated, corrective action taken, and the validation process repeated.
	† Compounding personnel must demonstrate proficiency of proper hand hygiene, garbing, and consistent cleaning procedures in addition to didactic evaluation and aseptic media fill.	**1751.6 Training of Sterile Injectable Compounding Staff, Patient, and Caregiver** (e) Pharmacies that compound sterile products from one or more non-sterile ingredients must comply with the following training requirements: (1) The pharmacy must establish and follow a written program of training and performance evaluation designed to ensure that each person working in the designated area has the knowledge and skills necessary to perform their assigned tasks properly. This program of training and performance evaluation must address at least the following: (D) Quality assurance procedures. (F) Proper gowning and gloving technique. (G) General conduct in the controlled area. (H) Cleaning, sanitizing, and maintaining equipment used in the controlled area. (I) Sterilization techniques. (2) Each person assigned to the controlled area must successfully complete practical skills training in aseptic technique and aseptic area practices. Evaluation must include written testing and a written protocol of periodic routine performance checks involving adherence to aseptic area policies and procedures. Each person's proficiency and continuing training needs must be reassessed every 12 months. Results of these assessments must be documented and retained in the pharmacy for three years.

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	• Cleaning and disinfecting procedures performed by other support personnel shall be thoroughly trained in proper hand hygiene, and garbing, cleaning, and disinfection procedures by a qualified aseptic compounding expert. "In the event that cleaning and disinfecting procedures are also performed by other support personnel e.g. institutional environmental services, housekeeping), thorough training of proper hand hygiene, garbing, and cleaning and disinfection procedures shall be done by a qualified aseptic compounding expert. After completion of training, support personnel shall routinely undergo performance evaluation of proper hand hygiene, garbing, and all applicable cleaning and disinfecting procedures conducted by a qualified aseptic compounding expert."	**1751.6 Training of Sterile Injectable Compounding Staff, Patient, and Caregiver** (e) Pharmacies that compound sterile products from one or more non-sterile ingredients must comply with the following training requirements: (1) The pharmacy must establish and follow a written program of training and performance evaluation designed to ensure that each person working in the designated area has the knowledge and skills necessary to perform their assigned tasks properly. This program of training and performance evaluation must address at least the following: (F) Proper gowning and gloving technique. (G) General conduct in the controlled area. (H) Cleaning, sanitizing, and maintaining equipment used in the controlled area. (I) Sterilization techniques.
	• Support personnel shall routinely undergo performance evaluation of proper hand hygiene, garbing, and all applicable cleaning and disinfecting procedures conducted by a qualified aseptic compounding expert.	**1751.6 Training of Sterile Injectable Compounding Staff, Patient, and Caregiver** (2) Each person assigned to the controlled area must successfully complete practical skills training in aseptic technique and aseptic area practices. Evaluation must include written testing and a written protocol of periodic routine performance checks involving adherence to aseptic area policies and procedures. Each person's proficiency and continuing training needs must be reassessed every 12 months. Results of these assessments must be documented and retained in the pharmacy for three years.
Competency Evaluation of Garbing and Aseptic Work Practices	• Compounding personnel shall be evaluated initially prior to beginning compounding CSPs and whenever an aseptic media fill is performed using a Sample Form for Assessing Hand Hygiene and Garbing Related Practices of Compounding Personnel and the personnel glove fingertip sampling procedures.	**Not Specifically Addressed**
Aseptic Work Practice Assessment and Evaluation via Personnel Glove Fingertip Sampling	• Monitoring of compounding personnel glove fingertips shall be performed for all CSP risk level compounding.	**Not Specifically Addressed**
	• Glove fingertip sampling shall be used to evaluate the competency of personnel in performing hand hygiene and garbing procedures in addition to educating compounding personnel on proper work practices.	**Not Specifically Addressed**
	• All personnel shall demonstrate competency in proper hand hygiene and garbing procedures in addition to aseptic work practices.	**Not Specifically Addressed**
	• Sterile contact agar plates shall be used to sample the gloved fingertips of compounding personnel after garbing to assess garbing competency and after completing the media-fill preparation.	**Not Specifically Addressed**
	• Gloves shall not be disinfected with sterile 70% IPA immediately prior to sampling.	**Not Specifically Addressed**
Garbing and Gloving Competency Evaluation	• Compounding personnel shall be visually observed during the process of performing hand hygiene and garbing procedures.	**Not Specifically Addressed**

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	• The visual observation shall be documented on a Sample Form for Assessing Hand Hygiene and Garbing Related Practices of Compounding Personnel and maintained to provide a permanent record of and long-term assessment of personnel competency.	**Not Specifically Addressed**
Gloved Fingertip Sampling	• Immediately after the compounder completes the hand hygiene and garbing procedure, the evaluator shall collect a gloved fingertip and thumb sample from both hands of the compounder onto appropriate agar plates by lightly pressing each fingertip into the agar.	**Not Specifically Addressed**
	• The plates shall be incubated for the appropriate incubation period and at the appropriate temperature.	**Not Specifically Addressed**
	• All employees shall successfully complete an initial competency evaluation and gloved fingertip/thumb sampling procedure (0 cfu) no less than three times before initially being allowed to compound CSPs for human use.	**Not Specifically Addressed**
	• After completing the initial gowning and gloving competency evaluation, re-evaluation of all compounding personnel shall occur at least annually for low- and medium-risk level CSPs and semiannually for high-risk level CSPs before being allowed to continue compounding CSPs.	**1751.6 Training of Sterile Injectable Compounding Staff, Patient, and Caregiver** (2) Each person assigned to the controlled area must successfully complete practical skills training in aseptic technique and aseptic area practices. Evaluation must include written testing and a written protocol of periodic routine performance checks involving adherence to aseptic area policies and procedures. Each person's proficiency and continuing training needs must be reassessed every 12 months. Results of these assessments must be documented and retained in the pharmacy for three years.
	• Gloves shall not be disinfected with sterile 70% IPA prior to testing.	**Not Specifically Addressed**
	• The sampled gloves shall be immediately discarded and proper hand hygiene performed after sampling. The nutrient agar plates shall be incubated as stated below.	**Not Specifically Addressed**
	• The cfu action level for gloved hands shall be based on the total number of cfu on both gloves and not per hand.	**Not Specifically Addressed**
	‡ Results should be reported separately as number of cfu per employee per hand (left hand, right hand).	**Not Specifically Addressed**
Incubation Period (For Gloved Fingertip Sampling)	• At the end of the designated sampling period, the agar plates are recovered, covers secured, inverted and incubated at a temperature and for a time period conducive to multiplication of microorganisms. Trypticase soy agar (TSA) with lecithin and polysorbate 80 shall be incubated at 35°±2° for 2–3 days.	**Not Specifically Addressed**
Aseptic Manipulation Competency Evaluation	• All compounding personnel shall have their aseptic technique and related practice competency evaluated initially during the media-fill test procedure and subsequent annual or semiannual media-fill test procedures on the Sample Form for Assessing Aseptic Technique and Related Practices of Compounding Personnel.	**1751.6 Training of Sterile Injectable Compounding Staff, Patient, and Caregiver** (2) Each person assigned to the controlled area must successfully complete practical skills training in aseptic technique and aseptic area practices. Evaluation must include written testing and a written protocol of periodic routine performance checks involving adherence to aseptic area policies and procedures.

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		Each person's proficiency and continuing training needs must be reassessed every 12 months. Results of these assessments must be documented and retained in the pharmacy for three years.
Media-Fill Test Procedure	• The skill of personnel to aseptically prepare CSPs shall be evaluated using sterile fluid bacterial culture media-fill verification.	**1751.7. Sterile Injectable Compounding Quality Assurance and Process Validation.** (b) Each individual involved in the preparation of sterile injectable products must first successfully complete a validation process on technique before being allowed to prepare sterile injectable products. The validation process shall be carried out in the same manner as normal production, except that an appropriate microbiological growth medium is used in place of the actual product used during sterile preparation. The validation process shall be representative of all types of manipulations, products and batch sizes the individual is expected to prepare. The same personnel, procedures, equipment, and materials must be involved. Completed medium samples must be incubated. If microbial growth is detected, then the sterile preparation process must be evaluated, corrective action taken, and the validation process repeated. Personnel competency must be revalidated at least every twelve months, whenever the quality assurance program yields an unacceptable result, when the compounding process changes, equipment used in the compounding of sterile injectable drug products is repaired or replaced, the facility is modified in a manner that affects airflow or traffic patterns, or whenever improper aseptic techniques are observed. Revalidation must be documented.
	• Media-filled vials shall be incubated within a range of 35°C ±2° for 14 days.	**Not Specifically Addressed**
Surface Cleaning and Disinfection Sampling and Assessment	• Surface sampling shall be performed in all ISO classified areas on a periodic basis and can be accomplished using contact plates and/or swabs and shall be done at the conclusion of compounding.	**Not Specifically Addressed**
	• Locations to be sampled shall be defined in a sample plan or on a form.	**Not Specifically Addressed**
Cleaning and Disinfecting Competency Evaluation .	• Compounding personnel and other personnel responsible for cleaning shall be visually observed during the process of performing cleaning and disinfecting procedures during initial personnel training on cleaning procedures, changes in cleaning staff and at the completion of any Media-Fill Test Procedure.	**Not Specifically Addressed**
	• Visual observation shall be documented on a Sample Form for Assessing Cleaning and Disinfection Procedures and maintained to provide a permanent record of, and long-term assessment of, personnel competency.	**Not Specifically Addressed**
Surface Collection Methods	• Immediately after sampling a surface with the contact plate, the sampled area shall be thoroughly wiped with a non-shedding wipe soaked in sterile 70% IPA.	**Not Specifically Addressed**
	• Results should be reported as cfu per unit of surface area.	**Not Specifically Addressed**

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Action Levels, Documentation, and Data Evaluation	† Environmental sampling data shall be collected and reviewed on a routine basis as a means of evaluating the overall control of the compounding environment.	**Not Specifically Addressed**
	† If an activity consistently shows elevated levels of microbial growth, competent microbiology personnel shall be consulted.	**Not Specifically Addressed**
	† An investigation into the source of the contamination shall be conducted.	**Not Specifically Addressed**
	† When gloved fingertip sample results exceeds action levels after proper incubation, a review of hand hygiene and garbing procedures as well as glove and surface disinfection procedures and work practices shall be performed and documented.	**Not Specifically Addressed**
	‡ Any cfu count that exceeds its respective action level should prompt a re-evaluation of the adequacy of personnel work practices, cleaning procedures, operational procedures, and air filtration efficiency within the aseptic compounding location.	**Not Specifically Addressed**

Compounded Sterile Preparations

CSP Microbial Contamination Risk Levels	† Proper training and evaluation of personnel, proper cleansing and garbing of personnel, proper cleaning and disinfecting of compounding work environments, and proper maintenance and monitoring of controlled environmental locations (all of which are detailed in their respective sections).	**State law only addresses compounds made from one or more nonsterile ingredients and sterile compounds that do not meet these criteria.**
	Low-Risk Level CSPs † Aseptic manipulations within an ISO Class 5 environment using three or fewer sterile products and entries into any container. † In absence of passing sterility test, store not more than 48 hours at controlled room temperature, 14 days at cold temperature, and 45 days in solid frozen state at -25° to -10° or colder. † Media-fill test at least annually by compounding personnel.	**1735. Compounding in Licensed Pharmacies** (d) The parameters and requirements stated by this Article 4.5 (Section 1735 et seq.) apply to all compounding practices. Additional parameters and requirements applicable solely to sterile injectable compounding are stated by Article 7 (Section 1735 et seq.). **1735.2. Compounding Limitations and Requirements; Self-Assessment** (h) Every compounded drug product shall be given an expiration date representing the date beyond which, in the professional judgment of the pharmacist performing or supervising the compounding, it should not be used. This "beyond use date" of the compounded drug product shall not exceed 180 days from preparation or the shortest expiration date of any component in the compounded drug product, unless a longer date is supported by stability studies of finished drugs or compounded drug products using the same components and packaging. Shorter dating than set forth in this subsection may be used if it is deemed appropriate in the professional judgment of the responsible pharmacist. **1751. Sterile Injectable Compounding; Compounding Area; Self-Assessment**
	Low-Risk Level CSPs with 12-Hour or Less BUD † Fully comply with all four specific criteria. ‡ Sinks should not be located adjacent to the ISO Class 5 primary engineering control. ‡ Sinks should be separated from the immediate area of the ISO Class 5 primary engineering control device.	
	Medium-Risk Level CSPs † Aseptic manipulations within an ISO Class 5 environment using prolonged and complex mixing and transfer, more than three sterile products and entries into any container, and pooling ingredients from multiple sterile products to prepare multiple CSPs.	

