Vol. 30 No. 1

South Dakota Pharmacist

Winter Edition 2016

In This Issue:

SOUTH DAKOTA
PHARMACIST

Volume 30 Number 1

South Dakota Pharmacists Association
320 East Capitol
Pierre, SD 57501
(605)224-2338 phone
(605)224-1280 fax
www.sdpha.org

"The mission of the South Dakota Pharmacists Association is to promote, serve and protect the pharmacy profession."

South Dakota Board of Pharmacy
4305 South Louise Avenue
Suite 104
Sioux Falls, SD 57106
(605)362-2737
www.pharmacy.sd.gov

SDPhA CALENDAR

Please note: If you are not on our mass e-mail system check our website periodically for district meetings and other upcoming events. They will always be posted at: *http://www.sdpha.org*.

JANUARY

1 New Years Day
12 Legislative Session Begins
18 Martin Luther King, Jr. Day
26-27 SDPhA Legislative Days, Pierre, SD

FEBRUARY

12-14 Midwest Pharmacy Expo, Des Moines, IA
15 Presidents' Day

MARCH

District Meetings
4-7 American Pharmacists Association (APhA) Annual Meeting
Baltimore, MD
13 Daylight Savings Time Begins
27 Easter Sunday
29 Last Day of Legislative Session

APRIL

District Meetings
8-9 SD Society of Health-Systems Pharmacists (SDSHP)
Annual Conference, Rapid City, SD

Cover Photo by Sue Schaefer, Pierre, SD

SOUTH DAKOTA PHARMACIST
The *SD PHARMACIST* is published quarterly (Jan, April, July & Oct). *Opinions expressed do not necessarily reflect the official positions or views of the South Dakota Pharmacists Association.*

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DIRECTOR'S COMMENTS

Sue Schaefer | Executive Director

Happy New Year!

South Dakota's 91st Legislative Session will soon be upon us. Although the South Dakota Pharmacists Association doesn't have plans to introduce a bill this year, there are always bills that bear watching. It's too early to know exactly how many bills will be introduced that may impact pharmacy, but we'll do our best to keep you apprised via our weekly legislative update. We'll update you via Constant Contact (email) and Facebook, and the update will also be available on our website at www.sdpha.org.

Legislative Days is schedule for January 26th and 27th. Our Tuesday evening legislative update will be held at the RedRossa Restaurant in Pierre, and rooms have been reserved at the Clubhouse Inn and & Suites next door. Please call SOON to reserve your room and join us for Legislative Days! It's important to identify SDPhA when you book your room. We're really hoping to have a good number of pharmacists and technicians in attendance and hope we can count on you to attend this important event. The SDSU College of Pharmacy has already filled the bus again this year! It's always wonderful to have such great representation and the student pharmacists do an amazing job of putting on a health screening. It's also good to gather so pharmacists, faculty and students can learn about the Legislative process. I know I say it every year, but it's critical that pharmacy maintains a strong presence at the Capitol.

To register for Legislative Days, just send me an email at sue@sdpha.org or call 605-224-2338 and we'll get you set up. We've also included a registration form located within the pages of this issue for your convenience. We hope to see you in Pierre as we work for pharmacy! **We're also encouraging you to remember to support your Commercial & Legislative Branch (C&L) so Bob Riter and I can continue to represent you during Legislative Session.**

An exciting development during the Legislative Session will be the addition of a flu shot clinic for legislators, provided by immunizing pharmacists! We all hope that most of our lawmakers have already been vaccinated as they arrive for the upcoming legislative session, but just in case, SDPhA will have be there to provide immunizations on January 13th. This is a wonderful opportunity to share our story with our legislators and prove that pharmacists can do so much more!

Influenza hasn't been a huge health issue at this time, however, we're expecting a spike in February. We hope you're all encouraging your patients to receive the flu shot. We all know that some of the vaccine "missed" a bit this year, but the shot still affords some protection and we need to encourage folks to get vaccinated. For additional information on statistics or to stay updated, please visit: https://doh.sd.gov/diseases/infectious/flu/surveillance.aspx.

Some other initiatives we've been involved in/working on include:

Convention Resolution – Enhancing Patient Care through Pharmacy-based Services

The workgroup is now complete and will hold their first meeting early this month. Members include Jan Lowe and Eric Grocott, Co-Chairs; Tadd Hellwig, Alex Middendorf, Bill Hayes, Steve Lee, Dave Helgeland, Kyle Heer, Jon Schuchardt, Kari Shanard-Koenders, Sue Schaefer and Bob Riter. The group will work to review current laws and rules to determine what needs to be addressed regarding pharmacist-provided services for patients in South Dakota.

Medical Marijuana – Ballot Initiative

We are awaiting word to see if the medical marijuana measure will be placed on the ballot in 2016. Our Executive Board and staff will work hard to provide pharmacists with information so that you can make an informed decision on this measure.

Diabetes Education – Department of Health

The Association's Secretary-Treasurer Erica Bukovich and I have been involved in the development of a diabetes education "toolkit" for healthcare professionals to aid in identifying and referring potential diabetes patients.

Collaborative Practice Toolkit

The National Alliance of State Association Executives (NASPA) is currently working on a national toolkit which will include samples of various CPAs in play throughout the nation. If you have samples of CPAs you'd like to share, please contact me! Once completed, the toolkit will be placed on the SDPhA Website for our members to access.

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PRESIDENT'S PERSPECTIVE

Rob Loe | SDPhA President

Happy New Year! I hope you had a very Merry Christmas and took time from your busy schedules to enjoy your family, friends and faith. As we remember the many blessings we have this holiday season. I am thankful to live in South Dakota where common sense still prevails and the legislative process works.

We hope to see many friendly pharmacy faces at Legislative Days. The Legislative Update and dinner is Tuesday, January 26th at 6:00 pm at the RedRossa Italian Grill in Pierre. We will get updates from our Executive Director, Sue Schaefer, and Lobbyist, Robert Riter on bills being brought to the legislature and how they will affect pharmacy. This is a great opportunity to educate ourselves and participate in the legislative process. There will be opportunities for discussion with legislators and time to show them the progressive and exciting things pharmacists can do. This is a great chance to get to know your South Dakota elected representatives.

Many of us continue to vaccinate our patients for influenza. The clock is ticking but it's still not too late to educate our patients and encourage them to get their flu shots. Don't forget to log immunizations in the State Registry (SDIIS)! It's easy and fast. If you're not signed up, contact Tammy LeBeau at the SD Department of Health at 605-773-2795. In addition, this is a great opportunity to screen our patients and help them get updated on other vaccinations. In 2012, shingles vaccination rates were estimated to be 20% for adults over age 60. In recent years we have seen a resurgence in cases of pertussis. Furthermore, the CDC estimates that in 2011 there were 4,200 deaths from pneumococcal disease. Pharmacy has shown its value as partners in vaccinating patients from influenza. There are many more opportunities where pharmacy can help reduce the amount of vaccine preventable disease.

We are excited to see the pharmacist-provided services workgroup begin their work as a result of the convention resolution. Soon they will gather, roll up their up their sleeves, and work on this important issue. We know the group is eager to find ways to enhance patient care through pharmacy services, and recognize pharmacists as the providers they are. There are many studies that show, over and over, when pharmacists are involved in disease management, outcomes improve and healthcare costs are reduced.
We thank the members of this committee for volunteering their time to work on this critical issue.

Please remember to save the date on your calendar for September 16 and 17, 2016. The SDPhA Annual Convention will be held in Brookings. The schedule is being planned and we hope you all attend.

SAVE THE DATE!

SOUTH DAKOTA Pharmacists ASSOCIATION

South Dakota Pharmacists Annual Convention
September 16-17, 2016 (Display Day 16th)
Swiftel Center
Brookings, SD

SOUTH DAKOTA BOARD OF PHARMACY

Kari Shanard-Koenders | Executive Director

Happy New Year from the SD Board of Pharmacy! Let us all strive to make it the very best year for our patients. It might take an extra minute and with all of the pressures in a busy environment, it might be hard to justify, but remind yourself, "do no harm".

NEW REGISTERED PHARMACISTS

The following 22 candidates recently met licensure requirements and were registered as pharmacists in South Dakota: Joel Aukes, Emilvin Beltran, Alyssa Brunner, James Burzynski, Cynthia Cooper, Annette English, David Farber, Kimberly Faucett, Diane Fox, Rebecca Karg, Andrew King, Angela Le, Adam Manoucheri, Michael Meekins, Patricia Morrical, Hiral Patel, Michelle Phipps, Syed Saleem, Roxane Skiles, Zachary Thompson, Kao Vang, and Curtis Waldvogel.

