Spring Edition 2015 Vol. 29 No. 2

South Dakota Pharmacist

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SOUTH DAKOTA
PHARMACIST

Volume 29 Number 2

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

South Dakota Board of Pharmacy
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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*.

APRIL

17-18 SD Society of Health-Systems Pharmacists (SDSHP)
Annual Conference, Sioux Falls, SD

19 Mobridge District Meeting, Jake's, Pierre, SD
5 pm Social/Dinner
Association Update, CE & Business Meeting to Follow

21 Watertown District Meeting, Hy-Vee Meeting Room, Watertown, SD
7 pm Dinner/Meeting, CE

22 Rosebud District Meeting, Dayspring Coffee Shop, Gregory, SD
6:30 pm Dinner/Meeting/Association Update

23 Black Hills District Meeting, Ramkota/Minerva's, Rapid City, SD
6 pm Social/Dinner/Meeting, CEs (2-3 credit hours anticipated)

30 Sioux Falls District Meeting, Overlook Cafe at the Falls, Sioux Falls, SD
5:30 pm – Display & Social | 6:15 pm – Dinner/Meeting
Student Auction

MAY

9 SDSU Graduation, Brookings

11 Yankton District Meeting, Minerva's, Yankton, SD
6 pm Appetizers | 6:30 pm Program (2 hrs. of CE available)

25 Memorial Day

JUNE

6-10 ASHP Summer Meeting, Denver, CO

JULY

4 Independence Day

AUGUST

1 License Renewal Window Opens

Cover: Lt. Governor Matt Michels, SDPhA Board Members, and SDSU College of Pharmacy Faculty and Students on the Capitol Stairs

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

Busy Bees

Pharmacy is busy. Unbelievably busy. A report from the Pharmacy Workforce Center, formerly known as the Pharmacy Manpower Project, just published results of their 2014 Workforce Survey indicating that pharmacists are performing more patient care activities in a variety of healthcare setting and spending less time in the traditional dispensing role. The report showcases that shift you're all feeling about the importance of your role in providing more patient-centric care and practicing at the top of your scope. Healthcare screenings, immunizations and medication therapy management seem to round out the top three. It validates your profession and further confirms your position as a valued member of the healthcare team. As students graduate from pharmacy schools, I anticipate this trend to continue upward. Our college does an amazing job of preparing young pharmacists to practice at the top of their scope, and the rest of healthcare, I believe will continue to recognize and furthermore, embrace this.

President Lynn Greff and I just returned from the APhA & NASPA meetings in San Diego. It's always a great meeting, and the House of Delegates provided a forum for feisty debates on topics such as cannabis and death penalties. Provider status still retains its position at the top for discussion, and as Lynn indicated, we still need our Congressional Delegation to sign on as co-sponsors of H.R. 592 and S. 314. Both pieces of legislation recognize pharmacists as providers. Please get engaged and let our representatives know it's important! If you need talking points, please let me know.

I would like to extend congratulations to the SDSU College of Pharmacy's APhA-ASP chapter on receiving 2nd runner-up in the Division AAA Chapter Achievement Awards. The award was presented to our students/faculty at the APhA Annual Meeting in San Diego. Eleven SDSU student pharmacists attended the meeting, along with three faculty members. We also enjoyed our annual "Phamily Dinner" at APhA at "The Field", a traditional Irish Pub. This is always a highlight for our staff and board members. It's always fun to share a few laughs and get to know one another a little better.

Along that line, again, ***congratulations to our APhA-ASP chapter on receiving the South Dakota Board of Regents Award for Excellence in Organizational Leadership***. The chapter was specifically recognized for their work in raising money to provide personal protective equipment for health care workers treating Ebola patients in Sierra Leone. The award was presented at the Board of Regents meeting last week. Our students continue to excel at everything they do, and we're so very fortunate they represent our future.

We're happy to announce that SDPhA has been working with APhA and Greg Welch at Indian Health Services (IHS) in Aberdeen to offer the Pharmacy-based Immunization Delivery Program. The "live" day has been scheduled for May 30th at the Sheraton Hotel in Sioux Falls beginning at 8:00 a.m., and approximately twelve hours of online study will be required prior to the training day for pharmacists to be able to acquire certification. We have room for about a dozen more pharmacists, so if this is something you've been itching to do, please give me a call or shoot me an email. The cost is very minimal at $150, and if we see significant activity and requests, we may set up an additional training session in the future. Our thanks to Greg Welch at IHS for his tenacity in helping make this happen! We have excellent trainers coming all the way from Alaska, so we hope you can join us.

As President Lynn mentioned, the 2015 Legislative Session remained relatively quiet for South Dakota Pharmacy. For more information, please refer to Bob Riter's article in this journal. We hope you're staying connected and enjoy receiving your weekly updates.

We're still working to determine if pharmacy will receive a provider reimbursement adjustment, once inflationary factors are taken into consideration. It's a convoluted process, and the Department of Social Services has advised they will be sending us information shortly.

Plans have been finalized for the Association's annual meeting, September 18-19, 2015 at the Lodge at Deadwood. You'll find an agenda and registration information within this journal, and it's also available online at www.sdpha.org. We sure hope you'll join us, as we have an excellent line up prepared for you! We've worked hard to make sure there's something for everyone, and how can you go wrong with a fall conference in the beautiful Black Hills?

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PRESIDENT'S PERSPECTIVE

Lynn Greff | SDPhA President

My Pharmacy Colleagues,

Our Legislative Days event is now over but not forgotten. One of the items I'll remember is the number of students that participated. The number of students is important for a couple of reasons. First, it gave our legislators a chance to see and visit with today's pharmacy students. I was so proud of the professionalism demonstrated by the students and the care they rendered to our legislators. These students were prepared for the hands-on experience of doing a health screening and more importantly they were able to discuss the clinical ramifications of the screenings with the legislators and gave appropriate referral advise for the legislators to see their physician as indicated by the screening. Second, it reinforced to me the overall quality of our pharmacy students. When there is this large a number of quality students, it demonstrates to me that our profession will have a strong and positive force that will bring a focus of care by pharmacists for our patients to the public and ultimately to those who will be payers for that care.

Another important item that I had a chance to sit in on was a committee meeting where our dental colleagues presented a revision of their practice act. I learned what it takes and how to present changes to a practice act as revisions move through the legislative process. As the time becomes appropriate for pharmacy to update our practice act, I know the things I learned will help in our endeavor.

The time is coming for districts to begin having their spring meetings. If you have not heard when your district is going to meet, you can check on our South Dakota Pharmacist's Association website, https://www.sdpha.org/, for an up-to-date list of upcoming events.

Another upcoming and important event is our South Dakota Pharmacist's Association Annual Convention. I want to give you the dates again now so you can block that time off in your personal calendar. It will be held September 18th and 19th, 2015 in Deadwood. We do have a block of rooms reserved at The Lodge at Deadwood but I would encourage you to reserve a room early to make sure you can stay on site at this great hotel. There is no doubt you will take valuable information for your practice back home with you. It is incredible that you can obtain 12 hours of continuing education in such a short time. There is a tentative schedule posted at our SDPhA website. When you check out the upcoming events, check out this schedule to see this impressive list of topics and the quality of the speaking faculty that is presenting these important and timely topics. Attend and I know you will leave with your knowledge bucket full!

I would be remiss if I did not mention the legislation to give provider status for pharmacists. This bill was reintroduced in the U.S. House of Representatives again this year. It is H.R. 592. Shortly after the House introduced this bill, a companion bill was introduced in the U.S. Senate. It is S. 314. One thing that is significant about the introduction of these bills, is that they were introduced by members of the House Ways and Means Committee, the House Energy and Commerce Committee, the Senate Finance Committee, and the Senate Health, Education, Labor, and Pensions Committee. Support of these bills in these committees is key to successful passage of this legislation because it is in these committees where these bills will be first considered before moving to deliberation before the full House and Senate respectively. At the first of March, there were 41 cosponsors of H.R. 592. Now there are 69 representatives who are cosponsors. Likewise, at the first of March there were 5 cosponsors of S. 314. Now there are 11 senators that have cosponsored S. 314. South Dakota has 57 of 66 counties that include areas designated as 'medically underserved'. Last year, Rep. Kristi Noem signed on as a cosponsor after our South Dakota Pharmacist's Association and many individuals had made contact with her offices. SDPhA has again made contact with her office in Washington and we are anxiously awaiting her response. Hopefully, she will again sign on as a cosponsor of H.R. 592.

Thank you for your commitment to Pharmacy and your daily display showing the caring face of pharmacy.

SOUTH DAKOTA BOARD OF PHARMACY

Randy Jones | Executive Director

NEW REGISTERED PHARMACISTS

The following candidates recently met licensure requirements and were registered as pharmacists in South Dakota: Drew Klinkebiel, Justin Cunningham, Sybille Lupee, Shivani Patel, Sarah Williams, Ashley Kann, Michael Stanley, and Heather Yennie.

New pharmacy permits issued over the same time period are Jones Drug – Aberdeen (Change of Ownership); Dan's Drug Store – Sioux Falls; Regional Home Infusion – Rapid City; Genoa QoL Healthcare Company (Change of Ownership).

LEGISLATIVE NEWS – NALOXONE BILL

The ninetieth session of the South Dakota Legislature is in full swing. Senate Bill 41 would provide trained first responders to administer naloxone to anyone that is experiencing symptoms of an opiate overdose. Excerpts of the bill are:

FOR AN ACT ENTITLED, An Act to provide for the possession and administration of opioid antagonists by first responders for the treatment of drug overdoses.

BE IT ENACTED BY THE LEGISLATURE OF THE STATE OF SOUTH DAKOTA:

Section 1. Any first responder trained in compliance with section 2 of this Act and acting under a standing order issued by a physician may possess and administer opioid antagonists to a person exhibiting symptoms of an opiate overdose.

Section 2. For the purposes of this Act, the term, opioid antagonist, means naloxone hydrochloride or any other similarly acting and equally safe drug approved by the federal Food and Drug Administration for the treatment of drug overdose.

Section 3. For the purposes of this Act, the term, first responder, includes:

(1) A law enforcement officer as defined by subdivision 22-1-1(22);

(2) A driver and attendant responding to an emergency call as part of an ambulance service licensed pursuant to chapter 34-11; and

(3) Firefighter.