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	†In absence of passing sterility test, store not more than 30 hours at controlled room temperature, 9 days at cold temperature, and 45 days in solid frozen state at -25°to -10°or colder. †Media-fill test at least annually by compounding personnel. **High-Risk Level CSPs** †Confirmed presence of nonsterile ingredients and devices, or confirmed or suspected exposure of sterile ingredients for more than one hour to air quality inferior to ISO Class 5 before final sterilization. †Sterilization method verified to achieve sterility for the quantity and type of containers. †Meet allowable limits for bacterial endotoxins. †Maintain acceptable strength and purity of ingredients and integrity of containers after sterilization. †In absence of passing sterility test, store not more than 24 hours at controlled room temperature, 3 days at cold temperature, and 45 days in solid frozen state at -25°to -10°or colder. Media-fill test at least semiannually by compounding personnel.	(a) Any pharmacy engaged in compounding sterile injectable drug products shall conform to the parameters and requirements stated by Article 4.5 (Section 1735 et seq.), applicable to all compounding, and shall also conform to the parameters and requirements stated by this Article 7 (Section 1751 et seq.), applicable solely to sterile injectable compounding. **1751.6 Training of Sterile Injectable Compounding Staff, Patient, and Caregiver** (e) Pharmacies that compound sterile products from one or more non-sterile ingredients must comply with the following training requirements: (1) The pharmacy must establish and follow a written program of training and performance evaluation designed to ensure that each person working in the designated area has the knowledge and skills necessary to perform their assigned tasks properly. This program of training and performance evaluation must address at least the following: (A) Aseptic technique. (B) Pharmaceutical calculations and terminology. (C) Sterile product compounding documentation. (D) Quality assurance procedures. (E) Aseptic preparation procedures. (F) Proper gowning and gloving technique. (G) General conduct in the controlled area. (H) Cleaning, sanitizing, and maintaining equipment used in the controlled area. (I) Sterilization techniques. (J) Container, equipment, and closure system selection. (2) Each person assigned to the controlled area must successfully complete practical skills training in aseptic technique and aseptic area practices. Evaluation must include written testing and a written protocol of periodic routine performance checks involving adherence to aseptic area policies and procedures. Each person's proficiency and continuing training needs must be reassessed every 12 months. Results of these assessments must be documented and retained in the pharmacy for three years. **1751.7. Sterile Injectable Compounding Quality Assurance and Process Validation.** (a) Any pharmacy engaged in compounding sterile injectable drug products shall maintain, as part of its written policies and procedures, a written quality assurance plan including, in addition to the elements required by section 1735.8, a documented, ongoing quality assurance program that monitors personnel performance, equipment, and facilities. The end product shall be examined on a periodic sampling basis as determined by the pharmacist-in-charge to assure that it meets required specifications. The Quality Assurance Program shall include at least the following: (4) Written justification of the chosen expiration dates for compounded sterile injectable products.

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Determining Beyond-Use Dates	†Use the general criteria in USP <795> in the absence of direct stability-indicating assays or authoritative literature that supports longer durations.	**1735.2. Compounding Limitations and Requirements; Self-Assessment** (d) A drug product shall not be compounded until the pharmacy has first prepared a written master formula record that includes at least the following elements: (6) Expiration dating requirements. (h) Every compounded drug product shall be given an expiration date representing the date beyond which, in the professional judgment of the pharmacist performing or supervising the compounding, it should not be used. This "beyond use date" of the compounded drug product shall not exceed 180 days from preparation or the shortest expiration date of any component in the compounded drug product, unless a longer date is supported by stability studies of finished drugs or compounded drug products using the same components and packaging. Shorter dating than set forth in this subsection may be used if it is deemed appropriate in the professional judgment of the responsible pharmacist. **1751.7. Sterile Injectable Compounding Quality Assurance and Process Validation.** (4) Written justification of the chosen expiration dates for compounded sterile injectable products.
Maintaining Sterility, Purity, and Stability of Dispensed and Distributed CSPs	†Written procedures for proper packaging, storage, and transportation conditions to maintain sterility, quality, purity, and strength of CSPs.	**1751.3. Sterile Injectable Policies and Procedures.** (a) Any pharmacy engaged in compounding sterile injectable drug products shall maintain a written policy and procedure manual for compounding that includes, in addition to the elements required by section 1735.5, written policies and procedures regarding the following: (1) Compounding, filling, and labeling of sterile injectable compounds. (6) Quality assurance program. (d) Pharmacies compounding sterile injectable products from one or more non-sterile ingredients must have written policies and procedures that comply with the following: (3) Policies and procedures must address at least the following: (B) Storage and handling of products and supplies. (C) Storage and delivery of final products. (D) Process validation. (I) For sterile batch compounding, written policies and procedures must be established for the use of master formulas and work sheets and for appropriate documentation. (J) Sterilization. (K) End-product evaluation and testing. **1751.7. Sterile Injectable Compounding Quality Assurance and Process Validation.** (a) Any pharmacy engaged in compounding sterile injectable drug products shall maintain, as part of its written policies and procedures, a written quality assurance plan including, in addition to the elements required by section 1735.8, a documented, ongoing quality assurance program that monitors personnel performance, equipment, and facilities. The end product shall be examined on a periodic sampling basis as determined by the pharmacist-in-charge to assure that it meets required specifications. The Quality Assurance Program shall include at least the following:

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		(2) The storage of compounded sterile injectable products in the pharmacy and periodic documentation of refrigerator temperature.
Redispensed CSPs	† When sterility, and acceptable purity, strength, and quality can be ensured.	**Not Specifically Addressed**
	† Assignment of sterility storage times and stability beyond-use dates that occur later than those of originally dispensed CSPs must be based on results of sterility testing and quantitative assay of ingredients.	**Not Specifically Addressed**
Packaging And Transporting CSPs	† Packaging maintains physical integrity, sterility, stability, and purity of CSPs.	**Not Specifically Addressed**
	† Modes of transport that maintain appropriate temperatures and prevent damage to CSPs.	**Not Specifically Addressed**
Immediate Use CSPs	† Fully comply with all six specified criteria. The immediate use provision is intended only for those situations where there is a need for emergency or immediate patient administration of a CSP. Such situations may include cardiopulmonary resuscitation, emergency room treatment, preparation of diagnostic agents, or critical therapy where the preparation of the CSP under conditions described for Low-Risk Level CSPs subjects the patient to additional risk due to delays in therapy. Immediate-use CSPs are not intended for storage for anticipated needs or batch compounding. Preparations that are medium-risk level and high-risk level shall not be prepared as immediate-use CSPs. Immediate-use CSPs are exempt from the requirements described for Low-Risk Level CSPs only when all of the following criteria are met:	**Not Specifically Addressed**
	1. The compounding process involves simple transfer of not more than three commercially manufactured packages of sterile nonhazardous products or diagnostic radiopharmaceutical products from the manufacturers' original containers and not more than two entries into any one container or package (e.g., bag, vial) of sterile infusion solution or administration container/device. For example, anti-neoplastics shall not be prepared as immediate-use CSPs because they are hazardous drugs.	**1735.2. Compounding Limitations and Requirements; Self-Assessment** (d) A drug product shall not be compounded until the pharmacy has first prepared a written master formula record that includes at least the following elements: (3) Process and/or procedure used to prepare the drug. (6) Expiration dating requirements. **1751.4. Facility and Equipment Standards for Sterile Injectable Compounding** (e) Pharmacies preparing parenteral cytotoxic agents shall do so in accordance with Section 41106(b) of Title 24 of the California Administrative Code, requiring a laminar airflow hood. The hood must be certified annually by a qualified technician who is familiar with the methods and procedures for certifying laminar airflow hoods and cleanroom requirements, in accordance with National Sanitation Foundation Standard 49 for Class II (Laminar Flow) Biohazard Cabinetry, as revised May, 1983. Certification records must be retained for at least three years.
	2. Unless required for the preparation, the compounding procedure is a continuous process not to exceed 1 hour.	**Not Specifically Addressed**
	3. During preparation, aseptic technique is followed and, if not immediately administered, the finished CSP is under continuous supervision to minimize the potential for contact with non-sterile surfaces, introduction of particulate matter or biological fluids, mix-ups with other CSPs, and direct contact of	**1751.6 Training of Sterile Injectable Compounding Staff, Patient, and Caregiver** (1) The pharmacy must establish and follow a written program of training and performance evaluation designed to ensure that each person working in the designated area has the knowledge and skills necessary to perform their assigned tasks properly. This program of training and performance evaluation must address

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	outside surfaces.	at least the following: (A) Aseptic technique. (B) Pharmaceutical calculations and terminology. (C) Sterile product compounding documentation. (D) Quality assurance procedures. (E) Aseptic preparation procedures. (F) Proper gowning and gloving technique. **1751.7. Sterile Injectable Compounding Quality Assurance and Process Validation.** (b) Each individual involved in the preparation of sterile injectable products must first successfully complete a validation process on technique before being allowed to prepare sterile injectable products. The validation process shall be carried out in the same manner as normal production, except that an appropriate microbiological growth medium is used in place of the actual product used during sterile preparation. The validation process shall be representative of all types of manipulations, products and batch sizes the individual is expected to prepare. The same personnel, procedures, equipment, and materials must be involved. Completed medium samples must be incubated. If microbial growth is detected, then the sterile preparation process must be evaluated, corrective action taken, and the validation process repeated. Personnel competency must be revalidated at least every twelve months, whenever the quality assurance program yields an unacceptable result, when the compounding process changes, equipment used in the compounding of sterile injectable drug products is repaired or replaced, the facility is modified in a manner that affects airflow or traffic patterns, or whenever improper aseptic techniques are observed. Revalidation must be documented.
	4. Administration begins not later than 1 hour following the start of the preparation of the CSP.	**Not Specifically Addressed**
	5. Unless immediately and completely administered by the person who prepared it or immediate and complete administration is witnessed by the preparer, the CSP shall bear a label listing patient identification information, the names and amounts of all ingredients, the name or initials of the person who prepared the CSP, and the exact 1-hour BUD and time.	**Not Specifically Addressed**

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	6. If administration has not begun within 1 hour following the start of preparing the CSP, the CSP shall be promptly, properly, and safely discarded.	**<u>**Time Constraints are Not Specifically Addressed</u>** **1735.2. Compounding Limitations and Requirements; Self-Assessment** (d) A drug product shall not be compounded until the pharmacy has first prepared a written master formula record that includes at least the following elements: (5) Post-compounding process or procedures required, if any. (6) Expiration dating requirements. (h) Every compounded drug product shall be given an expiration date representing the date beyond which, in the professional judgment of the pharmacist performing or supervising the compounding, it should not be used. This "beyond use date" of the compounded drug product shall not exceed 180 days from preparation or the shortest expiration date of any component in the compounded drug product, unless a longer date is supported by stability studies of finished drugs or compounded drug products using the same components and packaging. Shorter dating than set forth in this subsection may be used if it is deemed appropriate in the professional judgment of the responsible pharmacist. **1751.7. Sterile Injectable Compounding Quality Assurance and Process Validation.** The Quality Assurance Program shall include at least the following: (4) Written justification of the chosen expiration dates for compounded sterile injectable products.
Single-Dose and Multiple-Dose Containers	† Beyond-use date 28 days, unless specified otherwise by the manufacturer, for closure sealed multiple-dose containers after initial opening or entry. † Beyond-use time of 6 hours, unless specified otherwise by the manufacturer, for closure sealed single-dose containers in ISO Class 5 or cleaner air after initial opening or entry. † Beyond-use time of 1 hour for closure sealed single-dose containers after being opened or entered in worse than ISO Class 5 air. † Storage of opened single-dose ampuls is not permitted.	**Not Specifically Addressed**
Hazardous Drugs as CSPs	† Appropriate personnel protective equipment. Appropriate personnel protective equipment (PPE) shall be worn when compounding in a BSC or CACI and when using CSTD devices. PPE should include gowns, face masks, eye protection, hair covers, shoe covers or dedicated shoes, double gloving with sterile chemo-type gloves, and compliance with manufacturers' recommendations when using a CACI	**<u>**State Law only addresses with respect to High Risk CSPs</u>** **1751.5. Sterile Injectable Compounding Attire.** (a) When preparing cytotoxic agents, gowns and gloves shall be worn. (b) When compounding sterile products from one or more non-sterile ingredients the following standards must be met: (1) Cleanroom garb consisting of a low-shedding coverall, head cover, face mask, and shoe covers must be worn inside the designated area at all times. (2) Cleanroom garb must be donned and removed outside the designated area. (3) Hand, finger, and wrist jewelry must be eliminated. If jewelry cannot be removed then it must be thoroughly cleaned and covered with a sterile glove. (4) Head and facial hair must be kept out of the critical area or be covered.

