

# S O U T H D A K O T A P H A R M A C I S T

## IN THIS ISSUE

Legislative Days January 22-23

Legislative Calendar / Committee Information

Help your Patients Fight the Flu



WINTER EDITION 2019

## SOUTH DAKOTA PHARMACISTS ASSOCIATION

320 East Capitol, Pierre SD 57501  
605-224-2338 // 605-224-1280 fax  
www.sdpha.org

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

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### EXECUTIVE DIRECTOR / EDITOR

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### PRESCRIPTION DRUG MONITORING PROGRAM

Melissa DeNoon, Director  
Melanie Houg, Assistant

# 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: [www.sdpha.org](http://www.sdpha.org).*

## JANUARY

- 1 New Year's Day
- 8 94th South Dakota Legislative Session Opens  
State of the State Address,  
South Dakota State Capitol • 1 pm
- 10 Flu Shot Clinic  
South Dakota State Capitol – Room 411  
10 am – 12 noon
- 12 National Pharmacists Day
- 21 Martin Luther King Jr. Day
- 22 Legislative Days – Legislative Update and Dinner  
RedRossa Italian Grill • 6 pm
- 23 Legislative Days – Health Screenings  
by SDSU Pharmacy Students  
South Dakota State Capitol • Starting at 7 am
- 28 Sioux Falls District Volunteer Event  
*Lunch is Served* • 5:30 pm

## FEBRUARY

- 8–10 Midwest Pharmacy Expo  
Hilton Des Moines Downtown, Des Moines, IA
- 18 President's Day

## MARCH

- 10 Daylight Saving Times Begins
- 22–25 APhA Annual Meeting and Exposition  
Seattle, WA

## APRIL

- 11 South Dakota Board of Pharmacy Meeting  
The Lodge at Deadwood – Room TBA  
Deadwood, SD, 1–5 pm
- 12–13 South Dakota Society of Health System Pharmacists  
43rd Annual Meeting  
The Lodge at Deadwood, Deadwood SD

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advertisers the support they deserve.*

*The SOUTH DAKOTA PHARMACIST is published quarterly – January / April  
/ July / October. Opinions expressed do not necessarily reflect the official  
positions or views of the South Dakota Pharmacists Association.*

# DIRECTOR'S COMMENTS

Amanda Bacon // Executive Director



Happy New Year!

I hope you all enjoyed a wonderful holiday season filled with joy, and that your 2019 is off to a fantastic start! We are certainly off to a busy start in the SDPhA office. South Dakota's 94th Legislative Session is on, and we are already hard at work on your behalf at the Capitol. Please make sure you're watching your email and our social media pages

closely the next few months – things move awful quickly, and staying in the know is key. You'll receive email updates each Friday which will detail the bills we are monitoring, or have taken a position on. You'll also find where those pieces of legislation are at in the process, and perhaps most importantly – information about contacting your legislators when appropriate.

To that end, we highly encourage you to join us for Legislative Days Jan. 22-23 in Pierre. We have a great program planned for the evening of Tues., Jan. 22 with updates on our current efforts, as well as a quick primer on how the legislative process works. It's vital to have a strong understanding of the process – it is the basis for so much of the work we do. In addition, we look forward to this opportunity each year to showcase and educate lawmakers and the general public about all the great work pharmacists do. You'll find more details throughout this edition of the Journal, but you can also visit the SDPhA Member News and Announcements Facebook page, the website, or your inbox. If you'd like to come to the dinner Tues., Jan. 22 – please send me an email or a Facebook message to let me know. (Pro Tip: This is also the perfect time to meet some of the SDSU pharmacy students who will provide the health screenings at the Capitol the morning of Jan. 23.)

While we are not introducing legislation this year, we expect several bills impacting health care and pharmacy. At this stage, only the annual Department of Health scheduling bill (**SB 22**) has been filed. It has been read in the Senate and referred to the Senate Health and Human Services Committee. However, we anticipate others, and are also working on your behalf on some issues which may be able to resolved without legislation. We'll update you on all these things each week, so please watch our weekly updates closely. You may hear from us more often if need be.

Robert Riter, Margo Northrup and I will continue to work together to represent your interests at the Capitol this year. Lobbying is an expensive, but vital function. The Commercial and Legislative Branch (C&L) Fund is used to support the legislative work we do. It assists SDPhA in the protection and promotion of the profession during legislative session. It also relies solely on contributions, and we need your help to ensure we have the financial resources to swing into action on bills and policy that affect South Dakota Pharmacists. For the past several years, contributions have fallen well short of what we need – covering only about half of what we typically expend. Every dollar adds up – please consider a contribution today. You can donate **RIGHT HERE!**

## SOME OTHER QUICK UPDATES:

- We've secured a fantastic keynote speaker for the annual convention in Deadwood this September. Sioux Falls journalist Angela Kennecke will join us to share the very personal impact the opioid crisis has had on her life, and her crusade to keep other families from the same heartbreak
- We now have more than 40 people participating in the PTU online training program! You can find program details on pages 16-17. If you would like to enroll, or your have employees you'd like to have participate – let me know. It's extremely affordable, and signup is super simple.
- Pharmacists for Healthier Lives – **THIS WEBSITE** is a fantastic tool you NEED to use to help spread the word about the vital role you play in a patient's health. It's full of information, video and tidbits ready made to share on your social spaces. There is also a Facebook page. State associations from across the country and many other organizations have worked together to bring you this valuable resource.
- Watch for information about Spring District Meetings to come your way in February.

Respectfully,

**AMANDA BACON**

SDPhA Executive Director

# PRESIDENT'S PERSPECTIVE

Erica Bukovich // SDPhA Board President



Happy New Year, everyone! I hope this finds everyone well in 2019 and ready for the year ahead. All members of the SDPhA Board are excited to continue our work on behalf of the association this year as we represent each of you.

January also means Legislative Days is on the horizon. SDPhA will host this event Jan. 22 – 23. January 22 you will find us at

the Clubhouse Suites in Pierre. We will begin that Tuesday evening with a social and legislative update, which is a great opportunity not only to learn about important issues impacting pharmacy but also to gather with other members across the state. Wednesday morning you will again find us at the Capitol for light breakfast and health screenings provided by SDSU student pharmacists. Please consider joining fellow pharmacists and your SDPhA Board at this event.

SDPhA will continue to inform members throughout legislative session with updates, so keep your eyes out for email communications – Amanda Bacon's article has some more specifics for you on those efforts. Amanda, Robert

Riter and Margo Northrup will again represent SDPhA as lobbyists for the association and work diligently to keep us all in the know about everything happening in Pierre. If you have any questions or concerns regarding any issues, please feel free to contact the office or member of the Board.

While we are at the start of the year, it isn't too soon to be thinking about 2019 Convention. This year's event will be held in Deadwood, SD. We look forward to a weekend of learning and fun in the beautiful Black Hills. The Board is actively planning the events for the weekend of September 13-14, 2019 and looks forward to seeing everyone!

In closing, please remember to contact the any board member or the office with questions or concerns and we will do what we can to assist. On behalf of the SDPhA Board, we wish a Healthy and Happy New Year to all!

Respectfully,

**ERICA BUKOVICH**

SDPhA Board President

**SAVE the DATE** **SDPhA ANNUAL MEETING**

**SEPTEMBER 13-14, 2019**



The Lodge at Deadwood,  
Deadwood, SD

PO BOX 518 PIERRE, SD 57501 | (605) 224-2338 | WWW.SDPHA.ORG | SDPHA@SDPHA.ORG



**LEGISLATIVE DAYS**  
**January 22-23, 2019**

**Legislative Update and Dinner**  
January 22, 2019, 6 p.m. at RedRossa Italian Grill

**Health Screening**  
January 23, 2019, beginning at 7 a.m.  
by SDSU College of Pharmacy Students  
at the Capitol Building

**What does SDPhA do for you?**

- SDPhA provides you with legislative and regulatory representation on the state and national level;
- Protects and supports pharmacists in every practice setting;
- Liaison with national pharmacy organizations and state healthcare professional associations/societies;
- Provides media relations support and patient education opportunities for pharmacists;
- Liaison with SDSU's College of Pharmacy faculty and students;
- Provides pharmacists with critical information in a timely manner through the *SD Pharmacist* journal, email and fax blasts.