New pharmacy permits issued over the same time period are: Avera Grassland Pharmacy – Mitchell; Philip Health Services Inc. – Phillip (change from part time to telepharmacy); Rushmore Compounding Pharmacy – Rapid City; Roger's Family Pharmacy - Yankton (change of ownership); Lewis Drug #37 – Elk Point (change of ownership); CVS Pharmacy, dbaTarget Pharmacy #17566 - Sioux Falls (change of ownership); CVS Pharmacy, dbaTarget Pharmacy #16018 - Sioux Falls (change of ownership); CVS Pharmacy dbaTarget Pharmacy #1750 – Rapid City (change of ownership); Avera McKennan Pharmacy East Campus – Sioux Falls (AMDD); and PharMerica, Luther Manor – Sioux Falls (AMDD).

BOARD STAFF UPDATE

Beth Windschitl has been on staff since early October as the new full time Senior Secretary. She is a delightful addition to our office and has been a quick study and is extremely capable to assist with your needs. Melissa DeNoon, R.Ph. has been hired as the full time PDMP Director and will start in February. She is very talented and we are thrilled to have her excellent skill set on board soon to enhance the SD PDMP.

SD BOARD OF PHARMACY CLARIFIES CONTINUING EDUCATION REQUIREMENT QUESTION

During the December Board of Pharmacy meeting, the Board acted to clarify questions which have arisen regarding use of CE credits for both immunization CE requirements and annual renewal CE requirements. Board members determined that since there is nothing in law or rule stating that the items could not be used for both requirements, we would change our internal policy and allow immunization CE to also apply toward meeting the required 12 hours of continuing education credits until we can correct this with law or rule.

SD PHARMACY LAW BOOK UPDATED

As many of you know, the Department of Health recently updated the Hospital and Long Term Care facility rules. This changes your current law book substantially. The combined healthcare facility rules in ARSD 44:04 have been repealed and separated them into two sections, ARSD 44:73 (Nursing Facility) and ARSD 44:75 (Hospital). Everyone who serves either entity should be familiar with the changes.

1. "SD Law and Rules 2015" is the entire updated law book in one file and is located on our website and on the link http://doh.sd.gov/boards/pharmacy/assets/SDLawRules2015.pdf. **You may reference this electronic copy, if it is readily available, for your inspection requirement or you may print the entire file for a hard copy of the full law book.**
2. To update your current hard copy law book, please use "Law Book Update Instructions" http://doh.sd.gov/boards/pharmacy/assets/2015LawBookInstructions.pdf, which provides update instructions and a new "Contents" page.

NABP OFFERS FREE CE WITH FDA WEBINAR SERIES FOR HEALTHCARE PROFESSIONALS AND STUDENTS

The National Association of Boards of Pharmacy (NABP) has announced that the Food and Drug Administration (FDA) Center for Drug Evaluation and Research, Division of Drug Information is presenting a series of continuing educational webinars targeted toward students and health care professionals who wish to learn more about FDA and drug regulation. The webinars are presented by FDA staff.

The first webinar of 2016: Introduction to FDA's MedWatch Adverse Event Reporting Program
Date: Tuesday, January 26, 2016, Time: 12 PM CST, 11AM MST; Duration: 60 minutes

This webinar will give an overview of the FDA MedWatch Adverse Event reporting program, how and why to report adverse events to MedWatch, and where to find clinically relevant information from MedWatch. This is part one of a two-part series of webinars with information on safety reporting. Part

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SOUTH DAKOTA BOARD OF PHARMACY

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two will be held on February 9, 2016. Register Here: https://collaboration.fda.gov/ddi012616/event/registration.html

PRESCRIPTION DRUG MONITORING UPDATE

Appriss, the PDMP hosting vendor releases enhancements, new features and bug fixes approximately monthly. The items that may impact pharmacist users are.

New Features Added to SD PDMP:

1. **Active Morphine Milligram in Summary:** Within the Summary section of the patient report, the system now calculates the active MME of all opioid prescriptions. For any prescription that is currently still active based on the current date, the fill date and the days' supply, the system will take the sum of the individual prescription MMEs to provide an active morphine milligram equivalent for the patient. This is also provided on the PDF reports.

2. **Supervisor's Name in "Requested For" Column:** When a delegate runs a report for their supervisor, that supervisor's name will now appear in the "Requested For" column of the Requests History. This allows users to quickly see the supervisor that the delegate is acting on behalf of.

3. **Pharmacy Hover Over:** Similar to the additional information shown when a user hovers over the prescriber name within the prescriptions table, a user can see more information on the pharmacy when they hover over the truncated name. The pop-up will display the pharmacy's full name, address and phone number (if available).

BOARD MEETING DATES

Please check our website for the time, location and agenda for future Board meetings.

BOARD OF PHARMACY STAFF DIRECTORY

Office ... Phone 605-362-2737 ..... FAX 605-362-2738
Kari Shanard-Koenders, Executive Director and PDMP Director .....kari.shanard-koenders@state.sd.us
Melissa DeNoon, Director, SD PDMP ..... melissa.denoon@state.sd.us
Gary Karel, Pharmacy Inspector..... gary.karel@state.sd.us
Paula Stotz, Pharmacy Inspector .....paula.stotz@state.sd.us
Bill Vander Aarde, Pharmacy Inspector.....Contact Board office
Beth Windschitl, Senior Secretary ...beth.windschitl@state.sd.us
Melanie Houg, PDMP Assistant ..... melanie.houg@state.sd.us
Jessica Neal, Secretary .....jessica.neal@state.sd.us
Board of Pharmacy Website.....www.pharmacy.sd.gov

DIRECTOR'S COMMENTS

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Medicaid Expansion Workgroup

Jon Schuchardt with IHS has officially been added to the workgroup, and has represented pharmacy very well. We'll continue to share information on a possible expansion and how it will impact pharmacy as it becomes available. Schuchardt indicated that educational opportunities regarding pharmacist-provided MTM services seemed to be met with interest by the group.

Midwest Expo

We also continue to join with the Iowa Pharmacists Association to promote this valuable winter conference, which will be held February 12-14, 2016 in Des Moines, Iowa. The Midwest Expo is a comprehensive event offering a great deal of excellent CE for pharmacists and technicians. In exchange for our endorsement and promotion, our pharmacists will have access at a great rate to attend, and allows us to offer more benefits for our members. This event has become even more regional, with nine states now joining together.

Expanded Medication Therapy Management – CMS Pilot Project

Alex Middendorf and I have been engaged to determine how we can embrace the pilot project being offered to a handful of states in the nation. Insurance plans who want to engage pharmacists to provide EMTM services will no doubt be looking for networking opportunities within the pilot states. Alex and I will continue to work to see how South Dakota can "fit in" and assist pharmacies with providing enhanced services to patients while helping plans to reach their metric responsibilities.

The SDPhA Executive Board and staff are busy working away on the agenda for the Annual Convention, September 16th and 17th at the Swiftel Center in Brookings is underway, so save the date!

Warm and Healthy Regards,

Sue

SOUTH DAKOTA STATE UNIVERSITY

College of Pharmacy

Dennis Hedge | Dean

Greetings from the South Dakota State University College of Pharmacy!

The College has had a very busy and productive Fall Semester. In the lines below, I would like to update you on some significant events and achievements since the start of this academic year.

As mentioned in my last column, South Dakota State University launched "SDSU Health" on September 25th. SDSU Health is a consortium of South Dakota State University's health science programs, student health and counseling services, and health system and community partners committed to innovations in education, practice, and research across health professions and health-related programs. Of strategic importance to the College of Pharmacy, SDSU Health provides a framework for interprofessional collaboration and coordination of efforts that enhances our ability to educate the next generations of pharmacists and medical laboratory professionals to meet global and national health challenges.

The College of Pharmacy hosted an NAACLS accreditation site team for review of our BS degree in Medical Laboratory Science program on September 10-11, 2015. The visit went very well and the site team was quite complimentary of the program's students, faculty, and preceptors. The NAACLS Board of Directors will meet this spring at which time the SDSU Medical Laboratory Science program will be considered.

The College received very good news from NABP regarding NAPLEX results in October. Eighty-one of the eighty-two members of our 2015 PharmD Graduating Class took the NAPLEX during the May 1- August 31 test window. The SDSU pass-rate for first-time candidates was 100%. The national pass rate for this exam window was 93.86%. The SDSU mean scaled score was 110.20, which was well above the national mean of 101.53. Also, the SDSU mean score was above the national mean in all 3 areas of the exam.

The PharmD program admissions process for the incoming Fall 2016 P1 class began in October. Once again, the College of Pharmacy plans to admit 80 students into the PharmD program. To date, the academic profile of applicants remains very strong but it is still too early in the process to make any statement regarding the total number of applicants to the program. Nationally, the number of applicants to pharmacy schools is once again trending lower.

A major milestone was achieved on October 23 with the Investiture Ceremony of Dr. Wenfeng An as the College of Pharmacy's inaugural Markl Scholar in Cancer Research. The reason this was such a significant moment for the College is that endowed faculty positions, such as the Markl Scholar, are vital to the future success of our academic programs. Endowed positions will allow us to do things that we otherwise would not be able to do in our quest for academic and research excellence. In addition, endowed positions are symbolically important because they attest to the stature of the college and the quality of our faculty, which in turn enhances our national and international reputation.