Section 4. Each first responder authorized to administer an opioid antagonist shall be trained. A full view of this bill can be located on the states website at http://legis.sd.gov/Legislative_Session/Bills/Bill.aspx?File=SB14P.htm&Session=2015

The Governor has signed this bill into law.

ELECTRONIC PRESCRIBING OF CONTROLLED SUBSTANCES (EPCS)

The board staff receives multiple calls and questions pertaining to EPSC. Of late, most of the concern is how a pharmacist is to know if a prescriber has gone through and been approved to conduct this activity. The board staff is certainly not the dispensing software experts for all the different platforms out there, but we have witnessed feedback mechanisms from the software provider providing the logic that can authenticate the process. Many excellent Q&A on this topic can be found on the DEA website, and I will include a few that cover this topic nicely. Note, the language does state that all pharmacies must have a copy of the report from application provider stating that your platform has been approved. Our advice would be to check with your administration, DMs or IT people to secure one of those reports. From the DEA site:

Q. When can a pharmacy start processing electronic prescriptions for controlled substances?

A. A pharmacy will be able to process electronic controlled substance prescriptions only when the application the pharmacy is using to process prescriptions complies with the requirements in the interim final rule.

Q. How will a pharmacy be able to determine that an application complies with DEA's rule?

A. The application provider must either hire a qualified third party to audit the application or have the application reviewed and certified by an approved certification body. The auditor or certification body will issue a report that states whether the application complies with DEA's requirements and whether there are any limitations on its use for controlled substance prescriptions. (A limited set of prescriptions require information that may need revision of the basic prescription standard before they can be reliably accommodated, such as hospital prescriptions issued to staff members with an identifying suffix.) The application provider must give a copy of the report to pharmacies that use or are considering use of the pharmacy application to allow them to determine whether the application is compliant with DEA's requirements.

Q. Until a pharmacy has received an audit/certification report from the pharmacy application provider indicating that the application meets DEA's requirements, how can

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SOUTH DAKOTA BOARD OF PHARMACY

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the pharmacy application be used to process controlled substance prescriptions?

A. A pharmacy cannot process electronic prescriptions for controlled substances until its pharmacy application provider obtains a third party audit or certification review that determines that the application complies with DEA's requirements and the application provider gives the audit/certification report to the pharmacy. The pharmacy may continue to use its pharmacy application to store and process information from paper or oral controlled substances prescriptions it receives, but the paper records must be retained.

A full listing of the EPCS can be found at http://www.deadiversion.usdoj.gov/ecomm/e_rx/faq/pharmacies.htm

STAFF NEWS

The board is pleased to announce and welcome the addition of Jessica Neal to the staff. Jessica began employment in January and has already proved to be a valuable asset to the staff. Jessica is fulfilling Melanie Houg's previous duties as Melanie has transitioned very nicely into the PDMP Assistant's role.

BOARD MEETING DATES

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

BOARD OF PHARMACY STAFF DIRECTORY

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SD SOCIETY OF HEALTH-SYSTEM PHARMACISTS

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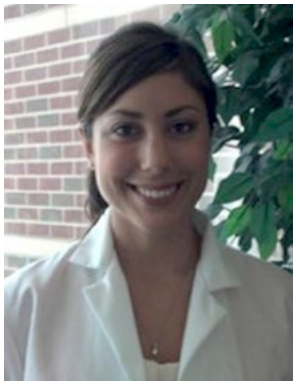

Spring Greetings from SDSHP!

Hopefully you all have had an opportunity to register for the 39th Annual SDSHP Conference to be held on April 17th & 18th at the Ramkota Hotel and Conference Center in Sioux Falls. The event will provide 11 hours of ACPE accredited continuing education and will also offer a technician track on Saturday morning. At the business meeting and awards presentation, we will be honoring Steve Petersen as the recipient of this year's Gary W. Karel Lecture Award as well as the pharmacist of the year and the technician of the year. The board would like to thank the annual meeting committee, chaired by Rhonda Hammerquist, for all their hard work in setting up what should be another great meeting.

SDSHP has been awarded the ASHP/ASHP Foundation State Affiliate Workshop grant. The grant will allow us to hold a leadership workshop that will focus on the Pharmacy Practice Model Initiative and the steps that pharmacists can take to enhance patient care in South Dakota. The event will be held May 16th at University Center North in Sioux Falls and is free to all SDSHP members. We can't thank Tadd Hellwig enough for his hard work in making this grant and workshop possible. Please visit our website at www.sdshp.com for more information.

The 2014-2015 Board of Directors has been a fantastic group to work with and I want to sincerely express my gratitude for their dedication to our profession. We have been able to accomplish many things this year, but this is only because of their dedication. A special thanks to our outgoing board members: Kelley Oehlke, Rachel Pavelko (term completes in August) and Amanda Janisch. I would especially like to recognize Marilyn Eighmy, our Support Specialist, who will be retiring this spring after 12 years with SDSHP. We will be forever grateful for her service, dedication, assistance, and guidance.

Finally, I would like to thank the members of SDSHP for giving me the opportunity to serve as your president. It has been an extremely rewarding year for me both personally and professionally. In the upcoming year, we will continue our tradition of serving health-system pharmacists and technicians under the excellent leadership of Tadd Hellwig.

SOUTH DAKOTA STATE UNIVERSITY

College of Pharmacy

Dennis Hedge | Dean

Greetings from the South Dakota State University College of Pharmacy!

As previously mentioned, the SDSU College of Pharmacy hosted an ACPE accreditation site team October 28-30, 2014. I am pleased to notify you that at the ACPE Board of Directors meeting this past January, the accreditation term for our Doctor of Pharmacy program was extended until June 30, 2023, which is the full eight-year cycle allowed between self-studies. The academic year for the next currently scheduled review of the Doctor of Pharmacy program for purposes of continued accreditation is 2022-2023. All of us at the College of Pharmacy would like to extend a sincere "thank you" to the pharmacists across the state and throughout the region for your support throughout the reaccreditation process.

The Pharm.D. program admissions process for our next P1 Class was recently completed. Consistent with national trends, total applications for admission to the Pharm.D. program were down slightly this past year. The good news, however, is that the number of applications from students on the SDSU campus and from other institutions in the region remained very steady. Once again, the academic profile of students entering the Doctor of Pharmacy program at SDSU is incredibly strong. The academic statistics of the incoming class include an average ACT score of 27.2 and an average cumulative college GPA of 3.79.

Dr. Tadd Hellwig was recognized at the SDSU Celebration of Faculty Excellence program in February as the College of Pharmacy's Outstanding Scholar for the past year. Dr. Hellwig's scholarly contributions have been impactful on both professional pharmacy practice and pharmacy education. Also, Dr. Debra Farver was selected by the College's students as SDSU College of Pharmacy Teacher of the Year. Those nominating Dr. Farver were especially appreciative of her work associated with interprofessional education initiatives and the manner in which she challenges and inspires students.

The USD-SDSU collaborative Master of Public Health program successfully launched this past January. Eleven students have been admitted into the MPH program and are currently taking courses. Those interested in the MPH degree can acquire additional information on the program by contacting Mary Beth Fishback, MPH Program Coordinator, via the College of Pharmacy's main office.

Finally, the integration of the Medical Laboratory Science program into the College of Pharmacy continues to go very well. The program recently completed a self-study seeking program reaccreditation through the National Accrediting Agency for Clinical Laboratory Sciences (NAACLS). A team from NAACLS will visit our campus to review the program during Fall Semester 2015.

As always, if you are in the Brookings area, please stop by for a visit.

DIRECTOR'S COMMENTS

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Districts have scheduled their spring meetings. I've placed the specifics in the calendar at the front of this journal, and we'll be sending out notices to each district as well. If you can't make your own meeting due to a scheduling conflict, attend a different meeting and get to know a few more of your colleagues! We've also included meeting information on our website: www.sdpha.org, and our Facebook page. Check us out and LIKE and FOLLOW us! We're also seeking nominations for the Hustead, Bowl of Hygeia and Distinguished Young Pharmacist Awards, so put on your thinking caps. We have so many wonderful pharmacists to recognize.

Busy, Busy, Busy … but in a good way, right?

Sunny Regards,

Sue

ACADEMY OF STUDENT PHARMACISTS

Leah Eckstein | APhA-ASP SDSU Chapter President

Greetings from our APhA-ASP Chapter at SDSU!

As the APhA-ASP SDSU Chapter President, I am excited to share some chapter updates with you. Throughout the spring, our committees have been busy planning and executing many events and activities.

In January, over 50 student pharmacists traveled to Pierre for Legislative Days. We were able to participate in screenings, present educational booths, and advocate for our profession at the Capitol. Legislative Days is always a highlight in the spring for our chapter! We are thankful for this opportunity provided by SDPhA and are proud of all the students involved in the planning of the event.

In February, our chapter teamed up with Phi Lambda Sigma (PLS) at SDSU to host a College of Pharmacy dodgeball tournament. It was a great time for students to get together and have some fun. The faculty also put together a team. They seemed to enjoy themselves just as much as the students! Another social event occurring within our chapter is the March Madness brackets sponsored by the Pre-Pharmacy Committee. These have both been great ways to bring students together for some friendly competition and recreation.

In March, our Medication Education committee went out in the community to educate preschoolers during Poison Prevention Week. The committee reached over 220 preschoolers through interactive presentations and information packets for the parents.

Throughout March and into April, our Operation Heart and Operation Diabetes committees have teamed up and are hosting weekly blood pressure and glucose screenings for the Brookings community. We have continued our patient care focus on underserved patients through holding regular screenings at the Harvest Table in Brookings and The Banquet in Sioux Falls. Medication reviews have been incorporated into The Banquet screenings, which give patients time to ask question about their medications and provide the P3 student pharmacists the opportunity to develop their skills in medication reviews. The Health Systems Committee has been hard at work organizing student led Journal Club, Residency Application Process Information night, and a clinical question challenge for all chapter members. They have also coordinated mock residency interviews, CV and cover letter workshops, and a statistics review.

As we continually work to increase our impact, we decided to add another faculty co-advisor this semester. Dr. Alex Middendorf will bring meaningful contributions to the chapter with his background in community pharmacy practice. He joins Dr. Tadd Hellwig and Dr. Brittney Meyer, and Dr. Teresa Seefeldt as advisors.