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		(5) Gloves made of low-shedding materials are required. (c) The requirements of subdivision (b) do not apply if a barrier isolator is used to compound sterile injectable products from one or more non-sterile ingredients.
	† Appropriate primary engineering controls (BSCs and CACIs) are used for concurrent personnel protection and exposure of critical sites.	**4127.7. Compounding Sterile Injectables from Nonsterile Ingredients; Requirements** On and after July 1, 2005, a pharmacy shall compound sterile injectable products from one or more nonsterile ingredients in one of the following environments: (a) An ISO class 5 laminar airflow hood within an ISO class cleanroom. The cleanroom must have a positive air pressure differential relative to adjacent areas. (b) An ISO class 5 cleanroom. (c) A barrier isolator that provides an ISO class 5 environment for compounding. **1751.3. Sterile Injectable Policies and Procedures.** (3) Policies and procedures must address at least the following: (F) Use and maintenance of environmental control devices used to create the critical area for manipulation of sterile products (e.g., laminar-airflow workstations, biological safety cabinets, class 100 clean rooms, and barrier isolator workstations). **1751.4. Facility and Equipment Standards for Sterile Injectable Compounding** (e) Pharmacies preparing parenteral cytotoxic agents shall do so in accordance with Section 41106(b) of Title 24 of the California Administrative Code, requiring a laminar airflow hood. The hood must be certified annually by a qualified technician who is familiar with the methods and procedures for certifying laminar airflow hoods and cleanroom requirements, in accordance with National Sanitation Foundation Standard 49 for Class II (Laminar Flow) Biohazard Cabinetry, as revised May, 1983. Certification records must be retained for at least three years. **505.5.1 Pharmacies: Laminar Flow Biological Safety Cabinet.** In all pharmacies preparing parenteral cytotoxic agents, all compounding shall be conducted within a certified Class II Type A or Class II Type B vertical laminar airflow hood with bag-in-bag-out design. The pharmacy must ensure that contaminated air plenums that are under positive air pressure are leak tight.
	† Hazardous drugs shall be stored separately from other inventory in a manner to prevent contamination and personnel exposure.	**Not Specifically Addressed** **1751.3. Sterile Injectable Policies and Procedures.** (a) Any pharmacy engaged in compounding sterile injectable drug products shall maintain a written policy and procedure manual for compounding that includes, in addition to the elements required by section 1735.5, written policies and procedures regarding the following: (5) Procedures for handling cytotoxic agents.
	† At least 0.01 inch water column negative pressure and 12 air changes per hour in non-cleanrooms in which CACIs are located.	**Not Specifically Addressed**

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	† Hazardous drugs shall be handled with caution at all times using appropriate chemotherapy gloves during receiving, distribution, stocking, inventorying, preparing for administration, and disposal.	**Not Specifically Addressed** **1751.2. Sterile Injectable Labeling Requirements.** (d) All cytotoxic agents shall bear a special label which states "Chemotherapy_ Dispose of Properly." **1751.3. Sterile Injectable Policies and Procedures.** (a) Any pharmacy engaged in compounding sterile injectable drug products shall maintain a written policy and procedure manual for compounding that includes, in addition to the elements required by section 1735.5, written policies and procedures regarding the following: (5) Procedures for handling cytotoxic agents. (c) Pharmacies compounding sterile injectable products shall have written policies and procedures for the disposal of infectious materials and/or materials containing cytotoxic residues. The written policies and procedures shall describe the pharmacy protocols for cleanups and spills in conformity with local health jurisdiction standards.
	† Hazardous drugs shall be prepared in an ISO Class 5 environment with protective engineering controls in place, and following aseptic practices specified for the appropriate contamination risk levels.	**No Specific Equivalent addressing risk levels** **4127.7. Compounding Sterile Injectables from Nonsterile Ingredients; Requirements** On and after July 1, 2005, a pharmacy shall compound sterile injectable products from one or more nonsterile ingredients in one of the following environments: (a) An ISO class 5 laminar airflow hood within an ISO class cleanroom. The cleanroom must have a positive air pressure differential relative to adjacent areas. (b) An ISO class 5 cleanroom. (c) A barrier isolator that provides an ISO class 5 environment for compounding. **1751.4. Facility and Equipment Standards for Sterile Injectable Compounding** (e) Pharmacies preparing parenteral cytotoxic agents shall do so in accordance with Section 41106(b) of Title 24 of the California Administrative Code, requiring a laminar airflow hood. The hood must be certified annually by a qualified technician who is familiar with the methods and procedures for certifying laminar airflow hoods and cleanroom requirements, in accordance with National Sanitation Foundation Standard 49 for Class II (Laminar Flow) Biohazard Cabinetry, as revised May, 1983. Certification records must be retained for at least three years. **1250.4 Compounding Area for Parenteral Solutions.** The pharmacy shall have a designated area for the preparation of sterile products for dispensing which shall: Any pharmacy that compounds sterile injectable products from one or more nonsterile ingredients must compound the medication in one of the following environments: • 5.1 An ISO class laminar airflow hood within an ISO class 7 cleanroom. The

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		cleanroom must have a positive air pressure differential relative to adjacent areas. • 5.2 An ISO class 5 cleanroom. • 5.3 A barrier isolator that provides an ISO class 5 environment for compounding. **Note**: For additional pharmacy mechanical standard requirements, see Chapter 5, California Mechanical Code. **505.5.1 Pharmacies: Laminar Flow Biological Safety Cabinet.** In all pharmacies preparing parenteral cytotoxic agents, all compounding shall be conducted within a certified Class II Type A or Class II Type B vertical laminar airflow hood with bag-in-bag-out design. The pharmacy must ensure that contaminated air plenums that are under positive air pressure are leak tight.
	† Access to drug preparation areas shall be limited to authorized personnel.	**Not Specifically Addressed**
		1751.3. Sterile Injectable Policies and Procedures. (d) Pharmacies compounding sterile injectable products from one or more non-sterile ingredients must have written policies and procedures that comply with the following: (3) Policies and procedures must address at least the following: (E) Personnel access and movement of materials into and near the controlled area.
	† A pressure indicator shall be installed that can readily monitor room pressurization, which is documented daily.	**Not Specifically Addressed**
	† Annual documentation of full training of personnel regarding storage, handling, and disposal of hazardous drugs.	**Storage and disposal not specifically addressed**
		1751.6 Training of Sterile Injectable Compounding Staff, Patient, and Caregiver (b) The pharmacist-in-charge shall be responsible to ensure all pharmacy personnel engaging in compounding sterile injectable drug products shall have training and demonstrated competence in the safe handling and compounding of sterile injectable products, including cytotoxic agents if the pharmacy compounds products with cytotoxic agents. (c) Records of training and demonstrated competence shall be available for each individual and shall be retained for three years beyond the period of employment.
	† When used, a CSTD shall be used in an ISO Class 5 primary engineering control device.	**Not Specifically Addressed**
	† At least 0.01 inch water column negative pressure is required for compounding of hazardous drugs.	**Not Specifically Addressed**
	‡ Negative-pressure buffer area is not required for low-volume compounding operations when CSTD is used in BSC or CACI.	**Not Specifically Addressed**
	† Compounding personnel of reproductive capability shall confirm in writing that they understand the risks of handling hazardous drugs.	**Not Specifically Addressed**
	† Disposal of all hazardous drug wastes shall comply with all applicable federal and state regulations.	**1751.2.(d)** All cytotoxic agents shall bear a special label which states "Chemotherapy - Dispose of Properly." **1751.3. Sterile Injectable Policies and Procedures.** (c) Pharmacies compounding sterile injectable products shall have written policies and procedures for the disposal of infectious materials and/or materials

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		containing cytotoxic residues. The written policies and procedures shall describe the pharmacy protocols for cleanups and spills in conformity with local health jurisdiction standards.
	‡ Total external exhaust of primary engineering controls.	**Not Specifically Addressed**
	‡ Assay of surface wipe samples every 6 months.	**Not Specifically Addressed**
Radiopharmaceuticals as CSPs	† Positron Emission Tomography is according to USP chapter <823>.	**Radiopharmaceuticals as CSPs are Not Specifically Addressed in Sterile Compounding State Regulations.**
	† Appropriate primary engineering controls and radioactivity containment and shielding.	
	† Radiopharmaceuticals compounded from sterile components, in closed sterile containers, with volume of 100 mL or less for a single dose injection or not more than 30 mL taken from a multiple-dose container shall be designated as and conform to the standards for low-risk level CSPs.	
	† Radiopharmaceutical vials, designed for multi-use, compounded with technetium-99m, exposed to ISO Class 5 environment and punctured by needles with no direct contact contamination may be used up to the time indicated by manufacturers recommendations.	
	† Location of primary engineering controls permitted in ISO Class 8 controlled environment.	
	† Technetium-99m/Molybdenum-99 generators used according to manufacturer, state, and federal requirements.	
	† Radiopharmaceuticals prepared as low-risk level CSPs with 12-hour or less BUD shall be prepared in a segregated compounding area.	
	† Materials and garb exposed in patient-care and treatment area shall not cross a line of demarcation into the segregated compounding area.	
	† Technetium-99m/Molybdenum-99 generators must be eluted in ISO Class 8 conditions.	
	† Segregated compounding area will be designated with a line of demarcation	
	‡ Storage and transport of properly shielded vials of radiopharmaceutical CSPs may occur in a limited access ambient environment without a specific ISO class designation.	
Allergen Extracts as CSPs	† Allergen extracts as CSPs are not subject to the personnel, environmental, and storage requirements for all CSP Microbial Contamination Risk Levels when certain criteria are met.	**Not Specifically Addressed**
Patient Monitoring and Adverse Events Reporting	† Written standard procedures describe means for patients to ask questions and report concerns and adverse events with CSPs, and for compounding supervisors to correct and prevent future problems.	**Not Specifically Addressed**

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	‡ Adverse events and defects with CSPs reported to FDA's MedWatch and USP's MEDMARX programs.	**Not Specifically Addressed**
		1735.5. Compounding Policies and Procedures (c) The policy and procedure manual shall include the following: (2) Documentation of a plan for recall of a dispensed compounded drug product where subsequent verification demonstrates the potential for adverse effects with continued use of a compounded drug product. **1751.7. Sterile Injectable Compounding Quality Assurance and Process Validation.** (a) Any pharmacy engaged in compounding sterile injectable drug products shall maintain, as part of its written policies and procedures, a written quality assurance plan including, in addition to the elements required by section 1735.8, a documented, ongoing quality assurance program that monitors personnel performance, equipment, and facilities. The end product shall be examined on a periodic sampling basis as determined by the pharmacist-in-charge to assure that it meets required specifications. The Quality Assurance Program shall include at least the following: (3) Actions to be taken in the event of a drug recall.
Quality Assurance		
Verification of Compounding Accuracy and Sterility	† Review labels and document correct measurements, aseptic manipulations, and sterilization procedures to confirm correct identity, purity, and strength of ingredients in, and sterility of, CSPs.	**1735.2. Compounding Limitations and Requirements; Self-Assessment** (f) The pharmacist performing or supervising compounding is responsible for the integrity, potency, quality, and labeled strength of a compounded drug product until it is dispensed. (i) The pharmacist performing or supervising compounding is responsible for the proper preparation, labeling, storage, and delivery of the compounded drug product.
	‡ Assay finished CSPs to confirm correct identity and, or, strength of ingredients.	1735.8. Compounding Quality Assurance (a) Any pharmacy engaged in compounding shall maintain, as part of its written policies and procedures, a written quality assurance plan designed to monitor and ensure the integrity, potency, quality, and labeled strength of compounded drug products. (b) The quality assurance plan shall include written procedures for verification, monitoring, and review of the adequacy of the compounding processes and shall also include written documentation of review of those processes by qualified pharmacy personnel. (c) The quality assurance plan shall include written standards for qualitative and quantitative integrity, potency, quality, and labeled strength analysis of compounded drug products. All qualitative and quantitative analysis reports for compounded drug products shall be retained by the pharmacy and collated with the compounding record and master formula.
	‡ Sterility test finished CSPs.	**1751.7. Sterile Injectable Compounding Quality Assurance and Process Validation.** (a) Any pharmacy engaged in compounding sterile injectable drug products shall maintain, as part of its written policies and procedures, a written quality assurance plan including, in addition to the elements required by section 1735.8, a

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		documented, ongoing quality assurance program that monitors personnel performance, equipment, and facilities. The end product shall be examined on a periodic sampling basis as determined by the pharmacist-in-charge to assure that it meets required specifications. (c) Batch-produced sterile injectable drug products compounded from one or more non-sterile ingredients shall be subject to documented end product testing for sterility and pyrogens and shall be quarantined until the end product testing confirms sterility and acceptable levels of pyrogens. (d) Batch-produced sterile to sterile transfers shall be subject to periodic testing through process validation for sterility as determined by the pharmacist-in-charge and described in the written policies and procedures. **1751.3. Sterile Injectable Policies and Procedures.** (a) Any pharmacy engaged in compounding sterile injectable drug products shall maintain a written policy and procedure manual for compounding that includes, in addition to the elements required by section 1735.5, written policies and procedures regarding the following: (6) Quality assurance program. (d) Pharmacies compounding sterile injectable products from one or more non-sterile ingredients must have written policies and procedures that comply with the following: (3) Policies and procedures must address at least the following: (J) Sterilization. (K) End-product evaluation and testing.
Sterilization Methods	**Sterilization Methods** † Verify that methods achieve sterility while maintaining appropriate strength, purity, quality, and packaging integrity.	**Not Specifically Addressed**
	‡ Prove effectiveness by USP chapter 71, equivalent, or superior sterility testing.	**Not Specifically Addressed**
Sterilization of High-Risk Level CSPs by Filtration	† Nominal 0.2-µm pore size sterile membranes that are chemically and physically compatible with the CSP.	**Not Specifically Addressed**
	† Complete rapidly without filter replacement.	**Not Specifically Addressed**
	† Subject filter to manufacturers recommended integrity test (e.g., bubble point test) after filtering CSPs.	**Not Specifically Addressed**
Sterilization of High-Risk Level CSPs by Steam	† Test to verify the mass of containers to be sterilized will be sterile after the selected exposure duration in the particular autoclave.	**Not Specifically Addressed**
	† Ensure live steam contacts all ingredients and surfaces to be sterilized.	**Not Specifically Addressed**
	† Pass solutions through a 1.2-µm or smaller nominal pore size filter into final containers to remove particulates before sterilization.	**Not Specifically Addressed**
	† Heated filtered air shall be evenly distributed throughout the chamber by a blower device.	**Not Specifically Addressed**
	† Dry heat shall only be used for those materials that cannot be sterilized by steam, when the moisture would either damage or be impermeable to the materials.	**Not Specifically Addressed**

