

November 2006



SC Department of Labor, Licensing, & Regulation – Board of Pharmacy

Kingstree Bldg, 110 Centerview Dr
PO Box 11927, Columbia, SC 29211-1927
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Published to promote voluntary compliance of pharmacy and drug law.

Next Board Vacancy

The next South Carolina Department of Labor, Licensing, and Regulation – Board of Pharmacy member term begins July 1, 2007, and ends June 30, 2013. Any pharmacist interested in running as a candidate must:

- ◆ reside in the Fifth Congressional District;
- ◆ be licensed and actively practicing pharmacy in South Carolina; and
- ◆ before December 1, 2006, submit to the Board office a biography and petition bearing signatures of at least 15 pharmacists practicing in the Fifth Congressional District.

After receiving biographies and petitions, the Board administrator will:

- ◆ prepare and mail ballots by January 15, 2007, to all pharmacists licensed and residing in the Fifth Congressional District and those pharmacists who certified on their last renewal application that they reside in the Fifth Congressional District; and
- ◆ certify as true and valid all ballots postmarked before February 15, 2007, and received by the Board office before February 25, 2007.

Before March 1, 2007, the Board will certify in writing to the governor the names of the three candidates receiving the most votes in the election along with the name of the person who the nominee replaces on the Board. The new member, when appointed by the governor, will take office on July 1, 2007.

If you are interested in becoming a candidate for this position or have any questions, please contact the Board office.

Community Pharmacy Technician Certificate WebCT (Online) Program

A Web-based Community Pharmacy Technician Certificate program will be offered through the Airport Campus of Midlands Technical College (MTC) beginning summer semester 2007. This program is accredited by the American Society of Health-System Pharmacists

(ASHP) and meets criteria for pharmacy technician state certification requirements mandated by the South Carolina Board of Pharmacy. This program has been developed to accommodate the individual who has current work experience in a community retail pharmacy setting and needs to become South Carolina state certified as a pharmacy technician. Additionally, this program is open for enrollment to the individual who desires to pursue a career as a pharmacy technician in a community retail pharmacy setting only and who has no prior work experience.

The program will last two semesters with the summer semester classes beginning May 21, 2007, and will run until August 3, 2007. Fall semester classes will begin August 20, 2007, and will run until December 3, 2007. A program orientation session will be scheduled on the Airport Campus prior to the beginning of fall semester. **Attendance at orientation will be mandatory.**

Application to the Community Pharmacy Technician Certificate Program

1. **Complete an application** for MTC listing “Community Pharmacy Technician Certificate” as the program of study. Admission applications can be obtained/submitted in one of the following ways: (a) at the admissions office on the Airport or Beltline campuses, (b) submitted by mail, or (c) preferably apply online at www.midlandstech.edu/edu/sds/adm/applications.html.
2. **Schedule placement testing.** All students entering the college **must** take the ACT[®] Computer-adapted Placement Assessment and Support Services (COMPASS[™]) or Assessment of Skills for Successful Entry and Transfer (ASSET[®]) Student Success System placement tests to qualify for entry into the Community Pharmacy Technician Certificate program and to receive subsequent advisement. SAT[®] or ACT scores qualify a candidate for admission to the college and eligibility for a program interview. SAT or ACT test scores do not qualify as college placement tests. Minimum scores for the COMPASS, ASSET, SAT,

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FDA Launches Consumer Educational Program on the Safe Use of OTCs

The United States Food and Drug Administration's (FDA) Center for Drug Evaluation and Research, in cooperation with the National Council on Patient Information and Education and Maryland's Montgomery County Public Schools, has launched "Medicines in My Home," an interactive educational program aimed at informing middle school students about the safe and effective use of over-the-counter (OTC) medicines. Key concepts students will learn from the program are:

- ◆ the Drug Facts label tells you what a medicine treats, if it is right for you and your problem, and how to use the medicine;
- ◆ read the label and follow the directions carefully and correctly;
- ◆ two medicines with the same active ingredient should not be used at the same time; and
- ◆ measure medicines correctly with measuring tools made for medicines.

The program emphasizes that medicines should be used only with permission from an adult and that if there are questions about medicine use, ask a pharmacist or doctor. Materials are provided to encourage students to share what they learn with their families so that all family members can learn to use OTC medicines more safely. Program information can be found at www.fda.gov/medsinmyhome.