As the season has officially become spring, I feel this academic year coming to a close. I would like to thank our chapter advisors, the chapter Executive Committee, and most importantly, the chapter members for making my year as chapter President an incredibly rewarding experience. I look forward to seeing what our chapter will accomplish in the future!

APhA Pharmacy-Based Immunization Delivery Program

The South Dakota Pharmacists Association is pleased to partner with APhA and IHS to bring the APhA Pharmacy-Based Immunization Delivery Program to South Dakota!

The course includes a twelve-hour online study program and an eight hour "live" day, currently scheduled for May 30th, 2015 at the Sheraton Hotel in Sioux Falls beginning at 8:00 a.m.

Cost to attend: $150

For more information, please contact Sue Schaefer at sue@sdpha.org or call 605-224-2338.

SD ASSOCIATION OF PHARMACY TECHNICIANS

Bonnie Small | President

IT'S FINALLY SPRING!

We are planning our meeting for October 3, 2015, in Sioux Falls – location to be announced. Five speakers will present again this year, including Randy Jones who will present Law CE and Medication Safety, both of which are required for certification. This will be a great opportunity to learn from other techs and receive CE hours (no tests are required). We will also be updating you on the many changes coming for pharmacy techs in 2016. I strongly encourage all techs to attend. We are continually updating our website (www.SDAPT.com) with new information as it becomes available. Check us out on Facebook, too. I am looking forward to seeing you all in Sioux Falls. Our membership tripled this last year and we hope to see this continue.

We are electing new officers this year and I would like to thank all who have been there for me. I've met a lot of great women and men through this conference. If you have any questions, I would be more than happy to answer them. I hope to see you all this fall!

National Plan To Combat Antibiotic-Resistant Bacteria Released

State Health Department, Health Care Partners Already At Work

SOUTH DAKOTA DEPARTMENT OF HEALTH

PIERRE, S.D. – A newly-launched federal plan will soon require states to take specific steps to reduce antibiotic resistance but South Dakota is already working on the issue says a state health official.

The new federal requirements call for antibiotic stewardship programs in all acute care hospitals, reductions of inappropriate antibiotic use in outpatient and inpatient settings, and programs in each state to monitor multidrug resistant organisms and assist healthcare facilities.

"South Dakota is well-positioned to meet these requirements. We've been working on these issues since 2013 when we came together with health care partners across the state to form the South Dakota Antimicrobial Stewardship Workgroup," said Angela Jackley, healthcare-associated infections coordinator for the department. "Antibiotic-resistant bacteria infect more than two million Americans every year and are responsible for more than 23,000 deaths so this is a critically important issue."

Workgroup members represent Avera Health, Regional Health, Sanford Health, hospitals, long term care facilities, clinics, the South Dakota Infection Control Council, the South Dakota Pharmacy Association, the South Dakota Association of Healthcare Organizations, the USD Sanford School of Medicine, the Indian Health Service and the Department of Health. Jackley said workgroup members have worked statewide to improve antibiotic prescribing and make sure antibiotics are used only when really needed so they remain effective. Efforts have included training for health providers on drug resistance and appropriate use of antibiotics, development of clinical guidelines to address antibiotic overprescribing in outpatient settings, monitoring multidrug resistant organisms, and working with hospitals and clinics to reduce the use of broad spectrum antibiotics.

South Dakota's efforts have been featured in a CDC publication on the subject and also on the antimicrobial stewardship website of the Association of State and Territorial Health Officials.

2015 LEGISLATIVE REPORT

Robert C. Riter & Margo D. Northrup | SDPhA Lobbyists

The legislature did approve a 2.5% increase to reimburse pharmacists from Medicaid funding. Of course, the level had been reduced several years ago from budget cuts but some gain has been made. Most of the medical care providers received a similar modest increase.

The legislature did approve a bill which appropriates $260,000 for reimbursing a limited group of eligible healthcare practitioners who are serving rural communities and another $382,000 to reimburse certain providers who have met the requirements of the health care recruitment assistance program. These confirm rural health care is important, but broader additional funding remains unlikely.

The legislature did approve SB 61, which is the annual bill sought by the Department of Health to place certain additional substances on the controlled substances schedule. It also passed SB 14, which provides for possession and administration of opioid antagonists (Naloxone) for trained first responders for the treatment of drug overdoses, providing there is a standing order through a licensed physician.

The legislature did approve a "right to try" bill. (HB 1080) It authorizes investigational treatments for patients under certain limited conditions. A physician must have confirmed the individual suffers from a progressive disease or medical condition, which creates significant functional impairment and is irreversible, and without intervention of any procedures would lead to death. This measure is of similar nature as that recently passed in a half dozen other states.

SB 101 was passed. It provides that health insurers cannot treat oral chemotherapy less favorably than intravenously administered cancer therapy. Also, a carrier may not classify benefits or increase copayments, deductibles or co-insurance for IV cancer treatment, unless the increase is applied to all other medical or pharmaceutical benefits.
The legislature also passed SB 118, which requires health insurers to provide prospective enrollees with written information describing the terms and conditions of prescription drug plans. It is intended to provide more transparency of prescription drug plan conditions.

The legislature did defeat HB 1078, which would have made significant modifications to the South Dakota Non-Profit Corporation Act. The Association had concerns with certain sections of the bill regarding member and director responsibilities. SB 59 would have established a state debt collection office. It was also of concern since it would have allowed the collection office to prevent the renewal of professional licensure, (like a licensed pharmacist or a pharmacy technician's license) when and if uncollected debt to the state existed. This bill was defeated.

HB 1058 pertained to communicable disease control in light of the Ebola situation. It clarifies the Department of Health's authority to seek a temporary restraining order or patient quarantine to enforce a public health intervention order.
HB 1059 authorized certain entities to access immunization information under limited circumstances. It allows schools and licensed daycares to check Department of Health records to ensure students meet school entry immunization requirements. The change does not, however, impact the right of a parent or guardian to sign a refusal for immunization information to be shared. Both of these bills passed and are effective on July 1, 2015, as are all of the other approved measures discussed above.

We appreciated the opportunity to against assist you. If you have questions about any of the measures, please do not hesitate to contact us.

Phamily Dinner

Lynn Greff, SDPhA President, and Sue Schaefer, SDPhA Executive Director, enjoyed their annual "Phamily Dinner" with SDPhA Student Pharmacists and faculty during the recent APhA meeting in San Diego.

129th Annual South Dakota Pharmacists Association Convention
The Lodge at Deadwood • Deadwood, SD
September 18-19, 2015

Line-up (Tentative)

Friday, September 18

8:00 a.m. – 9:30 a.m.	**Disease Management** James Keegan, MD
9:30 a.m. – 10:30 a.m.	**Advancing Pharmacy Practice through Collaborative Agreements** Deidre Van Gilder, PharmD Aly Howard, PharmD
10:30 a.m. – 11:30 a.m.	**Business Meeting**
11:30 a.m. – 1:00 p.m.	**Vendor Time/Luncheon/Awards Presentations**
1:00 p.m. - 2:30 p.m.	**Complementary Medicine** Dr. Teresa Seefeldt
2:30 p.m. – 3:00 p.m.	**SDSU Ice Cream Social**
3:00 p.m. – 4:30 p.m.	**Pharmacy Law** Dave Helgeland
4:30 p.m. – 5:30 p.m.	**Medicare Quality Measurements** Erica Bukovich, PharmD
Evening Event	**Cowboy Culture**

Saturday, September 19

8:00 a.m. – 8:30 a.m.	**Light Breakfast/Second Business Meeting**
8:30 a.m. – 10:00 a.m.	**New Drug Update** Joe Strain, PharmD
10:00 a.m. – 11:00 a.m.	**Unique Case Reports & Old West Medicine** Preceptor Education
11:00 a.m. – 1:00 p.m.	**Immunizations – What's New?** Wendy Jensen Bender, PharmD Dr. Lon Kightlinger, State Epidemiologist

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Cancellations will be accepted without penalty prior to September 7, 2015.
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Refunds will be issued after October 1, 2015.

*Full Registration includes all educational sessions, exhibits, meals and evening events.

**One-Day Registration includes educational sessions, exhibits, meals, and evening event, if applicable.

129th Annual South Dakota Pharmacists Association Convention

Registration Form

The Lodge at Deadwood | Deadwood, SD | September 18-19, 2015

All SDSU Student Registrations are FREE!
(Hotel Not Included)
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Full Registration*								
Before August 20, 2015	$150	$75	$20	$75	$125	Free	$225	_____
After August 20, 2015	$175	$100	$20	$100	$140	Free	$250	_____
One-Day Registration**								
Fri., Sept. 18, 2015	$100	$50	$10	$50	$90	Free	$150	_____
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PO Box 518 Pierre, SD 57501
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Register Online at www.sdpha.org

2015 AWARD NOMINATIONS

The SDPhA is accepting nominations for awards to be presented at the 2015 Convention in Deadwood. Nominations should be submitted along with biographical and contact information. The following awards will be presented:

Bowl of Hygeia

The recipient must be a pharmacist licensed in South Dakota; be living (not presented posthumously); not be a previous recipient of the award and not served as an SDPhA officer for the past two years. The recipient has compiled an outstanding record of community service, which apart from his/her specific identification as a pharmacist reflects well on the profession.

Nominee:_____

Distinguished Young Pharmacist

The nominee must hold an entry degree in pharmacy received less then ten years ago, licensed in South Dakota, member of SDPhA, practiced pharmacy in the year selected, involvement in a national pharmacy association, professional programs, state association activities and/ or community service.

Nominee:_____

Hustead Award

Nominee must be a pharmacist licensed in South Dakota, who has not previously received the award. The nominee shall have made a significant contribution or contributions to the profession, and should have demonstrated dedication, resourcefulness, service, and caring.

Nominee:_____

Distinguished Service Award

The nominee must be a non-pharmacist who has contributed significantly to the profession. The award is not routinely given each year, but reserved for outstanding individuals. Persons making the nomination should complete the form providing reasons why the nominee should be selected. The nomination should clearly outline why the nominee is worthy of the award. If a recipient is selected, the Association will then contact the individual to notify them of the selection and obtain biographical data.

Nominee:_____

Salesperson of the Year Award

Nominee must have made an outstanding contribution to the profession of pharmacy through outside support of the profession.