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	• Sufficient space shall be left between materials to allow for good circulation of the hot air.	**Not Specifically Addressed**
	• The description of dry heat sterilization conditions and duration for specific CSPs shall be included in written documentation in the compounding facility. The effectiveness of dry heat sterilization shall be verified using appropriate biological indicators and other confirmation.	**Not Specifically Addressed**
	• The oven should be equipped with a system for controlling temperature and exposure period.	**Not Specifically Addressed**
Depyrogenation by Dry Heat	• Dry heat depyrogenation shall be used to render glassware or containers, such as vials free from pyrogens as well as viable microbes.	**Not Specifically Addressed**
	• The description of the dry heat depyrogenation cycle and duration for specific load items shall be included in written documentation in the compounding facility.	**Not Specifically Addressed**
	• The effectiveness of the dry heat depyrogenation cycle shall be verified using endotoxin challenge vials (ECVs).	**Not Specifically Addressed**
	• The bacterial endotoxin test should be performed on the ECVs to verify the cycle is capable of achieving a 3 log reduction in endotoxin.	**Not Specifically Addressed**
FINISHED PREPARATION RELEASE CHECKS AND TESTS		
Inspection of Solution Dosage Forms and Review of Compounding Procedures	• Review procedures and documents to ensure sterility, purity, correct identities and amounts of ingredients, and stability.	**1735.2. Compounding Limitations and Requirements; Self-Assessment** (d) A drug product shall not be compounded until the pharmacy has first prepared a written master formula record that includes at least the following elements: (1) Active ingredients to be used. (2) Inactive ingredients to be used. (3) Process and/or procedure used to prepare the drug. (4) Quality reviews required at each step in preparation of the drug. (5) Post-compounding process or procedures required, if any. (6) Expiration dating requirements. (f) The pharmacist performing or supervising compounding is responsible for the integrity, potency, quality, and labeled strength of a compounded drug product until it is dispensed. (g) All chemicals, bulk drug substances, drug products, and other components used for drug compounding shall be stored and used according to compendial and other applicable requirements to maintain their integrity, potency, quality, and labeled strength. (i) The pharmacist performing or supervising compounding is responsible for the proper preparation, labeling, storage, and delivery of the compounded drug product. **1735.8. Compounding Quality Assurance** (a) Any pharmacy engaged in compounding shall maintain, as part of its written policies and procedures, a written quality assurance plan designed to monitor and ensure the integrity, potency, quality, and labeled strength of compounded drug products. (b) The quality assurance plan shall include written procedures for

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		verification, monitoring, and review of the adequacy of the compounding processes and shall also include written documentation of review of those processes by qualified pharmacy personnel. (c) The quality assurance plan shall include written standards for qualitative and quantitative integrity, potency, quality, and labeled strength analysis of compounded drug products. All qualitative and quantitative analysis reports for compounded drug products shall be retained by the pharmacy and collated with the compounding record and master formula. (d) The quality assurance plan shall include a written procedure for scheduled action in the event any compounded drug product is ever discovered to be below minimum standards for integrity, potency, quality, or labeled strength. **1751.1. Sterile Injectable Recordkeeping Requirements.** (b) In addition to the records required by section 1735.3 and subdivision (a), for sterile products compounded from one or more non-sterile ingredients, the following records must be made and kept by the pharmacy: (6) Preparation records including the master work sheet, the preparation work sheet, and records of end-product evaluation results. (c) Pharmacies shall maintain and retain all records required by this article in the pharmacy in a readily retrievable form for at least three years from the date the record was created. **1751.7. Sterile Injectable Compounding Quality Assurance and Process Validation.** (a) Any pharmacy engaged in compounding sterile injectable drug products shall maintain, as part of its written policies and procedures, a written quality assurance plan including, in addition to the elements required by section 1735.8, a documented, ongoing quality assurance program that monitors personnel performance, equipment, and facilities. The end product shall be examined on a periodic sampling basis as determined by the pharmacist-in-charge to assure that it meets required specifications.
	† Visually inspect for abnormal particulate matter and color, and intact containers and seals.	**1735.8. Compounding Quality Assurance** (c) The quality assurance plan shall include written standards for qualitative and quantitative integrity, potency, quality, and labeled strength analysis of compounded drug products. All qualitative and quantitative analysis reports for compounded drug products shall be retained by the pharmacy and collated with the compounding record and master formula.
Sterility Testing	† High-risk level CSPs prepared in batches of more than 25 identical containers, or exposed longer than 12 hours at 2º to 8º and 6 hours at warmer than 8º before being sterilized.	**Not Specifically Addressed**
Bacterial Endotoxin (Pyrogen) Testing	† High-risk level CSPs, excluding those for inhalation and ophthalmic administration, prepared in batches of more than 25 identical containers, or exposed longer than 12 hours at 2º to 8º and 6 hours at warmer than 8º before being sterilized.	**Not Specifically Addressed**
Identity and Strength	† Written procedures to verify correct identity, quality, amounts, and	**1735.8. Compounding Quality Assurance**

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Verification of Ingredients	purities of ingredients used in CSPs.	(a) Any pharmacy engaged in compounding shall maintain, as part of its written policies and procedures, a written quality assurance plan designed to monitor and ensure the integrity, potency, quality, and labeled strength of compounded drug products. (b) The quality assurance plan shall include written procedures for verification, monitoring, and review of the adequacy of the compounding processes and shall also include written documentation of review of those processes by qualified pharmacy personnel. (c) The quality assurance plan shall include written standards for qualitative and quantitative integrity, potency, quality, and labeled strength analysis of compounded drug products. All qualitative and quantitative analysis reports for compounded drug products shall be retained by the pharmacy and collated with the compounding record and master formula. (d) The quality assurance plan shall include a written procedure for scheduled action in the event any compounded drug product is ever discovered to be below minimum standards for integrity, potency, quality, or labeled strength. **1751.7. Sterile Injectable Compounding Quality Assurance and Process Validation.** (a) Any pharmacy engaged in compounding sterile injectable drug products shall maintain, as part of its written policies and procedures, a written quality assurance plan including, in addition to the elements required by section 1735.8, a documented, ongoing quality assurance program that monitors personnel performance, equipment, and facilities. The end product shall be examined on a periodic sampling basis as determined by the pharmacist-in-charge to assure that it meets required specifications.
	†Written procedures to ensure labels of CSPs contain correct names and amounts or concentrations of ingredients, total volumes, beyond-use dates, storage conditions, and route(s) of administration.	**1735.8. Compounding Quality Assurance** (a) Any pharmacy engaged in compounding shall maintain, as part of its written policies and procedures, a written quality assurance plan designed to monitor and ensure the integrity, potency, quality, and labeled strength of compounded drug products. (c) The quality assurance plan shall include written standards for qualitative and quantitative integrity, potency, quality, and labeled strength analysis of compounded drug products. All qualitative and quantitative analysis reports for compounded drug products shall be retained by the pharmacy and collated with the compounding record and master formula. **1735.4. Labeling of Compounded Drug Products** (a) In addition to the labeling information required under Business and Professions Code section 4076, the label of a compounded drug product shall contain the generic name(s) of the principal active ingredient(s). (b) A statement that the drug has been compounded by the pharmacy shall be included on the container or on the receipt provided to the patient. (c) Drug products compounded into unit-dose containers that are too small or otherwise impractical for full compliance

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		with subdivisions (a) and (b) shall be labeled with at least the name(s) of the active ingredient(s), concentration of strength, volume or weight, pharmacy reference or lot number, and expiration date. **1735.5. Compounding Policies and Procedures** (c) The policy and procedure manual shall include the following: (4) Documentation of the methodology used to test integrity, potency, quality, and labeled strength of compounded drug products. **1735.8. Compounding Quality Assurance** (a) Any pharmacy engaged in compounding shall maintain, as part of its written policies and procedures, a written quality assurance plan designed to monitor and ensure the integrity, potency, quality, and labeled strength of compounded drug products. **1751.2. Sterile Injectable Labeling Requirements.** In addition to the labeling information required under Business and Professions Code section 4076 and section 1735.4, a pharmacy which compounds sterile products shall include the following information on the labels for those products: (b) Name and concentrations of ingredients contained in the sterile injectable product. (c) Instructions for storage and handling. (d) All cytotoxic agents shall bear a special label which states "Chemotherapy - Dispose of Properly." **1751.3. Sterile Injectable Policies and Procedures.** (a) Any pharmacy engaged in compounding sterile injectable drug products shall maintain a written policy and procedure manual for compounding that includes, in addition to the elements required by section 1735.5, written policies and procedures regarding the following: (1) Compounding, filling, and labeling of sterile injectable compounds. (2) Labeling of the sterile injectable product based on the intended route of administration and recommended rate of administration.
Environmental Quality and Control		
Exposure of Critical Sites	† ISO Class 5 or better air.	**State Law only addresses ISO Class 5 air for parenteral cytotoxic agents and sterile compounds made from one or more non-sterile ingredients.** **4127.7. Compounding Sterile Injectables from Nonsterile Ingredients; Requirements** On and after July 1, 2005, a pharmacy shall compound sterile injectable products from one or more nonsterile ingredients in one of the following environments: (a) An ISO class 5 laminar airflow hood within an ISO class cleanroom. The

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		cleanroom must have a positive air pressure differential relative to adjacent areas. (b) An ISO class 5 cleanroom. (c) A barrier isolator that provides an ISO class 5 environment for compounding. **1250.4 Compounding Area for Parenteral Solutions.** The pharmacy shall have a designated area for the preparation of sterile products for dispensing which shall: 1. In accordance with Federal Standard 209(b), Clean Room and Work Station Requirements, Controlled Environment, as approved by the Commission, Federal Supply Service, General Services Administration meet standards for class 100 HEPA (high efficiency particulate air) filtered air such as laminar airflow hood or clean room. *Class 100 HEPA filtered air is equivalent to ISO 5 5. Any pharmacy that compounds sterile injectable products from one or more nonsterile ingredients must compound the medication in one of the following environments: • 5.1 An ISO class 1 laminar airflow hood within an ISO class 7 cleanroom. The cleanroom must have a positive air pressure differential relative to adjacent areas. • 5.2 An ISO class 5 cleanroom. • 5.3 A barrier isolator that provides an ISO class 5 environment for compounding. **Note**: For additional pharmacy mechanical standard requirements, see Chapter 5, California Mechanical Code. **505.5.1 Pharmacies: Laminar Flow Biological Safety Cabinet.** In all pharmacies preparing parenteral cytotoxic agents, all compounding shall be conducted within a certified Class II Type A or Class II Type B vertical laminar airflow hood with bag in-bag out design. The pharmacy must ensure that contaminated air plenums that are under positive air pressure are leak tight.
	†Preclude direct contact (e.g., touch and secretions) contamination.	**Not Specifically Addressed**

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ISO Class 5 Air Sources, Buffer Areas, and Ante-Areas	† A buffer area is an area that provides at least ISO Class 7 air quality.	**1250.4 Compounding Area for Parenteral Solutions.** The pharmacy shall have a designated area for the preparation of sterile products for dispensing which shall: 2. In accordance with Federal Standard 209(b), Clean Room and Work Station Requirements, Controlled Environment, as approved by the Commission, Federal Supply Service, General Services Administration meet standards for class 100 HEPA (high efficiency particulate air) filtered air such as laminar air flow hood or clean room. *Class 100 HEPA filtered air is equivalent to ISO 5 6. Any pharmacy that compounds sterile injectable products from one or more nonsterile ingredients must compound the medication in one of the following environments: • 5.1 An ISO class 1 laminar airflow hood within an ISO class 7 cleanroom. The cleanroom must have a positive air pressure differential relative to adjacent areas. • 5.2 An ISO class 5 cleanroom. • 5.3 A barrier isolator that provides an ISO class 5 environment for compounding. **Note**: For additional pharmacy mechanical standard requirements, see Chapter 5, California Mechanical Code. **4127.7. Compounding Sterile Injectables from Nonsterile Ingredients; Requirements** On and after July 1, 2005, a pharmacy shall compound sterile injectable products from one or more nonsterile ingredients in one of the following environments: (a) An ISO class 5 laminar airflow hood within an ISO class cleanroom. The cleanroom must have a positive air pressure differential relative to adjacent areas. (b) An ISO class 5 cleanroom. (c) A barrier isolator that provides an ISO class 5 environment for compounding.
	† New representations of facility layouts.	**Not Specifically Addressed**
	† Each compounding facility shall ensure that each source of ISO Class 5 environment for exposure of critical sites and sterilization by filtration is properly located, operated, maintained, monitored, and verified.	**1735.6. Compounding Facilities and Equipment** (a) Any pharmacy engaged in compounding shall maintain written documentation regarding the facilities and equipment necessary for safe and accurate compounded drug products. Where applicable, this shall include records of certification(s) of facilities or equipment. (b) Any equipment used to compound drug products shall be stored, used, and maintained in accordance with manufacturers' specifications. (c) Any equipment used to compound drug products for which calibration or adjustment is appropriate shall be calibrated prior to use to ensure accuracy. Documentation of each such calibration shall be recorded in writing and these records of calibration shall be maintained and retained in the pharmacy. **1751. Sterile Injectable Compounding; Compounding Area; Self-Assessment**