PO BOX 518 PIERRE, SD 57501  
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# SOUTH DAKOTA BOARD of PHARMACY

Kari Shanard-Koenders // Executive Director



## BOARD WELCOMES NEW REGISTERED PHARMACISTS/ PHARMACIES

Congratulations to the following seven candidates who recently met licensure requirements and were registered as pharmacists in South Dakota: Jaime Lynn Cantu, Amy Engle, Angelle Huff, Julie Ann Jacobson, Dillon Meyer, Kevin Reedstrom, and Sharon Scott. There was one full-time pharmacy license approved and issued during the period due to a change of ownership from Eureka Pharmacy & Gift Shoppe Inc. to Dosch Family Pharmacy in Eureka. There was also one Part-time pharmacy license issued Regional Health Home Plus LLC, dba Regional Health Home Plus LTC Pharmacy-Edgewood Senior Living, Spearfish

There was one full-time pharmacy license approved and issued during the period due to a change of ownership from Eureka Pharmacy & Gift Shoppe Inc. to Dosch Family Pharmacy in Eureka. There was also one Part-time pharmacy license issued Regional Health Home Plus LLC, dba Regional Health Home Plus LTC Pharmacy-Edgewood Senior Living, Spearfish

## SD BOARD ADOPTS NEW RULES

The Board held a rules hearing for the purpose of reviewing the following proposed rules: ARSD 20:51:32, 20:51:33, 20:51:34, 20:67. They were approved by the Board and were further approved by the Interim Legislative Research Council on November 20, 2018. They will be effective on December 20, 2018. These rules provide clarification regarding PDMP reporting and Wholesale and Other Drug Distributors licensing. ARSD 20:51:33 and 20:51:34 provides a mechanism for managing complaints and discipline for licensees or registrants.

## STAFF PREPAREDNESS SAVES PATIENT WHO REACTED TO SHINGRIX

*The Board heard this story and felt there is a valuable lesson. We want to recognize Anita for taking care of this patient and saving her life and asked her to write the story for the newsletter. Great job Anita!*  
**by Anita Tigner, Lewis Drug #9, Brandon, SD**

Providing a vaccination is fairly routine for most pharmacists; however, a recent incident has reminded me that we should never become complacent in carrying out those duties. We are required to become certified in vaccinations and to renew our CPR certificate every two years. Many of us also review emergency protocol going into the flu season, being fairly confident we will never be required to

implement emergency measures. I am thankful that I took the time to review the procedures and was well prepared for the emergency that ensued.

This particular Monday was relatively busy with several Shingrix appointments as well as several walk-in flu shots. My first appointment was a second dose of Shingrix for a husband and wife. I reviewed the intake form with the wife and prepared her dose as we chatted about the upcoming holiday. I informed her that some of my previous patients had a few more side effects after their second dose, such as a headache and fatigue but that it shouldn't last more than 24 to 48 hours.

I prepared the injection site and administered her dose in her right deltoid. As my usual procedure, I had her remain seated and asked how she was feeling as I completed her paperwork. She reported that she was feeling a bit dizzy. I inspected the injection site and no redness or rash was noted. She denied any difficulty breathing, and I did not see any swelling of her face or lips. She began feeling sweaty and dizzy so I had her place her head between her knees. At this point I had her husband come to the immunization room and I explained that his wife was not feeling well.

Assuming the dizziness would pass, I went ahead and administered the husband's vaccination. His vaccine was completed without incident. When she tried to sit up she became dizzy. I had her put her head between her knees again and examined the injection site and monitored her breathing. No swelling, rash or hives was noted. However, she had become very pale, was yawning excessively and acting strangely. I tried obtaining a blood pressure but was unable to get a good reading because she had become uncooperative. Her husband suggested they go home and she would be feeling better. I am thankful that I insisted that she stay with me. However, her husband had to run home, so he left her with me saying he would be back soon.

Shortly after he left my technician came over to see how she and I were doing. She was declining rapidly at this point. She had become nauseous. Her skin was quite pale and lips were turning blue. There was still no swelling of the face or lips and the injection site showed no signs of redness or swelling. I was having difficulty keeping her awake so I kept talking with her trying to reassure her. I told the tech to go call 911. She began vomiting shortly after my technician left the room. She was unable to hold her head up so I was supporting her by the shoulders and

monitoring her breathing. She began gurgling in her throat and I became very concerned that she was going into anaphylactic shock. I lifted her head to check her airway and examine her lips. Her face was a reddish purple and her eyes were closed, and she was unresponsive. She was breathing but with great difficulty. At his point, I knew I must administer epinephrine. Unfortunately, the EpiPen was in my emergency kit up on the third shelf. While supporting her shoulders I reached for the kit and yelled for Brad, my staff pharmacist to come to the immunization room immediately.

Within seconds Brad was preparing the EpiPen. I did not need to utter one word to Brad. He remained calm and administered the epinephrine promptly. She regained consciousness fairly quickly after the epinephrine, and I explained to her what had happened and that the paramedics were on their way. The police and paramedics arrived within about 3 minutes and she was very emotional. I continued to reassure her as I turned her care over to the paramedics.

I am thankful for the resources and training that are available to me and my fellow pharmacists. I am thankful, too, that Brad was well prepared to handle an emergency. I have learned a few important things from this incident. Follow your gut feeling and be prepared to act. Keep your epinephrine close at hand and always make your patient wait after any vaccine is administered. We must be prepared to act at all times and be confident in our training and abilities.

## WHAT WOULD YOU DO IF YOU OR A COLLEAGUE HAD A SUBSTANCE USE OR MENTAL HEALTH DISORDER?

The South Dakota Health Professionals Assistance Program (HPAP) is a program enacted through South Dakota Codified Law (SDCL) 36-2A to address issues related to regulated health care professionals' health and wellness. Specifically, HPAP is designed to help identify, guide, and support the recovery of professionals or eligible students with substance use or mental health disorders. As a pharmacist licensed in South Dakota you may have little or no cost for the evaluation. It is a confidential program and they are ready to help. For more information please see <https://www.mwhms.com/hpap> or call 605-475-471.

## BOARD MEETING DATES

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

## BOARD OF PHARMACY DIRECTORY

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### BOARD OF PHARMACY

605-362-2737 | 605-362-2738 fax  
www.pharmacy.sd.gov

### PDMP DATA ACCESS

<https://southdakota.pmpaware.net/login>

### PDMP DATA SUBMITTERS

<https://pmpclearinghouse.net/>

### NATIONAL ASSOCIATION OF BOARDS OF PHARMACY

www.NABP.pharmacy

( continued )

## PDMP UPDATE

by *Melissa DeNoon, PDMP Director*

The South Dakota Prescription Drug Monitoring Program's (SD PDMP) user base continues to increase. At 6,552 users across all roles as of the end of October 2018, the number of users has doubled since the end of 2016. This increase has contributed to the almost eightfold increase in program utilization since 2016 which is measured by the total number of program queries.

The SD PDMP provides monthly program statistics on their web page at <http://doh.sd.gov/boards/pharmacy/PDMP>. Each month the top ten most prescribed controlled substances are reported based on total prescription count. Three additional parameters are also reported including: 1) total quantity dispensed, 2) total days of supply, and 3) average quantity per prescription. A new option for program reporting is filtering by patient state so statistics can now be reported based on SD patients and/or all

patients in all states that SD licensed pharmacies dispense to. The graph below shows the top ten most prescribed controlled substances based on total prescription count for January through November 2018 filtered two ways, SD patients and all patients.

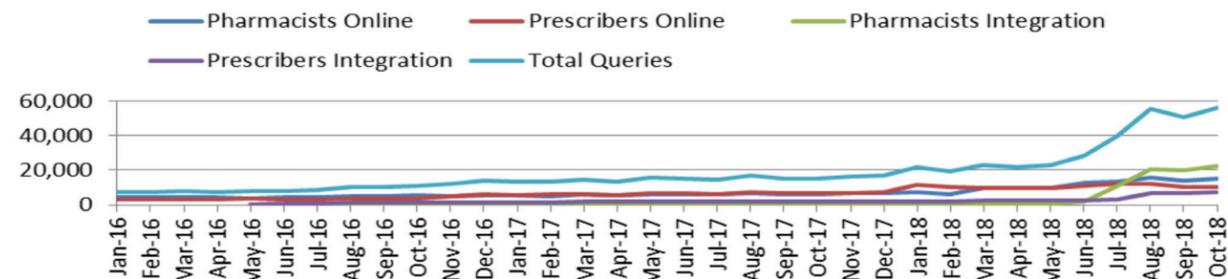
Integration of PDMP data into health systems' electronic health records and pharmacies' software systems is the future of PDMP. Integration provides key in-workflow, one-click access to this valuable clinical decision-making tool. SD PDMP integrations include: **1)** Avera Health System, **2)** Yankton Medical Clinic, **3)** Regional Health System, **4)** Walmart and Sam's Club Pharmacies, and in progress, **5)** Sanford Health System.

