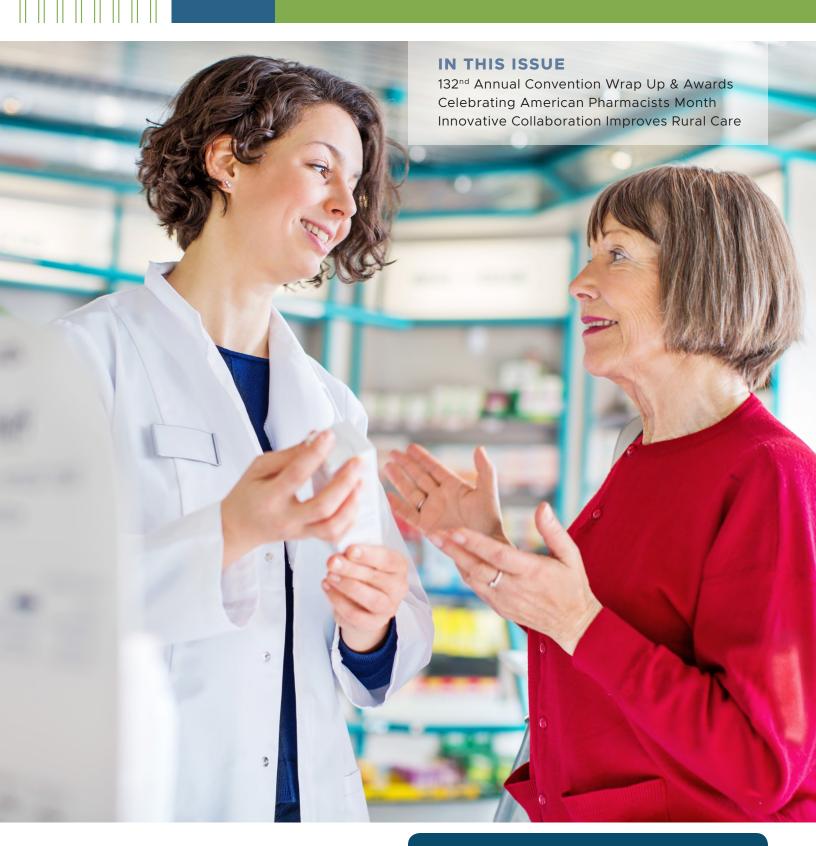
PHARMACIST



PHARMACIST

Volume 32 // Number 3

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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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.

OCTOBER

AMERICAN PHARMACISTS MONTH

- 6–9 National Community Pharmacists Association Annual Convention (NCPA) Boston, MA
- 8 Native American Day
- 16 National Pharmacy Technician Day
- 23 South Dakota Board of Pharmacy Rules Hearing 4001 W West Valhalla, Sioux Falls, SD 1 pm
- Aberdeen District Meeting
 Please check **sdpha.org** for time and location

NOVEMBER

- 6 Election Day
- 11 Veteran's Day
- 13 Sioux Falls District Meeting
 Remedy Brewing, Sioux Falls, SD
 Social 5:30 pm Meeting 6 pm
- 22 Thanksgiving Day

DECEMBER

- 4 Sioux Falls District Volunteer Event Feeding South Dakota, Sioux Falls, SD 6 – 7:30 pm
- South Dakota Board of Pharmacy Meeting4001 W Valhalla, Sioux Falls, SD8 am noon
- 24 Christmas Eve
- 25 Christmas Day
- 31 New Year's Eve

CONTENTS

FEATURES

- 4 Director's Comments
- 5 President's Perspective
- 6-8 Board of Pharmacy Report
- 9 South Dakota Association of Pharmacy Technicians Report
- 10-11 SDSU College of Pharmacy and Allied Health Professions
- 12 Academy of Student Pharmacists
- 13 South Dakota Society of Health System Pharmacists Report
- 14–15 Pharmacy Technicians University

CONVENTION WRAP-UP

- 16 Award Winners
- 17 2018 2019 Commercial and Legislative Form

CONTINUING EDUCATION

18–23 Continuing Education for Pharmacists

NEWS & UPDATES

- 24-25 Avera: Improves Rural Care
- 26 Pharmacy and the Law
- 28 Financial Forum

ADVERTISERS

- 29 Pharmacists Mutual Companies
- 30 Obituary
- 30 Classifieds

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2 · South Dakota Pharmacist 3 · Fall Edition 2018

DIRECTOR'S COMMENTS

Amanda Bacon // Executive Director



Happy Fall!