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		(a) Any pharmacy engaged in compounding sterile injectable drug products shall conform to the parameters and requirements stated by Article 4.5 (Section 1735 et seq.), applicable to all compounding, and shall also conform to the parameters and requirements stated by this Article 7 (Section 1751 et seq.), applicable solely to sterile injectable compounding. (b) Any pharmacy compounding sterile injectable drug products shall have a designated area for the preparation of sterile injectable products which shall meet the following standards: (1) Clean Room and Work Station Requirements, shall be in accordance with Section 490A.3.1 of Title 24, Part 2, Chapter 4A of the California Code of Regulations. (3) Be ventilated in a manner in accordance with Section 505.12 Title 24, Part 4, Chapter 5 of the California Code of Regulations. (4) Be certified annually by a qualified technician who is familiar with the methods and procedures for certifying laminar airflow hoods and clean room requirements, in accordance with standards adopted by the United States General Services Administration. Certification records must be retained for at least 3 years. (5) The pharmacy shall be arranged in accordance with Section 490A.3 of Title 24, Part 2, Chapter 4A of the California Code of Regulations. Items related to the compounding of sterile injectable products within the compounding area shall be stored in such a way as to maintain the integrity of an aseptic environment. (c) Any pharmacy compounding a sterile injectable product from one or more non-sterile ingredients shall comply with Business and Professions Code section 4127.7. **1751.1. Sterile Injectable Recordkeeping Requirements.** (b) In addition to the records required by Section 1735.3 and subdivision (a), for sterile products compounded from one or more non-sterile ingredients, the following records must be made and kept by the pharmacy: (3) Certification of the sterile compounding environment. (4) Other facility quality control logs specific to the pharmacy's policies and procedures (e.g., cleaning logs for facilities and equipment). (c) Pharmacies shall maintain and retain all records required by this article in the pharmacy in a readily retrievable form for at least three years from the date the record was created. **1751.3. Sterile Injectable Policies and Procedures.** (d) Pharmacies compounding sterile injectable products from one or more non-sterile ingredients must have written policies and procedures that comply with the following: (3) Policies and procedures must address at least the following: (F) Use and maintenance of environmental control devices used to create the critical area for manipulation of sterile products (e.g., laminar-airflow workstations, biological safety cabinets, class 100 cleanrooms, and barrier isolator workstations). (G) Regular cleaning schedule for the controlled area and any equipment in the controlled area and the alternation of disinfectants. Pharmacies subject to an

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		institutional infection control policy may follow that policy as it relates to cleaning schedules and the alternation of disinfectants in lieu of complying with this subdivision. **1751.4. Facility and Equipment Standards for Sterile Injectable Compounding** (c) All equipment used in the designated area or cleanroom must be made of a material that can be easily cleaned and disinfected. (d) Exterior workbench surfaces and other hard surfaces in the designated area, such as walls, floors, ceilings, shelves, tables, and stools, must be disinfected weekly and after any unanticipated event that could increase the risk of contamination. (e) Pharmacies preparing parenteral cytotoxic agents shall do so in accordance with Section 41106(b) of Title 24 of the California Administrative Code, requiring a laminar airflow hood. The hood must be certified annually by a qualified technician who is familiar with the methods and procedures for certifying laminar airflow hoods and cleanroom requirements, in accordance with National Sanitation Foundation Standard 49 for Class II (Laminar Flow) Biohazard Cabinetry, as revised May, 1983. Certification records must be retained for at least three years. **505.5 Pharmacies: Compounding Area for Parenteral Solutions.** The pharmacy shall have a designated area for the preparation of sterile products for dispensing which shall: 1. Be ventilated in a manner not interfering with laminar airflow.
	† Placement of devices (e.g., computers and printers) and objects (e.g., carts and cabinets) can be placed in buffer areas and shall be verified by testing or monitoring.	**Placement of Devices are Not Specifically Addressed** **1250.4 Compounding Area for Parenteral Solutions.** The pharmacy shall have a designated area for the preparation of sterile products for dispensing which shall: 3. The pharmacy shall be arranged in such a manner that the laminar-flow hood is located in an area which is exposed to minimal traffic flow, and is separate from any area used for bulk storage of items not related to the compounding of parenteral solution. There shall be sufficient space, well separated from the laminar-flow hood area, for the storage of bulk materials, equipment and waste materials.
Viable and Nonviable Environmental Sampling (ES) Testing	† Environmental sampling shall occur as part a comprehensive quality management program and shall occur minimally when several conditions exist.	**Not Specifically Addressed**
	‡ The ES program should provide information to staff and leadership to demonstrate that the engineering controls are maintaining an environment within the compounding area that consistently maintains acceptably low viable and nonviable particle levels.	**Not Specifically Addressed**
Environmental Nonviable Particle Testing Program	† Certification and testing of primary (LAFWs, BSCs, CAIs and CACIs) and secondary engineering controls (buffer and ante areas) shall be performed by a qualified individual no less than every six months and whenever the device or room is relocated, altered, or major service to the facility is performed. Certification procedures such as those outlined in the CETA Certification Guide for Sterile	**Not Specifically Addressed**

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	Compounding Facilities (CAG-003-2006) shall be used.	
Total Particle Counts	† Certification that each ISO classified area (e.g., ISO Class 5, 7 and 8) is within established guidelines shall be performed no less than every 6 months and whenever the LAFW, BSC, CAI, or CACI is relocated or the physical structure of the buffer room or ante-area has been altered.	**Not Specifically Addressed**
	† Testing shall be performed by qualified operators using current, state-of-the-art electronic equipment with results meeting ISO Class 5, 7, or 8 depending on the requirements of the area.	**Not Specifically Addressed**
	† All certification records shall be maintained and reviewed by supervising personnel or other designated employee to ensure that the controlled environments comply with the proper air cleanliness, room pressures, and air changes per hour.	**Not Specifically Addressed**
Environmental Viable Airborne Particle Testing Program—Sampling Plan	† An appropriate environmental sampling plan shall be developed for airborne viable particles based on a risk assessment of compounding activities performed.	**Not Specifically Addressed**
	† Selected sampling sites shall include locations within each ISO Class 5 environment and in the ISO Class 7 and 8 areas, and the segregated compounding areas at greatest risk of contamination (e.g., work areas near the ISO Class 5 environment, counters near doors, pass-through boxes).	**Not Specifically Addressed**
	† The plan shall include sample location, method of collection, frequency of sampling, volume of air sampled, and time of day as related to activity in the compounding area and action levels.	**Not Specifically Addressed**
	‡ It is recommended that compounding personnel refer to USP Chapter *Microbiological Evaluation of Clean Rooms and Other Controlled Environments* 1116 and the CDC Guidelines for Environmental Infection Control in Healthcare Facilities-2003 for more information.	**Not Specifically Addressed**
Viable Air Sampling	† Evaluation of airborne microorganisms using volumetric collection methods in the controlled air environments shall be performed by properly trained individuals for all compounding risk levels.	**Not Specifically Addressed**
	† Impaction shall be the preferred method of volumetric air sampling.	**Not Specifically Addressed**
	† For low-, medium-, and high-risk level compounding, air sampling shall be performed at locations that are prone to contamination during compounding activities and during other activities like staging, labeling, gowning, and cleaning.	**Not Specifically Addressed**
	† Locations shall include zones of air backwash turbulence within laminar airflow workbench and other areas where air backwash turbulence may enter the compounding area.	**Not Specifically Addressed**
	† For low-risk level CSPs with 12-hour or less BUD, air sampling shall be performed at locations inside the ISO Class 5 environment and other areas that are in close proximity to the ISO class 5 environment, during the certification of the primary engineering control.	**Not Specifically Addressed**
	‡ Consideration should be given to the overall effect the chosen sampling method will have on the unidirectional airflow within a	**Not Specifically Addressed**

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	compounding environment.	
Air Sampling Devices	† The instructions in the manufacturer's user manual for verification and use of electric air samplers that actively collect volumes of air for evaluation shall be followed.	**Not Specifically Addressed**
	† A sufficient volume of air (400–1000 liters) shall be tested at each location in order to maximize sensitivity.	**Not Specifically Addressed**
	‡ It is recommended that compounding personnel also refer to USP Chapter <1116> that can provide more information on the use of volumetric air samplers and volume of air that should be sampled to detect environmental bioburden excursions.	**Not Specifically Addressed**
Air Sampling Frequency and Process	† Air sampling shall be performed at least semiannually (i.e. every 6 months), as part of the re-certification of facilities and equipment for area where primary engineering controls are located.	**Not Specifically Addressed**
	† A sufficient volume of air shall be sampled and the manufacturer's guidelines for use of the electronic air sampling equipment followed.	**Not Specifically Addressed**
	‡ Any facility construction or equipment servicing may require the need to perform air sampling during these events.	**Not Specifically Addressed**
	† The microbial growth media plates used to collect environmental sampling are recovered, covers secured (e.g., taped), inverted, and incubated at a temperature and for a time period conducive to multiplication of microorganisms.	**Not Specifically Addressed**
	† The number of discrete colonies of microorganisms shall be counted and reported as colony-forming units (cfu) and documented on an environmental monitoring form. Counts from air monitoring need to be transformed into cfu/cubic meter of air and evaluated for adverse trends.	**Not Specifically Addressed**
	‡ TSA should be incubated at 35°±2° for 2–3 days.	**Not Specifically Addressed**
	‡ MEA or other suitable fungal media should be incubated at 28°±2° for 5–7	**Not Specifically Addressed**
Pressure Differential Monitoring	† A pressure gauge or velocity meter shall be installed to monitor the pressure differential or airflow between the buffer area and ante area and the ante-area and the general environment outside the compounding area.	**Not Specifically Addressed**
	† The results shall be reviewed and documented on a log at least every work shift (minimum frequency shall be at least daily) or by a continuous recording device.	**Not Specifically Addressed**
	† The pressure between the ISO Class 7 and general pharmacy area shall not be less than 5 Pa (0.02 inch water column (w.c.).	**Not Specifically Addressed**
	† In facilities where low- and medium-risk level CSPs are prepared, differential airflow shall maintain a minimum velocity of 0.2 meter/second (40 fpm) between buffer area and ante-area.	**Not Specifically Addressed**
Growth Media	† A general microbiological growth medium such as Soybean–Casein Digest Medium (also known as trypticase soy broth (TSB) or agar (TSA)) shall be used to support the growth of bacteria.	**Not Specifically Addressed**

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	† Malt extract agar (MEA) or some other media that supports the growth of fungi shall be used in high-risk level compounding environments.	**Not Specifically Addressed**
	† Media used for surface sampling shall be supplemented with additives to neutralize the effects of disinfecting agents (e.g., TSA with lecithin and polysorbate 80).	**Not Specifically Addressed**
Incubation Period (For Environmental Sampling)	**Incubation Period** † The microbial growth media plates used to collect environmental sampling are recovered, covers secured (e.g., taped), inverted, and incubated at a temperature and for a time period conducive to multiplication of microorganisms.	**Not Specifically Addressed**
	† The number of discrete colonies of microorganisms shall be counted and reported as colony-forming units (cfu) and documented on an environmental monitoring form. Counts from air monitoring need to be transformed into cfu/cubic meter of air and evaluated for adverse trends.	**Not Specifically Addressed**
	‡ TSA should be incubated at 35°±2° for 2–3 days.	**Not Specifically Addressed**
	‡ MEA or other suitable fungal media should be incubated at 28°±2° for 5–7 days.	**Not Specifically Addressed**
Action Levels, Documentation and Data Evaluation	† Sampling data shall be collected and reviewed on a periodic basis as a means of evaluating the overall control of the compounding environment.	**Not Specifically Addressed**
	† Competent microbiology personnel shall be consulted if an environmental sampling consistently shows elevated levels of microbial growth.	**Not Specifically Addressed**
	† An investigation into the source of the environmental contamination shall be conducted.	**Not Specifically Addressed**
	‡ Any cfu count that exceeds its respective action level should prompt a re-evaluation of the adequacy of personnel work practices, cleaning procedures, operational procedures, and air filtration efficiency within the aseptic compounding location.	**Not Specifically Addressed**
	‡ Table titled, Recommended Action Levels for Microbial Contamination should only be used as a guideline	**Not Specifically Addressed**
Facility Design and Environmental Controls	† Compounding facilities are physically designed and environmentally controlled to minimize airborne contamination from contacting critical sites.	**1735.6. Compounding Facilities and Equipment** (a) Any pharmacy engaged in compounding shall maintain written documentation regarding the facilities and equipment necessary for safe and accurate compounded drug products. Where applicable, this shall include records of certification(s) of facilities or equipment. (b) Any equipment used to compound drug products shall be stored, used, and maintained in accordance with manufacturers' specifications. (c) Any equipment used to compound drug products for which calibration or adjustment is appropriate shall be calibrated prior to use to ensure accuracy. Documentation of each such calibration shall be recorded in writing and these records of calibration shall be maintained and retained in the pharmacy.