Nominee:_____

District Technician of the Year Award

Nominee has demonstrated an excellent work ethic, is reliable, consistent, and works well with other. Technician provides a valuable service to the pharmacy profession.

Nominee:_____

Fax nominations by **May 15, 2015** to (605) 224-1280 or e-mail to sue@sdpha.org. Using the criteria for each award listed, please describe in detail the reason for the SDPhA Board of Directors to consider your nominee. Include specific examples and/or details.

Name of Individual Nominating:_____

Address:_____

City:_____ State:_____ Zip:_____

Phone:_____ Fax:_____ E-Mail:_____

Pharmacy/Organization:_____

2014 Recipients of the "Bowl of Hygeia" Award


Mike Mikell
Alabama


Scott Watts
Alaska


Crane Davis
Arizona


Eric Shoffner
Arkansas


Walter Cathey
California


Wendy Anderson
Colorado


Philip Bunick
Connecticut


Donald Holst
Delaware


Norman Tomaka
Florida


Robert Bowles
Georgia


Jeani Jow
Hawaii


Susan Cornell
Illinois


Sean McAlister
Indiana


Craig Clark
Iowa


Richard Bieber
Kansas


Jerrold White
Kentucky


Robert Hollier
Louisiana


Mark Polli
Maine


Donald Taylor
Maryland


Erasmo Mitrano
Massachusetts


Joseph Leonard
Michigan


Brent Thompson
Minnesota


Carter Haines
Mississippi


Kenneth Michel
Missouri


Mark Donaldson
Montana


Christopher Shea
Nevada


Lawrence Routhier
New Hampshire


Maria Leibfried
New Jersey


Stephen Burgess
New Mexico


Karl Fiebelkorn
New York


Ronald Maddox
North Carolina


Charles Peterson
North Dakota


James Liebetrau
Ohio


Henry Roberts
Oklahoma


Larry Cartier
Oregon


Julie Gerhart-Rothholz
Pennsylvania


Blanca Delgado-Rodriguez
Puerto Rico


Katherine Kelly Orr
Rhode Island


Gene Reeder
South Carolina

Earl Hinricher
South Dakota

Robert Shutt
Tennessee

May Jean Woo
Texas

Brent Olsen
Utah

Cynthia Warriner
Virginia

Patricia Slagle
Washington

Wallene Bullard
Washington D.C.

Arlie Winters
West Virginia*

Nicole McNamee
West Virginia

Terry Maves
Wisconsin

Ardis Meier
Wyoming

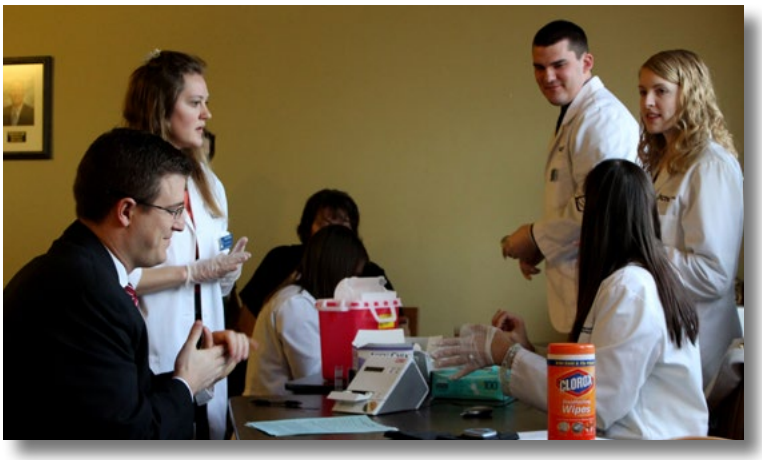
The Bowl of Hygeia award program was originally developed by the A. H. Robins Company to recognize pharmacists across the nation for outstanding service to their communities. Selected through their respective professional pharmacy associations, each of these dedicated individuals has made uniquely personal contributions to a strong, healthy community. We offer our congratulations and thanks for their high example. The American Pharmacists Association Foundation, the National Alliance of State Pharmacy Associations and the state pharmacy associations have assumed responsibility for continuing this prestigious recognition program. All former recipients are encouraged to maintain their linkage to the Bowl of Hygeia by emailing current contact information to awards@naspa.us. The Bowl of Hygeia is on display in the APhA Awards Gallery located in Washington, DC.

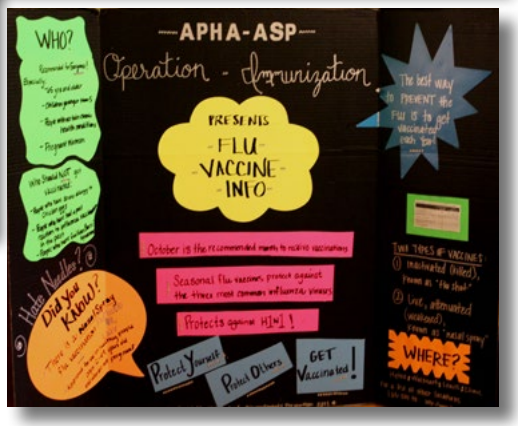
Boehringer Ingelheim is proud to be the Premier Supporter of the Bowl of Hygeia program.

* 2013 recipient not previously pictured.

SDPhA LEGISLATIVE DAYS 2015

January 27-28, 2015 • Pierre, SD





Pharmacists' Roles on the Healthcare Team Are Expanding, Study Shows

Pharmacy Workforce Survey results also indicate more opportunities for women within the profession.

ALEXANDRIA, VA.—Results released today from the Pharmacy Workforce Center's 2014 National Pharmacist Workforce Survey indicate that pharmacists are performing more patient care activities in a variety of healthcare settings, and spending less time in the traditional dispensing role. The 2014 report also reveals that pharmacy has shifted toward a female-dominated profession, with more women than men serving as actively practicing pharmacists and in management positions. This study is the fourth in a series of surveys conducted by the Midwest Pharmacy Workforce Research Consortium, which has been commissioned by the Pharmacy Workforce Center, Inc. (PWC) since 2000 and has been highly anticipated throughout the industry.

"The National Pharmacist Workforce Survey has once again pinpointed important shifts in the pharmacist workforce and reveals valuable insight about how pharmacists spend their time," said Douglas J. Scheckelhoff, M.S., FASHP, vice president of the Office of Practice Advancement at the American Society of Health-System Pharmacists and President of PWC. "A notable shift identified in the 2014 survey is that more pharmacists are working in patient care roles and providing more patient care services than in any previous survey. Demographic changes are also notable, with a majority of the active pharmacy workforce (57 percent) now being women, up from 46 percent just five years ago."

Over the past decade there has been a dramatic increase in the percentage of pharmacists who are performing healthcare-related services. Sixty percent of pharmacists provided medication therapy management and 53 percent performed immunizations in 2014, compared to only 13 and 15 percent, respectively, in 2004. The percentage of time that full-time pharmacists spent on services associated with medication dispensing decreased from 55 percent in 2009 to 49 percent in 2014.

Patients have greater access to pharmacists' services in a variety of settings than in past years. In 2014, 48 percent of chain pharmacies and 57 percent of supermarkets offered health screenings. This is a stark contrast to the percentage of pharmacists who reported offering those services in 2004: only 7 percent of chain pharmacies and 27 percent of supermarkets, respectively. In 2014, more than 25 percent of hospitals and other patient care settings have collaborative practice agreements in place, thus allowing pharmacists to expand their role as an integral member of the patient's healthcare team.

The pharmacy profession continues to provide growing opportunities for women. In addition to women now comprising the majority of the active workforce, the proportion of women who served in pharmacy management positions was greater than men for the first time since the workforce surveys began in 2000. In 2014, 55 percent of managers were female and 45 percent were male. This compares to 41 percent female managers in 2009, 41 percent in 2004 and 37 percent in 2000.

Women are also taking advantage of career opportunities outside of retail, supermarket and hospital pharmacy. The highest representation of females was in industry and other non-patient care settings, at 66 percent and 61 percent, respectively.

When it comes to pharmacists' careers, two trends emerged from the 2014 survey data. The first is that more than 50 percent of pharmacists stated that they have a high level of career commitment. In 2014, 66 percent of pharmacists reported feeling this way, which is a slight increase from 65 percent in 2004 and significantly greater than 50 percent reported in 2000. Pharmacists are also spending an average of 7.9 years with their employer according to the 2014 survey, which is only slightly less than the average tenure of a pharmacist in 2009 at 8.2 years.

The second trend supports the idea that pharmacy graduates can expect more career opportunities in the future as the older male pharmacist workforce continues to enter retirement age. Nearly 50 percent of actively practicing male pharmacists are over 55 years old, thus approaching retirement age and eventually leaving the profession.

The survey provides a snapshot of contemporary demographics practice characteristics and quality of work life in the U.S. during 2014. Data were collected from a random sample of 5,200 individuals selected from a list of 7,000 licensed pharmacists in the U.S. Response rate to the survey was 48%.

To view the complete survey results, executive summary and PWC fact sheet, visit the AACP Web site.

The Pharmacy Workforce Center (PWC), formerly known as the Pharmacy Manpower Project, Inc., is a nonprofit corporation comprised of major national pharmacy professional and trade organizations. Its mission is to serve the public and the pharmacy profession by developing data regarding the size and demography of the pharmacy workforce and conducting and supporting research in related areas. The South Dakota Pharmacists Association is represented on PWC through the National Alliance of State Pharmacy Associations.

AND THE LAW

by By Phillip J. Schieffer, PharmD/J.D. | Dual-Degree Candidate, Drake University

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.

That's Not My State

Often you find yourself flipping through pharmacy news and see recent court decisions that affect the practice of pharmacy in a different state. You might think, "Well it's not in my state, so who cares?"

Even though that decision may not pertain to your practice now, it could later. The extent to which it does stems from its *persuasive authority*. Persuasive authority is the characteristic of a judicial opinion that courts in other jurisdictions can rely on in deciding a case. But, this authority is neither absolute nor guaranteed.

Of course there are the judicial opinions issued in your state that directly affect your practice of pharmacy. These are said to have mandatory authority. Once an opinion is rendered based on a particular set of facts, it becomes the rule of law that all lower courts in that jurisdiction (including the court it came out of) must follow from then on. There is no discretion over whether to follow this rule.