HHS Warns Public of Heroin and Fentanyl Deadly Combo

In efforts to warn the public and health care professional communities regarding a recent rash of drug-related deaths due to an illicit street drug combination consisting of the prescription medication fentanyl and either heroin or cocaine, the Department of Health and Human Services (HHS) released a fact sheet containing specific information with the goal of saving lives.

A letter from H. Westley Clark, director of HHS Center for Substance Abuse Treatment, to health care professionals warned that in "just one week, an estimated 33 individuals in the Detroit, MI area are reported to have died after using this fatal mix of drugs; the same drug combination may have been responsible for more than 100 deaths in the same region last September [2005]." Philadelphia, PA; Chicago, IL; St Louis, MO; and Camden, NJ have also recently experienced similar clusters of drug-related deaths.

Fentanyl, an injectable Schedule II prescription opioid analgesic, is roughly 50 to 80 times more potent than morphine but can also be produced in clandestine laboratories in powder form and then mixed with or substituted for heroin. Fentanyl-related overdoses can result in sudden death through respiratory arrest, cardiac arrest, severe respiratory depression, cardiovascular collapse, or severe anaphylactic reaction. In some cases, heroin or cocaine users are aware they are purchasing this dangerous combination of drugs and in other cases, they are not. Because the potency of street-sold heroin or cocaine is amplified markedly by fentanyl and because the inclusion of fentanyl

may not be disclosed, any use, even a reduced dose, can result in overdose or death. The fact sheet advises that suspected overdoses should be treated rapidly with a naloxone injection, 0.4 to 2 mg intravenously, subcutaneously, or intramuscularly every two to three minutes, which should rapidly reverse symptoms related to a narcotic overdose; if there is no response after 10 minutes, then a different diagnosis should be considered.

For additional information, contact Kenneth Hoffman at the Substance Abuse and Mental Health Services Administration at 240/276-2701 or via e-mail at Kenneth.Hoffman@samhsa.hhs.gov.

Pharmacy Technicians and Medication Error Prevention



This column was prepared by the Institute for Safe Medication Practices (ISMP). ISMP is an independent nonprofit agency that works closely with United States Pharmacopeia (USP) and FDA in analyzing medication errors, near misses, and potentially hazardous conditions as reported by pharmacists and other practitioners. ISMP then makes appropriate contacts with companies and regulators, gathers expert opinion about prevention measures, then publishes its recommendations. If you would like to report a problem confidentially to these organizations, go to the ISMP Web site (www.ismp.org) for links with USP, ISMP, and FDA. Or call 1-800/23-ERROR to report directly to the USP-ISMP Medication Errors Reporting Program. ISMP address: 1800 Byberry Rd, Huntingdon Valley, PA 19006. Phone: 215/947-7797. E-mail: ismpinfo@ismp.org.

In an October 2005 article in the *American Journal of Health-System Pharmacists*, the results of a random nationwide survey of more than 800 pharmacy technicians' views about their medication errors was published (Desselle SP. Certified pharmacy technicians' views of their medication preparation errors and educational needs. *Am J Health-Syst Pharm*. October 1, 2005; 62:1992-97). Most of the technicians worked in community pharmacies, but more than a quarter (27%) were employed in hospitals.

As one might expect in both settings, interruptions and inadequate staffing were among the most frequent factors perceived to contribute to technician medication preparation errors. Inadequate staffing was perceived as especially problematic in chain pharmacies, while inadequate supervision by pharmacists was cited as a factor more frequently by hospital technicians. It also may come as no surprise that the pharmacists' most frequently cited response to an error that was caught during the checking process was to make the technician aware of the error and require him or her to correct it. However, only about 17% of the technicians reported that the pharmacist had used the error as an opportunity to provide instructions on how to avoid the same or similar errors in the future.

While many of these respondents attributed this responsibility to the organization as a whole, not necessarily the individual pharmacist who detects an error, it appears technicians may not be receiving guidance about system and process changes that can help avert errors. After an

Compliance News

Compliance News to a particular state or jurisdiction should not be assumed (the law of such state or jurisdiction.)



error is corrected, the checking pharmacist should find time that same day (or the next day, if necessary) to review the error with the technician and suggest ways to avoid it, including safer behavioral choices if applicable. Later, during pharmacy staff meetings or other forms of intradepartmental communication, errors, their causes, and ways to prevent them should be shared with all staff in a way that does not embarrass those who were possibly involved in the errors.

One or Both Nostrils?

