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We Hear That

NPA Lifetime Member, Lloyd Hunzeker, RP, Hay Springs, and his wife, Mary Ann, celebrated their 65th wedding anniversary on August 27th. Lloyd, a graduate from the University of Nebraska-Lincoln, took ownership of the Luneburg Pharmacy in Hay Springs in 1956 and retired after selling the store, Lloyd’s Pharmacy, in 1998. Happy Anniversary, Lloyd and Mary Ann!

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The Nebraska Mortar & Pestle (M&P) journal is owned by the Nebraska Pharmacists Association (NPA). It is published six times a year - February, April, June, August, October, and December. The subscription rate for non-members is $30 per year. The managing editor is Joni Cover (joni@npharm.org). The office of publication is 6221 S 58th St, Suite A, Lincoln, NE 68516-3687. The percentage of advertising does not exceed 20%. The average number of copies distributed every other month to subscribers by mail in the year 2016 was 794.

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Birthdays

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In Case You Missed It

Your NPA member benefits include a daily email with important drug and health information, as well as answers to member questions. Below is a partial list of some of the most recent Daily News Dose items and other important pharmacy news that you may have missed.

Pharmacists Month

Fellow NPA members,

I would like to express my deep gratitude for the dedication of the pharmacists, technicians, and student intern members of the NPA.

It is encouraging and heartwarming to experience the diverse dialogue that occurs among members of our profession. This idea-rich environment supports the work of the NPA by sparking new, creative solutions within a changing healthcare landscape. Thanks to all of you for the gift of your time and creativity! Kind Regards,

Lori Murante, PharmD
NPA President-Elect

Incorrect substitution of Spiriva Respimat 1.25 mcg with Spiriva Respimat 2.5 mcg

Spiriva Respimat is an anticholinergic indicated for:
- The long-term, once-daily, maintenance treatment of bronchospasm associated with chronic obstructive pulmonary disease (COPD), and for reducing COPD exacerbations
- The long-term, once-daily, maintenance treatment of asthma in patients 12 years of age and older

To receive the full dose of medication, Spiriva Respimat must be administered as two inhalations once-daily.
- Treatment of COPD: 2 inhalations of Spiriva Respimat 2.5 mcg once-daily
- Treatment of asthma patients 12 years and older: 2 inhalations of Spiriva Respimat 1.25 mcg once-daily

Be sure that your patients are getting the right product for the right disease, as this could be both an efficacy and safety issue if patients receive an incorrect inhaler.

Pharmacists Month

I am grateful to all of the student pharmacists that challenge me to improve as a pharmacist on a daily basis. The student pharmacists are the future of our profession.

It is inspiring to see the thirst for knowledge and genuine excitement of advancing the profession of pharmacy.

Jenny Tilleman, PharmD
NPA Immediate Past President

This guideline document, Opioid Use Disorders: Interventions for Community Pharmacists (https://cpnp.org/guideline/opioid), provides information on the following:
- Talking to Your Patients About Substance Use Disorder
- Three-Step Process for Screening Opioid Prescriptions for Safe Use
- Improving the Health of Patients with Substance Use Disorders
- Developing a Local Resource List
- Helpful Resources

CDC Resources for Vaccine Storage and Handling

- Keys to Storing and Handling Your Vaccine Supply
  A video designed to decrease vaccine storage and handling errors and preserve the nation’s vaccine supply by demonstrating to immunization providers the recommended best practices for storage and handling of vaccines. This program offers free ACPE-accredited continuing education hours.

- 2016-2017 Influenza Season Vaccine Label Examples
  Staff can easily become confused about influenza vaccines within the storage unit. Labeling the area where vaccines are stored can help staff quickly locate and choose the correct vaccine—perhaps preventing a vaccine administration error. Depending on how the vaccines are organized within the storage unit, labels can be placed on the containers or bins or directly attached to the shelves where the vaccines are placed.

- You Call The Shots
  An interactive, web-based immunization training course. It consists of a series of modules that discuss vaccine-preventable diseases and explain the latest recommendations for vaccine use. Each module provides learning opportunities, self-test practice questions, reference and resource materials, and an extensive glossary. CDC Resource website: http://wwww.cdc.gov/vaccines/hcp/admin/storage/index.html

Save the Date!

NPA Annual Convention
July 28 & 29, 2017
Cornhusker Hotel
Lincoln, Nebraska
The 2016 Creighton University Homecoming weekend held September 15–18 included a luncheon to celebrate the Golden Jays Class of 1966; the Alumni Advisory Board Workgroups Lunch and Fall Meeting; and continuing education for pharmacists. On Sept. 16, Creighton alumni and friends enjoyed the President’s Alumni Dinner and the dean’s reception hosted by Dean J. Chris Bradberry.

Lieutenant Commander (LCDR) Jeffrey S. Gildow, PharmD'07, MS, EMT, received the Young Alumni Appreciation Award in recognition of his exemplary service to the pharmacy profession. LCDR Gildow is deputy chief of pharmacy and infectious diseases pharmacist clinician at the Omaha/Winnebago Service Unit. He is a board certified specialist in pharmacotherapy with added qualifications in infectious diseases. He was responsible for implementing an antimicrobial stewardship program for the Omaha/Winnebago Service Unit. This program was used as a model for a nationally implemented program within the Indian Health Service. LCDR Gildow earned his BS from the University of Nebraska-Omaha, his MS from Central Michigan University, and his Doctor of Pharmacy degree from the Creighton University School of Pharmacy and Health Professions.

About the Young Alumni Appreciation Award

The Young Alumni Appreciation Awards are conferred annually on an outstanding graduate from each of the three disciplines in the School of Pharmacy and Health Professions (occupational therapy, pharmacy and physical therapy) who earned his or her degree from Creighton in the past 10 years. The citation is awarded to alumni who have distinguished themselves in their professional practice, community service or other areas that reflect positively on our School and the University.
Creighton Pharmacy Class of 2020

The Creighton University School of Pharmacy and Health Professions welcomed 150 pharmacy students (77 campus and 73 distance) at the 2016 Professionalism Ceremony at DJ Sokol Arena on August 19, 2016. The professional ceremony emphasizes responsibility to the students chosen profession and provides insight into the integration of knowledge and skills to come.
Combating an Epidemic of Prescription Drug Abuse

Abstract
The past decade has witnessed an alarming increase in the number of deaths due to prescription opioids that has paralleled the rise in the number of opioid prescriptions dispensed. Prescription drug monitoring programs, abuse-deterrent formulations and proper disposal of opioids have been promoted to help combat the opioid epidemic. We discuss changes that dentists, the third most frequent prescribers of opioids, can implement to help reduce the risk of prescription opioid abuse in their communities.

Objectives
At the conclusion of this lesson, pharmacists and pharmacy technicians should be able to:
1. Describe the characteristics and impact of prescription opioid abuse in the U.S.
2. Discuss the evidence for the use of opioids in the management of chronic non-cancer pain.
3. Define terms related to the medical and non-medical use of opioids including abuse, misuse, addiction, tolerance, physical dependence, and aberrant drug-related behavior.
4. Discuss strategies for combating prescription opioid abuse.
The addiction and abuse potential of opioids is well-known, with tight regulations governing the prescribing and dispensing of these agents at the state and federal levels. In the late 1990s, however, greater focus began to be placed on the regular assessment and treatment of pain, with state medical boards loosening restrictions on the prescribing of opioids for chronic, non-cancer pain. In 2001, the Joint Commission on the Accreditation of Health Care Organizations introduced new pain management standards, with recommendations to regularly assess and treat patients for pain by making “pain the fifth vital sign.” Coincidentally, around 2000, reports began to surface regarding adverse cardiovascular effects associated with selective cyclooxygenase-2 inhibitors (COX-2 inhibitors), which had been developed as safer alternatives to nonselective, nonsteroidal anti-inflammatory drugs (NSAIDs). In 2005, after reports of adverse cardiovascular effects associated with nonselective NSAIDs as well, the U.S. Food and Drug Administration (FDA) requested that warnings about adverse gastrointestinal and cardiovascular effects be added to all prescription NSAIDs. NSAIDs, along with acetaminophen and opioids, had been one of the most frequently utilized classes of drugs for the treatment of pain. Over the past decade, with fewer pharmacologic options perceived to be safe and effective for pain management, the use of opioids in the U.S. has significantly increased, with a similar increase in opioid-related overdoses and overdose-related deaths.

Easier access to prescription opioids, caused by increased prescribing, has undoubtedly contributed to the prescription opioid epidemic in the U.S. This article reviews the scope of and contributors to the current prescription opioid epidemic, and discusses various strategies that dentists can adopt to help combat the epidemic.

**The Opioid Epidemic**

Hydrocodone-containing products are the most frequently prescribed medication in the U.S., with 136.7 million prescriptions dispensed in 2011, bypassing chronic disease state medications such as levothyroxine and simvastatin. In fact, with just 4.6 percent of the world’s population, the U.S. consumes 80 percent of the world’s hydrocodone supply. Current data on annual opioid medication sales in the U.S. are estimated to equate to a quantity sufficient to supply every adult American with a 45-day supply of hydrocodone. Between 1999 and 2013, the amount of prescription opioids dispensed in the U.S. and the number of deaths due to prescription opioids have both quadrupled with more than 16,000 deaths attributed to opioids in 2013 (Figure 1). Although the rate of opioid prescribing appears to be gradually leveling off, a significant decline in the rate of opioid prescribing has yet to be observed.

**Dentists and the Opioid Epidemic**

In a 2009 nationwide study of opioid prescribing patterns, dentists prescribed 8 percent of all prescriptions for opioids, just behind primary care physicians (28.8 percent) and internists (14.6 percent), and were the main prescribers of opioids for patients aged 10 to 19 (30.8 percent). Dentists are also estimated to be frequent prescribers of immediate-release opioids which tend to be more frequently abused than extended-release opioids. It must therefore be considered that some of the opioids prescribed by dentists will end up being used for nonmedical purposes.