Respectfully Submitted for the Board,

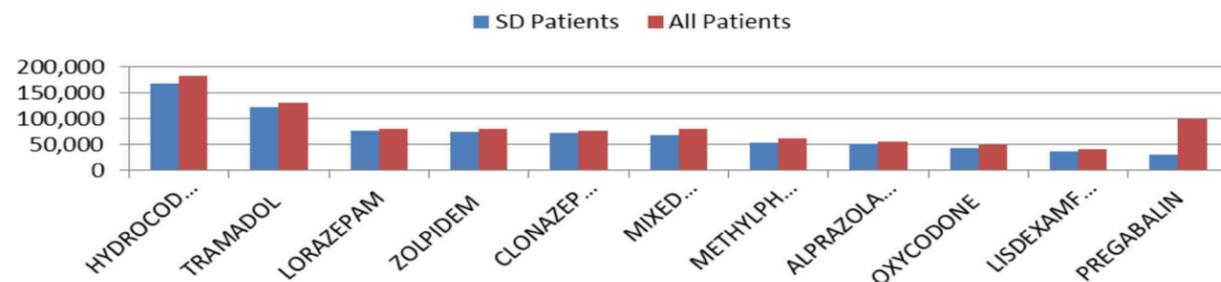
**KARI SHANARD-KOENDERS**

*Executive Director*

## Queries Jan 2016 to Oct 2018



## Top Drugs January - November 2018



# SOUTH DAKOTA ASSOCIATION of PHARMACY TECHNICIANS

*Jerrie Vedvei // SDAPT President*



Winter Greetings!

The Fall Conference for SDAPT is Sat., Oct. 5th. We are excited to once again have three locations; one each in Sioux Falls, Pierre and Rapid City.

We appreciate all the pharmacists and pharmacies across the state that support us and encourage their Technicians to attend this conference for great education.

One of the greatest things an employer can do, is show your staff you believe in them and send them to continuing education where they can associate with others in their field and gain great insight and education. The information gained at this conference is very beneficial for all of the pharmacies across the state.

Pharmacist, please share this date with all of your Technicians.

Thank you again to all of the pharmacists who support SDAPT.

Sincerely,

**JERRIE VEDVEI**

*SDAPT President*

## Did You Know?

You can submit immunization information to the South Dakota Department of Health's Immunization Registry? Contact Tammy LeBeau to get registered! Tammy is the Coordinator for South Dakota's Immunization Information System (SDIIS) and can be reached at her direct extension, 605-773-4783.

# SOUTH DAKOTA STATE UNIVERSITY COLLEGE of PHARMACY and ALLIED HEALTH PROFESSIONS

Jane Mort // Dean, College of Pharmacy & Allied Health Professions



Holiday Greetings from the College of Pharmacy and Allied Health Professions!

As the holiday season comes to a close, I want to express my deep appreciation for your support and interest in the College. We could not do all that we do without your support. It is clear that our successes really are your successes.

Speaking of success, NAPLEX results have been tabulated and show that all 2018 graduates of the College of Pharmacy and Allied Health Professions at South Dakota State University taking the exam passed on the first attempt. This 100% pass rate compares with a national average of 91.64 percent. In fact, for the most recently available data from NABP (2015-2017) indicates SDSU is number one in the nation for first time pass rate (99.1%). Another example of our students' achievement is found in their ASHP residency placement rate that exceeded the national rate (79% versus 65%). We are obviously very proud of our students and alumni!

Faculty are hard at work addressing significant health issues through their research. The accompanying table outlines the many grants obtained just in the last few months. This is an outstanding portfolio of funded projects and demonstrates the high quality of research occurring in the College. My compliments to each of these scholars on their grant success. An important addition to our team is Dr. Komal Raina from the University of Colorado who is joining us as the Kevin and Lorie Haarberg Endowed Chair in oncology research. Dr. Raina has a broad background in cancer research studying different epithelial cancer models, including, prostate, colon, lung, and pancreas, and has made significant contributions in establishing the efficacy of natural, non-toxic agents for effective cancer prevention, as well as discerning the molecular mechanisms involved in the agents' anti-cancer efficacy. We look forward to the many new findings emanating from these innovative projects.

## RECENT GRANTS:

- Drs. Guan and Perumal received the Board of Regents' Research & Development Innovation Grant for the project entitled *Enhancing the Capacity and Competitiveness of Cancer Research at South Dakota State University*.
- Dr. Jennifer Ball received funding from the State Department of Social Services, Division of Behavioral Health for the project, *Optimizing Interdisciplinary Training to Increase Medication-Assisted Treatment Providers Across South Dakota*, in support of South Dakota's State Targeted Response to the Opioid Crisis.
- Dr. Sharrel Pinto, Project Lead and PI, and Dr. Chamika Hawkins-Taylor and Dr. Alex Middendorf, Co-PIs, received a 5-year, multi-million dollar grant as part of the CDC's 1815 project, *Improving the Health of Americans through Prevention and Management of Diabetes and Heart Disease and Stroke*.
- Dr. An just received an NIH R15 for his cancer research *Developmental timing of LINE-1 retrotransposition in mouse models* and an NIH R01 subaward in his work with Dr. Laird from UCSF on cancer entitled *The intersection of stress and environmental chemicals in germ cell reprogramming*.
- Dr. Raina joined us on October 22nd and brought with her an NIH RO1 grant entitled *Rice bran microbial metabolism for colon cancer chemoprevention*.

From the outstanding success of our students and state-of-the-art curriculum/facilities, to the research that is making a difference in how pharmacy is practiced and diseases are managed – the College of Pharmacy and Allied Health Professions is an exciting place to be. Stop by, we would love to show you around!

Warm regards,  
**JANE MORT**  
Dean, College of Pharmacy & Allied  
Health Professions



# ACADEMY of STUDENT PHARMACISTS

Bailey Buenger // SCAPP/APhA-ASP SDSU Chapter President



Happy Holidays from the SDSU Student Collaboration for the Advancement and Promotion of Pharmacy! Our committees have hosted a variety of events over the past couple months. Our Katy's Kids committee handed out pamphlets on OTC safety and how medication is not candy at TrunkOrTreat in Brookings. As a part of the Women's Health Initiative, our self-care committee partnered

with Brookings Tae Kwon Do to host a self-defense class. At our last chapter meeting for the semester Dr. Nicole Cieri-Hutcherson presented to our chapter on women's health and infertility.

We have also recently hosted our chapter's Patient Counseling Competition. This year we had seventeen chapter members participate. The top ten contestants will compete in the final round of the competition at the beginning of the spring semester. As always, the winner of this competition will win an expense-paid trip to APhA Annual Meeting in Seattle, WA to compete in the National Patient Counseling Competition.

I would like to recognize our 2017-18 operations co-chairs and executive board for their hard work during the last school year. Thanks to their dedication and the health screenings provided by our members, our chapter was recognized with the 2017-18 Operation Heart national patient care project award at the APhA-ASP Midyear Regional Meeting (MRM) in Fargo, ND. Additionally at MRM, our member Chris Kotschevar was elected as the 2018-19 APhA-ASP Region 5 Regional Delegate. Our chapter was also recognized through ASHP-SSHP with the Outstanding Professional Development Project Award for the Transitions of Care program.

As president, I could not be more proud of what the chapter has accomplished this semester. Looking forward to the spring semester, we are starting to prepare for Legislative Days in Pierre and SCAPP elections for the upcoming 2019-20 school year.

Respectfully,  
**BAILEY BUENGER**  
SCAPP/APhA-ASP SDSU Chapter President



# SOUTH DAKOTA SOCIETY of HEALTH-SYSTEM PHARMACISTS

Aaron Larson, PharmD, BCPS // SDSHP President



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

### GARY VAN RIPER FINISHES FINAL TERM AS SDSHP SECRETARY IN APRIL

After serving our members for more than 40 years, Gary Van Riper will be stepping down from his long standing role as SDSHP secretary. Speaking for hundreds of SDSHP leaders

and thousands of members, SDSHP cannot express all of our gratitude for Gary's unwavering dedication and support for health-systems pharmacy. He has truly been an institution in advancing pharmacy practice and educating pharmacists in South Dakota. We will be honoring his unparalleled service to SDSHP and health-systems pharmacy with an Appreciation Party on Friday (1/25/19) in the event room at Shenanigans in Sioux Falls from 5:30 PM to 7:30 PM. We will supply appetizers and everyone is welcome to attend! You do not need to be a member of SDSHP to help celebrate Gary's accomplishments. We look forward to seeing you there!