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		1751. Sterile Injectable Compounding; Compounding Area; Self-Assessment (a) Any pharmacy engaged in compounding sterile injectable drug products shall conform to the parameters and requirements stated by Article 4.5 (Section 1735 et seq.), applicable to all compounding, and shall also conform to the parameters and requirements stated by this Article 7 (Section 1751 et seq.), applicable solely to sterile injectable compounding. (b) Any pharmacy compounding sterile injectable drug products shall have a designated area for the preparation of sterile injectable products which shall meet the following standards: (1) Clean Room and Work Station Requirements, shall be in accordance with Section 490A.3.1 of Title 24, Part 2, Chapter 4A of the California Code of Regulations. (3) Be ventilated in a manner in accordance with Section 505.12 Title 24, Part 4, Chapter 5 of the California Code of Regulations. (4) Be certified annually by a qualified technician who is familiar with the methods and procedures for certifying laminar airflow hoods and clean room requirements, in accordance with standards adopted by the United States General Services Administration. Certification records must be retained for at least 3 years. (5) The pharmacy shall be arranged in accordance with Section 490A.3 of Title 24, Part 2, Chapter 4A of the California Code of Regulations. Items related to the compounding of sterile injectable products within the compounding area shall be stored in such a way as to maintain the integrity of an aseptic environment. (c) Any pharmacy compounding a sterile injectable product from one or more non-sterile ingredients shall comply with Business and Professions Code Section 4127.7. **1751.1. Sterile Injectable Recordkeeping Requirements.** (b) In addition to the records required by Section 1735.3 and subdivision (a), for sterile products compounded from one or more non-sterile ingredients, the following records must be made and kept by the pharmacy: (3) Certification of the sterile compounding environment. (4) Other facility quality control logs specific to the pharmacy's policies and procedures (e.g., cleaning logs for facilities and equipment). (c) Pharmacies shall maintain and retain all records required by this article in the pharmacy in a readily retrievable form for at least three years from the date the record was created. **1751.3. Sterile Injectable Policies and Procedures.** (3) Policies and procedures must address at least the following: (F) Use and maintenance of environmental control devices used to create the critical area for manipulation of sterile products (e.g., laminar-airflow workstations, biological safety cabinets, class 100 cleanrooms, and barrier isolator workstations). **1751.4. Facility and Equipment Standards for Sterile Injectable Compounding** (c) All equipment used in the designated area or cleanroom must be made of a material that can be easily cleaned and disinfected.

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		(d) Exterior workbench surfaces and other hard surfaces in the designated area, such as walls, floors, ceilings, shelves, tables, and stools, must be disinfected weekly and after any unanticipated event that could increase the risk of contamination. **1250.4 Compounding Area for Parenteral Solutions.** The pharmacy shall have a designated area for the preparation of sterile products for dispensing which shall: 1 In accordance with Federal Standard 209(b), Clean Room and Work Station Requirements, Controlled Environment, as approved by the Commission, Federal Supply Service, General Services Administration meet standards for class 100 HEPA (high efficiency particulate air) filtered air such as laminar airflow hood or clean room. 2 Have non-porous and cleanable surfaces, walls, floors and floor coverings. 3 The pharmacy shall be arranged in such a manner that the laminar-flow hood is located in an area which is exposed to minimal traffic flow, and is separate from any area used for bulk storage of items not related to the compounding of parenteral solution. There shall be sufficient space, well separated from the laminar-flow hood area, for the storage of bulk materials, equipment and waste materials. 5 Any pharmacy that compounds sterile injectable products from one or more nonsterile ingredients must compound the medication in one of the following environments: • An ISO class laminar airflow hood within an ISO class 7 cleanroom. The cleanroom must have a positive air pressure differential relative to adjacent areas. • 5.2 An ISO class 5 cleanroom. • 5.3 A barrier isolator that provides an ISO class 5 environment for compounding. **Note**: For additional pharmacy mechanical standard requirements, see Chapter 5, California Mechanical Code. **505.5 Pharmacies: Compounding Area for Parenteral Solutions.** The pharmacy shall have a designated area for the preparation of sterile products for dispensing which shall: 1. Be ventilated in a manner not interfering with laminar airflow.
	† Compounding facilities shall provide a comfortable and well-lighted working environment, which typically includes a temperature of 20° or cooler to maintain comfortable conditions for compounding personnel when attired in the required aseptic compounding garb.	**Not Specifically Addressed**
	† Primary engineering controls provide unidirectional (i.e., laminar) HEPA air at a velocity sufficient to prevent airborne particles from contacting critical sites.	**1751.3. Sterile Injectable Policies and Procedures.** (d) Pharmacies compounding sterile injectable products from one or more non-sterile ingredients must have written policies and procedures that comply with the following: (3) Policies and procedures must address at least the following: (F) Use and maintenance of environmental control devices used to create the critical area for manipulation of sterile products (e.g., laminar-airflow

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		workstations, biological safety cabinets, class 100 cleanrooms, and barrier isolator workstations). **1250.4 Compounding Area for Parenteral Solutions.** The pharmacy shall have a designated area for the preparation of sterile products for dispensing which shall: 1 In accordance with Federal Standard 209(b), Clean Room and Work Station Requirements, Controlled Environment, as approved by the Commission, Federal Supply Service, General Services Administration meet standards for class 100 HEPA (high efficiency particulate air) filtered air such as laminar air flow hood or clean room. 5 Any pharmacy that compounds sterile injectable products from one or more nonsterile ingredients must compound the medication in one of the following environments: • 5.1 An ISO class laminar airflow hood within an ISO class 7 cleanroom. The cleanroom must have a positive air pressure differential relative to adjacent areas. • 5.2 An ISO class 5 cleanroom. • 5.3 A barrier isolator that provides an ISO class 5 environment for compounding. **Note**: For additional pharmacy mechanical standard requirements, see Chapter 5, California Mechanical Code.
	† In situ air pattern analysis via smoke studies shall be conducted at the critical area to demonstrate unidirectional airflow and sweeping action over and away from the product under dynamic conditions.	**Not Specifically Addressed**
	† Policies and procedures for maintaining and working within the primary engineering control area shall be written and followed. The policies and procedures will be determined by the scope and risk levels of the aseptic compounding activities used during the preparation of the CSPs.	**State Law only addresses sterile compounds made from one or more non-sterile ingredients. Other risk levels are not specifically addressed.** **1751.3. Sterile Injectable Policies and Procedures.** (d) Pharmacies compounding sterile injectable products from one or more non-sterile ingredients must have written policies and procedures that comply with the following: (3) Policies and procedures must address at least the following: (F) Use and maintenance of environmental control devices used to create the critical area for manipulation of sterile products (e.g., laminar-airflow workstations, biological safety cabinets, class 100 cleanrooms, and barrier isolator workstations). **1751.7. Sterile Injectable Compounding Quality Assurance and Process Validation.** (a) Any pharmacy engaged in compounding sterile injectable drug products shall maintain, as part of its written policies and procedures, a written quality assurance plan including, in addition to the elements required by section 1735.8, a documented, ongoing quality assurance program that monitors personnel performance, equipment, and facilities. The end product shall be examined on a periodic sampling basis as determined by the pharmacist-in-charge to assure that it meets required

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		specifications. The Quality Assurance Program shall include at least the following: (1) Cleaning and sanitization of the parenteral medication preparation area
	† The principles of HEPA-filtered unidirectional airflow in the work environment shall be understood and practiced in the compounding process in order to achieve the desired environmental conditions.	**1250.4 Compounding Area for Parenteral Solutions.** The pharmacy shall have a designated area for the preparation of sterile products for dispensing which shall: 1 In accordance with Federal Standard 209(b), Clean Room and Work Station Requirements, Controlled Environment, as approved by the Commission, Federal Supply Service, General Services Administration meet standards for class 100 HEPA (high efficiency particulate air) filtered air such as laminar air flow hood or clean room. 3 The pharmacy shall be arranged in such a manner that the laminar-flow hood is located in an area which is exposed to minimal traffic flow, and is separate from any area used for bulk storage of items not related to the compounding of parenteral solution. There shall be sufficient space, well separated from the laminar-flow hood area, for the storage of bulk materials, equipment and waste materials.
	† Clean rooms for nonhazardous and nonradioactive CSPs are supplied with HEPA that enters from ceilings with return vents low on walls, and provide not less than 30 air changes per hour.	**Not Specifically Addressed**
	† Buffer areas maintain 0.02- to 0.05-inch water column positive pressure, and do not contain sinks or drains.	**Not Specifically Addressed**
	† Air velocity from buffer rooms or zones to ante-areas is at least 40 feet/minute.	**Not Specifically Addressed**
	† The primary engineering controls shall be placed within a buffer area in such a manner as to avoid conditions that could adversely affect their operation.	**1250.4 Compounding Area for Parenteral Solutions.** The pharmacy shall have a designated area for the preparation of sterile products for dispensing which shall: 1 In accordance with Federal Standard 209(b), Clean Room and Work Station Requirements, Controlled Environment, as approved by the Commission, Federal Supply Service, General Services Administration meet standards for class 100 HEPA (high efficiency particulate air) filtered air such as laminar air flow hood or clean room. 3 The pharmacy shall be arranged in such a manner that the laminar-flow hood is located in an area which is exposed to minimal traffic flow, and is separate from any area used for bulk storage of items not related to the compounding of parenteral solution. There shall be sufficient space, well separated from the laminar-flow hood area, for the storage of bulk materials, equipment and waste materials.
	† The primary engineering controls shall be placed out of the traffic flow and in a manner to avoid disruption from the HVAC system and room cross-drafts.	**State law does not address HVAC system and room cross-drafts** **1250.4 Compounding Area for Parenteral Solutions.** The pharmacy shall have a designated area for the preparation of sterile products for dispensing which shall: 1. In accordance with Federal Standard 209(b), Clean Room and Work Station Requirements, Controlled Environment, as approved by the Commission, Federal Supply Service, General Services Administration meet standards for class 100 HEPA (high efficiency particulate air) filtered air such as laminar air flow hood or clean room.

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		3. The pharmacy shall be arranged in such a manner that the laminar-flow hood is located in an area which is exposed to minimal traffic flow, and is separate from any area used for bulk storage of items not related to the compounding of parenteral solution. There shall be sufficient space, well separated from the laminar-flow hood area, for the storage of bulk materials, equipment and waste materials.
	† HEPA-filtered supply air shall be introduced at the ceiling.	**Not Specifically Addressed**
	† All HEPA filters shall be efficiency tested using the most penetrating particle size and shall be leak tested at the factory and then leak tested again in situ after installation.	**Not Specifically Addressed**
	† Activities and tasks carried out within the buffer area shall be limited to only those necessary when working within a controlled environment.	**1751.3. Sterile Injectable Policies and Procedures.** (3) Policies and procedures must address at least the following: (E) Personnel access and movement of materials into and near the controlled area.
	† Only the furniture, equipment, supplies, and other material required for the compounding activities to be performed shall be brought into the room.	**1751.3. Sterile Injectable Policies and Procedures.** (3) Policies and procedures must address at least the following: (E) Personnel access and movement of materials into and near the controlled area.
	† Surfaces and essential furniture in buffer rooms or zones and clean rooms shall be nonporous, smooth, nonshedding, impermeable, cleanable, and resistant to disinfectants.	**1751.4. Facility and Equipment Standards for Sterile Injectable Compounding** (c) All equipment used in the designated area or cleanroom must be made of a material that can be easily cleaned and disinfected. **1250.4 Compounding Area for Parenteral Solutions.** The pharmacy shall have a designated area for the preparation of sterile products for dispensing which shall: 2. Have non-porous and cleanable surfaces, walls, floors and floor coverings.
	† The surfaces of ceilings, walls, floors, fixtures, shelving, counters, and cabinets in the buffer area shall be smooth, impervious, free from cracks and crevices, and nonshedding, thereby promoting cleanability and minimizing spaces in which microorganisms and other contaminants may accumulate.	**1751.4. Facility and Equipment Standards for Sterile Injectable Compounding** (c) All equipment used in the designated area or cleanroom must be made of a material that can be easily cleaned and disinfected. **1250.4 Compounding Area for Parenteral Solutions.** The pharmacy shall have a designated area for the preparation of sterile products for dispensing which shall: 2. Have non-porous and cleanable surfaces, walls, floors and floor coverings.
	† The surfaces shall be resistant to damage by disinfectant agents.	**1751.4. Facility and Equipment Standards for Sterile Injectable Compounding** (c) All equipment used in the designated area or cleanroom must be made of a material that can be easily cleaned and disinfected. **1250.4 Compounding Area for Parenteral Solutions.** The pharmacy shall have a designated area for the preparation of sterile products for dispensing which shall: 2. Have non-porous and cleanable surfaces, walls, floors and floor coverings.
	† Junctures of ceilings to walls shall be coved or caulked to avoid cracks and crevices where dirt can accumulate.	**Not Specifically Addressed**
	† Ceiling tiles shall be caulked around each perimeter to seal them to the support frame.	**Not Specifically Addressed**
	† The exterior lens surface of ceiling lighting fixtures shall be smooth, mounted flush, and sealed.	**Not Specifically Addressed**