Dentists are uniquely positioned health care professionals in the community as they frequently come in contact with adolescents and young adults. The rates of current use of illicit drugs is highest among young adults aged 18 to 25 (19.6 percent) than any other age group. Because adolescents and young adults may infrequently need to seek the care of other health care professionals, dentists may be the only health care professionals who will have the opportunity to screen many of the patients in this age group for potential substance abuse problems and help refer patients to available resources.

**Acute Pain Versus Chronic Pain**

Pain is often misleadingly classified as being either “acute” or “chronic” based on the duration of symptoms. While acute pain is usually thought of as a symptom of underlying tissue damage and activation of nociceptors caused by trauma or surgery that typically resolves as the injury heals, chronic pain may signal some sort of...
underlying disease pathology, as in the case of fibromyalgia or multiple sclerosis, or result from abnormal continued activation of nociceptors long after an injury has healed.8

As such, pharmacologic interventions that may be useful for acute pain may have no effect in a patient with chronic pain and the management of a patient with chronic pain will usually require multiple modalities, with pharmacologic therapy playing a moderate adjunctive role.8

While there is evidence for the short-term use of opioids for the management of acute pain, the evidence for the long-term use of opioids for the management of chronic pain has come under scrutiny. A recent systematic review of the scientific literature found a lack of data regarding the effectiveness of long-term opioid use for chronic pain. Despite widespread use of opioids for chronic pain, no controlled studies have evaluated the use of long-term opioids greater than one year for outcomes related to pain, function or quality of life. On the other hand, evidence from observational studies appears to suggest that opioid therapy for chronic pain is associated with increased risk for overdose, abuse and dependence.9 An observational study of patients receiving opioids for chronic non-cancer pain found that, compared to patients taking no more than 20 mg of oral morphine equivalents per day, patients taking 50 mg to 99 mg per day had a 3.7-fold increase in overdose risk, and patients taking 100 mg or more per day had an 8.9-fold increase in overdose risk.10 Various guidelines, therefore, recommend exercising extreme caution when prescribing greater than 90 mg to 200 mg of oral morphine equivalents per day for a patient, or consulting a pain management specialist for referral.11,12

### Definitions Related to the Medical and Nonmedical Use of Opioids
Confusion is common among clinicians and patients regarding the terminology used to describe different patterns of nonmedical use of opioids (Table 1). For example, symptoms of physical dependence or tolerance to opioids are frequently mistaken for signs of opioid addiction. Many patients taking opioids on a chronic basis, whether for medical or nonmedical use, may exhibit symptoms of physical dependence, such as withdrawal symptoms upon abrupt discontinuation, or tolerance such as requiring higher doses to achieve the same effects. However, these symptoms alone are not sufficient evidence of opioid addiction.

A consensus definition developed by the American Pain Society, American Academy of Pain Medicine and the American Society of Addiction Medicine identifies four additional criteria for addiction: impaired control over drug use, compulsive use, continued use despite harm, or craving.13 While opioid addiction implies ongoing nonmedical use of opioids, opioid abuse can include ongoing nonmedical use of opioids, as well as a one-time nonmedical use of an opioid. Opioid misuse, in contrast to opioid abuse, is defined as taking a prescription opioid for pain relief, but in a way not originally prescribed. For example, taking a higher dose or taking a dose more frequently than prescribed would be considered misuse. Taking an opioid that had been prescribed for dental pain when one has back pain would also be considered misuse.

### Sources of Prescription Opioids Used for Nonmedical Purposes and the Role of Health Care Providers
Where do nonmedical users of prescription opioids obtain their opioids? Based on data from the National Survey on Drug Use and Health, an estimated 70 percent of nonmedical users obtained the opioids from friends or family members and only 20 percent reported obtaining the opioid
Figure 2. Source of prescription opioid used for nonmedical purpose.14


through a legitimate doctor’s prescription (Figure 2).14 However, compared to those who reported the lowest frequency of opioid use (on to 29 days), those who reported the highest frequency of opioid use (200-365 days) were more likely to obtain opioids via prescription from a physician (17.9 percent versus 27.3 percent).14 The sobering reality is that most prescription opioids that are being used for nonmedical purposes originated from legitimate prescriptions. Thus, efforts to combat the prescription opioid epidemic must target the diversion and sharing of legitimate prescriptions for opioids, as well as increased vigilance and screening for patterns of inappropriate opioid use before prescribing. Although most health care providers are well aware of the potential dangers of prescription opioids, providers may not be as aware of the factors contributing to the opioid abuse problem in the U.S. and recent policy changes to try to address the problem.

Prescription Opioid Hoarding

Given that the vast majority of nonmedical users of prescription opioids are obtaining them from friends or family members, there is a concern that most leftover opioid prescriptions end up in the medicine cabinet rather than being discarded. But why do patients have leftover prescription opioids in the first place? Several studies have focused on trying to determine how many tablets of opioid medications patients actually use following painful procedures, compared to how many tablets they were prescribed. A 2006 survey of oral and maxillofacial surgeons in the U.S. revealed that 85 percent of the respondents almost always prescribed an opioid after third molar extractions and the average number of opioid tablets prescribed was 20 (range eight to 40).15 However, the number of tablets patients actually consumed was not determined. To better characterize prescription opioid consumption following third molar extractions, Weiland et al. conducted a phone survey with 48 patients at 24 hours and seven days following surgery.16 The median number of opioid tablets prescribed was 20 (range 10 to 40), and patients reported consuming a median of three tablets (range 0 to 10) at 24 hours, and a median of eight tablets (range 0 to 34) by day seven. None of the patients reported discarding their unused opioid tablets (median 12 tablets) and most reported storing the unused tablets in medicine cabinets.

A survey of adults in Utah confirmed that hoarding of leftover prescription opioids was common, with 72 percent of patients who had been prescribed an opioid reporting that they had leftover medication, and 71 percent of those patients reporting that they had kept the medication.17

Utilizing nonopioid analgesics and limiting the quantity of opioid medications prescribed after painful procedures may help to reduce the abuse and diversion of leftover prescription opioids. Additionally, all health care providers should educate patients on the hazards of hoarding and sharing leftover prescription opioids and counsel on recommended methods for disposal.

Disposing Leftover Prescription Opioids

The FDA recommends disposing of most medications by mixing with an unpalatable substance such as used coffee grounds or kitty litter, placing in a sealed plastic bag and throwing in the household trash.18 However, for certain controlled substances such as the prescription opioids hydrocodone, oxycodone, hydromorphone, morphine and others, the FDA recommends that these controlled Schedule II medications be flushed down the toilet or sink to reduce the risk for overdose due to accidental ingestion.18

Alternatively, patients may turn in leftover prescription opioids to participating law enforcement agencies and pharmacies that are registered with the Drug Enforcement Agency to take back controlled substances.19 In many communities, police stations have locked boxes for the collection of unneeded controlled substances. A few specially registered pharmacies may be able to accept leftover controlled substances for disposal. However, these registered and participating sites may be uncommon or difficult to find in the community.

[Editor’s Note: To find a medication disposal location in Nebraska, go to www.leftovermeds.com or call 1-800-222-1222.]

The different recommended methods for disposing of different types of medications can cause confusion among patients and health care providers. Recently, AB 623 aimed at reducing prescription opioid-related deaths by reducing opportunities for inappropriate access was introduced in the California Legislature by Assembly member Jim Wood, DDS (D-Healdsburg). One component of the bill proposed by Dr. Wood, a practicing dentist,
would mandate that pharmacists counsel patients on the proper storage and disposal of opioids, thus helping to ensure that the majority of patients receiving prescription opioids are educated on how to safeguard the supply of prescription opioids in the community.

**Abuse-Deterrent Formulations of Opioids**

Abuse-deterrent formulations (ADFs) of opioids have been developed to prevent manipulation of the opioid formulations for the purpose of abuse. Some ADFs such as hydrocodone extended-release (ER) and oxycodone ER, are formulated to resist physical alteration through chewing, crushing or dissolving, while other ADFs, such as morphine plus naltrexone and oxycodone plus naloxone, contain opioid antagonists that will block the euphoric effects of the opioid component when the formulation is manipulated through chewing, crushing or dissolving.20

Although ADFs may help to reduce abuse of the particular opioid formulation, they do not appear to be associated with decreased rates of opioid abuse and opioid-related deaths overall.21,22 Unfortunately, as we have started to regain control over access to prescription opioids, more and more opioid abusers have begun turning to heroin as a cheap and readily accessible alternative. In one survey, although abuse of an ER formulation of oxycodone declined after it was changed to an ADF in 2010, reported use of heroin increased and 25-30 percent of respondents continued abuse of the oxycodone ADF.23 Prescribers should therefore continue to exercise caution by limiting prescribing of ADFs of opioids.