### PHARMACY MONTH SOCIAL EVENTS

SDSHP held two social events in the month of October to help celebrate Pharmacy Month. The east river event was held on October 23rd at Monks House of Ale Repute in Sioux Falls, and the west river event was held on October 25th at Dakota Point Brewing in Rapid City. We had a great turn out of pharmacists and student pharmacists at these events and are hoping to have another set of social events in the spring. Be on the lookout for more information on these upcoming social events in the next few months!

### ASHP MIDYEAR CLINICAL MEETING

As President of SDSHP, I had the opportunity to attend the 2018 ASHP Midyear Clinical Meeting in Anaheim, CA from December 2nd through the 6th. Midyear is the largest gathering of pharmacy professionals in the world with more than 25,000 attendees. This year Earvin Magic Johnson delivered the keynote address where his message resonated with and inspired the audience. We also had

another very successful *Dakota Night* reception with more than 150 pharmacy professionals in attendance. SDSHP would like to thank our *Dakota Night* co-sponsors including SDSU College of Pharmacy and Allied Health Professions, North Dakota Society of Health-System Pharmacists, North Dakota Board of Pharmacy, and Portola Pharmaceuticals.

### UPCOMING CONTINUING EDUCATION EVENTS

We have a number of CE events coming up, so start marking your calendars! The South Dakota pharmacy residents will be presenting at these upcoming CE events. SDSHP members can attend these events for free. Please come and support the South Dakota residents and receive ACPE accredited CE! Further information on these events will be distributed via email in the coming weeks.

- East River Resident CE Event – Jan. 26 from 8 am to 12 pm in the Benedictine Room at the Avera Prairie Center in Sioux Falls
- East River Resident CE Event – Feb. 2 from 1 to 5 am in the Benedictine Room at the Avera Prairie Center in Sioux Falls
- West River Resident CE Event – Feb. 23 in the East Auditorium at Rapid City Regional (Time TBD)

### MEMBERSHIP RENEWAL

Membership renewal will begin in early January. Be on the lookout for your renewal email! If you have not previously been a member of SDSHP and are interested in becoming a member, please visit SDSHP.com and click on the *Join SDSHP* tab.

### 43RD ANNUAL SDSHP CONFERENCE

The 43rd Annual SDSHP Conference will take place on April 12-13, 2019 at the Lodge at Deadwood in Deadwood, SD. I would like to thank the members of the Annual Meeting Committee who have been working diligently to create another year of fantastic CE programming. Please visit [www.sdshp.com](http://www.sdshp.com) for more information and to register for the conference!

Respectfully submitted,  
**AARON LARSON**  
SDSHP President

## 2018 / 2019 COMMERCIAL & LEGISLATIVE (C&L) and DISTRICT DUES CONTRIBUTIONS

FIRST NAME \_\_\_\_\_ LAST NAME \_\_\_\_\_

ADDRESS \_\_\_\_\_

CITY \_\_\_\_\_ STATE \_\_\_\_\_ ZIP CODE \_\_\_\_\_

HOME PHONE \_\_\_\_\_ MOBILE PHONE \_\_\_\_\_

EMPLOYER / COMPANY \_\_\_\_\_

WORK ADDRESS \_\_\_\_\_

WORK CITY \_\_\_\_\_ STATE \_\_\_\_\_ ZIP CODE \_\_\_\_\_

WORK PHONE \_\_\_\_\_ WORK FAX \_\_\_\_\_

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Do you wish to receive SDPhA email alerts regarding important pharmacy issues?  YES  NO

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# 94th SOUTH DAKOTA LEGISLATIVE SESSION CALENDAR

2019 40 Legislative Days

Please refer to the Joint Rules, Chapter 17 for complete information. Prepared by the South Dakota Legislative Research Council 3/9/2018



	Sun	Monday	Tuesday	Wednesday	Thursday	Friday	Sat
January 2019	6	7	8 Session Opens 12 Noon (CST) State of the State L.D. 1	9 State of the Judiciary L.D. 2	10 State of the Tribes L.D. 3	11 L.D. 4	12
	13	14 Executive orders filed (Constitution, Art. IV, Sec. 8) L.D. 5	15 L.D. 6	16 Jt. Memorial Service 3:00 pm L.D. 7	17 Concurrent Resolution limited introduction deadline (J.R. 6B-3) L.D. 8	18	19
	20	21 Martin Luther King Jr. Day	22 L.D. 9	23 L.D. 10	24 L.D. 11	25 Last 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	26
February 2019	Jan 27	Jan 28 All bill draft requests due in LRC (J.R. 6A-5) L.D. 13	Jan 29 L.D. 14	Jan 30 Last day for introduction of individual bills and joint resolutions Must be at the front desk TWO HOURS prior to session. L.D. 15	Jan 31 Last day for introduction of committee bills and joint resolutions Must be at the front desk TWO HOURS prior to session. L.D. 16	Feb 1	2
	3	4 L.D. 17	5 L.D. 18	6 L.D. 19	7 L.D. 20	8	9
	10	11 L.D. 21	12 L.D. 22	13 L.D. 23	14 Last day for JCA selection of general fund revenue targets (J.R. 7-11.1) L.D. 24	15	16
March 2019	17	18 Presidents' Day	19 L.D. 25	20 Last day to use J.R. 5-17 L.D. 26	21 L.D. 27	22 Last day to move required delivery of bills or resolutions by a committee to the house of origin L.D. 28	23
	Feb 24	Feb 25 Last day to pass bills or joint resolutions by the house of origin Last day for introduction of concurrent resolutions L.D. 29	Feb 26 L.D. 30	Feb 27 Last day for JCA to move required delivery of special appropriation and property sale bills to house of origin L.D. 31	Feb 28 Last day for house of origin to pass special appropriation and property sale bills delivered by JCA L.D. 32	Mar 1	2
	3	4 Last day for introduction of commemorations L.D. 33	5 J.R. 5-13 in effect L.D. 34	6 Last day to move required delivery of bills or joint resolutions by a committee to the second house L.D. 35	7 Last day for a bill or joint resolution to pass both houses L.D. 36	8	9
	10	11 L.D. 37	12 L.D. 38	13 L.D. 39	14	15	16
	17	18	19	20	21	22	23
	24/31	25	26	27	28	29 Reserved for consideration of gubernatorial vetoes L.D. 40	30

# STANDING COMMITTEES

94th Legislative Session Meeting Schedule – 2019

This schedule and all Legislative Research Council documents are available on the LRC home page: [sdlegislature.gov](http://sdlegislature.gov).



TIME	ROOM	MONDAY WEDNESDAY FRIDAY	TUESDAY THURSDAY
7:45 – 9:45 a.m.	414	<b>House State Affairs</b> Rep. Qualm, Chair David Ortbahn, Staff	<b>House Ag &amp; Natural Resources</b> Rep. Brunner, Chair Amanda Marsh, Staff
7:45 – 9:45 a.m.	413	<b>House Education</b> Rep. Lana Greenfield, Chair Anita Thomas, Staff	<b>Senate Judiciary</b> Sen. Russell, Chair Emily Kerr, Staff
7:45 – 9:45 a.m.	412	<b>Senate Local Government</b> Sen. Phil Jensen, Chair Emily Kerr, Staff	<b>House Health &amp; Human Services</b> Rep. Kevin Jensen, Chair Anita Thomas, Staff
7:45 – 9:45 a.m.	423	<b>Senate Transportation</b> Sen. Ernie Otten, Chair Amanda Marsh, Staff	<b>Senate Education</b> Sen. Solano, Chair Clare Charlson, Staff
7:45 – 9:45 a.m.	464		<b>House Taxation</b> Rep. Willadsen, Chair Alex Timperley, Staff
10:00 a.m. – Noon	414	<b>Senate State Affairs</b> Sen. Ewing, Chair Clare Charlson, Staff	<b>House Local Government</b> Rep. Herman Otten, Chair Clare Charlson, Staff
10:00 a.m. – Noon	413	<b>House Judiciary</b> Rep. Hansen, Chair Wenzel Cummings, Staff	<b>House Transportation</b> Rep. Mills, Chair David Ortbahn, Staff
10:00 a.m. – Noon	412	<b>Senate Health &amp; Human Services</b> Sen. Soholt, Chair Emily Kerr, Staff	<b>Senate Ag &amp; Natural Resources</b> Sen. Cammack, Chair Anita Thomas, Staff
10:00 a.m. – Noon	423	<b>Senate Taxation</b> Sen. Monroe, Chair Amanda Marsh, Staff	<b>Senate Commerce &amp; Energy</b> Sen. Stalzer, Chair Wenzel Cummings, Staff
10:00 a.m. – Noon	464	<b>House Commerce &amp; Energy</b> Rep. Rounds, Chair Alex Timperley, Staff	
8:00 a.m. – Noon	Appropriations 362	<b>Joint Committee on Appropriations</b> Sen. Wiik, Lead Co-Chair, Rep. Karr, Co-Chair Tamara Darnall, Jeff Mehlhaff, Amanda Doherty-Karber, Shane Mattheis, Staff	
At the Call of the Chair		<b>Government Operations &amp; Audit</b> (Chairs: Sen. Maher & Rep. Peterson/Auditor Gen.) <b>Legislative Procedure</b> (Chairs: Sen. Greenfield & Rep. Haugaard/Jason Hancock) <b>Military &amp; Veterans Affairs (Senate)</b> (Chair: Sen. Nelson/Wenzel Cummings) <b>Retirement Laws</b> (Chairs: Sen. White & Rep. Zikmund/Jeff Mehlhaff)	