The process of following decisions with mandatory authority is called *stare decisis*, meaning "let the decision stand." Mandatory authority derived from stare decisis serves the purpose of continuity (so people know what the law is and how to act), as well as efficiency in not having to consider policy arguments every time the same issue is raised.

Let's look at *Bobay v. Walgreen*.[1] In 2007, Pansey and Dennis Bobay filed a complaint against Walgreen alleging that the pharmacy owed Ms. Bobay a duty to warn her about potential adverse injuries that could result from taking cyclosporine, gemfibrozil, and Vytorin. The Bobays were trying to prove negligence and in order to do that needed to show Walgreen's had a duty to warn Ms. Bobay about drug interactions. However, the rule of law was already established that pharmacists had no such duty unless directed by the prescribing physician. That rule came from a case previously decided by the Indiana Court of Appeals.[2]

Since the federal judge in the United States District Court for the Northern District of Indiana was deciding on an issue in which Indiana state law governed, he was forced to apply the rule, thus favoring defendant Walgreen. As a result, that claim was dismissed from court on a motion for summary judgment. The Bobays could not recover from Walgreen on that claim because the facts were similar enough to a case that had previously been decided within their jurisdiction. The court was bound by mandatory authority.

But what about judicial opinions from courts that have no jurisdiction where you practice pharmacy? They're not your laws, right? Right. Your courts aren't bound by them, right? Right. So we can totally disregard them, right? I wouldn't. If the issue has yet to be decided in your courts, that outside opinion could play a big part in shaping your professional landscape.

Persuasive authority comes into play when a court is looking at an issue for the first time. It has no previous decisions in their own jurisdiction, so they aren't bound by any rule of law. It has to make the rule of law and apply it to the case at hand. This process is not to be taken lightly, so persuasive authority is used for guidance in creating mandatory authority.

Exactly how persuasive a decision is, though, relies on a host of considerations. The more similar the facts are, the more persuasive it is. Reasoning behind an opinion, the person that wrote it, and the court from which the decision came all matter, too. Whether a court shares a specific doctrine on the matter is also important. Even demographic and geographic comparisons are made. It's difficult to tell with any certainty how persuasive an "outside" decision may be.

(continued on page 19)

Cover Photo Shoot: Behind the Scenes

Above and Right: Pharmacy students' joy turned to horror when Lt. Governor Matt Michels and Professor Dave Helgeland set up some shenanigans during the photo shoot on the Capitol steps. The P3s were told to follow the Lt. Governor after the photo to take their ethics test that they had to miss that morning due to the Legislative Days commitment. They were mortified…it was hilarious!

Above: Pharmacy students took time for shenanigans of their own while setting up for the photo shoot on the Capitol steps.

Rx and the Law: That's Not My State

(continued from page 18)

So here we go again. Let's get back to a pharmacist's duty to warn a patient about adverse effects. The State of Washington looked at this issue for the very first time in *McKee v. American Home Products Corporation*.[3] Here, Elaine McKee alleged that the defendant pharmacists were negligent and should have warned her about the addictive effects of Plegeline for appetite suppression, that its therapeutic effect diminishes after a few weeks, and that it is not a drug to be used for long-term duration.

Since this was an issue of first impression the court looked outside the State of Washington for help. The court was persuaded particularly by factually similar cases that arose out of the Florida District Court of Appeals and Michigan Court of Appeals. There, they held that pharmacists had no such duty to warn of potential adverse effects, but only a duty to properly fill a prescription. Also, since Washington followed the "learned intermediary" doctrine they looked at decisions from other states that followed the same doctrine.[4] Those states found no duty to warn on the part of the pharmacist because they did not know the nuances of a patient's health. Even though the court wasn't bound by those prior decisions, it chose to follow their rulings anyway.

Maybe you might want to skim through that article after all. You can anticipate what the argument for or against an issue will be when it's raised. Making yourself aware of what's going on in other states helps to keep you aware of your own professional responsibilities and their evolution.

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1. *Bobay v. Walgreen Co., 2009 WL 1940727, (N.D. Ind. June 30, 2009).*
2. *Ingram v. Hook's Drugs, Inc., 476 N.E. 2d 881, 887 (Ind. Ct. App. 1985)*
3. *McKee v. American Home Products Corp., 782 P.2d 1045 (Wash. 1989)*
4. *Learned intermediary doctrine applied here means that it is the physician that has the duty to warn, because not only are they educated on drug therapy, but they also have comprehensive knowledge of a patient's medical history, unlike the pharmacist.*

© Phillip J. Schieffer, PharmD/J.D. is a Dual-Degree Candidate at Drake University.

Continuing Education for Pharmacists

"Pneumococcal Pneumonia: Overview, Prevention and Immunization Recommendations"

Course authors:

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Molly Mack, *Pharm.D. Candidate 2015*, South Dakota State University College of Pharmacy

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Goal: To enhance pharmacists' knowledge of pneumococcal pneumonia, including prevention guidelines and information on the PCV13 and PPSV23 vaccines.

Learning Objectives

1. Summarize the pathophysiology of pneumococcal pneumonia;
2. Recognize symptoms and complications associated with pneumococcal pneumonia;
3. List practices to help prevent the transmission of pneumococcal pneumonia in the healthcare and community settings;
4. Identify patients of certain age groups and with particular disease states for whom the pneumococcal vaccines are recommended;
5. Describe the appropriate administration technique for the PCV13 and PPSV23 vaccines;
6. Identify the adverse events associated with, and the contraindications and precautions to, pneumococcal vaccination.

Introduction

Although most people might dismiss pneumococcal pneumonia as a disease of the elderly, in truth, it can afflict anyone. It can lead to hospitalization and – in serious cases – fatal outcomes. Furthermore, extensive antibiotic use worldwide has led to antibiotic-resistant strains of nearly every disease-causing bacteria; *Streptococcus pneumoniae* is no exception. With knowledge of these two facts, public health organizations, like the Centers for Disease Control and Prevention (CDC), are placing a larger emphasis on the prevention of pneumococcal pneumonia. As such, it is the aim of the current article to disseminate information about the disease and its prevention, including vaccination recommendations.

In this continuing education course, an overview of pneumococcal pneumonia, including impact and pathophysiology, will be conducted. Next, CDC-endorsed methods for prevention of the disease will be presented. And finally, the current recommendations for the administration of the pneumococcal vaccines (PCV13 and PPSV23) will be outlined. This article will serve as a reference for questions about pneumococcal disease and vaccine administration.

Impact

Streptococcus pneumoniae is the most common microbial cause of adult pneumonia, accounting for 36% of community-acquired pneumonia (CAP) cases and 50% of hospital-acquired pneumonia cases. Each year roughly 500,000 Americans are diagnosed with pneumococcal pneumonia, which proves to be lethal in 5-7% of patients.[1, 2] The disease is also the cause of approximately 302,000 hospitalizations per year in the United States.[3] Certainly, the disease affects the wellness of the patient, but it also affects the finances of U.S. health-care. In fact, managing and treating the illness costs the U.S. health-care system over $20 billion each year.[4]

Pathophysiology

S. pneumoniae are lancet-shaped, gram-positive, facultative anaerobes. Surrounding their cell membranes, the bacteria may be encapsulated in a layer of complex polysaccharides. It is only these encapsulated strains that are pathogenic to human hosts. To date, over 90 serotypes of *S. pneumoniae* have been identified.[5]
S. pneumoniae is transmitted primarily by respiratory droplets from infected persons or through direct person-to-person contact. The bacteria commonly colonize the human nasopharynx, but often do not have clinical manifestations until moving elsewhere in the body. Pneumococcal infections most commonly present as pneumonia, but may also present as invasive diseases such as bacteremia and meningitis. The bacteria gain access to the lower respiratory tract through one of three ways: the bloodstream, particle inhalation, or aspiration of oronasopharyngeal contents.[2,4,5]

An incubation period of 1 to 3 days precedes the onset of symptoms. Symptoms of pneumonia are caused by an inflammatory reaction in response to the bacteria in the lungs. Symptoms usually include a rapid onset of fever and general malaise, but may also include diaphoresis, productive cough, chest pain, fatigue, dyspnea, and rigor. These symptoms are more severe in the geriatric, pediatric, and immunocompromised populations. Symptoms may persist for up to 3 months after treatment is completed. More complicated cases of the disease can result in fatal outcomes.[4, 5]

Prevention

The CDC emphasizes the importance of prevention in combating pneumococcal disease. *Guidelines for Environmental Infection Control in Health-Care Facilities* were published as recommendations for health-care institutions to protect their employees and patients from infections. These guidelines are categorized based on evidential support; for example, category IA guidelines are "strongly recommended for implementation and strongly supported by well-designed experimental, clinical, or epidemiologic studies." [6]

The foundation of these guidelines relies on health-care employee education and involvement. One category IA guideline stresses the significance of educating workers on effective procedures and the reasons for infection prevention practices. Proper education ensures worker proficiency in infection-control procedures for more effective implementation.[6]

Sterilization practices are vital to pneumonia prevention, and methods vary depending on the equipment. Category IA guidelines for disinfection suggest using steam sterilization or wet heat pasteurization for equipment that have contact with lower respiratory tract mucous membranes. FDA-approved low-temperature sterilization methods are recommended for devices that are susceptible to heat or moisture.[6]

Specific hand hygiene practices are suggested, based upon how the hands were contaminated. These practices include antibacterial soap and water, non-antimicrobial soap and water, or alcohol-based

antiseptic. Hand hygiene should still be practiced whether gloves are worn or not.[6]

The CDC also has recommendations for preventing pneumonia outside of health-care facilities. Community-acquired pneumonia can be prevented with effective hand hygiene and frequent sterilization of commonly touched surfaces like door knobs and countertops. Coughing or sneezing into a sleeve or elbow rather than into one's hands can abate the spread of pneumonia. Individuals can decrease their risk of contracting pneumonia by avoiding or treating medical conditions that may inhibit immune response and by limiting exposure to cigarette smoke.[7] Vaccines against pneumococcal pneumonia are also an option for prevention and will be detailed further in the next section.