Another exciting item of note was the addition of a position aimed at addressing academic instruction of "future practice" in our academic programs. Ms. Michelle Parker began employment as Health & Instructional Technology Coordinator on November 23rd. Ms. Parker is assisting the faculty with incorporation of new and emerging health/learning technologies in the classroom and experiential settings.

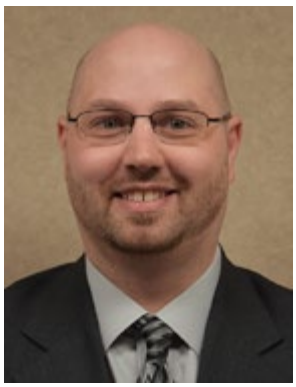
In closing, thank you for making 2015 a great year for the College of Pharmacy! We are very appreciative of your contributions and investment in our programs.

Best wishes for the New Year!

Dennis D. Hedge, Dean of Pharmacy

SD SOCIETY OF HEALTH-SYSTEM PHARMACISTS

Tadd Hellwig, Pharm.D., BCPS | SDSHP President



Happy Holidays from the South Dakota Society of Health-System Pharmacists!

ASHP Midyear Clinical Meeting

I recently had the opportunity to attend the 50th ASHP Midyear Clinical Meeting in New Orleans, LA. This meeting drew over 20,000 students, residents, and health-system pharmacists from across the country. The meeting provided plenty of CE and networking opportunities. In cooperation with the SDSU College of Pharmacy, NDSU College of Pharmacy, NDSHP, and North Dakota Board of Pharmacy we sponsored another very successful "Dakota Night" reception with well over 100 in attendance.

Continuing Education

The South Dakota pharmacy residents will be presenting upcoming CE programs. SDSHP members please take advantage of these opportunities for free CE and to support the residents of South Dakota. Visit our website at www.sdshp.com for more information on topics, location, and registration details. Upcoming dates are:

- February 20th, 2016 Sioux Falls
- February 20th, 2016 Rapid City

40th Annual SDSHP Conference

The 40th Annual SDSHP Conference will be held on April 8-9, 2016 at the Rushmore Plaza Holiday Inn in Rapid City. A variety of topics will be presented including: hepatitis C update, multidisciplinary approach to COPD, bridging anticoagulants, debate on antibiotic coverage in CAP, biosimilars, preceptor updates, and clinical pearls including a session on South Dakota Practice Advancement Initiative pearls. In addition, there will be a technician CE track on Saturday. Poster presentations and exhibit theatre are scheduled to take place on Friday. Again, please visit www.sdshp.com for further details and registration.

ASHP House of Delegates

Tadd Hellwig (SDSU/Sanford Health) and Erin Christensen (Sioux Falls VA) will represent South Dakota at the ASHP Summer Meeting in Baltimore, MD this summer during the ASHP House of Delegates. Our senior alternate is Rhonda Hammerquist (Sanford Health) and the junior alternate is Jaclynn Chin (Sioux Falls VA). Congratulations to our delegates and thank you for representing our state and being at the forefront to review policy proposals on important issues related to health-system pharmacy practice and medication use.

SD ASSOCIATION OF PHARMACY TECHNICIANS

Sue DeJong | President

Happy 2016! As I write, we are in the middle of a beautiful January thaw. It makes me already think Spring!

The beginning of a new year brings many challenges to your pharmacies. There are new insurance plans for almost everyone it seems. Along with that are new prior authorizations, audits, CMRs, MTMs and more!

Your pharmacists truly appreciate the professional and diligent work and support that you offer in your pharmacies. Without you they would not be able to accomplish everything that each day brings. Even with a day well planned, there are always some surprises or glitches!

As you dive in to meet these daily challenges and sometimes overwhelming craziness, do it with a smile. Take opportunities to build each other up so you can accomplish great things together.

Your SDAPT Board and I are working hard to plan our Fall CE day in October 2016. We will strive to provide five CE opportunities for pharmacy technicians as well as a great opportunities to network with technicians from all over the state working in so many different capacities. It's always a chance to reacquaint with the old and meet new friends that you have so much in common with. Please check our Facebook page and our SDAPT website for information and to set the date on your calendar.

Life is one long vacation for people who love their work!

Seize the day and all that it brings!

Pharmacists Provide Influenza Immunizations at the 2016 Legislative Session Opening

Pharmacists Rob Loe and Ashley Landenberger took time on Wednesday, January 13th, to provide immunization protection for those lawmakers who had yet to receive a seasonal flu shot. Over 20 legislators, pages and interns were vaccinated in the first-ever flu shot clinic provided by pharmacists at the State Capitol Building in Pierre.

Earlier this fall, Executive Director Sue Schaefer was approached by the Legislative Research Council asking for help at the request of the Speaker of the House, Dean Wink (District 29). Speaker Wink felt it would be valuable for lawmakers to have the option for vaccination in case they hadn't had an opportunity to receive the shot before arriving in Pierre for the 2016 Legislative Session.

Rob Loe stepped up, and courtesy of Lynn's Dakotamart, provided the vaccine and administration free of charge to ensure those who wished to be covered, would receive support. Loe and SDPhA's Executive Director Sue Schaefer also offered to make sure to verify that each immunization would be recorded with the lawmaker's primary care provider and also to the SDIIS (South Dakota Immunization Information System).

Schaefer offered, "We encourage everyone to receive their immunizations earlier in the season, but for those who ran out of time, this offered them that extra level of protection and support as they face a sometimes-stressful and tiring legislative session."

According to Loe, this was also a wonderful opportunity to educate and let lawmakers know that pharmacists are trained to do so much more. Let's keep the momentum going!

Pictured (top to bottom):

1. *SDPhA President/Pharmacist Rob Loe and Pharmacist Ashley Landenberger prepare for the Association's first Legislator Flu Shot Clinic at the Capitol Building.*
2. *Pharmacist Ashley Landengerger visits with Senator Billie Sutton (District 21) as he prepares for his Influenza immunization. Billie is the son of pharmacist and recent Bowl of Hygeia winner Renee Sutton of Burke.*
3. *Senator Craig Tieszen, District 34 and Representative Steve McCleerey, District 1 prepare to roll up their sleeves and get immunized for Influenza.*
4. *Senator Alan Solano, District 32, receives his immunization from SDPhA's President Rob Loe.*

Preparing for USP <800> Hazardous Drugs – Handling in Healthcare Settings

Patricia C. Kienle, RPh, MPA, FASHP, Director, Accreditation and Medication Safety, Cardinal Health Innovative Delivery Solutions

USP<800> Hazardous Drugs – Handling in Healthcare Settings is expected to become an official USP chapter in 2016. It has been available in proposed versions since March 2014. Two public comment periods have allowed practitioners to influence the requirements and wording of the document.

USP chapters numbered under 1000 are enforceable chapters; these are not just guidelines. All of the components of the chapter must be followed. The FDA, state boards of pharmacy and health, and accreditation organizations expect compliance.

Information concerning the hazards of exposure to certain drugs has been in the medical literature since the late 1970s. The drugs referenced in <800> are those that are hazards to personnel, not those that EPA regulates as hazards to the environment. However, some drugs are hazards to both.

Guidance documents concerning the risks of exposure have been available in the pharmacy and medical literature since 1985.[1,2] OSHA publishes an electronic Technical Manual on Controlling Occupational Exposure to Hazardous Drugs[3]. The National Institute for Occupational Health and Safety (NIOSH) publishes both an Alert on Preventing Occupational Exposure to Antineoplastic and Other Hazardous Drugs in Health Care Settings[4] and a List of Antineoplastic and Other Hazardous Drugs in Health Care Settings.[5]

Though much of the original work on occupational exposure focused on antineoplastic agents, the hazards of other agents is now clear.[6] Hazardous drugs are those that exhibit any of the following properties:

- Carcinogen
- Genotoxin
- Teratogen
- Reproductive toxin
- Organ toxicity at low doses
- Structure or toxicity similar to drugs classified as hazardous

USP <800> supplements – and does not replace – the existing USP chapters concerning compounding. USP <795> Pharmaceutical Compounding – Nonsterile Preparations, USP <797> Pharmaceutical Compounding – Sterile Preparations, and related chapters all must be considered when compounding.[7]