**Prescription Drug Monitoring Programs**

Most states now have prescription drug monitoring programs (PDMPs), although the components of the programs are not all the same. It is hoped that accurately maintained PDMPs will help prescribers, pharmacists, law enforcement officials and regulatory boards to more effectively monitor and investigate patterns related to the prescribing, dispensing, and use of controlled substances. California’s PDMP is known as the Controlled Substance Utilization Review and Evaluation System (CURES) and is overseen by the California Department of Justice. Under CURES, information regarding prescriptions dispensed for Schedule II, III and IV substances must be electronically transmitted to CURES within seven days of dispensing.24 While reporting of prescriptions to CURES is mandatory, checking the CURES database before prescribing or dispensing is currently not mandatory. However, health care providers involved in the prescribing or dispensing of controlled substances are encouraged to access the CURES Patient Activity Reports for patients under their direct care to assess for warning signs of inappropriate use of controlled substances, or “doctor shopping,” a practice in which patients visit many different prescribers to obtain prescriptions. CURES appears to be an underutilized resource, with only an estimated 9.8 percent of the total number of licensed prescribers and pharmacists in California registered in 2014.25 New legislation mandated that all California pharmacists and prescribers of controlled substances be registered with CURES by July 1, 2016, to facilitate ready access to records and help CURES realize its full potential.24 PDMPs have been implemented with the hope of helping to reduce the abuse and misuse of controlled substances, but without substantial evidence to demonstrate potential or actual benefits. Results have begun to trickle in from different states to suggest possible beneficial effects on the prescribing and dispensing of controlled substances after implementation of PDMPs. Florida’s PDMP, implemented in 2011, was associated with a significant, 25 percent, decline in oxycodone- caused mortality, which was inversely related to the number of PDMP queries.26 The investigators hypothesize that health care providers may have changed their prescribing habits for individual patients after querying the PDMP. Indeed, health care provider access to PDMP information has been shown to influence the prescribing habits of physicians treating patients presenting to the emergency department with painful conditions unrelated to acute injuries, with fewer or no opioids prescribed after reviewing PDMP data, compared to what was originally planned.27

![Figure 3. The prescription drug abuse plan.](Adapted from Executive Office of the President of the United States. Epidemic: Responding to America’s prescription drug abuse crisis, 2011. www.whitehouse.gov/sites/default/files/ondcp/policy-and-research/er_abuse_plan.pdf)
Conclusions
The prescription opioid abuse problem has reached epidemic proportions in the U.S. A liberalized attitude toward prescribing of opioids that began over a decade ago has undoubtedly contributed to the problems we are experiencing now. Dentists, who are estimated to be responsible for 8 percent of all the prescriptions for opioids in the U.S. and the major prescribers of opioids among the 10-19-year-old age group, can play a major role in helping to combat the prescription opioid epidemic. Regaining control over access to prescription opioids will most likely require a multifaceted approach, including education, monitoring, proper disposal and enforcement, as no one intervention is likely to be successful on its own (Figure 3). Strategies that health care professionals should adopt to help reduce the risk for prescription drug abuse include screening patients for substance abuse prior to prescribing opioids, prescribing the minimum quantity of opioid to manage acute pain, educating patients to dispose of and never share leftover prescription opioids, and using PDMPs to verify drug-use histories and prevent “doctor shopping” (Table 2). However, as more programs are successfully implemented to control access to prescription opioids, health care professionals must also remain vocal advocates for their patients with legitimate needs for opioids, to ensure that the pendulum does not swing too far in the opposite direction, resulting in needless patient suffering.

About the Authors
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Table 2. Reducing the Risk of Prescription Drug Abuse: Strategies for Health Care Professionals

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<thead>
<tr>
<th>Strategies for Health Care Professionals</th>
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<tr>
<td>Screen for Substance Abuse</td>
<td>• Inquire about alcohol, tobacco and drug use prior to prescribing opioids.</td>
</tr>
<tr>
<td>Minimize the Risk of Leftover Opioids</td>
<td>• Prescribe the minimum quantity of opioid to manage acute pain.</td>
</tr>
<tr>
<td>Prevent “Doctor-Shopping”</td>
<td>• Educate patients to dispose of and never share leftover prescription opioids.</td>
</tr>
<tr>
<td>• Use PDMPs to verify drug-use history.</td>
<td>• Be suspicious of patients who ask for specific drugs or report that their medication was lost or stolen.</td>
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References


**Policies for the Nebraska Mortar & Pestle (M&P) continuing pharmacy education lessons and quizzes:**

1. **M&P** Quizzes are valid only for the membership year in which they are published. Quizzes for the 2016 Membership Year must be received by December 8, 2016. Quizzes cannot be carried over to another membership year.

2. If more than three questions are missed, the quiz will be returned. The quiz can be resubmitted.

3. CPE transcripts can be printed from NABP e-Profiles at www.nabp.net.

4. CPE credits are submitted to NABP by the 15th of each month. For example, *M&P* CPE quizzes completed in the month of October 2016 will be sent to NABP e-Profiles before November 15, 2016.

**ACPE®**

The Nebraska Council for Continuing Pharmacy Education (NCCPE) is accredited by the Accreditation Council for Pharmacy Education (ACPE) as a provider of continuing pharmacy education (CPE). This CPE home study lesson has been accredited for 1.0 contact hour or 0.10 CEU. UAN 0128-0000-16-338-H01-P for pharmacists and 0128-0000-16-338-H01-T for pharmacy technicians. This lesson is a knowledge-based CPE activity targeted to pharmacists and pharmacy technicians.

*The Nebraska Pharmacists Association disclaims any liability to you or your patients resulting from reliance solely upon the information contained herein.*

**Quiz Answers may be submitted:**

1. Online: www.npharm.org

2. Fax: 402-420-1406

3. Email: m&p@npharm.org

4. Mail: NPA Mortar & Pestle
   6221 S 58th St, Ste A
   Lincoln, NE 68516
1. Between 1999 and 2013, the number of prescription opioid-related deaths in the U.S. has increased by approximately:
   a. 50%
   b. 2-fold
   c. 3-fold
   d. 4-fold

2. Most nonmedical users of prescription opioids obtain the prescription opioids from:
   a. Doctors
   b. Drug dealers
   c. Friends and family
   d. Pharmacies

3. Which statement is most accurate regarding the evidence for the long-term use of opioids for chronic pain?
   a. Long-term use of opioids is certainly associated with severe physical and psychological harm.
   b. Long-term use of opioids is associated with a diminished risk for abuse, dependence and overdose.
   c. Long-term use of opioids is associated with physical dependence and when patients are tolerant.
   d. The most effective pharmacologic therapy for the management of chronic pain.

4. “A state of adaptation in which exposure to a drug induces changes that result in a diminution of one or more drug’s effects over time” best describes:
   a. Aberrant behavior
   b. Addiction
   c. Physical dependence
   d. Tolerance

5. People who exhibit symptoms of withdrawal upon abrupt discontinuation of opioids are most likely:
   a. Abusing
   b. Addicted
   c. Hoarding
   d. Physically dependent

6. An 18-year old received a prescription for hydrocodone/acetaminophen after having 3 wisdom teeth extracted. One month later, he suffered a football-related injury and took 2 tablets from his leftover supply of hydrocodone/acetaminophen. This would best be described as an example of:
   a. Abuse
   b. Addiction
   c. Appropriate use
   d. Misuse

7. According to the FDA, what would be most appropriate to recommend to a patient regarding disposal of a leftover prescription of oxycodone tablets?
   a. Flush tablets down the toilet
   b. Mix tablets with coffee grounds and dispose of in the trash
   c. Obliterate the prescription label and dispose of prescription container in the trash
   d. Return prescription container to any local pharmacy for disposal

8. Which is an example of an abuse-deterrent formulation of an opioid?
   a. Fentanyl transdermal patches that are individually packaged in tamper-resistant pouches
   b. Immediate-release oxycodone that has an enteric coating to prevent “dose-dumping”
   c. Long-acting oxycodone that when dissolved turns into a gel that is difficult to inject intravenously
   d. Tablets containing a combination of an opioid and acetaminophen to ensure that patients do not take more than 10 tablets per day

9. Which California pharmacists are required to be registered with the Controlled Substance Utilization Review and Evaluation System (CURES) by July 1, 2016?
   a. All pharmacists
   b. Pharmacists who dispense controlled substances
   c. Pharmacists who prescribe controlled substances
   d. Pharmacists working in government facilities

10. Which are potential strategies to reduce prescription opioid abuse?
    a. Check the prescription drug monitoring program database prior to prescribing opioids to patients
    b. Educate patients about proper disposal of opioids
    c. Prescribe the minimum quantity of opioid to manage acute pain
    d. All of the above

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Keep the TOP portion for your records. Return the BOTTOM portion to the NPA office.

Or, take this quiz online at www.npharm.org

Name ____________________________
Mailing Address _________________________________
City/State/Zip ____________________________

*NABP e-Profile # ________________  *Date of Birth (MMDD) _________
*Required for ACPE credit.

CPE Home Study Evaluation
1. Rate this lesson: (Excellent) 5 4 3 2 1 (Poor)
   2. Did this lesson meet each of its objectives? ___ Yes ___ No
   3. Was the content without commercial bias? ___ Yes ___ No
      If not, please explain ____________________________
   4. Did the lesson meet your educational/practice needs? ___ Yes ___ No
   5. Comments/future topics are welcome. ____________________________

The deadline for this quiz is December 8, 2016

2016 Quiz #13 - Combating an Epidemic of Prescription Opioid Abuse
ACPE #0128-0000-16-338-H01-P for pharmacists
ACPE #0128-0000-16-338-H01-T for technicians
1.0 Contact Hour - Knowledge Based CPE Activity

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Certificates of Insurance

Joan is leasing a new building for her expanding pharmacy practice. As part of her lease, she must provide a certificate of insurance to her landlord. The landlord is insisting on a number of provisions that must be included on the certificate. However, her insurance company is unwilling to provide the certificate as required by the landlord. Joan is unhappy and stressed at being caught in the middle of this tug of war.

A certificate of insurance is a document issued by an insurance company that provides evidence of property and/or casualty insurance coverage. This certificate is evidence for Joan’s landlord that she has coverage on her property and on other items required under the lease. The trend has been that landlords, vendors, customers, and others who have a contractual relationship with the insured business want additional provisions included on the certificate. Examples of these provisions include longer notice periods for policy cancellation, statement that coverage can’t be voided by the insured’s actions, or statements that the policy coverage meets the requirements of the contract.

This is where the tug of war begins. The certificate is only evidence that insurance coverage exists. It is not an insurance policy. The certificate cannot change the policy or guarantee compliance with a contract. At least 16 states have specific laws that do not allow the insurance companies to add these sorts of provisions to the certificate. Numerous other states have implemented this prohibition through issuance of bulletins by the insurance commissioner. Here are two examples.

Indiana’s law became effective in 2013. The law specifically states that a certificate does not amend, extend or alter the coverage provided by the policy referenced. It also states that the certificate cannot grants rights to a person that are not contained in the policy, such as an extended notice period. Massachusetts has a very similar law that was passed in 2015. In addition to what Indiana’s law says, Massachusetts also says that the certificate shall not be construed as an insurance policy. Both states’ laws provide that it is a violation of the law to knowingly prepare, issue, request or require the issuance of a certificate contrary to the law. In both states, the insurance commissioner can enforce the law with a cease and desist order and the imposition of a fine (up to $500 in Massachusetts and up to $1,000 in Indiana).