Submitted by ISMP

Although many nasal sprays are intended for administration in each nostril for a single dose, there are notable exceptions. For example, some medications are meant to be delivered via the nasal passage but **not** sprayed into each nostril. Calcitonin salmon (**Fortical**[®], **Micalcin**[®]) is a prime example. Patients should administer a single spray (200 international units) into one nostril daily, using alternate nostrils each day. Other examples in metered-dose or unit-dose nasal spray containers include butorphanol, desmopressin (**DDAVP**[®]), sumatriptan (**Imitrex**[®]), and zolmitriptan (**Zomig**[®]).

Some pharmacy and/or physician electronic prescribing systems have been preprogrammed to print directions that default to "spray in each nostril" when nasal sprays are selected. For the previously mentioned drugs, this would result in the administration of a double dose of medication. One health care facility recently reported that about 50 patients, who had been prescribed medications intended to be given into one nostril, had prescription container labels that instructed the patients to administer the spray into both nostrils. Some physicians might anticipate patients' confusion and write the prescription for "half" doses in each nostril. Even if instructed to use the spray in one nostril, patients who administer other nasal medications in both nostrils may spray these medications into both nostrils without thinking.

Explicit verbal directions and written instructions that emphasize administration via one nostril only are critical to avoid an overdose.

FDA/ISMP National Campaign to Help Eliminate Ambiguous Medical Abbreviations

FDA and the ISMP have launched a national education campaign that focuses on eliminating the use of potentially harmful abbreviations by health care professionals, medical students, medical writers, and the pharmaceutical industry. The campaign addresses the use of error-prone abbreviations in all forms of medical communication, including written medication orders, computer-generated labels, medication administration records, pharmacy or prescriber computer order entry screens, and commercial medication labeling, packaging, and advertising. For more information visit www.fda.gov/cder/drug/MedErrors.

DEA Provides Retail Training Materials

Drug Enforcement Administration (DEA) recently announced the availability of training materials regarding self-certification training for regulated retail sellers of non-prescription drug products containing

ephedrine, pseudoephedrine, and phenylpropanolamine as required by the Combat Methamphetamine Epidemic Act of 2005 (Title VII of Public Law 109-177).

Two sets of training materials have been developed: one for regulated persons who are mobile retail vendors, and one for regulated persons who are not mobile retail vendors. Both sets of training materials may be found on the Diversion Control Program Web site, www.deadiversion.usdoj.gov, under "Combat Methamphetamine Epidemic Act of 2005."

DEA notes that regulated sellers must use the content of these training materials in the training of their employees who sell scheduled listed chemical products. A regulated seller may utilize additional content in its training program, but DEA's posted material must be included.

DEA is continuing to work to promulgate regulations to implement the Combat Methamphetamine Epidemic Act of 2005.

FDA Announces Release of Guidance on Useful Written Consumer Medication Information

In the July 18, 2006 *Federal Register*, FDA announced the availability of a guidance entitled "Useful Written Consumer Medication Information (CMI)." This guidance is intended to assist individuals or organizations (eg, pharmacies, private vendors, health care associations) in developing useful written consumer medication information to comply with Public Law 104-180. CMI is written information about prescription drugs developed by organizations or individuals, other than a drug's manufacturer, that is intended for distribution to consumers at the time of dispensing. Since neither FDA nor the drug's manufacturer reviews or approves CMI, FDA recommends that the developers of written medication information use the factors discussed in this guidance to help ensure that their CMI is useful to consumers.

This guidance can be accessed at www.fda.gov/cder/guidance/7139fnl.htm.

2007 Survey of Pharmacy Law Available Soon

NABP's 2007 *Survey of Pharmacy Law* CD-ROM will be available in early December 2006. New topics include whether or not licensure for wholesale distributors of non-prescription drugs is required and the recognition of Verified-Accredited Wholesale Distributors[®] accreditation.

The *Survey* consists of four sections: organizational law, licensing law, drug law, and census data. The *Survey* can be obtained for \$20 from NABP by downloading the publication order form from www.nabp.net and mailing in the form and a money order to NABP. The CD-ROM is provided free of charge to all final-year pharmacy students through a grant from AstraZeneca Pharmaceuticals. If you do not have Web access or would like more information on the *Survey*, please contact NABP at 847/391-4406 or via e-mail at custserv@nabp.net.

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or ACT must be achieved as indicated in the section below entitled “Program Admission Requirements.” The placement test schedule is available online at www.midlandstech.edu/testcenter/dleitest.html.