Recommended Steps for Compliance With USP <800>

1. Identify the hazardous drugs and the dosage forms you handle
   - Use the 2014 NIOSH List of Hazardous Drugs to identify the agents and dosage forms you handle at your pharmacy. NIOSH sorts the hazardous agents into three tables: antineoplastic, non-antineoplastic, and reproductive-only hazards. The tables identify the reason the drug is on the list, and provide a link for further information.
   - Some dosage forms mitigate some of the hazards. For example, if you purchase FDA-approved final oral dosage forms and dispense them without alteration, your exposure is less than if you need to crush tablets to make a suspension.
2. Determine the containment approach you will take, consistent with the requirements in proposed <800>.
   - <800> allows two approaches: either follow all of the containment strategies listed in <800>, or – for specific dosage forms of specific hazardous drugs (HDs) on the list – perform an Assessment of Risk and identify the alternative containment strategies you will take.
   - If you work with Active Pharmaceutical Ingredient (API) of any of the HDs on the list, you must use all the containment strategies listed in <800>.
   - If you manipulate any of the antineoplastics on the list, you must use all the containment strategies listed in <800>. Only counting or packaging is not considered manipulation. However, you still need to identify those agents you only count or package (such as methotrexate tablets) as hazardous, and take appropriate precautions. These precautions need to include disclosure to your personnel that they are handling an HD and might include:
     - Use of a separate counting tray and spatula
     - Cleaning the tray with an agent intended to deactivate and decontaminate HD areas
3. If you decide to use an Assessment of Risk approach, the assessment must be specific to the dosage form you handle, must be reviewed annually, and documentation of the Assessment and review must be available.
4. You must have appropriate facilities if you manipulate any of the HDs on the NIOSH list.
   - The facility requirements are designed to contain and appropriately exhaust potential hazardous contamination.
   - All manipulation of HDs that are not entity-exempt must be

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Preparing for USP <800> Hazardous Drugs – Handling in Healthcare Settings

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compounded in a room (called the Secondary Engineering Control) that meets the facility requirements in <800>.
  - Separate room
  - Negative pressure
  - Vented to the outside
  - An appropriate number of air changes per hour
- Nonsterile compounding requires a Containment Ventilated Enclosure as a Primary Engineering Control, such as a properly functioning powder hood, used within the Secondary Engineering Control
- Sterile compounding requires a Biological Safety Cabinet (BSC) or Compounding Aseptic Containment Isolator (CACI) as the Primary Engineering Control, used within the Secondary Engineering Control

5. You must use appropriate Personal Protective Equipment (PPE).
   - USP <795> for nonsterile compounding and USP <797> for sterile compounding have specific requirements for PPE.
   - The American Society for Testing and Materials (ASTM) has a performance test for permeation of antineoplastic agents through materials used for gloves. Use gloves which meet ASTM 6978 for working with hazardous drugs.
6. Policies need to reflect requirements in USP chapters, your state board of pharmacy regulations, accreditation organization standards, and best practices.
   - Develop and periodically review policies and procedures.
   - Inform your personnel concerning the risks of working with hazardous drugs, and have a signed statement from each employee in his/her personnel file.
   - Review the Medical Surveillance section of proposed USP <800>.
   - Consider having a "spill drill" as an inservice. Be sure your staff would know the steps to take if there was a spill of a hazardous drug.

Implementation of the requirements of USP <800> provides you and your employees protection from known hazards.

Reference sources available on request.

SDPhA Legislative Days
January 26-27, 2016

Legislative Days provides you with an opportunity to visit face-to-face with your state legislators, express your opinions, and observe the legislative process.

Tuesday, January 26

- Networking Social and Dinner at 6 p.m. at the ClubHouse Hotel & Suites/ RedRossa in Pierre for student pharmacists, pharmacists, and pharmacy technicians
- Legislative Update

Wednesday, January 27

- SDSU College of Pharmacy student pharmacists will provide healthcare screenings in the President's and Speaker's lobbies (third floor of the Capitol) starting at 7 a.m.
- Pharmacists may visit with legislators.
- A light breakfast will be provided.

Registration Deadline: January 19, 2016

Hotel Reservations:
ClubHouse Hotel & Suites
808 W. Sioux Ave.
Pierre, SD 57501
605-494-2582

Capitol Photo Courtesy of SD Department of Tourism

Legislative Days 2016 Registration Form

Name: _____

Address: _____

City: _____ State: _____ Zip: _____

Email: _____

Pharmacy/Organization: _____

Registration Deadline: January 19, 2016

Please send registration form to:

SDPhA
PO Box 518
Pierre, SD 57501

OR Phone: (605) 224-2338
Fax: (605) 224-1280
Email: sdpha@sdpha.org

We hope to see you in Pierre as we address important pharmacy issues!

91st SOUTH DAKOTA LEGISLATIVE SESSION CALENDAR

2016 ◈ 38 Legislative Days

Please refer to the Joint Rules, Chapter 17 for complete information on page 2

	Sun	Monday	Tuesday	Wednesday	Thursday	Friday	Sat
January 2016	**3**	**4**	**5**	**6**	**7**	**8**	**9**
	10	**11**	**12** Session Opens 12 Noon (CST) *State of the State* L.D. 1	**13** *State of the Judiciary* L.D. 2	**14** *State of the Tribes* L.D. 3	**15** L.D. 4	**16**
	17	**18** *Martin Luther King Jr. Day*	**19** Executive orders filed (Constitution, Art. IV, Sec. 8) L.D. 5	**20** L.D. 6	**21** *Jt. Memorial Service 3:00 pm* L.D. 7	**22** Concurrent Resolution limited introduction deadline (J.R. 6B-3) L.D. 8	**23**
	24	**25** L.D. 9	**26** L.D. 10	**27** L.D. 11	**28** Final day for unlimited bill & joint resolution introduction (J.R. 6B-3) Must be at the front desk TWO HOURS prior to session. L.D. 12	**29**	**30**
February 2016	**Jan 31**	**Feb 1**	**2** All bill drafts with sponsors due back in LRC L.D. 13	**3** L.D. 14	**4** Final day for introduction of individual bills and joint resolutions Must be at the front desk TWO HOURS prior to session. L.D. 15	**5** Final day for introduction of committee bills and joint resolutions Must be at the front desk TWO HOURS prior to session. L.D. 16	**6**
	7	**8** L.D. 17	**9** L.D. 18	**10** L.D. 19	**11** L.D. 20	**12**	**13**
	14	**15** *Presidents Day*	**16** L.D. 21	**17** L.D. 22	**18** L.D. 23	**19** L.D. 24	**20**
	21	**22** Last day to use J.R. 5-17 L.D. 25	**23** Last day to move required delivery of bills or resolutions by a committee to the house of origin L.D. 26	**24** Last day to pass bills or joint resolutions by the house of origin Last day for introduction of concurrent resolutions and commemorations L.D. 27	**25** L.D. 28	**26**	**27**
March 2016	**Feb 28**	**Feb 29** L.D. 29	**Mar 1** L.D. 30	**2** L.D. 31	**3** J.R. 5-13 in effect L.D. 32	**4**	**5**
	6	**7** Last day to move required delivery of bills or resolutions by a committee to the second house L.D. 33	**8** Last day for a bill or joint resolution to pass both houses L.D. 34	**9** Reserved for concurrences or conference committees L.D. 35	**10** Reserved for concurrences or conference committees L.D. 36	**11** L.D. 37	**12**
	13	**14** ←	**15**	**16** Recess	**17**	**18** →	**19**
	20	**21** ←	**22**	**23** Recess	**24**	**25** →	**26**
	27 *Easter*	**28**	**29** Reserved for consideration of gubernatorial vetoes L.D. 38	**30**	**31**		

Prepared by the South Dakota Legislative Research Council based on the Joint Rules adopted on March 11, 2015

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91st LEGISLATIVE SESSION DEADLINES

2016 ◈ 38 Legislative Days

Legislative day	Calendar Date	Deadline
L.D. 1	January 12	Session Opens—12 Noon (CST)
L.D. 5	January 19	Executive orders filed (Constitution, Art. IV, Sec. 8)
L.D. 8	January 22	Concurrent Resolution limited introduction deadline (J.R. 6B-3)
L.D. 12	January 28	Final day for unlimited bill & joint resolution introduction (J.R. 6B-3) *Must be at the front desk TWO HOURS prior to session*
L.D. 13	February 2	All bill drafts with sponsors due back in LRC
L.D. 15	February 4	Final day for introduction of individual bills and joint resolutions (Chapter 17) *Must be at the front desk TWO HOURS prior to session*
L.D. 16	February 5	Final day for introduction of committee bills and joint resolutions (Chapter 17) *Must be at the front desk TWO HOURS prior to session*
L.D. 25	February 22	Last day to use J.R. 5-17 (Chapter 17)
L.D. 26	February 23	Last day to move required delivery of bills or resolutions by a committee to the house of origin (Chapter 17)
L.D. 27	February 24	Last day to pass bills or joint resolutions by the house of origin Last day for introduction of concurrent resolutions and commemorations (Chapter 17)
L.D. 32	March 3	J.R. 5-13 in effect (Chapter 17)
L.D. 33	March 7	Last day to move required delivery of bills or resolutions by a committee to the second house (Chapter 17)
L.D. 34	March 8	Last day for a bill or joint resolution to pass both houses (Chapter 17)
L.D. 35	March 9	Reserved for concurrences or conference committees (Chapter 17)
L.D. 36	March 10	Reserved for concurrences or conference committees (Chapter 17)
L.D. 38	March 29	Reserved for consideration of gubernatorial vetoes (Chapter 17)

Manual of the Legislature, Joint Rules (Adopted on March 11, 2015)

Chapter 17. Legislative Deadlines

Legislative Action	40 Day Session
Final day for unlimited introduction of individual bills and joint resolutions[2]	12th Day
Final day for introduction of individual bills and joint resolutions[2]	15th Day
Final day for introduction of committee bills and joint resolutions[1&2]	16th Day
Last day upon which Joint Rule 5-17 can be invoked on a bill or resolution in either house	26th Day
Last day to move required delivery of bills or resolutions by a committee to the house of origin[1]	27th Day
Last day to pass bills or joint resolutions by the house of origin[1]	28th Day
Final day for introduction of concurrent resolutions and commemorations	28th Day
During the seven final legislative days motions to reconsider and reconsideration being made upon the same day (any time before adjournment)	34th Day on
Last day to move required delivery of bills or resolutions by a committee to the second house[1]	35th Day
Last day for a bill or joint resolution to pass both houses[1]	36th Day
Two days preceding the final two days of a legislative session shall be reserved for concurrences or action upon conference committee reports	37th Day 38th Day
The final day of a legislative session is reserved for the consideration of vetoes	40th Day

[1]This deadline does not apply to the general appropriations bill.