In many states, the certificate of insurance is a filed form. This means that the insurance company must have the certificate form filed with and approved by the Department of Insurance prior to using it. In these states, the insurance company is not allowed to deviate from the state-approved certificate.

These laws and regulations are what put Joan in the middle of the tug of war. The landlord or other party is trying to modify the insurance policy issued to Joan through changes on the certificate. The policies themselves are also state-approved forms and cannot be changed arbitrarily. That may be why they are attempting to make the changes via the certificate. That is why Joan’s insurance company is reluctant to change the policy or the certificate of insurance. In many jurisdictions, it is a violation of the law for the insurance company to do so. In the states with laws specifically addressing certificates, Joan or the landlord could also be in violation of the law and fined accordingly for asking or requiring that the changes be made. In these situations, the insurance company is not just trying to be difficult. They are trying to comply with the law. You should ask your insurance company for an explanation as to why the requested changes can’t be made. This can then be passed on to the landlord or other requesting party.

1 Ind. Code Section 27-1-42.
2 Mass. Gen. L. Ch. 175L.

Don R. McGuire, Jr., RPh, JD, is General Counsel, Senior Vice President, Risk Management & Compliance, at Pharmacists Mutual Insurance Company. This article discusses general principles of law and risk management. It is not intended as legal advice. Pharmacists should consult their own attorneys and insurance companies for specific advice. Pharmacists should be familiar with policies and procedures of their employers and insurance companies, and act accordingly.
Dear Pharmacist,

The Centers for Disease Control and Prevention (CDC) recognizes and appreciates the increasingly important role that you play in public health, including vaccinating the public against seasonal influenza and other vaccine-preventable diseases. In fact, as of November 2015, nearly one in four adults who received an influenza vaccine were vaccinated in a community pharmacy or retail setting (http://www.cdc.gov/flu/fluuvaxview/nifs-estimates-nov2015.htm), and there are now more than 280,000 immunization trained pharmacists.

As of the middle of September, manufacturers reported having already distributed more than 90 million doses of 2016-2017 flu vaccine. Please begin to vaccinate your patients as you receive the influenza vaccine. Vaccination by the end of October is recommended, if possible, however, please continue to vaccinate your patients throughout the influenza season. Vaccine administered in December or later, even if influenza activity has already begun, is likely to be beneficial during the majority of the influenza seasons.

For the 2016-2017 season, ACIP has made several updates and clarifications to its seasonal influenza vaccination recommendations:

- Only injectable influenza vaccines are recommended this flu season. People aged 6 months and older should receive an appropriate formulation of either an inactivated influenza vaccine (IIV) or the recombinant influenza vaccine (RIV) with no preference for any recommended vaccine over another. The various vaccines are approved for different age groups. An age-appropriate vaccine should always be used. While some LAIV may be available in the form of FluMist Quadrivalent, that vaccine is not recommended for use this season because of concerns about its effectiveness.

- The composition of 2016-2017 flu vaccines has been updated to better match circulating viruses.

- An influenza vaccine with MF59 adjuvant (FLUAD™) is available for adults 65 years and older. People 65 years of age and older may receive this vaccine, high-dose inactivated influenza vaccine (Fluzone High-Dose), or standard-dose inactivated vaccine.
• The recommendations for flu vaccination of people with egg allergies have been modified:
  o Anyone with egg allergy can receive any licensed, age-appropriate, and recommended flu vaccine. For those with a history of severe allergic reaction to egg (any symptom other than hives), vaccination should occur in a medical setting and be supervised by a health care provider who can recognize and manage severe allergic conditions.
  o CDC has prepared an algorithm summarizing the new recommendations which is available at http://www.cdc.gov/flu/protect/vaccine/egg-allergies.htm.

• Children 6 months through 8 years of age who have previously received two or more total doses of any trivalent or quadrivalent influenza vaccine before July 1, 2016, only need one dose of 2016-2017 seasonal influenza vaccine. Children 6 months through 8 years of age who have not previously received two or more total doses of any trivalent or quadrivalent influenza vaccine before July 1, 2016 will need two doses of 2016-2017 seasonal influenza vaccine. Children 9 years of age and older need only one dose.

Vaccine manufacturers have projected that as many as 157 million to 168 million doses of injectable flu vaccine will be available for the 2016-2017 season. Based on these projections, the supply of injectable flu vaccine should be sufficient to meet any increase in demand resulting from the recommendation to not use LAIV this season. Influenza vaccine information for providers and patients is available at http://www.cdc.gov/flu.

As you and your colleagues begin your seasonal influenza vaccination efforts, please take this opportunity to also assess the other vaccination needs of your patients. We encourage and appreciate every effort you can make to implement the Standards for Adult Immunization Practice in your pharmacy, i.e. to find new ways to assess for vaccination needs, recommend, offer and document additional immunizations. Many pharmacies are taking the opportunity to promote zoster, pneumococcal and Tdap vaccination to their adult patients. Thank you for all that you do for your patients and for your continued public health contribution to a well-functioning “immunization neighborhood” in collaboration with healthcare providers in your communities.

Sincerely,

[Signature]

Nancy Messonnier, MD (CAPT, USPHS)
Director
National Center for Immunization and Respiratory Diseases
Centers for Disease Control and Prevention
Revisiting Seasonal Allergies: Spotlight on Sublingual Immunotherapy

Abstract
Allergic rhinitis is prevalent in the United States in both adults and children. It is characterized by an overreaction of the immune system to an allergen which would not elicit an immune response in an individual without allergies. Common allergens are grass and tree pollens, mold, and pet dander. Symptoms can include rhinorrhea, nasal congestion, and itchy, watery eyes. Treatment ranges from non-pharmacologic options, such as avoidance of the allergen, to pharmacotherapy aimed at reducing symptoms. Sublingual allergy immunotherapy (SLIT) is a relatively new therapeutic option for grass and weed pollen allergies which targets the cause of the symptoms. With successful SLIT, the allergic reaction is lessened resulting in fewer symptoms for the patient upon subsequent exposures. Pharmacists are well-equipped to screen eligible patients and educate them on this new therapy.

Objectives
At the conclusion of this lesson, pharmacists and pharmacy technicians should be able to:
1. Describe the burden of allergic rhinitis and the immunology of an allergic response.
2. List the indications for each sublingual immunotherapy.
3. Examine the warnings and precautions unique to sublingual immunotherapies.
4. Identify the major counseling points of the available sublingual immunotherapies.

Overview
Allergic rhinitis affects more than 40 million people in the United States and its prevalence is on the rise.1,2 Symptoms vary from person to person and can include itchy, watery eyes; sneezing; runny nose; nasal congestion; postnasal drip; pruritus; fatigue and headache. A wide variety of allergens can cause allergic rhinitis which may be perennial or seasonal in nature. Perennial allergic rhinitis can occur year round and be caused by dust mites, pet dander, cleaning sprays, cosmetics, cigarette smoke, or cockroaches. Seasonal allergic rhinitis, also known as hay fever, occurs at predicted times of the year and is commonly triggered by a specific type of plant, tree, or weed pollen. Patients suffering from allergic rhinitis often turn to pharmacies for relief.2
Allergic rhinitis is caused by the body’s immune system overreacting to an allergen. Reducing exposure to allergens through lifestyle modifications (Table 1) can help reduce symptoms, but these measures often provide insufficient relief.

Similarly, over-the-counter (OTC) products may not control symptoms adequately in all patients (Table 2). Many allergic rhinitis sufferers still seek additional relief and pharmacists are likely to encounter them in community pharmacy settings across the country.

### Treatment Guidelines

Treating allergic rhinitis is important for a number of reasons. Allergic rhinitis can lead to impaired sleep and ultimately a lower quality of life. Allergic rhinitis is associated with numerous other comorbidities including chronic sinusitis, conjunctivitis, and even asthma, which can be fatal. An estimated 60-78% of people with asthma have coexisting allergic rhinitis, and studies have shown that treating allergic rhinitis in these patients improves or prevents their asthma symptoms. Treatment guidelines for allergic rhinitis include recommendations for patients with comorbid asthma.

The Allergic Rhinitis and its Impact on Asthma (ARIA) Guidelines were originally published in 2001 following a World Health Organization (WHO) workshop and were last updated in 2010. These guidelines support the use of allergen avoidance techniques, as well as the OTC medications listed in Table 2. One caveat to the recommendation for OTC treatment of allergic rhinitis is that decongestants, both oral and intranasal, are recommended to be used only on a very short-term basis for the relief of acute symptoms. In addition to OTC therapies, the guidelines recommend prescription drug therapy for the management of allergic rhinitis, adding an oral leukotriene receptor antagonist and intranasal anticholinergic to the list of therapy options (Table 3).

The guidelines also recommend allergen-specific immunotherapy, or “therapeutic vaccines for allergic disease” for the safe and efficacious treatment of allergic rhinitis. Pharmacists have a unique opportunity to educate their communities and screen potentially eligible patients for these products. Immunotherapy can decrease or even prevent symptoms of allergic rhinitis by targeting the cause, while OTC and prescription drug products only provide temporary symptom relief.