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## Pharmacist Consult – Commonly Encountered Pediatric Infections, Part 1: A Review of Rhinosinusitis, Sore Throats, Ear Aches

### Knowledge-based CPE

**Course Author:** Nicole Carr, Pharm.D.  
Community Practice Pharmacist, Minneapolis, MN

**Course Development:** This course was developed under the guidance and review protocols of the Office of Continuing Education, South Dakota State University College of Pharmacy and Allied Health Professions.

### LEARNING OBJECTIVES

1. Describe the etiology and pathophysiology of commonly encountered pediatric infections including rhinosinusitis, sore throats, and ear aches;
2. Provide appropriate consultation to patients and parents regarding prognosis of common pediatric infections and make appropriate referral recommendations;
3. Provide nonpharmacological counseling points on the treatment of bacterial and viral infections in children;
4. Differentiate between viral and bacterial infections based on signs and symptoms.

### INTRODUCTION

Upper respiratory infections, including rhinosinusitis, pharyngitis, and otitis media, are the most common infectious diseases that lead to doctor's office and emergency department visits.<sup>1</sup> Therefore, it is important for pharmacists to be familiar with the diagnosis and management of these infections in order to provide recommendations to patients in the community pharmacy setting.

Differentiating between the clinical presentations of viral and bacterial infections is essential for pharmacists to make appropriate OTC recommendations and referrals to providers.

## RHINOSINUSITIS

**Epidemiology:** Approximately 30 million patients present to clinics with rhinosinusitis each year in the United States.<sup>1</sup> Although rhinosinusitis is most frequently caused by viruses, it is the fifth most common indication for antibiotics prescribed in clinics.<sup>2</sup>

**Etiology:** Acute rhinosinusitis is the inflammation of the mucosal lining in the nasal passage and paranasal sinuses.<sup>2</sup> If the infection is bacterial, the most likely cause is *Streptococcus pneumoniae* or *Haemophilus influenzae*.<sup>1</sup> These pathogens account for 50 to 70% of bacterial rhinosinusitis. *Moraxella catarrhalis* causes 8 to 16% of bacterial rhinosinusitis.

Increased administration of the pneumococcal conjugate vaccine has decreased rates of *S. pneumoniae*, and there has been a relative increase in *H. influenzae*.<sup>3</sup> Penicillin susceptibility of *S. pneumoniae* varies by location and ranges from 10 to 60% of isolates being nonsusceptible. Nearly 100% of *M. catarrhalis* and 10 to 42% of *H. influenzae* produce  $\beta$ -lactamases that cause resistance to amoxicillin.

A pediatric patient is more likely to be infected with an amoxicillin-resistant isolate if he or she attends daycare, has had antibiotics within the last 30 days, or is younger than 2 years of age.

**Pathophysiology:** In approximately 5% of viral upper respiratory infections in children, a secondary bacterial infection follows.<sup>2</sup> Mucosal inflammation caused by the viral infection impairs drainage from the sinuses, which allows mucus to become trapped and bacteria to proliferate.<sup>1</sup>

**Clinical Presentation:** It is difficult to differentiate bacterial from viral rhinosinusitis without a sinus puncture, which is not recommended because it is invasive and expensive.<sup>1</sup> Acute bacterial sinusitis is diagnosed when a child presents with any of the 3 following criteria including nasal discharge or daytime cough for greater than 10 days without improvement, worsening course of illness, or severe onset and purulent nasal discharge for 3 days.<sup>3</sup> Severe onset would include a fever of equal to or greater than 39° C.

Approximately 6% of children presenting with upper respiratory symptoms have acute bacterial sinusitis consistent with the above definition.

**Nonpharmacologic Therapy:** If acute bacterial rhinosinusitis is suspected, decongestants and antihistamines are not recommended due to their drying effect and disturbance

of mucus clearance.<sup>1,2</sup> Saline irrigation is still recommended for adults, and intranasal corticosteroids are recommended for patients with a history of allergic rhinitis.

The role of saline irrigation in children with rhinosinusitis is less clear.<sup>2</sup> One study showed improvement in nasal symptoms after saline irrigation, but the process is often not well tolerated in children.

Adjunct therapies in addition to antibiotics lack clinical trial data to determine their place in therapy.<sup>3</sup> Intranasal steroids have shown benefit in adults with acute bacterial sinusitis, but there is not enough data to make a strong recommendation in children.

**Treatment:** For patients with severe onset or worsening course, antibiotic therapy is recommended.<sup>3</sup> For patients with persistent illness, the provider may choose to either prescribe antibiotics or observe the child for an additional three days.

In one study, the number needed to treat (NNT) was 3 to 5 children receiving antibiotic therapy for acute bacterial sinusitis, in order to prevent one adverse outcome.

The number needed to harm (NNH) from antibiotic therapy was 3, with the most common adverse effect being diarrhea.

Caregivers should then monitor for worsening of symptoms or failure to improve within 72 hours of starting an antibiotic.

## ACUTE PHARYNGITIS

**Epidemiology:** Two million clinic and emergency department visits are caused by acute pharyngitis annually.<sup>1</sup> Children ages 5 to 15 years are most likely to develop acute pharyngitis caused by Group A  $\beta$ -hemolytic *Streptococcus* (GABHS).<sup>1,4</sup>

GABHS is spread by direct contact, with outbreaks occurring most often in winter and early spring.<sup>1</sup>

The incubation period is two to five days, and infected patients may spread the infection to others during the acute illness and for up to a week after.

**Etiology:** Viruses are the most common cause of acute pharyngitis.<sup>1,4</sup> If the infection is bacterial, the most likely cause is GABHS. GABHS is responsible for only 15 to 30% and 5 to 15% of acute pharyngitis cases in children and

adults, respectively. Antibiotics are nonetheless prescribed for a full 73% of patients complaining of a sore throat at an office visit.

Other bacterial causes of acute pharyngitis are uncommon.<sup>1</sup> Appropriate treatment of GABHS pharyngitis is important to prevent acute rheumatic fever, avoid spreading of illness, and improve clinical signs and symptoms.<sup>4</sup> The accurate diagnosis of GABHS pharyngitis is important to prevent the inappropriate administration of antibiotics.

**Clinical Presentation:** Clinical features of GABHS pharyngitis include sudden onset sore throat, fever, headache, tonsillopharyngeal inflammation, and tonsillopharyngeal exudates.<sup>4</sup>

Patients with symptoms should undergo microbiologic testing.<sup>1</sup> Rapid antigen detection tests and cultures from a throat swab are often needed to distinguish GABHS pharyngitis from viral pharyngitis, as the clinical presentation of each of these inflammatory conditions overlap.<sup>4</sup> It is not recommended to test patients younger than 3 years old because GABHS pharyngitis occurs infrequently in this population.<sup>1,4</sup>

Testing in this population may be considered in specific circumstances, such as an older sibling being diagnosed with GABHS pharyngitis and symptoms present in the child.<sup>4</sup>

Household contacts should not be routinely tested, nor should they be empirically treated if they are asymptomatic. If a patient presents with viral symptoms, which include rhinorrhea, conjunctivitis, diarrhea, cough, oral ulcers, and hoarseness, a GABHS rapid antigen detection test is not recommended.

**Nonpharmacologic Treatment:** Supportive care for acute pharyngitis includes antipyretic medications and analgesics.<sup>1,4</sup> An NSAID or acetaminophen is appropriate adjunct therapy in addition to an appropriate antibiotic for symptoms and to reduce fever. Aspirin, however, is not appropriate for use in children.<sup>4</sup>

Lozenges and throat sprays with menthol and topical anesthetics may also help provide temporary pain relief.<sup>1</sup> Consideration should also be given to the potential for choking risk from lozenges in pediatric patients.