[2]Bills and joint resolutions must be submitted to the Legislative Research Council at least 48 hours prior to this deadline, pursuant to Joint Rule 6A-5.

17-1. Calendar less than 40 days. If a Session Calendar is adopted for a period of thirty-five (35) days to thirty-nine (39) days, inclusive, the legislative deadlines set forth in Chapter 17 of the Joint Rules shall be decreased as follows:

(1) Decrease the deadlines occurring after the 16th day but prior to the 34th day by one (1) day for every two (2) days by which the length of the adopted calendar is less than forty (40) days;

(2) Decrease the deadlines occurring on and after the 34th day by the same number of days by which the length of the adopted calendar is less than forty (40) days.

Prepared by the South Dakota Legislative Research Council based on the Joint Rules adopted on March 11, 2015 2

AND THE LAW by Don R. McGuire Jr., R.Ph., J.D.

This series, Pharmacy and the Law, is presented by Pharmacists Mutual Insurance Company and your State Pharmacy Association through Pharmacy Marketing Group, Inc., a company dedicated to providing quality products and services to the pharmacy community.

Delivering the Prescription

A lot has been written about quality processes in the dispensing function and many good ideas are out there; the Two Dosage Unit rule, shelf talkers, NDC checks, etc. But one thing that isn't often talked about is getting the right prescription to the right patient. All of the safety and quality processes go for naught if the prescription is given to the incorrect patient. Consider these two examples.

Tom Smith comes into Anytown Pharmacy to pick up his wife's prescription. In the will-call bin with her prescription was also one for Ron Smith. The technician thought Tom had said Ron and assumed that the second prescription was his. She gave Tom both prescriptions. The error was discovered when Tom returned home.

Paul was making a delivery for City Pharmacy one afternoon and pulled into a driveway shared by 101 and 103 Main Street. Mary was standing in the driveway. "You got here just in time; I'm headed out for my doctor's appointment." Paul ignored his normal protocol at the insistence of the patient. He gave the prescriptions to Mary who left for her appointment. Paul discovered later that the prescriptions were for a patient who lived at 103, but Mary lived at 101.

Many times pharmacists don't think about the actual hand-off to patients. They would be surprised to learn what happens at the delivery point. For example; patients step forward when someone else's name is called, patients or staff hear names incorrectly, patients with the same or similar names appear at the pharmacy at the same time, or patients in the same extended family with the same name utilize the same pharmacy. Unfortunately, claims history tells us that these patients are very likely to take the medications that they go home with or get delivered to them. This occurs even when their name isn't on the label, they have never heard of the drug or their own doctor's name is not on the prescription. Also unfortunately, juries are less inclined to place blame on the patient for these sorts of mishaps. Fair or not, the responsibility falls on the pharmacy to get the right medication to the right patient. A number of solutions are available.

Previous articles have extolled the value, to both the patient and the pharmacist, of patient counseling. This article won't repeat all of those benefits, but patient counseling is an effective tool to discover errors at the time of delivery. But patient counseling is not always needed or required, so we need other tools. Asking the patient to produce identification and requiring the staff to review prior to handing over the medications is one method. Others have asked the patient for a second identifier to differentiate patients with similar names; address, phone number or social security number. This has to be done as discreetly as possible to protect the patient's privacy. It is also helpful to ask additional questions of persons picking up others' prescriptions; what is their relationship to the patient or ask some of the secondary identifiers above. Delivery drivers should never deviate from their protocols and should verify the address and identity of the patient when delivering medications. Date, time and to whom the medications were delivered should all be documented.

Most of the time, delivery to the patient is not a problem, so little attention is paid to it. But, ignoring this step of the dispensing process creates a weak point in the pharmacy's overall quality initiative. History shows us that patients will take whatever medication is given to them, even when it makes no rational sense to do so. It is essential that this final step in the dispensing process gets the same attention as other steps in the process. Once the medication is in the wrong hands, it is impossible to predict the outcome.

© Don R. McGuire Jr., R.Ph., J.D., is General Counsel, Senior Vice President, Risk Management & Compliance at Pharmacists Mutual Insurance Company.

Continuing Education for Pharmacists

Pharmacist Patient Assessment Skills for Optimizing Self-Care, Part 1 of 4: Introduction and Evaluation of Skin, Hair and Nails

Knowledge-based CPE

Goal -To enhance pharmacists' knowledge regarding patient assessment.

Learning Objectives - Upon successful completion of this course, the pharmacist should be able to:

1. Utilize communication skills that enhance information exchange between the patient and the pharmacist.
2. Effectively evaluate a patient using the QuEST/SCHOLAR process for OTC counseling.
3. Define characteristics of febrile patients that indicate a need for physician evaluation.
4. Assess the skin, hair and nails to identify common medical conditions.
5. Recognize opportunities for utilizing basic patient assessment skills in the ambulatory care setting.

Messerschmidt

Oehlke

Kimberly A. Messerschmidt, Pharm.D.
Professor of Pharmacy Practice, SDSU College of Pharmacy
Clinical Pharmacist, Sanford USD Medical Center

and

Kelley J. Oehlke, Pharm.D.
Residency Program Director, Clinical Pharmacy Specialist, Ambulatory Care
Sioux Falls VA Medical Center

Introduction

JW is a 28-year-old female who approaches the pharmacy reporting that she has been experiencing a cold for several days. The patient explains that the rhinorrhea has resolved but the dry, hacking cough persists, waking her up at night. She asks you what cough syrup would be best to treat her problem. You take her temperature, which is normal, and complete a respiratory assessment with no significant findings. Upon further questioning to review her symptoms and medical history, you determine the patient is an appropriate candidate for self-care and proceed to assist her with the selection of an appropriate over the counter (OTC) product.

As illustrated in the case above, one of the most important roles of a community pharmacist is to help patients make decisions regarding self-care, and to provide counseling regarding proper use of the products selected. In order to do this in a safe and appropriate manner, the pharmacist must use effective communication skills, both when gathering patient information, and also when providing information regarding medication use.

Over the counter medication counseling differs from prescription drug counseling in that it generally requires more exploratory questions on the part of the pharmacist in order to clarify and assess the patient's needs and determine the appropriateness of self-care. QuEST is an acronym used to describe a systematic approach developed by the American Pharmacists Association (APhA) that was designed to help pharmacists elicit the information needed and provide appropriate recommendations regarding self-care.[1]

QuEST Process[1]

- **Qu**ickly and accurately assess the patient (e.g., symptoms, current medications and medical conditions, allergies)
- **E**stablish that the patient is an appropriate candidate for self-care
- **S**uggest appropriate strategies for self-care
- **T**alk with the patient about:
  - √ The medication's actions, proper administration, and potential adverse effects
  - √ What to expect from treatment
  - √ Appropriate follow-up

The first step of the QuEST process is to quickly and accurately assess the patient, and this first involves talking with him or her in order to gather the needed information. The pharmacist's physical appearance and attitude can either hinder or enhance this communication; therefore, it is always important to be well groomed and professionally dressed. In most cases, a white lab coat helps convey a professional image, but it may not be the optimal apparel when working with children or psychiatric patients. In these instances, more casual attire (i.e., no white lab coat) may be more appropriate and will usually help the patient feel less threatened and more at ease. A concerned, unhurried and nonjudgmental approach will also help promote open and honest communication. Always strive to make the interview area as comfortable and private as possible. Ideally, the area should be relatively quiet and free of any distractions or interruptions. It should also be clean, well organized, and have a sufficient amount of lighting.

Good communication skills are essential to a successful interaction. Unless you are very familiar with the patient, always start the interview by introducing yourself with your name and professional title. It is generally best to address adult patients by their last name and appropriate title (e.g., Mr. Johnson) until you are invited to do otherwise. In some cultures, using a patient's first name is a sign of disrespect. If you are unsure of how to pronounce their name, don't be afraid to ask. It is also imperative to know who the patient is, for example, are they asking for a recommendation for themself, or for another family member.