### Immunotherapy

Immunotherapy attenuates the underlying pathophysiology of the allergic response, reducing symptoms for the sufferer. Seasonal allergies are Immunoglobulin-E (IgE) mediated hypersensitivities. IgE antibodies are created the first time a person is exposed to an allergen, and they attach...
themselves to mast cells which are involved in the body's immune response. The second time an allergic individual is exposed to that same allergen, mast cells which are bound to IgE, release a large number of inflammatory mediators, including histamine, leukotrienes, prostaglandins, and cytokines. These inflammatory mediators cause the symptoms commonly associated with allergic rhinitis. Allergy immunotherapy works by delivering small doses of the allergen to the patient on a regular basis and desensitizing the body's immune system to that particular allergen. In successful cases, the body reacts less severely to the allergen upon subsequent exposures, preventing the greater magnitude of allergic reaction from recurring.\(^7\)

Subcutaneous allergy immunotherapy (SCIT), historically known as the “allergy shot”, has been available since the early 1900s. Discomfort and inconvenience have made this a last resort for treating seasonal allergies. Frequent injections can be costly and often require a significant investment in time and travel to the provider’s office. Additionally, SCIT has been associated with rare cases of fatal anaphylaxis.\(^8\)

**Sublingual Allergy Immunotherapy**

Sublingual allergy immunotherapy (SLIT) offers patients the benefits of immunotherapy without the disadvantages of allergy shots. With SLIT, patients can simply dissolve one tablet under the tongue once a day and receive the benefit of immunotherapy without the discomfort of needles. In April 2014, three SLIT agents were approved by the FDA and placed on the market in the United States: Grastek\(^6\) by Merck & Co., Inc.; Oralair\(^5\) by Stallergenes S.A. and distributed by Greer Laboratories, Inc.; and Ragwitek\(^6\) also by Merck & Co., Inc. (Table 4).\(^10\)

**Timothy Grass Pollen Allergen Extract (Grastek)**

Grastek consists of 2800 bioequivalent allergy units (BAU) of Timothy Grass pollen allergen extract. It is indicated for grass pollen-induced allergic rhinitis with or without conjunctivitis in patients aged 5-65. Contraindications include eosinophilic esophagitis; hypersensitivity to any of the inactive ingredients; severe systemic allergic reactions or severe local reactions to previous sublingual allergen immunotherapy; and severe, unstable, or uncontrolled asthma.\(^11\)

Grastek only contains the pollen extract for Timothy Grass, one of the most common causes of grass allergies in the United States, but cross-sensitivities have been noted with grass pollen allergies. Desensitizing an allergy sufferer to Timothy Grass pollen could decrease their allergic reactions to other grass pollens.\(^5\)

Patients should dissolve one Grastek tablet sublingually once a day for 12 weeks prior to the expected onset of the grass pollen season and continue throughout the remainder of the season. Package insert recommendations state that the tablet be completely dissolved under the tongue and the patient avoid swallowing for one minute.\(^11\)

Patients taking one tablet daily for at least 8 weeks prior to the start of the pollen season had a 21% decrease in rhinoconjunctivitis symptoms and a 29% decrease in rescue medication usage as compared to placebo.\(^5\)

Adverse reactions reported in more than 5% of people taking Grastek included pruritus of the ear and mouth, throat irritation, and mouth edema. Rare but serious reactions included laryngitis, anaphylaxis, and asthma exacerbation. Grastek was not studied in patients also taking other forms of allergy immunotherapy, but the manufacturer states that concomitant use of another such product may increase the likelihood of adverse events. Women who are nursing or pregnant should use Grastek only if deemed medically necessary, and prescribers should proceed with caution. Under the old labeling system, Grastek was a pregnancy category B drug, meaning there was no harm shown in animal studies but that no studies were done in pregnant women. Anyone having a severe or systemic allergic reaction to Grastek should stop taking it and immediately seek medical attention.\(^11\)

**Mixed Grass Pollens Allergen Extract (Oralair)**

Oralair contains Sweet Vernal, Orchard, Perennial Rye, Timothy, and Kentucky Blue Grass mixed pollens allergen extract and is dosed by index of reactivity (IR). For pediatric patients aged 10-17, it is dosed as one 100 IR tablet sublingually on day 1, two 100 IR tablets sublingually on day 2 (taken as a single dose), and then one 300 IR tablet sublingually once a day for the duration of treatment. Adult patients aged 18-65 do not require dose titration. The dose is 300 IR sublingually once a day for the entire duration of treatment for this age group. Treatment should be initiated 4 months before the grass pollen season begins and should continue throughout the season. Oralair, similar to Grastek, is indicated for allergic rhinitis with or without conjunctivitis, for patients allergic to at least one of the components. Each dose should be allowed to dissolve completely under the tongue and retained for at least one minute before swallowing.\(^12\) A Phase III study of Oralair in U.S. adults showed a 28% decrease in rhinoconjunctivitis symptoms and use of rescue medications in the treatment group versus the placebo group.\(^13\)

Oralair is contraindicated in patients with a history of eosinophilic esophagitis; hypersensitivity to any of its inactive ingredients; severe systemic allergic reactions or severe local reaction to previous sublingual allergen immunotherapy; and
severe, uncontrolled, or unstable asthma. Adverse reactions reported in more than 5% of people taking Oralair included mouth edema; pruritus of the mouth, ear, and tongue; throat irritation, and oropharyngeal pain. Laryngeal edema, dyspnea, and anaphylactic reactions were rare but reported. Oralair was not studied in patients receiving concomitant allergy immunotherapy, but the same theoretical risk of increased adverse events as noted with Grastek applies. Pregnant or nursing women should use Oralair only if clearly needed; adequate studies have not been conducted in these populations. While there were no adverse events reported in animal studies, giving it a pregnancy category B rating under the old system, prescribers should proceed with caution when treating pregnant women. Patients who experience any severe or systemic allergic reactions while taking Oralair should discontinue its use and consult a healthcare provider immediately.12

**Short Ragweed Pollen Allergen Extract (Ragwitek)**

Ragwitek, as the name suggests, contains short ragweed pollen allergen extract. The dose for Ragwitek is 1 sublingual tablet (12 Amb a 1-Unit) daily. Amb a 1-Unit is a measurement specific to the major allergen in ragweed pollen.14 It is indicated for short ragweed pollen-induced allergic rhinitis with or without conjunctivitis in adults ages 18-65. Treatment with Ragwitek should begin at least 12 weeks before the expected onset of ragweed pollen season and should continue throughout the season. Ragwitek should completely dissolve and remain in the mouth for at least one minute.15 Allergic rhinitis sufferers who received the active treatment in two studies of Ragwitek achieved a relative reduction of 24% to 26% in allergy symptoms and need for allergy medications as compared to placebo.16

Throat irritation; ear, tongue, and mouth pruritus; oral paresthesia; and mouth edema were noted in at least 5% of patients taking Ragwitek. Dyspnea, dysphagia, and swelling of the throat were rarely reported. Contraindications to Ragwitek include hypersensitivity to any of its inactive ingredients; history of severe systemic allergic reactions or local severe reactions to any previous sublingual allergen immunotherapy; history of eosinophilic esophagitis; and severe, uncontrolled, or unstable asthma. Ragwitek was not studied in patients receiving any other type of allergy immunotherapy, but per the manufacturer, these patients may be at a higher risk for adverse events. Reproduction studies were not performed in either animals or humans with Ragwitek, previously earning it a pregnancy category C rating. Ragwitek should be prescribed with caution in any pregnant or nursing women and only used if clearly needed. If a severe allergic reaction occurs in response to Ragwitek, the patient should stop taking it immediately and seek emergency medical care.15

**Warnings and Precautions**

To date, SLIT has been shown to be safer than SCIT. Fatal anaphylaxis continues to be a rare but major concern with SCIT. While anaphylaxis can still occur with SLIT, it is less likely to be fatal.9 Anyone taking Grastek, Oralair, or Ragwitek should also receive an epinephrine auto-injector and training on its use in the event of anaphylaxis. SLIT should be used with caution, or even avoided, in patients taking medications which could block or intensify the effects of epinephrine (e.g., beta-blockers, alpha-blockers, cardiac glycosides, diuretics, ergot alkaloids, thyroid hormone replacements, tricyclic antidepressants, and monoamine oxidase inhibitors.) First-generation antihistamines such as diphenhydramine and chlorpheniramine can increase the side effect profile of epinephrine. Clinical judgment should be applied on a case-by-case basis to determine whether a patient could tolerate these increased adverse events should they need to use the epinephrine auto-injector. Currently, there are no known drug-drug interactions for any of the SLIT products.11,12,15

For all three products, treatment should be suspended in patients with any type of oral inflammation or injury, and can be restarted upon complete healing. This would include conditions such as thrush, mouth ulcers, or oral lichen planus. Wounds, such as those following a dental extraction or oral surgery, would also require treatment suspension.11,12,15

**Feasibility of SLIT**

With all of these products, there are some feasibility and practicality concerns. First, while the outpatient convenience of SLIT is one of its biggest advantages, patients must spend some time in the doctor’s office before initiating therapy. They must undergo allergy testing and test positive to an allergen contained in the product before that product can be prescribed. While cross-sensitivities have been observed in pollen allergies, these products are not currently used for patients who test positive to other pollens, unless they also test positive for one of the pollens in the products. This broadens the scope of SLIT in those patients, because many patients with grass allergies are multi-sensitized.11,12,15

Each product gives recommendations for commencement of treatment based on when the product-specific pollen season will begin, which varies from year to year. Advice from allergists and meteorologists can narrow the window, but it remains somewhat unpredictable. These medications work best when started as early as the manufacturer recommends, but starting them sooner in an effort to be cautious increases cost for the patient.17

These products come with more complicated dosing instructions than most allergy relief medications. Each tablet must remain under the tongue until it is completely dissolved, at least one minute. Additionally, patients should be educated not to eat or drink anything for five minutes, to maximize the medication’s efficacy. Patients will not receive the benefit of the immunotherapy by swallowing the tablet, as trials showed this route of administration to be ineffective.3 To reduce the risk of degradation by water or sunlight, all tablets should be removed from the blister pack using dry hands immediately.
before administration. Ragwitek, Oralair, and Grastek should be stored between 68 and 77 degrees Fahrenheit. After each dose, patients should wash their hands to avoid spreading the allergen to a sensitive area such as the eyes or nose.11,12,15 With improper medication administration, patients may continue to experience allergy symptoms. Pharmacists can intervene to optimize patient compliance.