Immunization

According to the National Foundation for Infectious Diseases, approximately 73 million adults in the U.S. have not been vaccinated despite having an indication for pneumococcal vaccination.[2] Two types of pneumococcal vaccines are commercially available: PCV13 and PPSV23. Pneumococcal 13-valent protein conjugate vaccine, also known as PCV13 or Prevnar®13 (Wyeth), is recommended to protect infants, as well as children and older adults with certain high-risk conditions, from pneumococcal disease. PCV13 protects against the 13 *S. pneumonia* serotypes that most frequently cause pneumococcal disease.[8, 9]

Introduced in 2010, PCV13 has largely replaced PCV7, which was a heptavalent conjugate formulation used since the turn of the century.

Pneumococcal polysaccharide vaccine, also known as PPSV23 or Pneumovax®23 (Merck), is recommended for older adults and certain high-risk children and adults. Although it has not been proven in the literature to protect against pneumococcal pneumonia, PPSV23 does decrease the risk of general pneumococcal disease.[5] PPSV23 contains the 13 serotypes found in PCV13 along with 11 additional serotypes that are often associated with severe pneumococcal disease.[10, 11]

Dosage Forms & Storage

Prevnar®13 is available as a prefilled syringe containing 0.5 mL suspension for intramuscular injection. The rubber plunger and tip cap of the syringe are both latex- free. Syringes should be refrigerated at 36°F to 46°F. Prevnar®13 should be discarded if the vaccine ever becomes frozen.[9]

Pneumovax®23 is available as single-use vials containing 0.5 mL or multi-dose vials containing 2.5 mL of solution for intramuscular/ subcutaneous injection. All unopened vials as well as open multi-dose vials should be refrigerated at 36°F to 46°F.

Multi-dose vials should be discarded if not used within 48 hours after first puncture. Pneumovax®23 should be discarded if the vaccine ever becomes frozen.[11]

All PPSV23 and PCV13 doses should be discarded after the expiration date.

Recommendations

The Advisory Committee on Immunization Practices (ACIP) is an independent panel that advises the CDC on best immunization practices. Their recommendations are summarized in the sections to follow.

For infants/children 2–71 months

According to ACIP recommendations, all infants and children between the ages of 2 and 59 months who have not yet received pneumo-

coccal vaccination should be vaccinated with a PCV13 series. Ideally, infants should be immunized with a four-dose series at 2, 4, 6, and 12-15 months of age.[12] This regimen should be tailored based on the age of the patient at first dose as well as the presence of certain high-risk medical conditions (*Table 1*). Once they become older than 7 months of age, children no longer require a full series of four doses to be immunized (further details in *Table 1*). For healthy children 5 years of age or older, routine use of PCV13 is not recommended.[5, 12]

For children with a PCV7 vaccination history, the ACIP recommendations are based on the age of the patient and the number of doses previously administered. Patients who have received an incomplete series of PCV7 should finish the series with PCV13. Even patients who have received a complete, age-appropriate regimen of PCV7 should receive a supplemental dose of PCV13.

Children aged 12 to 23 months who received two or three doses of PCV7 before 12 months of age and at least one dose of PCV13 after 12 months of age require no additional doses (further details in ***Table 2***).[12]

Children age 24 to 71 months with certain high-risk medical conditions require a PCV13 series of up to two doses, depending on vaccination history. These high-risk medical conditions include: CSF leaks, cochlear implants, functional or anatomic asplenia, and certain immunocompromising conditions (*Table 3*: groups B, C, & D). Patients within this group should also receive one supplemental dose of PPSV23 following the completion of his or her PCV13 vaccinations.

A second PPSV23 vaccination is further recommended five years after the initial dose for children with anatomic or functional asplenia or certain immunocompromising conditions (*Table 3*: groups C & D). When treatment is initiated that re-categorizes the patient as high-risk (i.e. cochlear implant placement, elective splenectomy), PCV13 and/or PPSV23 vaccination should be completed two weeks prior to the procedure or therapy (further details in ***Table 1 & Table 2*** on page 5).[12]

For children/adolescents/teenagers 6–18 years

Children, adolescents, and teens 6 to 18 years of age with certain high-risk conditions who have not yet received PCV13, and irrespective of PCV7 and PPSV23 vaccination history, should receive a single dose of PCV13. These high-risk medical conditions include: CSF leaks, cochlear implants, functional or anatomic asplenia, and certain immunocompromising conditions (***Table 3***: groups B, C, & D on page 6).

This group of patients should also receive one supplemental dose of PPSV23 following the completion of his or her PCV13 vaccinations. A second PPSV23 vaccination is recommended five years after the initial dose for children with anatomic or functional asplenia or certain immunocompromising conditions (***Table 3***: groups C & D on page 6).[12]

For adults >18 years

Healthy adults 19 to 64 years of age, according to ACIP recommendations, need not receive pneumococcal vaccination.

> In certain situations, public health authorities may recommend a single dose of the PPSV23 vaccination for Alaska Native and American
>
> Indians between the ages of 50 and 64 years who are living in areas where the risk for severe pneumococcal disease is higher.[13]

Table 1. Pneumococcal vaccination recommendations for vaccine-naïve children age 2-71 months[12]

Patient age (months) at first dose	Recommended PCV13 series	Recommended PCV13 booster doses	Recommended PPSV23 regimen
2-6	3 doses*	1 dose at 12-15 months ℓ	None
7-11	2 doses*	1 dose at 12-15 months ℓ	None
12-23	2 doses**	None	None
24-59 (healthy)	1 dose	None	None
24-71 (asplenic or immunocompromised, *Table 3*: Groups C & D)	2 doses**	None	2 doses†
24-71 (CSF leak or cochlear implant, *Table 3*: Group B)	2 doses**	None	1 dose‡

* Administer doses ≥ 4 weeks apart; ideally 8 weeks apart

** Administer doses ≥ 8 weeks apart

† Administer 1st dose ≥ 8 weeks after the final PCV13 dose; administer 2nd dose 5 years after the 1st dose

‡ Administer ≥ 8 weeks after final PCV13 dose

ℓ Booster dose must be administered ≥ 8 weeks after final dose in primary series

Table 2. Pneumococcal vaccination recommendations for children age 2-71 months with previous immunization(s)[12]

Patient age (months)	Total number of PCV7 and/or PCV13 doses previously received	Recommended PCV13 regimen	Recommended PPSV23 regimen
2-6	1 dose	3 doses*,†	None
	2 doses	2 dose**,†	None
7-11	1 or 2 doses before 7 mos.	2 doses: 1st dose at age 7-11 mos.; 2nd dose at 12-15 mos.*	None
12-23	1 dose before 12 mos.	2 doses*	None
	1 dose at ≥ 12 mos.	2 doses**,‡	None
	2 or 3 doses before 12 mos.	1 dose**,‡	None
	Age-appropriate, complete PCV7 regimen	1 supplemental dose**	None
24-59 (healthy)	Any incomplete regimen	1 dose**	None
	Age-appropriate, complete PCV7 regimen	1 supplemental dose**	None
24-71 (asplenic or immunocompromised, *Table 3*: Groups C & D)	Any incomplete regimen of <3 doses	2 doses*: 1st dose**	2 doses ℓ
	Any incomplete regimen of 3 doses	1 dose**	2 doses ℓ
	Age-appropriate, complete PCV7 regimen	1 supplemental dose**	2 doses ℓ
24-71 (CSF leak or cochlear implant, *Table 3*: Group B)	Any incomplete regimen of <3 doses	2 doses*: 1st dose**	1 dose ◊
	Any incomplete regimen of 3 doses	1 dose**	1 dose ◊
	Age-appropriate, complete PCV7 regimen	1 supplemental dose**	1 dose ◊

* Administer doses ≥ 8 weeks apart

** Administer ≥ 8 weeks after most recent vaccination

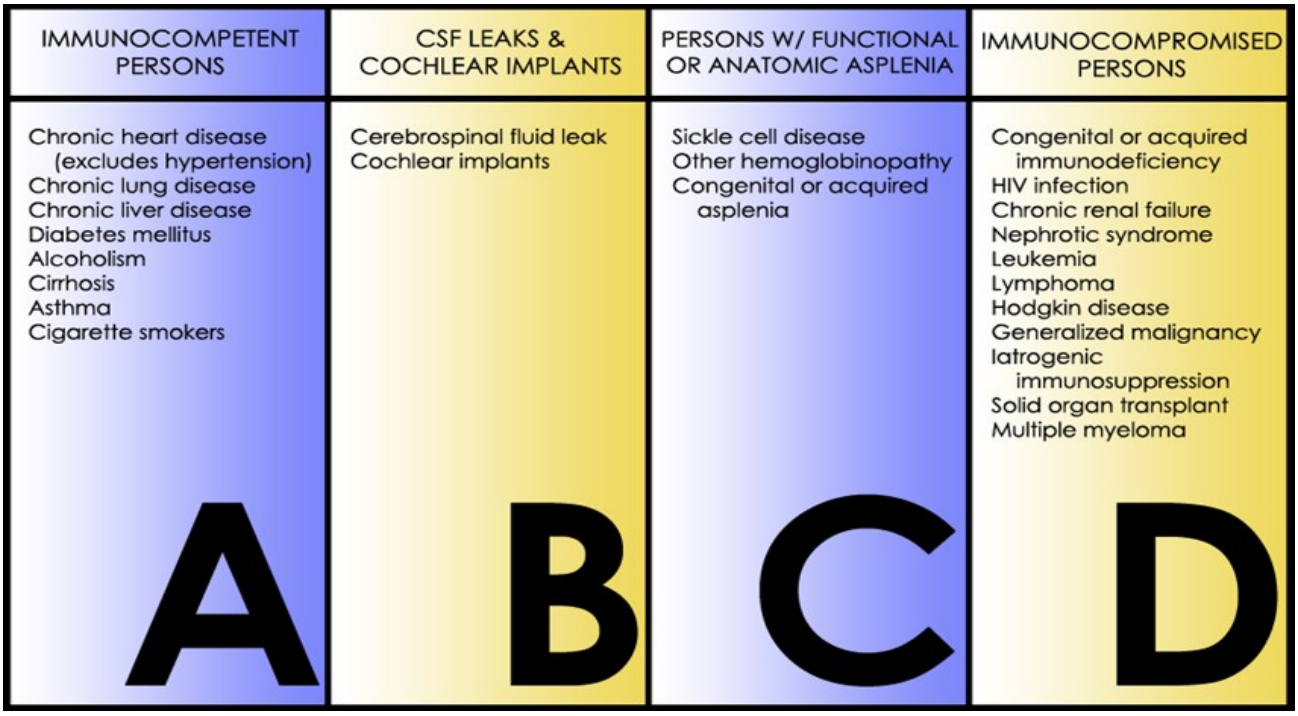
† The final dose should be administered at age 12-15 mos.