While gathering information from the patient, make sure to avoid judgmental or leading statements. Questions such as "You certainly don't smoke around your children, do you?" will only make a patient feel bad and hinder open and honest communication. Always use language and terminology the patient can easily understand (e.g., stroke instead of cerebrovascular accident). A combination of open and closed-ended questions may be used, but in general, open-ended questions (i.e., the kind starting with who, what, where, why or when) will elicit a more complete and accurate response than closed-ended questions (i.e., those with a yes or no answer). Closed-ended questions are best for clarifying specific details once you have gathered the general information (e.g., "Our records show that you usually get a flu shot each year. Have you received your vaccination yet?").

True or False? *It is always important to use medical terminology when communicating with patients so they know you are a professional and they can trust your recommendations.*

Non-verbal communication also impacts both the quality and quantity of information shared between the patient and the pharmacist. Use your body language to convey an interested and unhurried impression. An open and relaxed posture, with arms and legs uncrossed, shows interest and encourages conversation and trust. Good eye contact helps you recognize subtle non-verbal cues in the patient's body language. Whenever possible, come out from behind the counter and position yourself at the patient's eye level. This usually makes the patient feel more comfortable and less like they are being looked down upon. Maintaining an optimal "social distance" of three to five feet between yourself and the patient is usually comfortable for most individuals.

To get a complete picture of the problem, it is important to know exactly what kind of information needs to be collected. The SCHOLAR acronym provides a systematic method of evaluating a symptom by collecting pertinent information about its history and present status[1]. Each symptom has seven attributes that must be considered and evaluated. These seven characteristics include:

- **S**ymptoms: What is the current symptom of concern? Are there any other associated symptoms?
- **C**haracteristics: (e.g., quality, quantity, timing) How severe is the symptom? Does it interfere with daily activities?
- **H**istory: What was the patient doing when the symptom started? Has the patient ever had this symptom before?
- **O**nset: When did the symptom start? Did it come on gradually or suddenly?
- **L**ocation: Where is the symptom located? Is it in a specific area, or is it generalized?
- **A**ggravating factors: What makes the symptom worse? (e.g., activity, rest, eating, a recent medication change)
- **R**emitting/relieving factors: What makes the symptom better? (e.g., activity, rest, eating, medication)

It is important to remember that positive findings (e.g., fever and chills present), as well as negative findings (e.g., no nausea, vomiting or diarrhea) should be noted. As you explore these attributes, you will come to have a much better understanding of the nature of the problem and it will help you decide whether self-treatment or physician referral is the most appropriate course.

During this initial assessment, it is also important to ask about current medications, other co-existing medical conditions (including pregnancy and lactation), and known medication allergies. Don't forget to ask specifically about OTC drugs, herbals and dietary supplements. If the patient denies taking non-prescription medications, ask about common medical conditions such as the frequency of headaches or minor aches and pains and how they are treated.

Once you have completed the initial patient interview, you may need to perform some basic physical assessments in order to complete the picture (e.g., measure blood pressure, examine a rash or sore throat). In order to decrease patient anxiety, always explain what you are about to do. Also, make sure the examination area is comfortable and private and any needed equipment or supplies are readily available.

GENERAL

Some general observations about the patient's outward appearance, mood and behavior can sometimes provide valuable clues about his or her mental and physical health. Does the patient hear you well when you speak? Do they rise from their chair easily, or do they grimace with pain? Do they ambulate without difficulty? Is there any involuntary motor activity? Do they show any obvious signs of respiratory distress, pain or anxiety? Does the patient appear frail or malnourished? Is excessive weight adversely affecting their health? Is their clothing appropriate for the weather? Is their speech clear and appropriate? Normally a patient's physical appearance should correlate with their stated age. When an individual appears significantly older, it may be a sign of chronic disease or poor physical care (e.g., alcoholism or malnutrition).

If an ongoing infectious process is suspected, an assessment of body temperature may provide an important clue regarding the etiology of a patient's symptoms. Electronic thermometers have essentially replaced glass thermometers due to environmental and health concerns associated with mercury. The average normal body temperature in adults, when measured orally, is 37°C (98.6°F), but this can vary considerably, ranging from 35.8°C (96.4°F) in the early morning hours, up to 37.3°C (99.1°F) in the evening. The axillary (under the arm) route is generally reserved for infants and toddlers, but it may also be used in adults when the oral route is not accessible. Normal axillary temperatures in adults are around 36.5°C (97.7°F), which is approximately 0.5°C (1°F) lower than the oral route. For tympanic membrane temperature measurement, infrared technology provides a reading by measuring blood flow in the tympanic membrane. Ear temperature reflects the body's temperature because the tympanic membrane shares its blood supply with the hypothalamus. Although tympanic thermometers are simple to use, accurate measurement depends on following manufacturer's instructions. An advantage to this type of measurement is that results may be obtained in seconds, making them ideal for use in the clinic or hospital setting. Referral guidelines for febrile patients are listed in Table 1.

In general, a fever that is lower than 38.9°C (102°F) in an adult doesn't need to be treated unless the patient is very uncomfortable. Aspirin products should not be recommended for use in any child with a suspected viral illness due to a potential association with Reye's syndrome.

True or False? *Any body temperature greater than 98.6 °F is considered a fever and should be treated.*

SKIN, HAIR AND NAILS

Due to the size and complexity of the skin, susceptibility to pathologic conditions is high. The pharmacist's role is important, as many of the conditions may be treated with OTC medications while others are more serious and require a physician referral.

Skin

Overall assessment of the skin includes identifying changes in color, texture, temperature, turgor (elasticity or resiliency), odor, and the presence or lack of lesions. Table 2 describes basic medical terms that are commonly associated with the skin. Pharmacists should familiarize themselves with these terms.

Table 1. Characteristics of febrile patients that indicate a need for physician evaluation[2]

A rectal temperature of 38°C (100.4°F) or higher in a child younger than 3 months
A temperature of 38.9°C (102°F) or higher in a child 3 month or older
Any oral temperature over 39.4°C (103°F)
A fever lasting more than three days, or more than one day in a child less than 2 years of age
Symptoms of a severe infection such as meningitis (e.g., severe headache, light sensitivity, stiff neck, confusion)
Risk of dehydration (e.g., severe or persistent vomiting or diarrhea, unable to keep liquids down)
Difficulty breathing or chest pain, or a history of significant heart or lung disease
Abdominal pain, or pain with urination
Altered mental status, or extreme listlessness or irritability
Severe throat pain or swelling
Unusual skin rash
A child with a history of febrile seizures
Any patient in an immunocompromised state

Table 2. Terms describing the clinical presentation of the skin

Term	Description	Examples
Macule	A flat lesion, flush with the skin with a color different from the surrounding tissue.	Freckles, flat moles (nevi), petechiae, measles, scarlet fever rash
Patch	A macule which exhibits some scale or fine wrinkles and is greater than 1 cm in diameter.	Vitiligo, portwine stains, Mongolian spots, café au lait patch
Papule	A solid, elevated lesion less than 0.5 cm in diameter.	Wart (verruca), elevated moles, lichen planus
Plaque	A lesion greater than 0.5 cm in diameter but with marginal depth.	Psoriasis, seborrheic and actinic keratoses
Lichenification	Thickening of the skin which can be seen as well as palpated and which has ridged skin markings.	Chronic dermatitis
Nodule	A lesion greater than 0.5 cm in both width and depth.	Erythema nodosum, lipomas
Wheal	A transitory papule or plaque arising out of edema of the dermis which almost always produces pruritis.	Insect bites, urticaria (hives), allergic reaction
Cyst	A nodule containing a liquid or semi-solid which can be expressed.	Sebaceous cyst, cystic acne
Vesicle	A blister less than 0.5 cm in diameter filled with clear liquid	Varicella (chickenpox), herpes zoster (shingles)
Bulla	A blister more than 0.5 cm in diameter filled with clear liquid.	Blister, pemphigus vulgaris
Pustule	A vesicle filled with a purulent liquid.	Impetigo, acne
Crust	Exudate from a lesion which has dried on the skin.	Scab on abrasion, eczema
Scale	Aggregation of loose, hyperkeratotic cells of the stratum corneum. They normally are dry and appear to be white in color.	Flaking of skin with seborrheic dermatitis following scarlet fever, or flaking of skin following a drug reaction; dry skin
Fissure	A thin tear of the epidermis which may extend to the dermis.	Athlete's foot, cracks at the corner of the mouth
Erosion	Wider than a fissure but limited to the epidermis.	Varicella, variola after rupture
Ulcer	Destruction of the epidermis (with or without dermal injury) which exposes the dermis.	Decubiti, stasis ulcers

Inflammatory Conditions of the Skin

Common inflammatory skin conditions include contact dermatitis, acne, eczema, and diaper rash. Contact dermatitis presents as a rash that is divided into two types, irritant or allergic. The rash may appear within hours (irritant) to several days (allergic) and is usually confined to the area of contact. Examples of causative agents for an irritant type rash include soap, detergents, cosmetics and any substance that may irritate the skin. The patient may present with erythema, vesicles, crusts, scaling and/or pruritis. Allergic dermatitis may be caused by such things as poison ivy, metals (e.g., nickel found in jewelry), latex, and drugs such as neomycin. Allergic dermatitis may appear as papules, vesicles, erosions, crusts, erythema, blackheads, whiteheads and/or pruritis. It is important to remember the first step in treatment is to remove the offending agent.

