

# 2006 COMPOUNDING TASKFORCE REPORT

Colorado Department of Regulatory Agencies  
Division of Registrations  
Colorado State Board of Pharmacy




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# DEPARTMENT OF REGULATORY AGENCIES


## COLORADO STATE BOARD OF PHARMACY

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Convened pursuant to House Bill 05-1209, signed into law June 1, 2005 by Governor Bill Owens.

#### Introduction

This report is hereby filed pursuant to C.R.S. 12-22-121(17), which required the Director of the Division of Registrations, in the Department of Regulatory Agencies, to create a task force to study the compounding of drugs by pharmacists, and by January 1, 2007 report and make recommendations to the Joint Legislative Oversight Committee with oversight of the Department of Regulatory Agencies.

The task force was convened by Rosemary McCool, Division Director, and was comprised of pharmacists, physicians, a veterinarian and Board of Pharmacy members, as well as staff from the Department of Regulatory Agencies. Task force members were: Thomas Bader, RPh, Thomas Branigan, RPh, Katherine Edelblut, RPh, Chad Friday, RPh, Gary Graham, MD, Beth Jankowski, PA-C, Randall Knutsen, RPh, Melanie Marsden, DVM, Kathleen Sawada, MD, Marla Worley, RPh, and Gerald Young, RPh.

Board of Pharmacy staff to the task force were Susan L. Warren, JD, MPH, Wendy Anderson, RPh, Chris Gassen, RPh and Billie Marseilles, RPh, and Mark O'Neill, RPh.

Invited guest speakers to the task force were Gerald Eubanks, RPh, Susan Davenport, RPh, Lloyd Allen, RPh, PhD, and Charles Hakala, RPh. Various members of the task force also made presentations to the group, as well as participating in the discussions. Guests and contributors to the task force were Miles Doane, RPh, Gregg Pederson, RPh, and Gerald Eubanks, RPh.

The task force met five times – November 15, 2005, February 15, April 12, May 17 and June 14<sup>th</sup>, 2006. The task force met from 5 pm to 7 pm. Most meetings were held offsite from the Department of Regulatory Agencies. At the last meeting the task force reached consensus on the recommendations presented in this report.

#### Summary

The Task Force went through an educational and analytical process in order to determine whether or not Colorado law should be changed to allow for a broader distribution of compounded drugs to practitioners' offices. At the conclusion of the meetings, the Task Force decided to recommend that a broader distribution be allowed under certain circumstances as set forth in this report.

## **Background**

Compounding has always been a part of the practice of pharmacy in this country. Historically, compounded drugs were created on a small scale to meet a particular need of a single patient. Over the last several years, however, there has been growth in the compounding industry. Drugs get discontinued by manufacturers because they are not profitable, patients require dosages and forms that are not currently available, and the anti-aging industry has developed to meet the needs of aging baby boomers. Some pharmacies have become interested in compounding on a larger scale. Although the industry has changed, regulation of such activities has been slow to respond. The federal Food and Drug Administration (FDA) has had jurisdiction over drug manufacturing for the greater part of the 1900s. That jurisdiction includes the development of new drugs. It is unclear nationally at what point a compounding pharmacy makes products at such a scale that the FDA would consider them to be manufacturers, and would require oversight by the federal government. Issues of state versus federal control are not static. Therefore, the Board has struggled with the issue of whether such compounding is manufacturing or the practice of pharmacy or at what point it becomes manufacturing instead of traditional pharmacy practice.

Prior to 2005, Colorado law did not allow a pharmacy to distribute more than 5% of the total number of dosage units dispensed and distributed in a calendar year from that pharmacy. What this meant was that a pharmacy had to have patient-specific orders from a practitioner for almost all the medications. Only 5% of the total drugs annually could be sent out without a patient-specific order. This 5% could be distributed to physicians or others allowed to possess them. However, this amount only pertained to manufactured drugs; compounded drugs could not be distributed at all for office use or any other purpose. Compounded drugs therefore required a patient specific order from a practitioner in order to be dispensed. Compounding pharmacies in Colorado advocated for a change in the law to allow for greater distribution of compounded drugs. The Board of Pharmacy has concerns about the growth in compounding by pharmacies, and the corresponding public safety risks. These opposing viewpoints culminated in the passage of HB 05-1209 in 2005, which allowed for an increase (to 10%) in the distribution of compounded and manufactured products for office use by a practitioner. That bill also required the creation of a task force by the Department of Regulatory Agencies to study the growth of the compounding industry. The bill did not specify the process or goal of the taskforce, other than to study compounding.

The task force was convened. Staff approached the task force members with the following methodology for this task. The study would require education and research, so as to inform all members equally of the benefits and risks involved in compounding, the current nature of the regulatory climate, and what actions had been taken by other groups. In addition, education would be required about the FDA's procedures with regard to manufacturing, since compounding is similar to new drug development in various ways. Lastly, with varied representation on the task force, it would be important to have the members and observers describe their practices and discuss their needs with regard to compounding. At the end of this process, an overview of the issue should emerge. The task force followed this structure and the group was able to analyze options for regulation that addressed both the distribution of compounded products and protection of public safety.

## **Research and Education**

The task force was presented with articles and presentations that covered the following topics relating to the process and environment of compounding in a pharmacy: compounding in sterile and nonsterile environments and the current requirements and health risks of these activities; compounding formulation and methodology; veterinary compounding and the differences between such compounding and compounding for humans; compounding in various types of facilities (HMOs, hospitals, community pharmacies, nuclear pharmacies); compounding in various locations (rural, urban, internet); compounding in various dosage forms (injections, tablets, capsules, topicals); environmental controls needed for compounding, and equipment maintenance and operation.