‡ Children aged 12-23 mos. who received 2-3 doses of PCV7 before 12 mos. of age and at least 1 dose of PCV13 after 12 mos. of age require no additional doses of PCV13

ℓ Administer 1st dose ≥ 8 weeks after the final PCV13 dose; administer 2nd dose 5 years after the 1st dose

◊ Administer ≥ 8 weeks after final PCV13 dose

Table 3. High-risk indications for pneumococcal vaccination[12, 13, 14]



In contrast, there are specific recommendations for patients with certain underlying medical conditions. Adults age 19 to 64 years with chronic liver, lung , or heart disease (excluding hypertension), diabetes mellitus, asthma, or alcoholism should be vaccinated with a single dose of PPSV23 (***Table 3***: group A). Additionally, adults age 19 to 64 years who smoke cigarettes should receive a single dose of PPSV23 as well as guidance on smoking cessation.[14]

All vaccine-naïve adults older than 18 years with CSF leaks, cochlear implants, functional or anatomic asplenia, or certain immunocompromising conditions (***Table 3***: groups B, C, & D) should receive a dose of PCV13 followed by a dose of PPSV23 eight weeks later. Patients with functional or anatomic asplenia and patients with immunocompromising conditions (***Table 3***: groups C & D) require a second PPSV23 dose; this should be administered at least five years after the most recent dose of PPSV23.[14]

At 65 years of age, regardless of pneumococcal vaccine history, all persons should be vaccinated with PPSV23. Those who received PPSV23 before 65 years of age for any indication should receive another dose of PPSV23 at age 65 years or later; a minimum of five years must have passed since their previous PPSV23 dose. Patients who receive their first PPSV23 dose at age 65 years or later should receive just one dose (further details in ***Table 4*** *on page 7*).[13]

Table 4.
Pneumococcal vaccination recommendations for vaccine-naïve patients age 6–64 years[13, 14]

Patient age (years)	Recommended PCV13 regimen	Recommended PPSV23 regimen
19-64 (high-risk condition, *Table 3*: Group A)	None	1 dose*
6-64 (CSF leak or cochlear implant, *Table 3*: Group B)	1 dose	1 dose**
6-64 (asplenic or immunocompromised, *Table 3*: Groups C & D)	1 dose	2 doses†
≥65	None	1 dose‡,ℓ

* Patients who smoke should receive guidance on smoking cessation as well as the PPSV23 vaccine

** Administer ≥ 8 weeks after PCV13 dose

† Administer 1st dose ≥ 8 weeks after the final PCV13 dose; administer 2nd dose 5 years after the 1st dose

‡ All patients, regardless of previous vaccination history, should receive 1 dose of PPSV23 at ≥ 65 years of age

ℓ Patients who received PPSV23 before 65 years of age for any indication should receive another dose of PPSV23 at age 65 years or later; a minimum of 5 years must have passed since their previous PPSV23 dose

How to Administer

In patients for whom it is indicated, 0.5 mL of PCV13 vaccine should be injected intramuscularly using a 22–25 gauge needle. The length of the needle, between 5/8" and 1½," should be determined using ***Table 5***.

Table 5. Recommendations for needle length for intramuscular injection of pneumococcal vaccine[15]

Gender	Weight (lbs.)	Needle Length
Male	<130	5/8" - 1" *
	130-260	1 - 1.5"
	>260	1.5"
Female	<130	5/8" - 1" *
	130-200	1 - 1.5"
	>200	1.5"

*A 5/8" needle may only be used for patients weighing <130 lbs. **if** the subcutaneous tissue covering the deltoid muscle is not bunched & the injection is made at a 90□ angle.

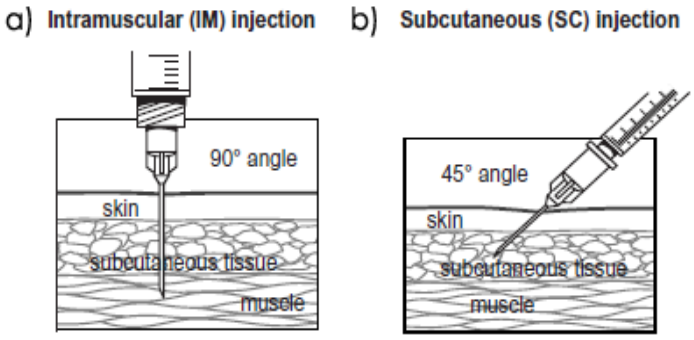
Adapted from http://www.immunize.org/catg.d/p3084.pdf on 7/24/13. We thank the Immunization Action Coalition.

PPSV23 vaccine should be administered to eligible patients as a 0.5 mL dose, and should be injected either intramuscularly or subcutaneously:

Administered intramuscularly, a 22–25 gauge needle should be used to inject the vaccine into the deltoid muscle at a 90° angle (**Figure 1A**). The length of the needle, between 5/8" and 1½", should be determined using ***Table 5***.[15]

Administered subcutaneously, a 23–25 gauge needle, 5/8" in length, should be used to inject the vaccine into the fatty tissue covering the triceps at a 45° angle (**Figure 1B**).[15]

Figure 1. Illustrations of proper injection technique for a) intramuscular and b) subcutaneous routes[15]



Adapted from http://www.immunize.org/catg.d/p3084.pdf on 7/24/13. We thank the Immunization Action Coalition.

Adverse Events

Common adverse reactions (reported in >10% of patients) to PCV13 and PPSV23 vaccine administration include the following: redness or tenderness at the injection site, headache, swelling at the injection site, myalgia, and mild fever.[8, 10] Incidence studies of adverse events from PCV13 in toddlers and children found that decreased appetite, decreased sleep, and irritability were also common reactions (reported in >30% of patients).[8]

Life-threatening reactions to PCV13 and PPSV23 are extremely rare. The most commonly reported serious adverse events from PCV13 include bronchiolitis, gastroenteritis, and pneumonia.[9] Conversely, the most commonly reported serious adverse events from PPSV23 include angina pectoris, heart failure, chest pain, and depression.[11] Serious adverse events within one month of vaccination occur in approximately 0.2–1.4% of patients who receive PCV13 and roughly 0.4–1.7% of patients who receive PPSV23.[9]

Some facts to bear in mind when administering PCV13 and/or PPSV23:

- In case of anaphylactic reactions, epinephrine or another similar agent must be administered immediately.
- Intramuscular injection of PCV13 in premature infants may cause apnea; providers are advised to weigh the risks and benefits of administration in this patient population.[9]

Contraindications & Precautions

Patients who have had a life-threatening allergic reaction to a previous administration of PCV13 or PCV7 or to any vaccine containing diphtheria toxoid should not receive PCV13.[8] Similarly, patients who have had serious allergic reactions to a previous dose of PPSV23 should not receive another dose.[10] Anyone with a severe allergy to any component of either vaccine (***Table 6***) should not be immunized.

Table 6. Components of Pneumovax®23 (Merck) and Prevnar®13 (Wyeth) vaccinations[9, 11, 16]

Vaccine	Active Ingredients	Inactive Ingredients
Pneumovax®23	Bacterial sugars from 23 pneumococcal serotypes: 1, 2, 3, 4, 5, 6B, 7F, 8, 9N, 9V, 10A, 11A, 12F, 14, 15B, 17F, 18C, 19F, 19A, 20, 22F, 23F, and 33F	Phenol (preservative)
Prevnar®13	Sterile suspension of saccharides of the capsular antigens of *S. pneumoniae* serotypes 1, 3, 4, 5, 6A, 6B, 7F, diphtheria CRM197 protein 9V, 14, 18C, 19A, 19F, and 23F, individually linked to nontoxic diptheria CRM protein	Casamino acids, yeast, ammonium sulfate, Polysorbate -80, succinate buffer, aluminum phosphate

Pregnant women and women who are breastfeeding are advised to avoid PPSV23 vaccination if at all possible, although no evidence linking the vaccine to fetal harm exists.[8] Pregnant and breastfeeding women are advised to receive PCV13 only if clearly needed, as well-controlled studies in pregnant women are lacking.[9] Vaccination of patients with moderate to severe acute illnesses should be done with caution.[10]

Conclusion

As one of the most accessible members of the health-care team, pharmacists must remain up-to-date regarding vaccine-preventable disease states and their immunization recommendations. Doing so allows the pharmacist to educate the patient and dispel any common misconceptions. Reliable patient education is paramount in decreasing the prevalence of vaccine-preventable diseases; it simultaneously bolsters the role of the pharmacist and improves the health of the patient.

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Suggested Readings

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Disclosure: *The authors and developers have had no financial relationship with any party having a commercial interest in this CPE.*

"Pneumococcal Pneumonia: Overview, Prevention, and Immunization Recommendations"

Continuing Education Post-test

1. ACIP recommends that vaccine-naïve adults age 19–64 years receive a single dose of PPSV23 if they have which of the following medical conditions?
   A. Hypertension B. Dyslipidemia C. Diabetes mellitus D. Retinitis pigmentosa

2. Pneumococcal lung infections have an incubation period that typically lasts:
   A. 0 days; symptom onset is immediate B. 1-3 days C. 3-5 days D. 5-7 days

3. Which of the following statements is TRUE?
   A. PPSV23 is a pneumococcal vaccine that has largely replaced PCV7 in clinical use.
   B. Prevnar®13 comes as a prefilled syringe with latex components. Avoid use in patients with latex sensitivities.
   C. Pneumovax®23 comes in both single-use and multi-dose vials.
   D. PCV13 may be injected either intramuscularly or subcutaneously.