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	† Any other penetrations through the ceiling or walls shall be sealed.	**Not Specifically Addressed**
	† The buffer area shall not contain sources of water (sinks) or floor drains. Work surfaces shall be constructed of smooth, impervious materials, such as stainless steel or molded plastic, so that they are easily cleaned and disinfected.	**Not Specifically Addressed**
	† Carts shall be of stainless steel wire, nonporous plastic, or sheet metal construction with good quality, cleanable casters to promote mobility.	**Not Specifically Addressed**
	† Storage shelving, counters, and cabinets shall be smooth, impervious, free from cracks and crevices, nonshedding, cleanable, and disinfectable.	**1751.4. Facility and Equipment Standards for Sterile Injectable Compounding** (c) All equipment used in the designated area or cleanroom must be made of a material that can be easily cleaned and disinfected. **1250.4 Compounding Area for Parenteral Solutions.** The pharmacy shall have a designated area for the preparation of sterile products for dispensing which shall: 2 Have non-porous and cleanable surfaces, walls, floors and floor coverings.
	† Their number, design, and manner of installation the items above shall promote effective cleaning and disinfection.	**Not Specifically Addressed**
	‡ If ceilings consist of inlaid panels, the panels should be impregnated with a polymer to render them impervious and hydrophobic.	**Not Specifically Addressed**
	‡ Dust-collecting overhangs, such as ceiling utility pipes, or ledges, such as windowsills, should be avoided.	**Not Specifically Addressed**
	‡ Air returns should be mounted low on the wall creating a general top-down dilution of room air with HEPA-filtered make-up air.	**Not Specifically Addressed**
Placement Of Primary Engineering Controls Within ISO Class 7 Buffer Areas	† Primary engineering controls for nonhazardous and nonradioactive CSPs are located in buffer areas, except for CAIs that are proven to maintain ISO Class 5 air when particle counts are sampled 6 to 12 inches upstream of critical site exposure areas during performance of normal inward and outward transfer of materials, and compounding manipulations when such CAIs are located in air quality worse than ISO Class 7.	**Not Specifically Addressed**
	† Presterilization procedures for high-risk level CSPs, such as weighing and mixing, shall be completed in no worse than an ISO Class 8 environment.	**Not Specifically Addressed**
	† Primary engineering controls shall be located out of traffic patterns and away from room air currents that could disrupt the intended airflow patterns.	**1250.4 Compounding Area for Parenteral Solutions.** The pharmacy shall have a designated area for the preparation of sterile products for dispensing which shall: 1 In accordance with Federal Standard 209(b), Clean Room and Work Station Requirements, Controlled Environment, as approved by the Commission, Federal Supply Service, General Services Administration meet standards for class 100 HEPA (high efficiency particulate air) filtered air such as laminar air flow hood or clean room. 3 The pharmacy shall be arranged in such a manner that the laminar-flow hood is located in an area which is exposed to minimal traffic flow, and is separate

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		from any area used for bulk storage of items not related to the compounding of parenteral solution. There shall be sufficient space, well separated from the laminar-flow hood area, for the storage of bulk materials, equipment and waste materials.
	† When isolators are used for sterile compounding, the recovery time to achieve ISO Class 5 air quality shall be documented and internal procedures developed to ensure that adequate recovery time is allowed after material transfer before and during compounding operations.	**Not Specifically Addressed**
	† When compounding activities require the manipulation of a patient's blood-derived or other biological material (e.g., radiolabeling a patients or a donors white blood cells), the manipulations shall be clearly separated from routine material-handling procedures and equipment used in CSP preparation activities, and they shall be controlled by specific standard operating procedures in order to avoid any cross-contamination.	**Not Specifically Addressed**
	† Food, drinks, and items exposed in patient care areas, and unpacking of bulk supplies and personnel cleansing and garbing are prohibited from buffer areas or rooms.	**Not Specifically Addressed**
	† Demarcation designation between buffer areas or rooms and ante-areas.	**Not Specifically Addressed**
	† Antiseptic hand cleansing and sterile gloves in buffer areas or rooms.	**Not Specifically Addressed**
	‡ Packaged compounding supplies and components, such as needles, syringes, tubing sets, and small- and large-volume parenterals, should be uncartoned and wiped down with a disinfectant that does not leave a residue (e.g., sterile 70% IPA) when possible in an ante-area, of ISO Class 8 air quality, before being passed into the buffer areas.	**Not Specifically Addressed**
Cleaning and Disinfecting the Sterile Compounding Areas	† Trained personnel write detailed procedures including cleansers, disinfectants, and non-shedding wipe and mop materials.	**1735.5. Compounding Policies and Procedures** (a) Any pharmacy engaged in compounding shall maintain a written policy and procedure manual for compounding that establishes procurement procedures, methodologies for the formulation and compounding of drugs, facilities and equipment cleaning, maintenance, operation, and other standard operating procedures related to compounding. (c) The policy and procedure manual shall include the following: (3) The procedures for maintaining, storing, calibrating, cleaning, and disinfecting equipment used in compounding, and for training on these procedures as part of the staff training and competency evaluation process. **1751.3. Sterile Injectable Policies and Procedures.** (3) Policies and procedures must address at least the following: (G) Regular cleaning schedule for the controlled area and any equipment in the controlled area and the alternation of disinfectants. Pharmacies subject to an institutional infection control policy may follow that policy as it relates to cleaning schedules and the alternation of disinfectants in lieu of complying with this subdivision.
	† Cleaning and disinfecting surfaces in the LAFWs, BSCs, CAIs, and CACIs shall be cleaned and disinfected frequently including at the beginning of	**Not Specifically Addressed**

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	each work shift, before each batch preparation is started, every 30 minutes during continuous compounding periods of individual CSPs, when there are spills, and when surface contamination is known or suspected from procedural breaches.	
	Trained compounding personnel are responsible for developing, implementing, and practicing the procedures for cleaning and disinfecting the DCAs written in the SOPs.	**1735.5. Compounding Policies and Procedures** (3) The procedures for maintaining, storing, calibrating, cleaning, and disinfecting equipment used in compounding, and for training on these procedures as part of the staff training and competency evaluation process.
	Cleaning and disinfecting shall occur before compounding is performed. Items shall be removed from all areas to be cleaned and surfaces shall be cleaned by removing loose material and residue from spills, e.g., water-soluble solid residues are removed with Sterile Water (for Injection or Irrigation) and low-shedding wipes. This shall be followed by wiping with a residue-free disinfecting agent, such as sterile 70% IPA, which is allowed to dry before compounding begins.	**Not Specifically Addressed**
	Work surfaces in ISO Class 7 and 8 areas and segregated compounding areas are cleaned at least daily.	**Not Specifically Addressed**
	Dust and debris shall be removed when necessary from storage sites for compounding ingredients and supplies, using a method that does not degrade the ISO Class 7 or 8 air quality.	**Not Specifically Addressed**
	Floors in ISO Class 7 and 8 areas are cleaned daily when no compounding occurs.	**State law requires weekly disinfection of floors, while USP 797 requires daily.** **1751.4. Facility and Equipment Standards for Sterile Injectable Compounding** (d) Exterior workbench surfaces and other hard surfaces in the designated area, such as walls, floors, ceilings, shelves, tables, and stools, must be disinfected weekly and after any unanticipated event that could increase the risk of contamination.
	IPA (70% isopropyl alcohol) remains on surfaces to be disinfected for at least 30 seconds before such are used to prepare CSPs.	**Not Specifically Addressed**
	Emptied shelving, walls, and ceilings in ante-areas are cleaned and disinfected at least monthly.	**Difference in disinfecting schedules between USP797 and State Law** **1751.4. Facility and Equipment Standards for Sterile Injectable Compounding** (d) Exterior workbench surfaces and other hard surfaces in the designated area, such as walls, floors, ceilings, shelves, tables, and stools, must be disinfected weekly and after any unanticipated event that could increase the risk of contamination.
	Mopping shall be performed by trained personnel using approved agents and procedures described in the written SOPs.	**Not Specifically Addressed**
	Cleaning and disinfecting agents, their schedules of use and methods of application shall be in accordance with written SOPs and followed by custodial and/or compounding personnel.	**1735.5. Compounding Policies and Procedures** (a) Any pharmacy engaged in compounding shall maintain a written policy and procedure manual for compounding that establishes procurement procedures, methodologies for the formulation and compounding of drugs, facilities and equipment cleaning, maintenance, operation, and other standard operating procedures related to compounding. (c) The policy and procedure manual shall include the following: (3) The procedures for maintaining, storing, calibrating, cleaning, and disinfecting equipment used in compounding, and for training on these procedures

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		as part of the staff training and competency evaluation process. **1751.3. Sterile Injectable Policies and Procedures.** (3) Policies and procedures must address at least the following: (G) Regular cleaning schedule for the controlled area and any equipment in the controlled area and the alternation of disinfectants. Pharmacies subject to an institutional infection control policy may follow that policy as it relates to cleaning schedules and the alternation of disinfectants in lieu of complying with this subdivision. **1751.7. Sterile Injectable Compounding Quality Assurance and Process Validation.** (a) Any pharmacy engaged in compounding sterile injectable drug products shall maintain, as part of its written policies and procedures, a written quality assurance plan including, in addition to the elements required by section 1735.8, a documented, ongoing quality assurance program that monitors personnel performance, equipment, and facilities. The end product shall be examined on a periodic sampling basis as determined by the pharmacist-in-charge to assure that it meets required specifications. The Quality Assurance Program shall include at least the following: (1) Cleaning and sanitization of the parenteral medication preparation area.
	† All cleaning materials, such as wipers, sponges, and mops, shall be nonshedding, preferably composed of synthetic microfibers, and dedicated to use in the buffer area, or ante-area, and segregated compounding areas and shall not be removed from these areas except for disposal.	**Not Specifically Addressed**
	† If cleaning materials are reused (e.g., mops), procedures shall be developed (based on manufacturer recommendations) that ensure that the effectiveness of the cleaning device is maintained and repeated use does not add to the bioburden of the area being cleaned.	**Not Specifically Addressed**
	† Supplies and equipment removed from shipping cartons shall be wiped with a suitable disinfecting agent (e.g., sterile 70% IPA) delivered from a spray bottle or other suitable delivery method.	**Not Specifically Addressed**
	† After the disinfectant is sprayed or wiped on a surface to be disinfected, the disinfectant shall be allowed to dry, and during this time the item shall not be used for compounding purposes.	**Not Specifically Addressed**
	† Sterile 70% IPA wetted gauze pads or other particle-generating material shall not be used to disinfect the sterile entry points of packages and devices.	**Not Specifically Addressed**

Standard Operating Procedures

Suggested Standard Operating Procedures	† All facilities are required to have these, and they must include at least the items enumerated in this section. The Compounding Facility shall have written, properly approved SOPs designed to ensure the quality of the environment in which a CSP is prepared. The following procedures are recommended:	**1735.5. Compounding Policies and Procedures** (a) Any pharmacy engaged in compounding shall maintain a written policy and procedure manual for compounding that establishes procurement procedures, methodologies for the formulation and compounding of drugs, facilities and equipment cleaning, maintenance, operation, and other standard operating