### Conclusion

While SLIT products are not without their drawbacks, their relative safety and ease of use make them feasible options to employ, alongside lifestyle modifications, for frustrated allergy sufferers who have failed other treatment modalities. Pharmacists, as the drug experts, can improve the lives of their patients with allergic rhinitis by educating about treatment options and determining the best option for them. They can also provide counseling pearls regarding proper storage and administration, and follow up to assess treatment satisfaction. By ensuring each patient using SLIT has access to epinephrine, pharmacists may prevent a fatal adverse reaction. SLIT is a promising treatment option for people suffering from allergic rhinitis, and pharmacists have the expertise to help their patients obtain safe and optimum relief.

### References

Revisiting Seasonal Allergies: Spotlight on Sublingual Immunotherapy

Quiz #14, October 2016, ACPE #0128-0000-16-340-H01-P/T

1. Which of the following is true about allergic rhinitis?
   a. Allergic rhinitis affects approximately 4 million people in the United States.
   b. Allergic rhinitis can lead to impaired sleep and a lower quality of life.
   c. Common symptoms include fever and purulent nasal discharge.
   d. Perennial allergic rhinitis occurs at predicted times of the year and is commonly triggered by pollens.

c. SLIT dosing instructions are not complicated and require minimal patient education.

d. Timing commencement of SLIT treatment with pollen season onset is predictable and consistent from year to year.

2. Seasonal allergies are mediated by ____ immunoglobulins.
   a. IgA  c. IgG
   b. IgE  d. IgM

3. Allergy immunotherapy works by:
   a. Blocking the attachment of antibodies to mast cells.
   b. Delivering small doses of the allergen to the patient on a regular basis.
   c. Increasing the release of histamine from mast cells.
   d. Sensitizing the body's immune system.

4. Grastek contains the grass pollen extract of:
   a. Kentucky Blue Grass  c. Timothy Grass
   b. Perennial Rye  d. All of the above

5. Immunotherapy with Oralair should begin ____ before grass pollen season.
   a. 1 week  c. 4 months
   b. 2 months  d. None of the above

6. Which of the following is true about sublingual immunotherapy (SLIT)?
   a. Anaphylaxis is not a concern with SLIT.
   b. When initiating SLIT, patients should receive an epinephrine auto injector and training on its use.

   7. SLIT should be used cautiously in patients taking:
      a. Beta-blockers  c. Thyroid hormone replacements
      b. Diuretics  d. All of the above

8. The first dose of any of the SLIT formulations ____.
   a. Can be administered in a pharmacy
   b. Can be self-administered by the patient in their home
   c. Must be administered in a physician's office
   d. Must be administered in a hospital with emergency life support available

9. Which of the following is true about the administration of SLIT?
   a. Each tablet must remain under the tongue for at least one minute.
   b. Patients may eat or drink immediately after taking a tablet.
   c. Patients should swallow tablets with plenty of water.
   d. Tablets may be crushed and mixed with 8 ounces of water or juice.

10. Which of the following describes the proper handling of the SLIT tablets?
    a. Patients should wash their hands after handling a tablet to avoid spreading the allergen.
    b. Tablets can be removed from their blister packs and placed into weekly pill-planners.
    c. Tablets do not require protection from sunlight.
    d. Tablets should be stored under refrigeration.

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Keep the TOP portion for your records. Return the BOTTOM portion to the NPA office.
Or, take this quiz online at www.npharm.org

Name _______________________________ Mailing Address _______________________________
City/State/Zip _______________________________

*NABP e-Profile # ________________ *Date of Birth (MMDD) ________________

*Required for ACPE credit.

The deadline for this quiz is December 8, 2016
Our Annual White Coat Ceremony took place on August 17 at the Michael F. Sorrell Events Center with a reception following in our new facility, UNMC Center for Drug Discovery and Lozier Center for Pharmacy Sciences and Education building.

Sixty-four students received their professional white laboratory jackets, provided by friends of the College of Pharmacy and the University of Nebraska Foundation, and took the pledge of professionalism.

Dean Courtney Fletcher welcomed the students. Jessica Downes, Pharm.D., Clinical Assistant Professor of Pharmacy Practice, delivered the keynote presentation on “Being Professional.”

Renae Heuermann, P4, also shared her reflections as a Pharmacy student.

Gary Yee, Pharm.D., Associate Dean for Academic Affairs, and Associate Dean for Student Affairs, Christopher Shaffer, Pharm.D., welcomed the class of 2020 to the Ceremony and assisted with the presentation of the white coats to the students.

The College of Pharmacy Open House followed where the new students and their families and friends were invited to mingle with faculty, students and staff.

Yasmine Al-Shidifat, Lincoln
Jared Anderson, Lincoln
Guenevere Arthur, Hickman
Adam Bassing, Hooper
Kaylee Beyea, Gothenburg
Madeline Blaha, Blair
Bakhodur Bobozhanov, Omaha
Melissa Borsh, Omaha
Erin Brown, Omaha
Andrew Butler, Kearney
Emily Casey, Papillion
Jacqueline Christensen, Grand Island
Leslie Chudomelka, Ashland
Derek Classen, Humphrey
Allyson Cole, Trenton
Laura Dieckgrafe, Cook
Anthony Donovan, Kearney
Craig Driver, Minden
Kealy Ecklund, Bellevue
Anna Eliasen, Glenvil
John Glass, Omaha
Tanner Griffith, Aurora
Kristen Ann Grimaldi, Omaha
Kelsey Haywood, Omaha
Qingfeng He, Zhanjiang, China
Brooke Herchenbach, Lincoln
Ku’ulei Hose, Grand Island
Brittany Janke, Winside
Alexa Karels, Papillion
Zachary Kaster, Tecumseh
Shane Klein, Lincoln
Molly Klinginsmith, Kearney
Brandon Knapp, Omaha
Anna Kohl, Omaha
Natasha Konfrst, Council Bluffs, IA
Kayla Lane, Arcadia
Sara Lennemann, Stamford
Tamehene Massaba, Omaha
Hannah Mlenkovich, Elkhorn
Daniel Olson, Holdrege
Diana Palandri, Omaha
Kelsie Post, Beatrice
Xiaoxiao Qi, Shanghai, China
Lauren Reiman, Blue Hill
Corey Ridge, Omaha
Taryn Rozanek, Fremont
Reda Safi, Omaha
Jessica Sobczyk, Omaha
Kelcy Sorensen, Omaha
Ryan Steffes, Omaha
Andrew Stoecklein, Papillion
Amy Thomas, Omaha
Natalie Tiefenthaler, Sioux Falls, SD
Brittany Trausch, Juniata
Megan Vandergrriend, Omaha
Madeline Volk, Ashland
Quyen Vu, Lincoln
Chao Wang, Anhui Province, China
Yike Wang, Chengdu, China
Jennifer Wetzel, Grand Island
Nakaisha Wiegert, Wausa
Marysa Wilson, Aberdeen, SD
Andre Wilt, Omaha
Ryan Winkelbauer, Omaha
Objectives
At the conclusion of this lesson, pharmacists and pharmacy technicians should be able to:

1. Explain the new requirements for the certification of pharmacy technicians.
2. Describe the changes to Nebraska’s Prescription Drug Monitoring Program (PDMP).
3. Review the changes to the Uniform Credentialing Act.

Introduction
Each year, the Nebraska Pharmacists Association introduces and influences legislation that is important to pharmacy practice in Nebraska. The 2016 Legislative Session was no exception, with a few changes made in the busy 60-day session. The following information highlights law changes that are important for Nebraska pharmacists and pharmacy technicians to know and understand.

Pharmacy Technician Certification
In 2014, the law was changed to require all pharmacy technicians in Nebraska working in a facility to become certified prior to working in that facility. Nebraska has required registration of pharmacy technicians for several years. Because of the difficulty of having technicians registered and certified prior to working as pharmacy technicians, the NPA successfully advocated for a change in the mandate for pharmacy technician certification.

In summary, Neb. Rev. Stat. §38-2890 states that all pharmacy technicians who are employed by a health care facility (hospital, pharmacy, long-term care, etc.) in Nebraska must be registered with the Pharmacy Technician Registry through the state of Nebraska in order to work as a pharmacy technician in that facility. Technicians who are registered on January 1, 2016 must be certified by January 1, 2017. Any pharmacy technician registered after January 1, 2016 has one year from the date of registration to become certified. The certification shall be a state or national certification approved by the Nebraska Board of Pharmacy. Once certified, the pharmacy technician must maintain certification during the time he/she is registered as a pharmacy technician. The Nebraska Board of Pharmacy has approved several pharmacy technician certification programs. The law change reflects the feedback the NPA received to allow pharmacy technicians additional time between registration and certification to work in a facility in Nebraska.

As a reminder, Neb. Rev. Stat. §38-2892 states that the pharmacist in charge… shall be responsible for the supervision and performance of a pharmacy technician.

Neb. Rev. Stat. §38-2895 states that the pharmacist in charge or the pharmacist supervising the pharmacy technician can be
cited for unprofessional conduct for allowing a pharmacy technician to perform functions requiring professional judgment and licensure as a pharmacist. Since the Pharmacy Technician Registry was created, there have been several pharmacists in charge who have been cited by the Nebraska Department of Health and Human Services, citing these statutes, for allowing a pharmacy technician to work as a pharmacy technician without a current registration. Now that there are initial and ongoing registration and certification requirements for pharmacy technicians, the pharmacists in charge must be diligent to ensure that credentials for pharmacy technicians (and pharmacists) working in their facility are current and active with the state of Nebraska.