4. Possible severe adverse effects from PPSV23 include all of the following EXCEPT:
   A. Chest pain B. Numbness in the extremities C. Depression D. Heart Failure

5. Vaccine-naïve infants should be immunized with a 4-dose series of PCV13 at what recommended schedule?
   A. 2, 4, 6, and 12-15 months C. 2, 4, 6, and 8-10 months
   B. 2, 5, 8, and 16-23 months D. 2, 6, 10, and 19-23 months

6. The ACIP would recommend which of the following patients to receive the PPSV23 vaccine at this time?
   A. A 44-year-old Alaska Native male with no notable underlying medical conditions
   B. A 65-year-old female with an HIV infection who received her last PPSV23 dose at age 63 years
   C. A 70-year-old female with no notable underlying medical conditions who had her last PPSV23 dose at age 65 years
   D. A 3-year-old male with cochlear implants who has completed his PCV13 series

7. Common adverse reactions to pneumococcal vaccine include all of the following **EXCEPT**:
   A. Headache B. Myalgia C. Mild fever D. Tissue atrophy

8. To sterilize medical equipment that frequently comes in contact with mucous membranes of the lower respiratory tract, the CDC strongly recommends all of the following methods **EXCEPT**:
   A. Steam sterilization
   B. Hydrogen peroxide-based disinfectants
   C. Low-temperature sterilization (for heat- or moisture-susceptible devices)
   D. Wet heat pasteurization

9. The most common microbial cause of adult community-acquired pneumonia is:
   A. *Mycoplasma pneumoniae* C. *Pneumocystis jiroveci*
   B. *Streptococcus pneumoniae* D. *Staphylococcus aureus*

Questions 10-12 continued on next page

"Pneumococcal Pneumonia: Overview, Prevention, and Immunization Recommendations"

Continuing Education Post-test *(continued)*

10. Patients who have experienced a severe allergic reaction to any vaccine containing _____ should **NOT** receive PCV13.
    A. Egg-protein B. 2-phenoxyethanol C. Diphtheria toxoid D. Gluten

11. *S. pneumoniae* gains access to the lower respiratory tract through all of the following ways **EXCEPT**:
    A. Food contamination
    B. Access through the bloodstream
    C. Particle inhalation
    D. Aspiration of oronasopharyngeal contents

12. For adult patients, the PPSV23 vaccine should be administered subcutaneously at what location of the body?
    A. Fatty tissue of the lower abdomen
    B. Fatty tissue covering the buttock
    C. Fatty tissue covering the deltoid muscle
    D. Fatty tissue covering the triceps

Complete answer sheet / evaluation on next page and send in for credit.

"Pneumococcal Pneumonia: Overview, Prevention, and Immunization Recommendations"

(Knowledge-based CPE)

To receive 2.0 Contact Hours (0.2 CEUs) of continuing education credit, preview and study the attached article and answer the 12-question post-test by circling the appropriate letter on the answer form below and completing the evaluation. A test score of at least 75% is required to earn credit for this course. 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.
Credit upload to a participant's eProfile account will be completed within 2 weeks following successful completion of this course.

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: #0063-0000-15-015-H01-P.

Learning Objectives - Pharmacists*: 1. Summarize the pathophysiology of pneumococcal pneumonia; 2. Recognize symptoms and complications associated with pneumococcal pneumonia; 3. List practices to help prevent the transmission of pneumonia in the health-care and community settings; 4. Describe appropriate administration technique of both PCV13 and PPSV23 vaccines; 6. Identify the adverse events associated with, and the contraindications and precautions to, pneumococcal vaccination.*

Circle the correct answer:

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**	**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 for re-licensing / recertification:	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 important points that you believe remain unanswered:*_____

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List any details relevant to commercialism: _____

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IN MEMORIAM

Richard "Dick" Haisch

Richard K. "Dick" Haisch, 80, passed away Monday, April 6, 2015 at Sanford USD Medical Center in Sioux Falls.

Richard Keith Haisch was born August 28, 1934 at Webster, SD to Lloyd and Marian (Mulford) Haisch. Dick graduated from Canton High School in 1952. He received a degree in pharmacy from SDSU in 1956. While at Brookings, he was a member of ROTC and served in the US Army for two years as a 2nd Lieutenant.

Dick was united in marriage to Maureen Kay Anderson July 9, 1956 in Canton. They lived in Albuquerque, NM and Phoenix, AZ before moving to Canton in 1960. Dick was a pharmacist and partner at Molstad Drug for 5 years and a partner at Bruggman Drug in Rock Rapids for 2 years. He purchased Noid Drug Store in 1967, changing the name to Haisch Pharmacy, which he owned for 26 years. He retired in 1996. Dick was an active member of Canton Lutheran Church since 1960, serving in stewardship, as a deacon and trustee, and sang in the choir. He was also very involved in the community as a member of Chamber of Commerce, Lions Club, Masonic Lodge, Canton-Inwood Hospital Board, Canton Good Samaritan Advisory Board, and Canton Development Corporation. He was a consultant pharmacist for the nursing and hospital for 10 years. He was a member of several state and national pharmacy associations. Dick and Kay enjoyed spending their winters in Arizona for over 20 years. Dick was an avid golfer and enjoyed photography and woodworking.

Those grateful for having shared his life are: his wife of 58 years, Kay; sons, Rick (Kathy) Haisch, Minot, ND and Paul (Lee Ann) Haisch, Alcester, SD; daughter, Lori (Don) Lems, Larchwood, IA; 9 grandchildren; 14 great-grandchildren and one angel; two brothers, Don (Phyllis) Haisch, Brandon, IA and Charles (Sue) Haisch, Polo, IL; and one sister, Janet (Larry) Ingalls, Webster, SD.

Jeff Kuper

Jeff was born on January 16, 1970 at Fort Irwin, CA and shortly after moved to Sioux Falls, SD where he grew up and attended Washington High School. While growing up, Jeff was active in the Boy Scouts and achieved the rank of Eagle Scout. During high school, he was very involved in the youth program at First Presbyterian Church. He enjoyed performing with the swing choir and various show choirs in high school. He graduated from high school in 1988. Jeff then went on to South Dakota State University in Brookings, SD to achieve a Bachelor of Pharmacy degree where he developed a life-long friendship with his Kappa Psi Fraternity brothers. He then went to The Ohio State University to earn his Doctorate of Pharmacy degree. He followed this with a one-year residency with specialization in infectious diseases in Buffalo, NY. Then he began his teaching career as an assistant professor and later promoted to associate professor at Rutgers University in NJ. During his 10-year tenure at Rutgers he had his own clinical practice specializing in infectious diseases at Robert Wood Johnson University Hospital in New Brunswick, NJ. Then after leaving Rutgers he became assistant director of pharmacy at the Robert Wood Johnson University Hospital. He spent the last eight years as a medical writer and was promoted to medical director at PharmaWrite based out of Princeton, NJ.

Jeff had the natural ability of being a mentor and teacher to many. In college he found his love of sports. His favorites teams were the NY Yankees and the MN Vikings and enjoyed going to many sports stadiums. He went to college loving to listen to classical music and came out loving country western music. Even though he grew up in the Midwest, he enjoyed the East coast where he attended numerous sports games, Broadway shows, and live music concerts including "The Boss" Bruce Springsteen.

His faith was always a very important part of his life. In high school he became a church elder at First Presbyterian Church in Sioux Falls. When he moved to the East coast he continued his service to God as a church elder and clerk of session at Plainsboro Presbyterian at Plainsboro, NJ. Throughout his life he enjoyed singing in church choirs. He was extremely encouraging and supportive of Donna beginning her ministry internship to become an AIM pastor. Together they sang in church choirs, enjoyed various church groups, and Jeff assisted Donna in leading Bible studies and even taught his own Bible study at church.

Jeff learned to live a full life with the limitations of health problems. As a child, he was diagnosed with cystic fibrosis. At the age of 40, he suffered a major stroke but miraculously recovered. After recovery, he moved back to Sioux Falls, SD to be closer to family in 2011. During this year, Jeff, through a family friend, met the love of his life Donna Randolph and became engaged one year later. Donna and Jeff were married August 10, 2013 at Peace Lutheran Church in Sioux Falls, SD. On January 2, 2015 after a recent hospitalization, he was diagnosed with stage 4 cancer of the bile duct. Due to numerous circumstances he was unable to be treated. Donna and Jeff relied on their incredibly strong faith to accept what was handed to them and decided to live each day to the fullest. Through all of his health issues, Jeff never complained and even to the last day of his life he was more concerned about the comfort of others than he was of his own comfort.

Jeff was preceded in death by his grandparents Marjorie and Earl Waggoner and Dick and Hilka Kuper. Jeff is survived by his wife Donna, parents David and Mary Kuper, brother Phil (Amanda), niece Olivia, cat Torre and numerous relatives and friends.

IN MEMORIAM

Gene Luke

Gene Luke, 77, of Wentworth, SD died Wednesday, January 14, 2015 at the Madison Hospital.

(Norval) Gene Luke was born June 17, 1937 in St. Lawrence, SD. He attended Brookings High School and South Dakota State University where he graduated with a degree in pharmacy. He worked with Osco Drug Stores in numerous states before he became self-employed in several business ventures.

He was united in marriage with Bonnie Assam on June 28, 1961 in Evanston, IL. Together, they had three children; Tom Luke of Sioux Falls, SD, Patty (Dwight) Luke-Gerber of Sioux Falls, SD and Gene (Kathy) Luke of Wentworth, SD. Bonnie passed away in July of 1999.

Gene married Peggy Dreesen on June 8, 2000. In addition to his wife, he is survived by his children, Tom Luke; Patty (Dwight) Luke-Gerber and their children, Luke and Nate Veatch, Sean and Quentin Gerber; Gene (Kathy) Luke and their children, Ann and Payton Brunkow, Holden and Treven Luke. He is also survived by his brothers, Duane and Lawrence.

The family requests that expressions of sympathy be in the form of donations to the Gideon's or to the Living Hope building fund.

Murray Widdis, Jr.

Murray Widdis, Jr. of Arlington Heights, IL, passed away in Venice, FL. Murray was born May 7, 1932, in Detroit, MI. He grew up in Sioux Falls, attended Washington High School and SDSU. Murray graduated with a degree in Pharmacy and was employed in sales with Eli Lilly & Co.

Survivors include his wife of 57 years, Kay (Salem) Widdis, 3 children and 6 grandchildren.

Memorials may be directed to the SDSU Foundation, in memory of the Murray D. Widdis, Jr. Pharmacy Scholarship, 815 Medary Ave., Brookings, SD.

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