I have more to say than space this edition, so let's dive right in!

AMERICAN PHARMACISTS MONTH

You may notice the American Pharmacists Month campaign this year has a little bit different look and feel. The APhA

campaign launched mid-October, and is really designed to bring attention to helping patients understand the pharmacist's importance as part of their health care team. Easy to Reach, Ready to Help, is a coordinated effort to show the wide variety of situations and services in which pharmacists can offer expertise to improve patient health. From safe medication use and diabetes management, to asthma, COPD and several points in between, you'll find resources for how to open the dialogue with patients, and let them know they are not alone to figure out how to handle these complex issues – you are on their team. The campaign has an emphasis on social media, and you can download it all for free at pharmacistmonth.com. The hope is American Pharmacists Month can act as a spring board to open conversations which extend well past the end of the month.

PHARMACY TECHNICIAN UNIVERSITY

We continue to receive a lot of questions about, and engagement in, the PTU program. It's exciting! You can find program details on pages 14 and 15. Whether you are interested in enrolling your technicians in this online learning module, or are a technician looking to enroll yourself, we can help! Give me a call at the office or shoot me an email for more details. I act as the program administrator, which helps keep costs as low as possible. Signing up is simple and the cost is very reasonable. Let us know how we can help!



SOCIAL MEDIA

We continue to expand our social media footprint. This growing presence is something we consider vital to our work of representing the pharmacy profession through advancing patient care, enhancing the public awareness and serving in the best interest of public health and pharmacy. You'll now find us on LinkedIn and Instagram, in addition to the Facebook pages many of you already follow.

Here's what's important to know about each platform:

- Our Facebook and Instagram are primarily consumerdriven health messages. These posts are intended to give you easy access to content you can in turn share on your social channels to help engage your patients and the general public.
- The SDPhA Member News and Announcements
 Facebook Group page is where you will now find industry news, SDPhA event and meeting information, and legislative updates as warranted.
- **LinkedIn** gives us an additional forum to gather and share news impacting the pharmacy profession.

Please like, follow, share and engage with us – that's what makes these tools effective.

LEGISLATIVE SESSION

The 94th South Dakota Legislative Session opens Jan. 8, 2019 and we're already preparing for this coming legislative session. If your district is having a fall meeting – this a good way to learn more about this process, and what you can expect from us in the coming months.

THANK YOU

Last, but certainly not least, I want to say thank you to each of you joined us for *Agents of Change*. It's a gift for me to have any opportunity to meet more of our folks, and I'm grateful for how gracious you have been about welcoming me into your *Pharm Fam*. Our board members work so hard to bring forward education that is timely and meaningful, and I cannot say enough about the SDSU student volunteers who are happy to do anything I ask at the drop of a hat. I already can't wait for Deadwood in 2019!

Respectfully,

AMANDA BACON

SDPhA Executive Director

PRESIDENT'S PERSPECTIVE

Erica Bukovich // SDPhA Board President



Happy Pharmacists Month!

I hope this finds each of you enjoying American Pharmacists Month. Each October marks a time to focus on promoting our profession and celebrate the contributions of our many wonderful pharmacists and technicians. Thank you to each and every one of you for your dedication to your role in pharmacy!

In September the 132nd Convention of the SDPhA was held in Sioux Falls and it was wonderful to see so many of your faces. The agenda was once again filled with diverse and timely continuing education sessions with opportunities for collaboration among attendees. Let's not forget the SDSU ice cream which has become an annual hit!

Another highlight of convention was the opportunity to recognize a number of deserving individuals for their respective contributions to pharmacy in South Dakota. Congratulations to all of our 2018 award winners:

Pharmacy Technician of the Year: Deb Mensing
Distinguished Young Pharmacist: Kristen Carter
Industry Salesperson of the Year: Phil Pruitt

Bowl of Hygeia: Hugh Mack

Hustead Award: Shane Clarambeau

Next year will take us to Deadwood on September 13-14, 2019. If you haven't attended us in recent years, consider joining us at the Lodge for collaboration and continuing education in the beautiful Black Hills.

Convention also marks the transition of the board. It was an honor to be selected as your next President of the South Dakota Pharmacists Association. At this time, I would like to thank Past President Eric Grocott for his tireless efforts supporting the association and the profession. This past year he dedicated countless hours and traveled many miles to share his passion for pharmacy. Thank you for your contributions, Eric!