Corticosteroids are not recommended for pediatric patients due to lack of efficacy and risk of side effects.<sup>1,4</sup>

## Pharmacist Consult – Commonly Encountered Pediatric Infections, Part 1: A Review of Rhinosinusitis, Sore Throats, Ear Aches

### Knowledge-based CPE

**Treatment:** A positive rapid test or culture indicates that the patient has a GABHS infection or is a carrier.<sup>1</sup> Twenty percent of children are carriers. To test, a throat swab is obtained and used for a rapid antigen-detection test (RADT).

The gold standard for diagnosis is a culture from a throat swab, but cultures take up to two days to result and are more expensive.<sup>1,4</sup> Compared to cultures, RADT has a specificity of 95% and a sensitivity of 70-90%.<sup>4</sup> If the RADT is positive, treatment should be prescribed and a culture would then be unnecessary.<sup>1,4</sup>

If the RADT is negative, a follow-up culture should be ordered to confirm the negative results in children and adolescents. In patients with a negative RADT, antibiotic therapy should only be initiated if the culture is positive. Antistrepto-coccal antibody titers are not useful in the diagnosis of GAS pharyngitis because the antibody levels do not reach a maximum until up to eight weeks after infection.<sup>4</sup>

### ACUTE OTITIS MEDIA

**Epidemiology:** In the United States, acute otitis media (AOM) is the most common indication for which antibiotics are prescribed for children.<sup>5</sup> Of all office visits for otitis media, 76% result in an antibiotic prescription.

Recently, there has been a notable decrease in the number of office visits for otitis media. It has been suggested that this could be due to an increase in pneumococcal vaccinations, influenza vaccinations, and public health campaigns that educate the public about the viral nature of many upper respiratory tract infections.

**Etiology:** Viruses cause 40 to 70% of acute otitis media cases.<sup>1</sup> If the infection is bacterial, the most likely cause of acute otitis media is *Streptococcus pneumoniae*, which accounts for 35 to 40% of all bacterial cases.<sup>1,5</sup>

Other common bacterial causes include *Haemophilus influenzae* (30-35%) and *Moraxella catarrhalis* (15-18%).

Widespread use of the pneumococcal vaccine has led to a decrease in the number of acute otitis media cases caused by *S. pneumoniae* and, at the same time, a relative increase in the number of cases caused by *H. influenzae*.<sup>1</sup>

Resistance to  $\beta$ -lactam antibiotics is common among these pathogens.<sup>1</sup> Risk factors for amoxicillin-resistance include attending a child care center, receiving antibiotics within the past 30 days, and being younger than two years old.

**Pathophysiology:** Viral upper respiratory tract infections often precede bacterial AOM.<sup>1,5</sup> Due to the infection, the middle ear becomes blocked with fluid.<sup>1</sup> Because the eustachian tube in children is more horizontal and shorter than in adults, they are more susceptible to acute otitis media.

**Clinical Presentation:** Most children present with acute onset otalgia.<sup>1</sup> While older children can verbalize this, younger children may present with tugging on the ear, excessive crying, fever, and changes in behavior or sleep.<sup>5</sup>

Three criteria are involved in a diagnosis of acute otitis media, differentiating it from otitis media with effusion and chronic otitis media.<sup>1</sup> All of the following must be present:

- Middle ear inflammation
- Acute signs of infection
- Presence of fluid in the middle ear

There is no gold standard for diagnosis. AOM should be diagnosed in patients exhibiting new onset otorrhea or moderate to severe bulging of the tympanic membrane.<sup>5</sup> Mild bulging of the tympanic membrane with onset of ear pain within the last 48 hours, or intense erythema of the tympanic membrane, may also be considered as diagnostic criteria. Patients without middle ear effusion should not receive an AOM diagnosis.

The American Academy of Pediatrics has published definitions to help differentiate between severe, non-severe, and recurrent AOM.

- Severe: fever of 39° C or greater or moderate-to-severe otalgia
- Non-severe: mild otalgia with a temperature of less than 39° C
- Recurrent: at least 3 episodes of AOM in the last 6 months, or at least 4 episodes in the last 12 months, with at least 1 in the last 6 months

**Prevention:** The pneumococcal vaccine and *H. influenzae* type b (Hib) vaccine may each beneficially reduce the incidence of acute otitis media in children.<sup>1,5</sup>

### VIRAL VS. BACTERIAL INFECTIONS

**Table 1:** Signs and symptoms used to differentiate the clinical presentation of viral and bacterial infections.<sup>1,2</sup>

VIRAL	BACTERIAL
Respiratory symptom duration is 5-10 days, with peak severity days 3-6	Symptoms for at least 10 days without clinical improvement
No fever; if fever is present, usually during the first 24-48 hours	Severe symptoms or high fever ( $\geq 39^{\circ}$ C) for 3-4 days at onset of illness with purulent nasal discharge or facial pain
Clear nasal drainage, transitions to purulent for several days, then back to clear	Worsening symptoms after initial improvement; symptoms may include new onset fever, headache, or increase in nasal drainage

Receiving the influenza vaccine may also reduce the risk of developing acute otitis media.

The American Academy of Pediatrics (AAP) guidelines also recommend exclusive breastfeeding for at least six months and avoiding tobacco smoke exposure in children.<sup>5</sup> Supine bottle feeding and pacifier use have been associated with an increased incidence of AOM and should be avoided.

**Nonpharmacologic Therapy:** AAP guidelines recommend treating the pain associated with AOM.<sup>5</sup> Antibiotics do not generally provide symptomatic relief within 24 hours; therefore, analgesics like acetaminophen and ibuprofen should be considered to help relieve pain quickly with, or without, antibiotics.

**Treatment:** The AAP guidelines for the treatment of acute otitis media provide guidance on whether antibiotics should be prescribed initially, or whether an observation period should be considered prior to the initiation of an antibiotic treatment regimen.<sup>5</sup>

Antibiotics should be prescribed if the patient is six months or older with severe signs and symptoms with unilateral or bilateral illness. Antibiotics should also be prescribed for patients who are less than twenty-four months old with bilateral AOM without severe signs or symptoms.

If antibiotics are prescribed, the physician should reevaluate the patient in 48 to 72 hours if the parent reports a worsening of symptoms or failure to improve. Antibiotics or observation should be considered in patients 6 to 23 months old with unilateral AOM without severe signs or symptoms, and in patients at least 24 months old with unilateral or bilateral AOM without severe signs or symptoms.

The decision whether to treat with antibiotics or observe should be made with parent or caregiver input. Antibiotics should be prescribed within 48 to 72 hours if child worsens or fails to improve.

### SUMMARY

Community pharmacists play an important role in the management of common pediatric infections and consulting with patients and providers to optimize therapy and improve outcomes for this population group.

**Financial Disclaimer:** The author and planners/reviewers of this course have no financial relationships to declare.

### References:

1. Frei C, Frei B. Upper respiratory tract infections. In: DiPiro JT, Talbert RL, Yee GC, Matzke GR, Wells BG, Posey LM. Pharmacotherapy: a pathophysiologic approach. New York: McGraw-Hill; 2014. p. 1717-29.
2. Chow AW, Benninger MS, Brook I, Brozek JL, Goldstein EJ, Hicks LA, et al. IDSA clinical practice guideline for acute bacterial rhinosinusitis in children and adults. Clin Infect Dis. 2012;54(8):72-112.
3. American Academy of Pediatrics. Clinical practice guideline for the diagnosis and management of acute bacterial sinusitis in children aged 1 to 18 years. J Pediatr. 2013;132:262-280.
4. Shulman ST, Bisno AL, Clegg HW, Gerber MA, Kaplan EL, Lee G, et al. Clinical practice guideline for the diagnosis and management of group A streptococcal pharyngitis: 2012 update by the Infectious Disease Society of America. Clin Infect Dis. 2012;55(10):86-102.
5. American Academy of Pediatrics. The diagnosis and management of acute otitis media. J Pediatr. 2013;131:964-999.