In addition, research about matters outside of the process of compounding was completed. Issues researched were: FDA regulatory requirements for manufacturers; Drug Enforcement Administration requirements about casual sales of controlled substances; recent inspection reports from Colorado pharmacies regarding compounding; comparison of environmental controls in compounding to those required in food preparation; research about the statutory/regulatory requirements for compounding in 20 states; research about the classification of pharmacies in 20 states; information from the Pharmacy Compounding Advisory Committee of the FDA; information from a U.S. Pharmacopeia (USP) representative; information from the Pharmacy Compounding Accreditation Board; research about the development of "specials" pharmacies in England; and information about the need for compounded products by veterinarians and physicians.

The issues that arose out of this research related to safety and efficacy. Safety in the compounding process is crucial and is the definitive objective both for compounding pharmacies and the Board. Education about the process enabled the task force members to identify the risk factors inherent in compounding. For instance, the use of non-expired products, providing a clean and appropriate environment with temperature controls, acceptable ventilation and well calibrated and maintained equipment, an experienced and well trained staff with knowledge of the standard operating procedures and documentation required, and an enforced process for accurate labeling and storage of the products compounded all are inherent parts of compounding successfully and safely. Veterinary concerns included the labeling of veterinary compounds with reliable and documentable withdrawal times if the medications were to be used in food animals.

## **Analysis**

At each meeting the task force was presented with new information about compounding, and with examples of risk due to inadequate compounding. Members were able to ask questions and evaluate the cases examples for information that would be helpful in planning an effective regulatory system. State inspection programs for pharmacies do not currently encompass the level of detail and scientific training and knowledge that are required in the manufacturing process. While inspectors can review documentation of what has occurred in compounding, they do not have the resources to test the end product for stability, sterility, authenticity or potency, as the FDA does on manufactured drugs. In the past, risks regarding testing were of a smaller scale, since most compounds were prepared in small volume, intended for only one patient's use. Certainly if the product was deficient, that single person might be harmed, but numerous people would not receive the preparation. That fact, however, is counterweighed by current data about safety in compounding. The Institute for Safe Medication Practices has found that the volume of a practice may actually decrease the risk to patients. That is, creating a compound for fifty people all at once may ultimately be less risky than creating that same compound for fifty people, one at a time. The same data exists for medical procedures.

Although not all task force members agreed that compounding pharmacies are engaging in manufacturing, all members agreed that the aspects of compounding that are regulated by the FDA are important in pharmacy compounding as well. The group moved to a discussion of how best to ensure safety while allowing for compounding on a larger scale than in the past. There was acknowledgment that future funding for Board staff would probably not encompass money for scientists or laboratory funds necessary to inspect the composition of compounds. With that in mind, the analysis focused on ways in which our current inspection process could be enhanced to increase oversight over compounding.

The group determined that the use of an expert accreditation or certification body with scientific support and USP level standards could be useful in supporting a more rigorous inspection process for compounding pharmacies. This requirement would be levied on pharmacies wishing to compound and distribute more than 10% of their total number of compounded drug dosage units dispensed and distributed on an annual basis. Pharmacies compounding less than that amount need not become certified.

The group also agreed with Board staff that within ownership systems of hospitals, one pharmacy could compound and distribute among all hospital pharmacies so owned without certification, so long as the products were not distributed outside of the common ownership system.

## **Recommendations**

The task force concluded its analysis and deliberations with the following recommendations:

### **1. Enhance Current Board rules about sterile and nonsterile compounding.**

The Board rules would address the following issues; need for a policy and procedures manual that addresses staff training and expertise, quality control system for the pharmacy, internal standard operating procedures, procurement of compounding materials, methods for the formulation, documentation and testing of compounded products, selection and procurement of equipment and maintenance records required, facilities modification, cleanliness, and temperature and ventilation systems required, including maintenance, laboratory procedures required, sampling and testing required, and a pre-determined recall system.

### **2. Create a new registration for compounding pharmacies.**

The registration would be called "compounding prescription drug outlet". All pharmacies compounding more than 10% of the total number of drug dosage units dispensed and distributed on an annual basis must secure this type of registration. To achieve this registration, the pharmacy would need to secure accreditation from a board approved accreditation body or organization. This would indicate that a scientific organization with expertise has certified the pharmacy to be within acceptable limits for compounding medications at a larger scope than 10%. An accreditation body for compounding pharmacies does currently exist.

In addition, this pharmacy would have to demonstrate that its ownership and CEO were Colorado licensed pharmacists. This requirement would apply to whatever type of ownership the pharmacy has created. This requirement is for public health purposes and enables the Board to exercise in-state jurisdiction over the pharmacy should some problem arise.

The 10% limitation on casual sales of manufactured drugs would remain a requirement for this type of pharmacy. It was never intended by law that pharmacies act as wholesalers, especially with regard to manufactured drugs. The primary business of pharmacies under Colorado law is to dispense medications to individual patients; thus the limitation of wholesale types of transfers.

### **3. Allow hospital pharmacies, HMO's and other similarly related pharmacies to distribute compounded preparations and prepackaged medications to pharmacies under the same ownership without registering as a manufacturer or without getting certification or accreditation as required above.**

Such pharmacy could continue to register as a prescription drug outlet. This allows one pharmacy in a group owned by the same hospital or entity to compound or repackage for all of its centers, thus increasing the volume of compounding or repackaging at one site, and most likely increasing the safety of the operation. Hospital pharmacies doing this type of activity would be required to have accreditation from the Joint Commission on Accreditation of Healthcare Organizations (JCAHO).