3. **Request official copies of transcripts** (high school and college) be sent to MTC.
4. Submit two typewritten **letters of recommendation** (eg, current or past employers, high school guidance counselors or teachers, faculty members from colleges previously attended).
5. **Apply for financial aid or lottery tuition assistance.** You must complete a financial aid application to be eligible for the South Carolina lottery scholarships. Visit the following MTC Web sites for additional information and forms:
 - a. Student Financial Services:
www.midlandstech.edu/sfs/
 - b. Free Application for Federal Student Aid:
www.fafsa.ed.gov/
 - c. Lottery-Funded Tuition Assistance:
www.midlandstech.edu/fafsa/
6. **Interview** with the director of the Community Pharmacy Technician Certificate program or designee when steps 1-4 are completed and admission to the college has been granted. Although a prospective student is granted admission to the college, acceptance into the Community Pharmacy Technician Certificate program is not automatically granted or guaranteed. Acceptance into the Community Pharmacy Technician Certificate program will be determined upon the results of an interview evaluation process. Final recommendation for acceptance or nonacceptance into the program will be issued by the program director.

All program admission requirements must be completed by the deadline of March 19, 2007, to be considered for acceptance into the Community Pharmacy Technician Certificate program.

Program Admission Requirements

1. Applicants **must** be high school graduates or equivalent. This is a requirement of ASHP. (Recommend high school or college credits in mathematics/science [algebra, biology, chemistry]). You will need to submit documentation that verifies graduation from high school or an equivalency program (eg, copy of high school diploma, general education development [GED], or transcript that shows graduation date).
2. Applicants must be at least 17 years of age. (Applicants **must** be 18 years of age at the time of graduation from the Community Pharmacy Technician Certificate Program. This is a requirement of ASHP).
3. Acceptable scores on placement tests:
 - a. COMPASS (computer-based)

- ◆ Minimum reading score of 80 and MTC writing sample score of 30 in order to place out of ENG 100.

- ◆ Minimum pre-algebra score of 44 in order to place out of Math 100).
- b. ASSET (paper-and-pencil)
 - ◆ Minimum reading score of 40 and MTC writing sample score of 30 in order to place out of ENG 100.
 - ◆ Minimum arithmetic numerical score of 40 and a minimum elementary algebra score of 36-47 in order to place out of Math 100).
 - c. **The COMPASS or ASSET tests can be waived with the following:**
 - ◆ A transferable English composition course that is equivalent to MTC’s ENG 101 or higher (Waives the reading and writing sample requirement).
 - ◆ A transferable math course that is equivalent to MTC’s Math 101 or higher (Waives the math/algebra requirement).
 4. Acceptable scores for program interview eligibility tests:
 - a. SAT: Total 910 (minimum verbal 430 and MTC writing sample score of 30).
 - b. ACT: 19 Comp (minimum verbal 18 and MTC writing sample score of 30).
 - c. Successful completion of the Pre-Health Care Certificate with a 2.5 grade point average and “C” or higher in each course. Visit the college Web site at www.midlandstech.com/edu/sds/sas/hb/hlc6.html for additional information regarding the Pre-Health Care Certificate.
 - d. Health Occupations Basic Entrance Test: Composite 50%, minimum reading 50%, writing sample of 30%.
 5. Typing skills are recommended.
 6. Possess current first aid and cardiopulmonary resuscitation (CPR) certification at time of entry.
 7. Have the emotional and physical ability to carry out normal pharmacy activities including lifting, stretching, and standing for long periods.
 8. Undergo a physical examination by a physician and complete a personal health form.
 9. South Carolina Law Enforcement Division (SLED) record check for arrests and convictions or drug-related charges.

Program Costs

These are current rates at the time of this document printing. (See chart on page 5.) The most current tuition costs are available online at www.midlandstech.edu/finance/tuition.htm. There are a wide variety of tuition assistance programs available at the college. Contact Student Financial Services for more information at 803/738-7792.