## Pharmacist Consult – Commonly Encountered Pediatric Infections, Part 1: A Review of Rhinosinusitis, Sore Throats, Ear Aches

### Learning Assessment – Post Test

- Acute rhinosinusitis in pediatric patients is most commonly caused by which of the following?
  - Streptococcus pneumoniae*
  - Haemophilus influenzae*
  - Moraxella catarrhalis*
  - Viruses
- Which of the following is NOT included in the diagnostic criteria for acute bacterial sinusitis in pediatric patients?
  - Nasal drainage or daytime cough for greater than 5 days without improvement
  - Worsening course of illness
  - Fever of  $\geq 39^\circ\text{C}$  at onset and purulent nasal discharge for 3 days
- If a pediatric patient presents with a diagnosis of acute bacterial rhinosinusitis and an antibiotic prescription, you should also recommend the use of over-the-counter decongestants or antihistamines for symptom relief.
  - True
  - False
- Which of the following patients should be referred to a provider for diagnostic testing for GABHS?
  - A 2-year-old patient presenting with a cough and fever
  - A 6-year-old patient presenting with cough, hoarseness, rhinorrhea, and conjunctivitis
  - A 12-year-old patient without symptoms whose younger brother was diagnosed with GABHS pharyngitis
  - A 7-year-old patient complaining of a sudden onset sore throat, headache, and fever
- Which of the following would be appropriate to recommend for the treatment of pain associated with GABHS pharyngitis in children? (select all that apply)
  - Acetaminophen
  - Prednisolone
  - Aspirin
  - Ibuprofen
- Which of the following is NOT a risk factor for amoxicillin resistance in bacteria that causes acute otitis media in children?
  - Attending daycare
  - Antibiotics within the last 90 days
  - Age younger than 2 years
- Which of the following is/are recommended for the prevention of acute otitis media in children?
  - Exclusive breastfeeding for at least the first six months
  - Pneumococcal vaccine and *H. influenzae* type b (Hib) vaccine
  - Avoiding tobacco smoke exposure
  - Annual influenza vaccine
  - All of the above
- Analgesics should be recommended for all pediatric patients with acute otitis media, whether or not they are prescribed an antibiotic.
  - True
  - False
- A pediatric patient presents to the pharmacy with a fever of  $39.5^\circ\text{C}$  along with facial pain for the last 3 days. Is a physician referral appropriate for this patient?
  - Yes, symptoms are consistent with potential bacterial infection
  - No, symptoms suggest a viral cause
- A patient presents to the pharmacy with mild respiratory symptoms for the past 5 days. His sputum has become thick and green recently after two days of clear nasal drainage. He thinks that he maybe had a fever with the onset of symptoms but states that it has resolved. Is a physician referral appropriate for this patient?
  - Yes, symptoms are consistent with potential bacterial infection
  - No, symptoms suggest a viral cause

## Pharmacist Consult – Commonly Encountered Pediatric Infections, Part 1: A Review of Rhinosinusitis, Sore Throats, Ear Aches

### Knowledge-based CPE

To receive 1.5 Contact Hours (0.15 CEUs) of continuing education credit, preview and study the attached article and answer the 10-question post-test by circling the appropriate letter on the answer form below and completing the evaluation. A test score of at least 70% is required to earn credit for this course. If a score of 70% (7/10) is not achieved on the first attempt, another answer sheet will be sent for one retest at no additional charge.

Participants should verify credit upload to their NABP accounts within two weeks of submission of this answer sheet to insure appropriate credit award.



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: **#0063-0000-18-033-H01-P**.

**Learning Objectives - Pharmacists:** 1. Describe the etiology and pathophysiology of commonly encountered pediatric infections including rhinosinusitis, sore throats, and ear aches; 2. Provide appropriate consultation to patients regarding prognosis of common pediatric infections and make appropriate referral recommendations; 3. Provide nonpharmacological counseling points on the treatment of bacterial and viral infections in children; 4. Differentiate between viral and bacterial infections based on signs and symptoms.

**Circle Correct Answer:** 1. A B C D    2. A B C    3. A B    4. A B C D    5. A B C D  
6. A B C    7. A B C D E    8. A B    9. A B    10. A B

**Course Evaluation:** must be completed for credit.

	DISAGREE							AGREE						
Material was effectively organized for learning:	1	2	3	4	5	6	7	1	2	3	4	5	6	7
Content was timely and applicable for re-licensing / recertification:	1	2	3	4	5	6	7	1	2	3	4	5	6	7
Each of the stated learning objectives was satisfied:	1	2	3	4	5	6	7	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: _____														
Course material was evidence-based, balanced, noncommercial:	1	2	3	4	5	6	7	1	2	3	4	5	6	7
List any instance of perceived bias _____														
Learning assessment questions appropriately measured comprehension	1	2	3	4	5	6	7	1	2	3	4	5	6	7
Length of time to complete course was reasonable for credit assigned	1	2	3	4	5	6	7	1	2	3	4	5	6	7
(Approximate amount of time to preview, study, complete and review this 1.0 hour CE course: _____)														

Comments: List any future CE topics of interest (and related skill needs): \_\_\_\_\_

NAME: \_\_\_\_\_ RPH LICENSE #: \_\_\_\_\_  
 ADDRESS: \_\_\_\_\_ CITY \_\_\_\_\_ STATE \_\_\_\_\_ ZIP \_\_\_\_\_  
 EMAIL ADDRESS: \_\_\_\_\_ PH: \_\_\_\_\_ INTEREST IN ADDITIONAL CE COURSES? Y / N  
 E-PROFILE ID NUMBER (EPID): \_\_\_\_\_ DATE OF BIRTH (MMDD): \_\_\_\_\_

**Course release date: April 30, 2018 / Expiration date: April 30, 2021 / Target audience: Pharmacists**  
 Mail this completed sheet with your check of \$8.50 to: SDSU College of Pharmacy-C.E. Coord. Box 2202C, Brookings, SD 57007 Office Ph: 605-688-4242 / Bernie.Hendricks@sdstate.edu

## Help Your Patients Fight the Flu



During most influenza seasons, adults 65 years and older bear the greatest burden of severe influenza disease. In fact, it is estimated that between 70-85% of influenza-related deaths and 50-70% of influenza-related hospitalizations occur among people in this age group.

Health care professionals caring for older adults have an important role in ensuring their patients know they are at high risk of influenza complications and receive an influenza vaccine every year. Talk to your patients about influenza and what influenza vaccines are available for them this season and remind them **it's not too late for them to get a vaccination for this season.**

There are several influenza vaccines available for people 65 years and older, including:

- **The high dose influenza vaccine (Fluzone High Dose®)** contains 4 times the amount of antigen as regular influenza. It is associated with a stronger immune response following vaccination.
- **The adjuvant vaccine (Fluad®)** is a standard dose influenza vaccine with an added adjuvant. An adjuvant is an ingredient added to a vaccine to help create a stronger immune response to vaccination.

South Dakotans received fewer flu vaccinations last season (2017–2018) compared to the previous year.

- **Older adults (65 years and older):** 12.5% decrease in flu vaccination to 47.7%
- **Adults aged 18–64 years:** 7.8% decrease in flu vaccination to 37.7%
- **Children aged 6 months–17 years:** 1.2% increase in flu vaccination to 64.4%

As of Dec. 29, 2018, the Department of Health has reported 234 lab-confirmed influenza A and 3 influenza B infections, 38 hospitalizations and one death so far this season. Monitor the flu bug at: <https://doh.sd.gov/diseases/infectios/flu/surveillance.aspx>

## SAVE THE DATE!



- Clinically Intensive Workshops
- Keynote on Professional Burnout
- Networking Opportunities & More

## FEBRUARY 8-10, 2019

**BRAND NEW LOCATION!** The 2019 Midwest Pharmacy Expo will be held at the beautiful, brand new Hilton Des Moines Downtown.

Agenda & registration coming in November to [www.MidwestPharmacyExpo.com](http://www.MidwestPharmacyExpo.com)

Mark your calendars for the 2019 Midwest Pharmacy Expo and get ready to learn, connect and be inspired with your colleagues from across the Midwest!

### SAME AGENDA, HOTTER TOPICS!

- Clinically Intensive Workshops on Friday
- Saturday keynote on professional burnout
- Sessions for pharmacists and pharmacy technicians covering USP 800, professional resiliency, continuity of care, provider readiness, and more trending and timely topics.
- Expo Sunday stalwarts New Drugs and Gamechangers plus a federal law topic in between

# PHARMACY & 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.*

## Documentation in the Modern World

The world continues to change and the way that we communicate with each other continues to evolve. This includes communication between you and your patients, and you and the prescribers. Pharmacists need to be able to sufficiently document their communications to support the actions taken in the care of their patients.

Early in my career, prescriptions were written on paper or called into the pharmacy. If clarification was needed after hours, it meant a call to the prescriber's answering service. The response time was seldom fast. The next great improvement in communication was the introduction of pagers. The prescriber got a message to call the pharmacy directly, but didn't know who the patient was or what the issue was. About this same time, faxing of prescriptions began to become more common. This included faxing refill requests to the prescriber's office and the return fax of the authorization. This format created its own documentation. The next step forward was electronic transmission of prescriptions from the prescriber to the pharmacy. No paper copy is generated with this method, but significant electronic documentation is available.