**Prescription Drug Monitoring Program (PDMP)**

Nebraska will have a functioning PDMP beginning January 1, 2017. Unlike all other states, Nebraska’s PDMP will be operated via the Nebraska Health Information Initiative (NeHII) which will utilize the Dr. First system to access data stored by Optum. Per Neb. Rev. Stat. §71-2454, all dispensed prescriptions (whether in the state or to an address in the state) for controlled substances must be reported to the PDMP beginning January 1, 2017, and all dispensed prescriptions must be reported to the PDMP beginning January 1, 2018. Patients may not opt out of their prescription information being reported to the PDMP. The dispensed prescriptions must be reported daily into the PDMP by the dispenser or his/her designee. Prescribers and dispensers will be allowed to access the PDMP at no charge. Nebraska dispensers may begin reporting information to the PDMP prior to the January 1, 2017 go-live date once the system is ready (per notification from NeHII) and able to accept data. The information that must be reported by dispensers to the PDMP includes:

- (a) The patient’s name, address, and date of birth;
- (b) The name and address of the pharmacy dispensing the prescription;
- (c) The date the prescription is issued;
- (d) The date the prescription is filled;
- (e) The name of the drug dispensed or the National Drug Code number as published by the federal Food and Drug Administration of the drug dispensed;
- (f) The strength of the drug prescribed;
- (g) The quantity of the drug prescribed and the number of days’ supply; and
- (h) The prescriber’s name and National Provider Identifier number or Drug Enforcement Administration number when reporting a controlled substance.

Nebraska pharmacists and other health care providers have requested a functioning PDMP for several years. While the PDMP will be different than those in all other states, the hope is that since the dispensed medications will be reported from pharmacies, including mail order, that the PDMP will have the most current and accurate prescription drug data for utilization by health care providers for the care of their patients.

**Original Prescription Transfers**

For years, at the request of the patient, Nebraska pharmacists have used professional judgment in the best interest of the patient by “transferring” original prescriptions that have not been previously filled from one pharmacy to another. The “transfer” request is often because the prescription was sent to the wrong pharmacy by the prescriber or the pharmacy does not have the medication in stock. After this best practice was questioned by legal counsel from a national chain, pharmacists in Nebraska were told that the Nebraska Department of Health and Human Services no longer believed “transfer” requests should be allowed because the practice was not clearly defined in state law, only refill transfers are mentioned in Nebraska law.

To protect pharmacists as they assist and care for patients, LB 567 was passed in 2016 to clarify that it is permissible for a pharmacist to “transfer” an original prescription for a non-controlled substance to another pharmacy at the request of the patient or the patient’s caregiver (the pharmacist is recognized as an agent of the patient). The law also states that for controlled substance transfers, pharmacists must follow the federal law 21 CFR 1306.25. That federal law covers transfers for refills but is silent on original prescription transfers. Acting in the best interest of the patient and using professional judgement is the recommended course of action for pharmacists. The statutory language can be found at Neb. Rev. Stat. §38-2871.

A common question from pharmacists pertains to transfer of refills of controlled substances that were prescribed electronically. Per federal law regarding refills of electronic controlled substance prescriptions, 21 CRF 1306.25(b)(4) states:

- (4) For electronic prescriptions being transferred electronically, the transferring pharmacist must provide the receiving pharmacist with the following information in addition to the original electronic prescription data:
  - (i) The date of the original dispensing.
  - (ii) The number of refills remaining and the date(s) and locations of previous refills.
  - (iii) The transferring pharmacy’s name, address, DEA registration number, and prescription number for each dispensing.
  - (iv) The name of the pharmacist transferring the prescription.
  - (v) The name, address, DEA registration number, and prescription number from the pharmacy that originally filled the prescription, if different.
  - (5) The pharmacist receiving a transferred electronic prescription must create an electronic record for the prescription that includes the receiving pharmacist’s name and all of the information transferred with the prescription under paragraph (b)(4) of this section.
  - (c) The original and transferred prescription(s) must be maintained for a period of two years from the date of last refill.
(d) Pharmacies electronically accessing the same prescription record must satisfy all information requirements of a manual mode for prescription transfer.

(e) The procedure allowing the transfer of prescription information for refill purposes is permissible only if allowable under existing State or other applicable law.

As a reminder, Neb. Rev. Stat. §38-2871 (b) states: the transfer is communicated directly between two pharmacists or pharmacist interns except when the pharmacies can use a real-time, online data base.

Changes to the Uniform Credentialing Act

With the passage of LB 750, the Legislature made a few changes to the Uniform Credentialing Act (UCA). The UCA are the statutes that authorize the various health care practice acts and the authority of the state Department of Health and Human Services to regulate and sanction the professions. The focus of LB 750 was to add language to allow a person to report certain conduct of a credential holder confidentially and without the fear of discrimination. An addition to the UCA found in Neb. Rev. Stat. §38-1,142 states: An individual or a business credentialed pursuant to the Uniform Credentialing Act shall not discriminate or retaliate against any person who has initiated or participated in the making of a report under the act to the department. Such person may maintain an action for any type of relief, including injunctive and declaratory relief, permitted by law.

LB 750 also changed the Licensee Assistance Program (Neb. Rev. Stat. §38-175(5)) to include: … Any person who contacts the department for information on or assistance in obtaining referral or treatment of himself or herself or any other person credentialed by the department for abuse of, dependence on, or active addiction to alcohol, any controlled substance, or any mind-altering substance that impairs the ability to practice the profession shall be referred to the program. Such inquiries shall not be used by the department as the basis for investigation for disciplinary action, except that such limitation shall not apply to complaints or any other reports or inquiries made to the department concerning persons who may be suffering from abuse of, dependence on, or active addiction to alcohol, any controlled substance, or any mind-altering substance that impairs the ability to practice the profession or when a complaint has been filed or an investigation or disciplinary or other administrative proceeding is in process.

LB 750 added the language in (3) of Neb. Rev. Stat. §38-1,106, which states: (1) Reports under sections 38-1,129 to 38-1,136, complaints, and investigational records of the department shall not be public records, shall not be subject to subpoena or discovery, and shall be inadmissible in evidence in any legal proceeding of any kind or character except a contested case before the department. Such reports, complaints, or records shall be a public record if made part of the record of a contested case before the department. No person, including, but not limited to, department employees and members of a board, having access to such reports, complaints, or investigational records shall disclose such information in violation of this section, except that the department may exchange such information with law enforcement and other state licensing agencies as necessary and appropriate in the discharge of the department’s duties and only under circumstances to ensure against unauthorized access to such information. Violation of this subsection is a Class I misdemeanor.

(2) Investigational records, reports, and files pertaining to an application for a credential shall not be a public record until action is taken to grant or deny the application and may be withheld from disclosure thereafter under section 84-712.05.

NEW LANGUAGE: (3) The identity of any person making a report, providing information leading to the making of a report, or otherwise providing information to the department, a board, or the Attorney General included in such reports, complaints, or investigational records shall be confidential whether or not the record of the investigation becomes a public record.

Partial Filling of Controlled Substances

Both Nebraska law and federal law allow for partial fills of controlled substances. President Obama recently signed into law the Comprehensive Addiction and Recovery Act (CARA) of 2016. The CARA contains language that pertains to partial fills of controlled substances. The language in the CARA is more lenient than the language in Nebraska law, so pharmacists must comply with Nebraska law until changes are made.

As a reminder, Neb. Rev. Stat. §28-414 (5)(a) A prescription for a controlled substance listed in Schedule II of section 28-405 may be partially filled if the pharmacist does not supply the full quantity prescribed and he or she makes a notation of the quantity supplied on the face of the prescription or in the electronic record. The remaining portion of the prescription may be filled within seventy-two hours of the first partial filling. The pharmacist shall notify the prescribing practitioner if the remaining portion of the prescription is not or cannot be filled within such period. No further quantity may be supplied after such period without a new written, signed paper prescription.

(b) A prescription for a controlled substance listed in Schedule II of section 28-405 written for a patient in a long-term care facility or for a patient with a medical diagnosis documenting a terminal illness may be partially filled. Such prescription shall bear the words "terminal illness" or "long-term care facility patient" on its face or in the electronic record. If there is any question whether a patient may be classified as having a terminal illness, the pharmacist shall contact the prescribing practitioner prior to partially filling the prescription. Both the pharmacist and the prescribing practitioner have a corresponding responsibility to assure that the controlled substance is for a terminally ill patient. For each partial filling, the dispensing pharmacist shall record on the back of the prescription or on another appropriate record, uniformly maintained and readily retrievable, the date of the partial filling, quantity dispensed, remaining quantity authorized to be dispensed, and the identification of the

The Nebraska Mortar & Pestle 27
dispensing pharmacist. The total quantity of controlled substances listed in Schedule II which is dispensed in all partial fillings shall not exceed the total quantity prescribed. A prescription for a Schedule II controlled substance for a patient in a long-term care facility or a patient with a medical diagnosis documenting a terminal illness is valid for sixty days from the date of issuance or until discontinuance of the prescription, whichever occurs first…

According to the CARA, partial fills for schedule II controlled substances shall be filled not later than 30 days. In an emergency situation, the partial fill shall not be filled later than 72-hours after the prescription is issued. (21 USC 829(f)). Again, Nebraska’s law is more restrictive, therefore, Nebraska’s law must be followed until such time as the state law is changed.

As a reminder, Neb. Rev. Stat. §28-414.01 (4) A prescription for a controlled substance listed in Schedule III, IV, or V of section 28-405 may be partially filled if (a) each partial filling is recorded in the same manner as a refilling, (b) the total quantity dispensed in all partial fillings does not exceed the total quantity prescribed, and (c) each partial filling is dispensed within six months after the prescription was issued.

Naloxone
The Nebraska Legislature passed LB 390 (which included LB 546 introduced by Senator Adam Morfeld) in 2015 to help combat the crisis of opioid overdoses. LB 390 (now Neb. Rev. Stat. §28-470) allows pharmacists to provide naloxone with or without a prescription. A pharmacist may dispense or provide naloxone to a person who is apparently experiencing or who is likely to experience an opioid-related overdose, or a family member, friend, or other person in a position to assist a person who is apparently experiencing or who is likely to experience an opioid-related overdose. Pharmacists acting with reasonable care are not subject to administrative action or criminal prosecution.

Conclusion
Pharmacists and pharmacy technicians must understand the law changes that impact the practice of pharmacy as well as patient care. On behalf of our members, the NPA will continue to advocate for changes to laws that improve pharmacy practice.