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Tuition for Summer and Fall Semesters	
Full-time Students (12 or more credit hours)	Tuition (per semester)
Richland and Lexington County residents	\$1,500
Fairfield County residents	\$1,500
Other South Carolina residents	\$1,872
Nonresidents (not in South Carolina)	\$4,500
Part-time Students (fewer than 12 credit hours)	Tuition (per credit hour)
Richland and Lexington County residents	\$125
Fairfield County residents	\$125
Other South Carolina residents	\$156
Nonresidents (not in South Carolina)	\$375
Non-instructional Support Services	
Student fee (per semester)	\$50
First-time student enrollment fee	\$25
Pharmacy textbooks	\$400
Pharmacy course packets with CD-ROMs	\$35
BIO 110 textbook (new and includes WebCT access code)	\$87
WebCT access code (needed if buying a used textbook)	\$25-\$30
AHS 102 textbook (new and includes WebCT access code)	\$100
Arm patch	\$10
Lab jacket	\$35 +
Malpractice insurance	\$6
Technology lapel pin	\$40-\$164

Course Requirements		
Summer Semester Courses	Course Credits	Course Prerequisites
BIO 110 or 112 Anatomy and Physiology *	3-4	RDG 100 and ENG 100
AHS 102 Medical Terminology *	3	RDG 100 and ENG 100 with minimum grade of "C"
PHM 101 Introduction to Pharmacy (includes 4 lab sessions at 3 hrs each) **	3	Acceptance into program
PHM 113 Pharmacy Math	3	Acceptance into program
PHM 152 Pharmacy Technician Practicum *** (on-site clinical is 9 hrs/week)	2	PHM 101; PHM 113
Fall Semester Courses	Course Credits	Course Prerequisites
PHM 109 Applied Pharmacy Practice	2	PHM 101; PHM 113
PHM 114 Therapeutic Agents I (first half of semester)	3	AHS 102; BIO 110 or 112; PHM 101
PHM 124 Therapeutic Agents II (second half of semester)	3	PHM 114
PHM 118 Community Pharmacy Seminar	1	PHM 101; PHM113; PHM 152 (PHM 109 is a corequisite)
PHM 164 Pharmacy Technician Practicum II *** (on-site clinical is 12 hrs/week)	4	PHM 152

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*MTC BIO 210 and BIO 211: If both of these courses are completed, they will qualify as an acceptable substitution credit for either BIO 110 or BIO 112. Anatomy & Physiology and Medical Terminology courses taken at another community college or university will be evaluated for course substitution transfer credit and must be approved by the program director.

**PHM 101 will require you to travel to MTC Airport Campus to attend a total of four three-hour lab sessions during the fall semester. Lab sessions will be offered during the day; however, if enrollments are numerous, a student may have to attend an evening lab session.

***PHM 152 and PHM 164 will be evaluated against community pharmacy work experience and credit may be granted. Any allowable credit will be evaluated and calculated by the director of the Community Pharmacy Technician Certificate program. If you have community retail pharmacy work experience, documentation from your supervising pharmacist must be provided. Upon enrollment into the Community Pharmacy Technician Certificate program, if a student cannot be granted credit for PHM 152 and PHM 164, clinical experience will be arranged within a community retail pharmacy in a student's home community, which **will not** be the same as the student's current pharmacy employment site (if in fact the student is employed) or at any facility within the same retail pharmacy chain.

If it is determined that clinical practicum will be a requirement for a particular student, an entire criminal background check will be mandatory at a cost to the student of \$40 to \$50.

All Pharmacy coursework (PHM prefix), BIO 110, and AHS 102 will be offered as online courses. All lecture material and assignments will be done online. Testing procedures will require the student to take monitored and

proctored examinations at MTC or at a host college testing center site nearest to his or her home community as is feasible.

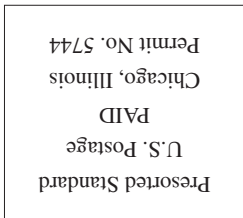
To be able to participate in this online program, students must have access to the Internet on a computer system that has Microsoft® Word 2003 and Microsoft® PowerPoint® 2003 installed. Lecture material and PowerPoint slideshows are contained on CD-ROM in Microsoft Word and Microsoft PowerPoint formats.

If you need additional information, please contact Kevin Eisenhour, director, Community Pharmacy Technician Certificate program, Midlands Technical College, PO Box 2408, Columbia, SC 29202. E-mail: eisenhourk@midlandstech.edu.

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Lee Ann F. Bundrick, RPh, Administrator - State News Editor
Carmen A. Catizone, MS, RPh, DPh - National News Editor &
Executive Editor
Larissa Doucette - Editorial Manager



National Association of Boards of Pharmacy Foundation, Inc
1600 Fehamville Drive
Mount Prospect, IL 60056
SOUTH CAROLINA DEPARTMENT OF LABOR,
LICENSING, & REGULATION – BOARD OF PHARMACY