In addition, the entire Board has been an incredible group of professionals to work with and I cherish the time with this dedicated group. The collaborative experience has been rewarding and I have gained so much from working with each of you. A special thank you to Jan Lowe for her contributions over the past several years on the Board, and welcome to Kristen Carter and Melissa Gorecki!

Our Executive Director, Amanda Bacon, has also been a tremendous support to our organization. We thank her for her for her contributions this year and the energy she brings to the office. It has been a pleasure working with her and I look forward to the year ahead.

This year, please watch for ways to stay involved with the Association. Fall District meetings are being announced, which are a great way to engage on the local level. Mark your calendars for Legislative Days on January 22-23, 2019 in Pierre, SD. Plan to attend and see our wonderful students in action at the State Capitol.

In the meantime, please remember the Association loves to hear from you. We encourage you to reach out with issues or questions, or with ideas to become involved. SDPhA will continue to monitor and engage on issues related to our profession, so watch for updates throughout the year.

In closing, by the time you read this we will be in the midst of American Pharmacists Month. Each October marks an opportunity to celebrate and promote our profession. What ways are you celebrating this year? We would love to hear from you this month and year!

Respectfully,

ERICA BUKOVICH

SDPhA Board President

4 · South Dakota Pharmacist 5 · Fall Edition 2018

SOUTH DAKOTA BOARD of PHARMACY

Kari Shanard-Koenders // Executive Director



BOARD WELCOMES NEW REGISTERED PHARMACISTS/ PHARMACIES

Congratulations to the following 23 candidates who recently met licensure requirements and were registered as pharmacists in South Dakota: Janelle Anderson, Kaitlyn Bailey, Nicholas Buschette, Christen Colwell, Tracy Eilers,

Jenna Engel, Christina Hansen, Austin Hansen, Jessica Johnson, Elizabeth Klein, Jacky Lee, Kathryn MacCamy, Laura Nesheim, Alex Olson, Hannah Reedstrom, Megan Schlinz, Hannah Schmidt, Kaitlyn Stewart, Kiimberly Sturzenbecher, Cheyenne Von Krosigk, Paige Weeldreyer, Joshua Weinberg, and Kevin Wintz. There were also three new full-time pharmacy licenses: Lewis Drug, Inc., dba Lewis Drug #14,Sioux Falls; Lewis Drug, Inc., dba Lewis Drug #15 Sioux Falls; and Avera McKennan, dba Avera on Louise, Sioux Falls. There were also two new part-time pharmacy licenses issued during this time: Regional Health, dba Advanced Orthopedic Hospital, Rapid City and Lewis Drugs Inc., dba Lewis Drug Call Center, Sioux Falls.

GOVERNOR REAPPOINTS BOARD MEMBERS

Governor Dennis Daugaard has reappointed Tom Nelson of Spearfish / Sioux Falls and Leonard Petrik of Rapid City to the South Dakota Board of Pharmacy. Tom Nelson will be in his second term and Leonard Petrik will be in his third term protecting South Dakota patients on the Board of Pharmacy. Congratulations and thank you for your continuing service.

BOARD OFFICE IMPLEMENTING LICENSING SOFTWARE ILEMS

by iGOV SOLUTIONS

The Board office is now actively moving our mostly paper application process to a new on-line licensing software platform. We started using it on October 9 for completion of technician renewals. All certificates will look different going forward. The new system will be fantastic once it is fully up and running. We do appreciate your patience. Please let us know if you have questions.

USP 800 FIRST STEPS TO IMPLEMENTATION

by Paula Stotz, RPh, Pharmacy Inspector

- Each entity handling hazardous drugs (HD) MUST identify a Designated Person (DP) who will be responsible for developing and implementing procedures and overseeing the entity's compliance with USP 800. (An organization may identify one or multiple employees to ensure compliance and safety).
- 2. Each entity MUST develop and maintain a current NIOSH list of hazardous drugs handled by the entity. The list MUST undergo a documented review at least every 12 months.
- 3. For any HD that WILL NOT be handled, stored, compounded, repackaged, or dispensed with all the containment stratagies of USP 800, an Assessment of Risk (AOR) MUST be performed for each HD. (The AOR for each HD MUST undergo a documented review at least every 12 months). **An AOR may NOT be performed for any HD Active Pharmaceutical Ingredient (API) or any antineoplastic requiring manipulation.
- 4. If an AOR approach is taken, the entity MUST document the alternate containment stratagies and/or work practices which will be employed or each HD and dosage form. The entity should research, develop, and implement Standard Operating Procedures (SOP) for consistency within the occupational safety plan to ensure worker safety during all aspects of HD handling.