In today's world, the speed of communication in the 1980s seems like the Stone Age. And as the speed of communication has increased, keeping a record or documenting these communications is not at the forefront of most people's minds. Communications happen in the now. Keeping them for the future doesn't seem important. But it is important in professional communications. Texting patients and prescribers has become more prevalent as a fast and efficient means of communication. While nothing is ever truly deleted from cyberspace, trying to recover texts from two years ago should not be your documentation plan. Approach the documentation of texting as you would a phone call.

Documentation should be readily retrievable. In the past, documentation on the prescription itself was the favored location. That is still a good place for it, but we do not always have a paper prescription today. Computer systems have expanded documentation functionality today. You can also use a log book (paper or electronic) to document all communications. Documentation for texts is

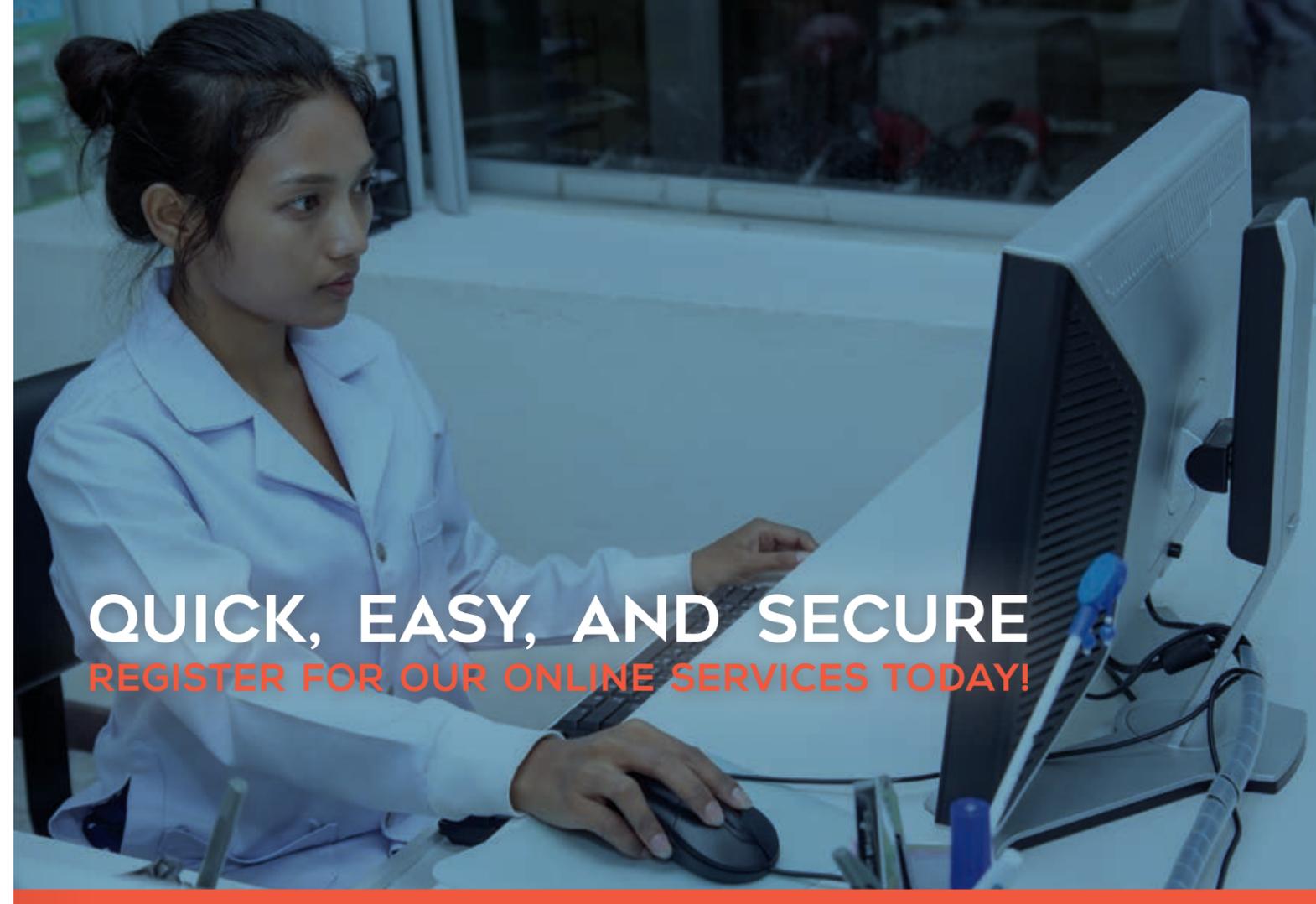
analogous to that for phone calls. The typical entry for a phone call includes date, time, person talked to, the question at hand, and the resolution. Documentation created out of a pattern of consistent behavior is every bit as admissible as a document itself. Documentation of texts should include date, time, the number texted, the question, and the resolution.

Pharmacists should also take HIPAA into consideration when using texts to communicate about prescriptions. What protected health information (PHI), if any, is being transmitted? If PHI is being transmitted, is the PHI protected from disclosure? The pharmacist should be careful that correct phone number is used for this type of communication. If the pharmacist is using their personal phone for such communications, is the information protected so that family members don't accidentally have access to the PHI? This is another good reason to not let your children play with your phone.

In the fast pace of today's world, documenting texts can be forgotten, but it is as important as documenting phone calls. Most pharmacists have developed a habit for documenting phone calls. This habit needs to be expanded to include the information that is being communicated by text. While those with Luddite tendencies might say that it would be better to eliminate the use of texting in this situation, I doubt that we will be able to stem the tide. Texting is becoming the preferred method of communication with many people. Proper documentation of those transactions is essential to complete your patient care records.

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

This article discusses general principles of law and risk management. It is not intended as legal advice. Pharmacists should consult their own attorneys and insurance companies for specific advice. Pharmacists should be familiar with policies and procedures of their employers and insurance companies, and act accordingly.



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# OBITUARY

## Robert Lee Gregg



Robert *Bob* Lee Gregg was born on March 2, 1932 in White River, SD to Ceptor W. and Margaret (McGuire) Gregg. He passed away Nov. 25, 2018 at Sanford Medical Center in Chamberlain. He was 86.

He grew up on a ranch on the Rosebud Indian Reservation, attending a one-room school that initially had 17 students, with only four speaking English.

Here began his interest in the Sioux language and culture. The school superintendent brought a box of books to the school frequently to satisfy his reading habits. He was a lifelong avid reader with a library of history, Native American, cowboy, horse, political, and religious titles.

Bob attended South Dakota State College, with engineering as an initial interest. College was funded by working a year and then attending school for a year. During one of his work years, he was drafted into the U.S. Army during the Korean War, serving as a medic in a field hospital where soldiers were stabilized before evacuation to MASH units.

After the war, he finished college - switching to Pharmacy School. He met and married Julie Tyler. They moved to Kennebec, SD and opened Kennebec Drug. They worked in the store together. Their children included Allen, Mark, and Susan. The family was active in school and community events as well as any horse activities.

Following the deaths of the Doctors Horothy, Bob and Julie moved to Chamberlain and operated Gregg Drug. Running a successful business did not slow involvement in many community organizations and horse groups. Trail riding continued to be a frequent time-off hobby. He was also a 4th degree Member of the Knights of Columbus and a 60 year Life Member of the Johnson-Peterson Post No. 179 of Kennebec-Reliance, SD.

Finally retiring, Bob closed his store, but continued to work 40 hours a week for Casey Drug – or as he described it *half-time*. Bob and Julie enjoyed time with family and trail riding with friends for many years.

Bob is preceded in death by his parents Ceptor and Margaret, his brothers Merle and Leo, and a daughter-in-law Kristi Gregg. Survivors include his wife of 62 years Julie of Chamberlain, SD; his children Allen and Kathy of Sioux Falls, SD, Mark and wife Kim of Sioux Falls, SD and Susan Doop and husband Marlin of Gillette, WY; his grandchildren Derrick Gregg, Dylen Gregg, Tiffany Menke, Randi Doop, Joey Doop, and Jesse Doop; and his great grandchildren Gabriela Gregg, Logan Gregg, Noah Gregg, and Georgia Menke; his sister Mary Ellen; and his niece Susan Fink.

Funeral services for Robert L. *Bob* Gregg, 86, of Chamberlain, SD were held Thurs., Nov. 29, 2018 at St. James Catholic Church in Chamberlain.

# CLASSIFIEDS

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