Policies for the Nebraska Mortar & Pestle (M&P) continuing pharmacy education lessons and quizzes:

1. M&P Quizzes are valid only for the membership year in which they are published. Quizzes for the 2016 Membership Year must be received by December 8, 2016. Quizzes cannot be carried over to another membership year.

2. If more than three questions are missed, the quiz will be returned. The quiz can be resubmitted.

3. CPE transcripts can be printed from NABP e-Profiles at www.nabp.net.

4. CPE credits are submitted to NABP by the 15th of each month. For example, M&P CPE quizzes completed in the month of October 2016 will be sent to NABP e-Profiles before November 15, 2016.

The Nebraska Council for Continuing Pharmacy Education (NCCPE) is accredited by the Accreditation Council for Pharmacy Education (ACPE) as a provider of continuing pharmacy education (CPE). This CPE home study lesson has been accredited for 1.0 contact hour or 0.10 CEU. UAN 0128-0000-16-342-H03-P for pharmacists and 0128-0000-16-342-H03-T for pharmacy technicians. This lesson is a knowledge-based CPE activity targeted to pharmacists and pharmacy technicians.

The Nebraska Pharmacists Association disclaims any liability to you or your patients resulting from reliance solely upon the information contained herein.

Quiz Answers may be submitted:
1. Online: www.npharm.org
2. Fax: 402-420-1406
3. Email: m&p@npharm.org
4. Mail: NPA Mortar & Pestle
   6221 S 58th St, Ste A
   Lincoln, NE 68516

All of the M&P CPE Lessons and Quizzes for 2016 have been published. They are due on December 8, 2016. No carry overs. No exceptions.
1. If a pharmacy technician is registered in the state of Nebraska on January 1, 2016, that pharmacy technician must be certified by:
   a. January 1, 2016  
   b. June 30, 2016  
   c. January 1, 2017  
   d. June 30, 2017

2. If a pharmacy technician is registered with the state of Nebraska on June 30, 2016, that pharmacy technician must be certified by:
   a. January 1, 2016  
   b. June 30, 2016  
   c. January 1, 2017  
   d. June 30, 2017

3. When should the pharmacist in charge verify that pharmacists and pharmacy technicians have valid Nebraska credentials?
   a. Only upon hire  
   b. Only once a year  
   c. Only on January 1 of each year  
   d. As often as deemed appropriate to ensure personnel are properly credentialed.

4. When are dispensers required to report all dispensed prescription drug data to the PDMP?
   a. January 1, 2017  
   b. June 30, 2017  
   c. January 1, 2018  
   d. All dispensed prescription drug data does not have to be reported.

5. Information that is not required to be reported to the PDMP includes:
   a. Patient Name  
   b. Patient Date of Birth  
   c. Drug Name or NDC  
   d. Prescription Number

6. A pharmacist is allowed to transfer an original prescription for a non-controlled substance at the request of the patient or patient’s caregiver.
   a. True  
   b. False

7. Reporting by a person of a credential person:
   a. Must be done in person at the Department of Health and Human Services office.  
   b. May be done in a confidential manner.  
   c. Must be done in the public records section of the local newspaper.  
   d. Must be done at a Board of Pharmacy meeting.

8. Nebraska law allows the partial filling of a Schedule II controlled substance if:
   a. the pharmacist does not supply the full quantity prescribed and he or she makes a notation of the quantity supplied on the face of the prescription or in the electronic record.  
   b. the remaining portion of the prescription may be filled within seventy-two hours of the first partial filling.  
   c. the pharmacist notifies the prescribing practitioner if the remaining portion of the prescription is not or cannot be filled within such period.  
   d. All of the above

9. Nebraska pharmacists must follow Nebraska law rather than federal law for the partial filling of Schedule II controlled substance?
   a. True  
   b. False

10. Nebraska pharmacists may dispense naloxone:
    a. Pursuant to a prescription  
    b. Without a prescription  
    c. To a friend or family member of someone suspected of experiencing an opioid related overdose  
    d. All of the above

This is the LAST M&P CPE quiz for 2016!

Keep the TOP portion for your records. Return the BOTTOM portion to the NPA office.

Or, take this quiz online at www.npharm.org

The deadline for this quiz is December 8, 2016
**PHARMACY VISITS**

*Participating Nebraska MEDS Pharmacy*

**ALLIANCE**
- Box Butte General Hospital
- *Safeway Pharmacy #0549
- *Shopko Pharmacy #2694

**BRIDGEPORT**
- *Nein Pharmacy
- Sonny’s Pharmacy

**CHADRON**
- *Chadron Community Hospital
- *Petersen Drug
- Safeway Pharmacy #2563
- Wal-Mart Pharmacy #10-2579

**CHAPPELL**
- *Western Drug Company

**GORDON**
- Gordon Memorial Hospital
- *Stockmen’s Drug

**GERING**
- U-Save Pharmacy

**HEMINGFORD**
- *Dave’s Pharmacy

**KIMBALL**
- *Bemis Drug

**NORTH PLATTE**
- *Depot Drug
- *Great Plains Health
- *Rx Express Pharmacy
- *Shopko Pharmacy #2053
- *U-Save Pavilion Pharmacy, Francist St
- *U-Save Pharmacy, Leota St
- VA Health Care System
- *Walgreens Pharmacy #12405
- Wal-Mart Pharmacy #10-1585
- *Westfield Pharmacy

**OMAHA**
- *Kubat Pharmacy, Center St
- *U-Save Pharmacy, 108th & Maple

**SCOTTSBLUFF**
- Campbell Drug
- Community Pharmacy at Regional West
- Griff’s Compounding Center
- K-Mart Pharmacy #7024
- Regional West Medical Center
- Safeway Pharmacy #0556
- Walgreens Pharmacy #07383
- Western Nebraska Veterans Home
- Wal-Mart Pharmacy #10-0867

**SIDNEY**
- *Safeway Pharmacy #2555
- Sidney Regional Medical Center
- Wal-Mart Pharmacy #10-5170
- *Western Drug Company

**VALENTINE**
- Cherry County Hospital
- *Shopko Pharmacy

**NEW PHARMACY ENROLLMENTS**
- *CHI Health Pharmacy - Florence, Omaha
- *Good Life Discount Pharmacy, Albion
- *Doniphan Pharmacy, Doniphan
- *Super Saver Pharmacy #28 State St, Grand Island
- *Safeway Pharmacy #0549, Alliance
- *Western Drug Company, Chappell
- *Western Drug Company, Sidney
- *Tekamah Drug Company, Tekamah
- *U-Save Pavilion Pharmacy Francis St, North Platte

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**Every Day is a Take-Back Day in Nebraska**

The NPA continues to visit pharmacies across the state. There are 295 pharmacies participating in the Nebraska MEDS Drug Disposal Initiative. A list of the pharmacies can be found at www.nebraskameds.org. For questions about the program, call 402-420-1500.

The NPA would like to thank Matt Kubat, RP, and his staff for the use of the Kubat Pharmacy at 4924 Center Street in Omaha to film television ads for the statewide marketing campaign for the Nebraska MEDS Drug Disposal program. Along with the very busy Kubat Pharmacy pharmacists and technicians, NPA pharmacist, Marcia Mueting, PharmD, graciously agreed to be a part of the filming process. The television ads can be found at: [http://www.nebraskameds.org/Files/NMC-916-15-Child-R.mp4](http://www.nebraskameds.org/Files/NMC-916-15-Child-R.mp4) and [http://www.nebraskameds.org/Files/NMC-916-15-Teen-R.mp4](http://www.nebraskameds.org/Files/NMC-916-15-Teen-R.mp4).

The NPA would also like to thank the U-Save Pharmacy staff at 108th & Maple in Omaha for allowing KETV to do a news story about the Nebraska MEDS statewide drug disposal initiative. U-Save pharmacist, Charisse Beck, PharmD, and NPA CEO, Joni Cover, were part of the KETV New Anchor, Julie Cornell’s story. The story can be found at: [http://www.ketv.com/news/nebraska-launches-drug-take-back-campaign/41571650](http://www.ketv.com/news/nebraska-launches-drug-take-back-campaign/41571650).
NPA Pharmacy Visits

Walgreen’s Pharmacy, Scottsbluff
(l to r): Don Graham, RP, Felicia Hernandez, Jessica Lore, and Lora Hampton

K-Mart Pharmacy, Scottsbluff
(l to r): Tammy Graves, Jeremy Reynolds, PharmD, and Kristsen Hansen

U-Save Pharmacy, 108th & Maple, Omaha
(l to r): Brittny Thompson, Jane Heller, Rachel Christenham, and Charisse Beck, PharmD

Dave’s Pharmacy, Hemingford
(l to r): Kristina Kramer, Aimee Otto, RP, Mindy Stites, Dave Randolph, RP, owner, and Thelma Kopejtka

Bemis Drug, Kimball
(l to r) Jorday Autrey, PharmD, and Larry Walker, RP

Kubat Pharmacy, 4924 Center St, Omaha
Matt Kubat, RP, Owner, and NPA Pharmacist, Marcia Mueting, PharmD, Lincoln
Renew Your Membership for 2017

With the *M& P* issued only six times a year, just one month’s lapse in your membership could mean that you will miss out on the next issue and 15 hours of free continuing pharmacy education! Plus, you don’t want to miss even one Daily News Dose email full of the latest pharmacy news. Renew your membership by logging into your NPA member profile or by calling the NPA office staff at 402-420-1500.

The road from the contemplation of a sale to the closing of a deal is filled with obstacles, road blocks and speed bumps. Let us help you navigate them successfully.

1. Contemplating a sale
2. Evaluating the business
3. Finding a buyer
4. Negotiating price & terms
5. Letter of Intent
6. Purchase agreement
7. Buyer financing
8. Transition issues
9. Taking inventory
10. Closing the Deal

This is what we do every day, all day. It’s a full time job. Don’t attempt it on your own. Let us help you get to the end of the road successfully. Visit our website to view a list of references that you can contact.