Acne presents as comedones (blackheads), closed comedones (whiteheads), papules, pustules, and nodules. Generally, acne is most common during puberty due to the androgenic hormones and is most frequently found on the face and upper trunk. Mild acne may be treated with OTC products but moderate to severe acne should be referred to a physician for care.

Eczema often appears during infancy or early childhood and is commonly found in the skin folds (e.g., elbow, knee). Risk factors may include family history of allergic rhinitis, hay fever, and asthma. Eczema may present with pruritis, erythematous patches, plaques, or papules and lichenification from chronic scratching. Remember that the best recommendation is to get the patient to stop scratching. Initial self-treatment may involve cold packs, wet dressings, skin hydration, topical steroids and oral antihistamines. If these measures are not sufficient, then the patient should be referred to their physician.

Diaper rash is most commonly found in infants and may be caused by irritation (e.g., alkaline urine or stool), moisture (e.g., occlusion, infrequent diaper changes), *Candida albicans*, and chemicals (e.g., laundry detergents, fabric softeners, soap, medications, or lotions applied locally). Treatment includes keeping the area dry with frequent diaper changes, washing the area with plain water, avoiding friction when drying the skin, and using a skin protectant.

Infectious Conditions

Examples of infectious skin conditions include impetigo, fungal infections, cellulitis, abscesses and Community-Acquired Methicillin-Resistant Staphylococcus Aureus (CA-MRSA). Table 3 depicts the various conditions and their common signs and symptoms. Bacterial conditions should be referred to a physician.

Table 3. Common infectious skin conditions

Infectious Condition	Characteristics
Impetigo	• Caused by bacterial infection • Risk factors may include warm temperature with high humidity, any breakage in the skin, poor hygiene, pre-existing skin disorders • Lesions with purulent exudate that dries and forms honey-colored crusts
Fungal infections	• Most common types: tinea pedis (athletes foot), tinea corporis (ringworm), tinea cruris (jock itch) • Erythema, scaling and pruritis
Cellulitis	• Bacterial infection • Hot, painful, red, non-elevated, poorly defined margins
Abscess	• Contains necrotic debris, bacteria and inflammatory cells • Open or closed sore, domed nodule, red and may drain fluid
Community-Acquired MRSA	• Appear as pustules or boils which often are red, swollen, painful, or have pus or other drainage • Lesions often have necrotic centers similar to spider bites

Drug-induced Conditions

Medications may also be a culprit in various skin conditions. Most commonly, skin reactions present as urticaria, angioedema, fixed drug eruptions, Stevens-Johnson syndrome (SJS), toxic epidermal necrolysis, or photosensitivity reactions. The medications causing the skin condition and the reactions themselves are generally unpredictable and can range from mild to severe. Anticonvulsants, sulfonamide antibiotics, allopurinol, nonsteroidal anti-inflammatory drugs (NSAIDs) and dapsone are some of the more common examples of medications that are known to cause drug reactions.[3] Patients should contact their physician if they have suspicion of a drug-related skin condition; however, most reactions disappear within a few days after discontinuing the agent. Symptomatic control of the affected area is the primary intervention.

Stevens-Johnson syndrome initially flares up with flu-like symptoms, followed by a rash (painful, red or purplish in color) which spreads and blisters, with eventual skin shedding. SJS should be immediately referred to a physician since hospitalization is often required. The underlying cause must be identified and permanently avoided. If a specific medication is identified as the cause, then additional medications with cross-sensitivity must also be avoided. Potential non-drug causes of SJS include various infections such as herpes, HIV, typhoid, hepatitis, diphtheria and influenza, as well as physical causes like radiation therapy or even UV light.

Other skin concerns of patients may be related to skin cancer. It is important to remember the acronym ABCDE for common signs and symptoms of melanoma:

Asymmetry

Border is irregular

Color is changed or variegated

Diameter is greater than 6 mm (eraser-end of a pencil)

Evolution - enlargement or elevation of a mole over time

Generally, a patient should see a physician if any of these are present.[3]

Hair

Assessment of the patient may also include identifying changes in hair loss or growth, distribution, texture, and color. It is important to ask the patient if the change had a sudden or gradual onset, was symmetric or asymmetric, or was a reoccurrence of a previous condition. Associated symptoms such as pain, itching, lesions, presence of systemic disease, high fever, or recent psychological or physical stress should be addressed. Examples of common hair disorders include folliculitis (inflammation of the hair follicle), furuncles (deep-seated folliculitis caused by *Staphylococcus aureus*) and carbuncles (boils that can penetrate into the subcutaneous layer), alopecia (baldness), and hirsutism (abnormal hair growth).

Nails

Inspection of the nails involves evaluation of their color, length, configuration, symmetry, and cleanliness. Any change in the structure, shape or color may be suggestive of a potential systemic disease and should be referred to a physician.

Inspect the nail for atrophy, hypertrophy, abnormal shape (spoon nails can be caused by iron deficiency or Raynaud's syndrome), pitting (seen in psoriasis), color changes (caused by kidney or pulmonary disease or cancers), and clubbing (associated with chronic hypoxia). Evaluate the nail bed for separation from the nail plate (onycholysis) and hemorrhage. Examine the nail folds for erythema, inflammation, swelling, tenderness and separation from the nail plate.

QuEST PROCESS CONTINUED

After the initial patient assessment and interview are completed, the second step of the QuEST process involves determining whether or not the patient is an appropriate candidate for self-care. Most medical conditions that can be safely self-treated are characterized as having no severe symptoms, and no symptoms that are persistent or repeatedly return without an identifiable cause. Additionally, patients should not pursue self-treatment in an attempt to avoid medical evaluation and treatment by a physician. Based upon this evaluation, a decision can be made regarding referring the patient to a physician, or making an appropriate self-treatment recommendation. Strategies for self-care may include non-pharmacological measures such as rest, hydration, dietary alterations, and suggestions for preventing recurrence of the problem, as well as non-prescription medications.

If self-treatment is determined to be appropriate, the final step of the process involves talking with the patient about your recommendations. Key information to convey should include a discussion of the following:

- Medication actions and what to expect from treatment (including expected time course)
- Specific administration instructions
- The most common adverse effects and how to manage them
- Directions for appropriate follow-up (when to contact their physician if they don't experience the desired effect)

Since a majority of information shared between patients and pharmacists consists of verbal or written instruction, pharmacists need to be sure the information is being provided at a level the patient can fully understand. Functional health literacy (FHL) is a measure of a person's ability to perform basic tasks within the context of healthcare (e.g., reading medication labels or insurance forms, understanding and performing tasks associated with proper medication administration), and problems with FHL are one of many factors that can contribute to nonadherence. Millions of Americans are functionally illiterate when it comes to healthcare, and as a result, these patients are likely to have difficulty taking medications as intended by the prescriber. Because of potential embarrassment, patients may be reluctant to admit lack of understanding, and this can make it difficult to determine the appropriate level of information to offer. A preferred method of assessing understanding is to use the "teach back" method where the patient is asked to restate the instructions back to the provider (e.g., "Can you tell me in your own words how you should take this medication?").

True or False? *Problems with functional health literacy can make it difficult for a patient to understand how to take their medications appropriately.*

Once you have verified patient understanding, make sure you have allowed the patient to express all of their concerns. Slowing down and taking the time to really listen to the patient will help create an atmosphere of mutual trust and respect. When closing the interview, always thank the patient for his or her time and extend an offer to be available to answer any further questions should they arise.

CONCLUSION

The pharmacist in the introductory case could have easily directed JW to the cough syrup aisle. However, by using the QuEST process, the pharmacist was able to accurately assess the nature of her cough and determine that she was an appropriate candidate for self-care. Patient assessment skills, along with strong communication skills, are essential for making appropriate self-care recommendations. Together, these skills allow the pharmacist to formulate a complete picture of the patient's overall health status and make the most appropriate recommendations for optimizing patient care.

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ASSESSMENT QUESTIONS

1. Which of the following statements regarding the QuEST/SCHOLAR process is FALSE?
    A. It was developed to give pharmacists a structured format for gathering patient information and providing appropriate recommendations for self-care.
    B. The SCHOLAR method can be used to help evaluate patient symptoms.
    C. The second step of the QuEST process is to determine whether a patient is an appropriate candidate for self-care.
    D. The final step of the QuEST process is to always talk with the patient's physician before making any self-care recommendations.