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		procedures related to compounding. (b) The policy and procedure manual shall be reviewed on an annual basis by the pharmacist-in-charge and shall be updated whenever changes in processes are implemented. (c) The policy and procedure manual shall include the following: (1) Procedures for notifying staff assigned to compounding duties of any changes in processes or to the policy and procedure manual. (2) Documentation of a plan for recall of a dispensed compounded drug product where subsequent verification demonstrates the potential for adverse effects with continued use of a compounded drug product. (3) The procedures for maintaining, storing, calibrating, cleaning, and disinfecting equipment used in compounding, and for training on these procedures as part of the staff training and competency evaluation process. (4) Documentation of the methodology used to test integrity, potency, quality, and labeled strength of compounded drug products. (5) Documentation of the methodology used to determine appropriate expiration dates for compounded drug products. **1735.8. Compounding Quality Assurance** (a) Any pharmacy engaged in compounding shall maintain, as part of its written policies and procedures, a written quality assurance plan designed to monitor and ensure the integrity, potency, quality, and labeled strength of compounded drug products. **1751.3. Sterile Injectable Policies and Procedures.** (a) Any pharmacy engaged in compounding sterile injectable drug products shall maintain a written policy and procedure manual for compounding that includes, in addition to the elements required by section 1735.5, written policies and procedures regarding the following: (1) Compounding, filling, and labeling of sterile injectable compounds. (2) Labeling of the sterile injectable product based on the intended route of administration and recommended rate of administration. (3) Equipment and supplies. (4) Training of staff in the preparation of sterile injectable products. (5) Procedures for handling cytotoxic agents. (6) Quality assurance program. (7) Record keeping requirements. (b) The ingredients and the compounding process for each preparation must be determined in writing before compounding begins and must be reviewed by a pharmacist. (c) Pharmacies compounding sterile injectable products shall have written policies and procedures for the disposal of infectious materials and/or materials containing cytotoxic residues. The written policies and procedures shall describe the pharmacy protocols for cleanups and spills in conformity with local health jurisdiction standards. (d) Pharmacies compounding sterile injectable products from one or more

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		non-sterile ingredients must have written policies and procedures that comply with the following: (1) All written policies and procedures shall be immediately available to all personnel involved in these activities and board inspectors. (2) All personnel involved must read the policies and procedures before compounding sterile injectable products, and any additions, revisions, and deletions to the written policies and procedures must be communicated to all personnel involved in sterile compounding. (3) Policies and procedures must address at least the following: (A) Competency evaluation. (B) Storage and handling of products and supplies. (C) Storage and delivery of final products. (D) Process validation. (E) Personnel access and movement of materials into and near the controlled area. (F) Use and maintenance of environmental control devices used to create the critical area for manipulation of sterile products (e.g., laminar-airflow workstations, biological safety cabinets, class 100 cleanrooms, and barrier isolator workstations). (G) Regular cleaning schedule for the controlled area and any equipment in the controlled area and the alternation of disinfectants. Pharmacies subject to an institutional infection control policy may follow that policy as it relates to cleaning schedules and the alternation of disinfectants in lieu of complying with this subdivision. (H) Disposal of packaging materials, used syringes, containers, and needles to enhance sanitation and avoid accumulation in the controlled area.. (I) For sterile batch compounding, written policies and procedures must be established for the use of master formulas and work sheets and for appropriate documentation. (J) Sterilization. (K) End-product evaluation and testing. **1751.7. Sterile Injectable Compounding Quality Assurance and Process Validation.** (a) Any pharmacy engaged in compounding sterile injectable drug products shall maintain, as part of its written policies and procedures, a written quality assurance plan including, in addition to the elements required by section 1735.8, a documented, ongoing quality assurance program that monitors personnel performance, equipment, and facilities. The end product shall be examined on a periodic sampling basis as determined by the pharmacist-in-charge to assure that it meets required specifications.
	1. Access to the buffer area is restricted to qualified personnel with specific responsibilities or assigned tasks in the compounding area.	**1751.3. Sterile Injectable Policies and Procedures.** (3) Policies and procedures must address at least the following: (E) Personnel access and movement of materials into and near the controlled area.
	2. All cartoned supplies are decontaminated in the area by removing them from shipping cartons and wiping or spraying them with a nonresidue-generating disinfecting agent while	**1751.3. Sterile Injectable Policies and Procedures.** (3) Policies and procedures must address at least the following: (H) Disposal of packaging materials, used syringes, containers, and needles

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	they are being transferred to a clean and properly disinfected cart or other conveyance for introduction into the buffer area. Manufacturer's directions or published data for minimum contact time will be followed/individual pouched sterile supplies need not be wiped because the pouches can be removed as these sterile supplies are introduced into the buffer area.	to enhance sanitation and avoid accumulation in the controlled area.
	3. Supplies that are required frequently or otherwise needed close at hand but not necessarily needed for the scheduled operations of the shift are decontaminated and stored on shelving in the ante-area.	**Not Specifically Addressed**
	4. Carts used to bring supplies from the storeroom cannot be rolled beyond the demarcation line in the ante-area, and carts used in the buffer area cannot be rolled outward beyond the demarcation line unless cleaned and disinfected before returning.	**Not Specifically Addressed**
	5. Generally, supplies required for the scheduled operations of the shift are wiped down with an appropriate disinfecting agent and brought in the buffer area, preferably on one or more movable carts. Supplies that are required for back-up for general support of operations may be stored on the designated shelving in the buffer area, but excessive amounts of supplies are to be avoided.	**1250.4 Compounding Area for Parenteral Solutions.** The pharmacy shall have a designated area for the preparation of sterile products for dispensing which shall: 3. The pharmacy shall be arranged in such a manner that the laminar-flow hood is located in an area which is exposed to minimal traffic flow, and is separate from any area used for bulk storage of items not related to the compounding of parenteral solution. There shall be sufficient space, well separated from the laminar-flow hood area, for the storage of bulk materials, equipment and waste materials.
	6. Nonessential objects that shed particles shall not be brought into the buffer area, including pencils, cardboard cartons, paper towels, and cotton items (e.g., gauze pads).	**Not Specifically Addressed**
	7. Essential paper-related products (e.g. paper syringe overwraps, work records contained in protective sleeve) shall be wiped down with an appropriate disinfecting agent prior to being brought into the buffer area.	**State Law Addresses Equipment but Makes No Specific Mention of Essential Paper-related Products.**
	8. Traffic flow in and out of the buffer area shall be minimized.	**1751.3. Sterile Injectable Policies and Procedures.** (3) Policies and procedures must address at least the following: (E) Personnel access and movement of materials into and near the controlled area.
	9. Personnel preparing to enter the buffer area shall remove all personal outer garments, cosmetics (because they shed flakes and particles), and all hand, wrist, and other visible jewelry or piercings that can interfere with the effectiveness of PPE.	**State Law Only Addresses Garbing Requirements for Sterile Preparations Made from One or More Non-sterile Ingredients and Cytotoxic agents.**
	10. Personnel entering the ante-area shall don attire described in *Personnel Cleansing and Garbing and Personnel Training and Competency Evaluation of Garbing, Aseptic Work Practices and Cleaning/Disinfection Procedures.*	**1751.4. Facility and Equipment Standards for Sterile Injectable Compounding** (b) During the preparation of sterile injectable products, access to the designated area or cleanroom must be limited to those individuals who are properly attired.
	11. Personnel shall then thoroughly wash hands and forearms to	**Not Specifically Addressed**

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	the elbow with soap and water for at least 30 seconds. An air dryer or disposable nonshedding towels are used to dry hands and forearms after washing.	
	12. Personnel entering the buffer area shall perform antiseptic hand cleansing prior to donning sterile gloves using waterless alcohol-based surgical hand scrub with persistent activity.	**Not Specifically Addressed**
	13. Chewing gum, drinks, candy, or food items shall not be brought into the buffer area or ante-area. Materials exposed in patient care and treatment areas shall never be introduced into areas where components and ingredients for CSPs are present.	**Not Specifically Addressed**
	14. At the beginning of each compounding activity session, and whenever liquids are spilled, the surfaces of the direct compounding environment are first cleaned with USP Purified Water to remove water-soluble residues. Immediately thereafter, the same surfaces are disinfected with a nonresidue-generating agent using a nonlinting wipe.	**Not Specifically Addressed**
	15. Primary engineering controls shall be operated continuously during compounding activity. When the blower is turned off and before other personnel enter to perform compounding activities, only one person shall enter the buffer area for the purposes of turning on the blower (for at least 20 minutes) and disinfecting the work surfaces.	**Not Specifically Addressed**
	16. Traffic in the area of the DCA is minimized and controlled.	**1751.3. Sterile Injectable Policies and Procedures.** (3) Policies and procedures must address at least the following: (E) Personnel access and movement of materials into and near the controlled area.
	17. Supplies used in the DCA for the planned procedures are accumulated and then decontaminated by wiping or spraying the outer surface with sterile 70% IPA or removing the outer wrap at the edge of the DCA as the item is introduced into the aseptic work area.	**Not Specifically Addressed**
	18. All supply items are arranged in the DCA so as to reduce clutter and provide maximum efficiency and order for the flow of work.	**Not Specifically Addressed**
	19. After proper introduction into the DCA of supply items required for and limited to the assigned operations, they are so arranged that a clear, uninterrupted path of HEPA-filtered air will bathe all critical sites at all times during the planned procedures. That is, no objects may be placed between the first air from HEPA filters and an exposed critical site.	**Not Specifically Addressed**
	20. All procedures are performed in a manner designed to minimize the risk of touch contamination. Gloves are disinfected with adequate frequency with an approved disinfectant such as sterile 70% IPA.	**Not Specifically Addressed**
	21. All rubber stoppers of vials and bottles and the necks of ampuls are disinfected by wiping with sterile 70% IPA and	**Not Specifically Addressed**

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	waiting for at least 10 seconds before they are used to prepare CSPs.	
	22. After the preparation of every CSP, the contents of the container are thoroughly mixed and then inspected for the presence of particulate matter, evidence of incompatibility, or other defects.	**1735.2. Compounding Limitations and Requirements; Self-Assessment** (d) A drug product shall not be compounded until the pharmacy has first prepared a written master formula record that includes at least the following elements: (4) Quality reviews required at each step in preparation of the drug. (5) Post-compounding process or procedures required, if any. (f) The pharmacist performing or supervising compounding is responsible for the integrity, potency, quality, and labeled strength of a compounded drug product until it is dispensed. **1735.8. Compounding Quality Assurance** (a) Any pharmacy engaged in compounding shall maintain, as part of its written policies and procedures, a written quality assurance plan designed to monitor and ensure the integrity, potency, quality, and labeled strength of compounded drug products. (b) The quality assurance plan shall include written procedures for verification, monitoring, and review of the adequacy of the compounding processes and shall also include written documentation of review of those processes by qualified pharmacy personnel. (c) The quality assurance plan shall include written standards for qualitative and quantitative integrity, potency, quality, and labeled strength analysis of compounded drug products. All qualitative and quantitative analysis reports for compounded drug products shall be retained by the pharmacy and collated with the compounding record and master formula. (d) The quality assurance plan shall include a written procedure for scheduled action in the event any compounded drug product is ever discovered to be below minimum standards for integrity, potency, quality, or labeled strength. **1751.7. Sterile Injectable Compounding Quality Assurance and Process Validation.** (a) Any pharmacy engaged in compounding sterile injectable drug products shall maintain, as part of its written policies and procedures, a written quality assurance plan including, in addition to the elements required by section 1735.8, a documented, ongoing quality assurance program that monitors personnel performance, equipment, and facilities. The end product shall be examined on a periodic sampling basis as determined by the pharmacist-in-charge to assure that it meets required specifications.
	23. After procedures are completed, used syringes, bottles, vials and other supplies are removed, but with a minimum of exit and reentry into the DCA so as to minimize the risk of introducing contamination into the aseptic workspace.	**State law addresses disposal of equipment and materials but makes no mention of minimum of exit and reentry into the DCA**

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BUSINESS, CONSUMER SERVICES AND HOUSING AGENCY
DEPARTMENT OF CONSUMER AFFAIRS
GOVERNOR EDMUND G. BROWN JR.

September 10, 2013

To: Members, Enforcement and Compounding Committee

Subject: Agenda Item II (d) – Recalls of Compounded Drugs Throughout the United States

Between May 21, 2013 and August 26, 2013, the Board posted two subscriber alerts related to compounding drug recalls and two subscriber alerts related to cease and desist orders issued. A summary of the alerts are listed below.

- Specialty Compounding, LLC, in Cesar Park, Texas, voluntarily recalled all sterile medication that had not yet reached its expiration date. The recall was initiated after reports of bacterial infections affecting 15 patients at two Texas hospitals.

- The U.S. Food and Drug Administration advised pharmacies of concerns about the adequacy of testing performed by Front Range Laboratories, Inc., in Loveland, Colorado following FDA investigator's observations of methods used by Front Range to assess sterility, strength and stability for compounding pharmacies. This was an alert only. No products were recalled.

- Olympia Compounding Pharmacy, in Orlando Florida, was issued a cease and desist order on May 30, 2013, for any and all sterile compounded drug products.

- Specialty Compounding, LLC, of Cedar Park, Texas was issued a cease and desist order on August 9, 2013, from furnishing sterile compounded products in California. This action was based on their voluntary recall noted above. The board has since entered into a stipulated agreement extending the agreement longer than 30 days

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BUSINESS, CONSUMER SERVICES AND HOUSING AGENCY
DEPARTMENT OF CONSUMER AFFAIRS
GOVERNOR EDMUND G. BROWN JR.

September 10, 2013

To: Members, Enforcement and Compounding Committee

Subject: Agenda Item III: Enforcement and Compounding Committee Meeting Dates for the Remainder of 2013

Provided below are the committee dates for the remainder of the year:

- December 3, 2013, Location to be determined