2. Which of the following promotes good communication between a patient and a pharmacist?
    A. Counseling the patient near the phone so you don't miss any important calls
    B. Using professional language and terminology to demonstrate your expertise in the area
    C. Maintaining an open posture and good eye contact
    D. Using closed-ended questions to make efficient use of your time

3. When evaluating a patient for appropriateness of self-care, it is important to ask about:
    A. Current prescription medications and medical conditions
    B. Dietary supplements and OTC medications
    C. Current symptoms
    D. All of the above

4. A child with a fever of 102.5° F should be:
    A. Self-treated with an OTC anti-pyretic such as acetaminophen or ibuprofen
    B. Referred to their physician for evaluation
    C. Self-treated with appropriate non-pharmacologic measures such as fluids and rest
    D. No treatment or evaluation is necessary

5. A blister less than 0.5 cm in diameter filled with clear liquid is a:
    A. Papule
    B. Cyst
    C. Vesicle
    D. Bulla

6. *ABCDE* is an acronym to help remember the signs and symptoms of:

A. Melanoma
B. Fungal infections
C. Chicken pox
D. Measles

7. Potential causes of Stevens-Johnson syndrome include:

A. Radiation therapy
B. Allopurinol
C. HIV
D. Sulfonamide antibiotics
E. All of the above

8. Stevens-Johnson syndrome is a self-limiting condition that does not require physician referral.

A. True
B. False

9. Patients that are appropriate candidates for self-care include:

A. Adult patients who do not have severe symptoms
B. Adults who have symptoms that recur repeatedly without an identifiable cause
C. Any patient who prefers to use a "natural" approach in order to avoid seeing a physician
D. Most children since OTC treatments are safer than most prescription medications

10. Functional health literacy refers to a person's ability to:

A. Read a physician's handwriting
B. Understand written or verbal health information that is directed toward a patient
C. Use appropriate medical terminology
D. Understand prescribing information in drug information references such as the Physician's Desk Reference (PDR)

11. Aspirin should NOT be recommended for the treatment of a fever in a child with a suspected viral illness due to:

A. The possibility of stomach upset and diarrhea
B. The potential association with Reye's syndrome
C. Poor efficacy when compared to acetaminophen
D. The risk of bleeding

12. Which of the following patients needs to be referred to a physician for further evaluation?

A. An adult patient with a fever accompanied by a severe headache and a stiff neck
B. An elderly patient with a temperature of 101.2°F who is on chronic corticosteroids for her underlying lung disease
C. An otherwise healthy patient with an oral temperature of 103.5°F
D. All of the above

"Pharmacist Patient Assessment Skills for Optimizing Self-Care, Part 1 of 4: *Introduction and Evaluation of Skin, Hair and Nails"*

Knowledge-based CPE

To receive **2.0 Contact Hours** (0.2 CEUs) of continuing education credit study the attached article and answer the 12-question test by circling the appropriate letter on the answer form below. A test score of 75% or better is required to earn credit of **2.0 Contact Hours** (0.2 CEUs) of continuing pharmacy education credit. If a score of 75% (9/12) is not achieved on the first attempt, another answer sheet will be sent for one retest at no additional charge.

The South Dakota State University College of Pharmacy is accredited by the Accreditation Council for Pharmacy Education as a provider of continuing pharmacy education. The Universal Program Identification number for this program is: #0063-0000-14-041-H01-P.

Learning Objectives - Pharmacists*: 1. Utilize communication skills that enhance information exchange between the patient and the pharmacist; 2. Effectively evaluate a patient using the QuEST/SCHOLAR process for OTC counseling; 3. Define characteristics of febrile patients that indicate a need for physician evaluation; 4. Assess the skin, hair and nails to identify common medical conditions; 5. Recognize opportunities for utilizing basic patient assessment skills in the ambulatory care setting.*

Circle the correct answer below:

1. A B C D	**5. A B C D**	**9. A B C D**
2. A B C D	**6. A B C D**	**10. A B C D**
3. A B C D	**7. A B C D E**	**11. A B C D**
4. A B C D	**8. A B C D**	**12. A B C D**

Course Evaluation *– must be completed for credit.*	**Disagree**						**Agree**
Material was effectively organized for learning:	1	2	3	4	5	6	7
Content was applicable / useful in practice:	1	2	3	4	5	6	7
Each of the stated learning objectives was satisfied:	1	2	3	4	5	6	7
List any learning objectives above not met in this course: _____							
List any 'learning gaps' that you believe were not addressed: _____							
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IN MEMORIAM

John W. Moriarty

John Willibald Moriarty, 94, a lifelong resident of Brookings, SD, entered eternal life on December 6, 2015, on the feast of St. Nicholas, surrounded by his children.

John W. Moriarty was the oldest of five children born to John Jeremiah and Cecilia Anna Maria (Eibner) Moriarty in their Brookings home on January 3, 1921. John's parents were the inspiration for the family's entrepreneurial spirit, always asking what the next endeavor would be. He received his education in Brookings and graduated from South Dakota State College with a degree in Pharmacy. In 1947, John married Bernice Goven, a farmer's daughter from Turtle Lake, ND. They settled in Brookings and had a family of nine accomplished children.

He worked as a pharmacist before founding Moriarty Construction with his youngest brother Paul in the early 1950's. John and Paul laid sidewalks, constructed houses and built some of the earlier apartment buildings in Brookings. One of the homes was the first entirely electric house in the area. In the early 1960's, John and Paul opened the Bunny Wash 'n Dry to service the campus community. John and his brothers, Joseph, James, Paul, and brother-in-law, Cyril Multhauf, opened the Campus Pharmacy on Medary Avenue where he worked as a pharmacist. Thereafter, in the mid-1960's, the family developed the City Plaza shopping center and opened a new store, The City Drug.

During this time, John and his family continued to build housing in Brookings to serve the needs of its residents, and develop commercial properties for industries seeking to relocate to Brookings. In the early 1970's, the Moriarty family expanded the City Plaza and added several more businesses to meet the growing needs of Brookings. In addition to planning many future developments for Brookings, John worked in the retail businesses at the City Plaza until the 1990's.

Simultaneously, he and his brothers, working together, ventured into agriculture and this became one of his greatest passions. This led to related endeavors, including raising livestock and poultry, and in the 1980's, with foresight and regard for others, he planted an expansive apple orchard which became the scene of apple pickings for community groups and annual family reunions in the fall. He also established the first Farmers' Market in Brookings on the City Plaza parking lot and until just recently, John could be found there on Wednesdays and Saturdays selling his apples and farm fresh eggs.

Although he had many successful ventures in business, real estate, and agriculture, his greatest source of pride was the family that he and Bernice reared and the many beautiful grandchildren that followed. The latter loved to spend as much time as they could with their grandpa in his orchard on the creek. John was a lifelong member of St. Thomas More Catholic Church and a charter member of the Knights of Columbus. John and Bernice were both inducted into the equestrian Order of the Holy Sepulchre of Jerusalem in 1982. He was also a member of Rotary International for many years and a member of the SDSC ROTC Drill Team, later known as the '44 Kings.

John is survived by his children, David (Jennifer) of Brookings, Mary Moriarty of Salt Lake City, UT, Patrick Moriarty, MD of Bemidji, Minnesota, the Hon. Joan Moriarty (Gregory) and husband Thomas of St. Louis, MO, Leo (Eleanor) Moriarty, DDS of Webster City, IA, Gerard (Jean) Moriarty of Brookings, SD, and Michael (Maya) Moriarty, DDS of Seward, AK, grandchildren, David, Daniel, Marie, Paul, Mark, Patrick, Joseph and Cecilia Moriarty, Patrick (Katie) Thronson, Gregory, Matthew and Natalie Moriarty, Veronica Gregory, Michael, James (Kristen), Kathleen and Bridget Moriarty, Caroline, Nicholas, Elizabeth, Gabrielle, Bernice and Teresa Moriarty, Maille and M. John Moriarty, and great-granddaughter, Marleigh Moriarty, brothers, Dr. Joseph (Mary) of Coon Rapids, MN, Dr. James (Patricia) of North Oaks, MN, and Paul (Doris) Moriarty of Brookings and many nieces and nephews, and godchildren. Late in life he married LaVonne Schaefer of Brookings. He is also survived by the many friends he made and cherished.

John is preceded in death by his loving wife of 54 years, Bernice (Goven) Moriarty, sons, John Gregory Moriarty, MD, Charles X. Moriarty, DDS, and infant sons, Mathew, Mark, and Phillip, his daughter-in-law Michele (Karaba) Moriarty, his parents, John and Cecilia Moriarty, his sister, Cecilia E. Multhauf and brother-in-law, Cyril J. Multhauf, MD.

John grew up in a home filled with faith, love, and a proud work ethic. Everyone was taught to get along and work together to build for future generations. It was this foundation that shaped his life and the person he became. John's legacy to his family and the people of Brookings was a life filled with kindness, care, mercy, and love for all. Those wishing to honor this legacy may pass on a charitable act of their time, talent, or treasure to someone they meet along life's journey, encouraging them to do the same.

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