- 5. All personnel who handle HDs MUST be trained based on job function and prior to the employee indepentently handling HDs. Employee compentencies in handling HD MUST be demonstrated and documented. Compentencies MUST undergo documented reassessment at least every 12 months.
- 6. Personal Protective Equipment (PPE) MUST be available and worn by all employees who handle HD, based on the SOP and AOR. Disposable PPE must not be re-used. All PPE worn when handling HD MUST be placed in an appropriate waste container, such as yellow trace waste containers. Gloves which are labeled ASTM6978 should be used for handling all HD drugs, not just antineoplastics.
- Appropriate deactivation, decontamination, cleaning, and disinfecting (where required) agents MUST be available and used by all personel who handle HD.
- 8. Dispensing equipment SHOULD be dedicated for use only with HDs and SHOULD be decontaminated after each use. (Compounding equipment MUST be dedicated for use only with HDs).
- 9. A spill kit MUST be readily available in all areas where HDs are routinely handled. The spill kit SHOULD have all the items needed to handle a spill with HDs that you work with in your pharmacy.

Remember MUST vs SHOULD. MUST is required, SHOULD is a best practice recommendation. Download USP <800> HazRx™ Mobile App today for a nominal fee! https://t.co/6GVIA9bB7Q.

BOARD MEETING DATES

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

BOARD OF PHARMACY DIRECTORY

DIRECTOR, SD PDMP

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BOARD OF PHARMACY

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PDMP DATA ACCESS

https://southdakota.pmpaware.net/login

PDMP DATA SUBMITTERS

https://pmpclearinghouse.net/

NATIONAL ASSOCIATION OF BOARDS OF PHARMACY

www.NABP.pharmacy

SD BOARD of PHARMACY

(continued)

PDMP UPDATE

by Melissa DeNoon, PDMP Director

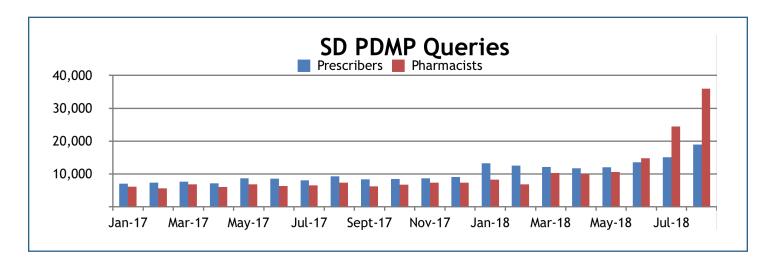
As of the end of August 2018, the SD PDMP has 6,469 registered users across all roles. The program's mandated prescriber registration is at 95% compliance. Increased program utilization is reflected in the over two-fold increase in prescriber queries and almost six-fold increase in pharmacist queries since January 2017. The increase in the number of users, the integration of the SD PDMP into electronic health records, and the integration of the SD PDMP into pharmacy management systems have contributed substantially to increased program utilization. This is a key driver impacting patient care for South Dakotans. The SD PDMP is now integrated into the first pharmacy management systems. These are in Walmart and Sam's Club pharmacies.

South Dakota pharmacists now have access to the PMP AWARxE program enhancement, Clinical Alerts. Clinical Alerts will provide notifications on patients that meet one or more of the following thresholds:

- 1. Multiple provider episodes within a time period (AKA 'shopping')
- 2. Daily active morphine milligram equivalents (MME) over 90 MME per day, and/or
- 3. Concurrent opioid and benzodiazepine prescribing. These alerts will appear in red on the patient report under the patient demographic section. Prescribers

of prescriptions that trigger one or more of these thresholds and thereby a patient clinical alert, are sent an email advising them to log into their PMP AWARxE account and view their Clinical Alert dashboard. Only prescribers have this Clinical Alert dashboard, but all users that guery a patient with an active clinical alert will see the alert on the patient eport. The 'shopper' alert replaces the Unsolicited Report letters sent to prescribers and pharmacies in the past by the SD PDMP. It is important for all users that are viewing a patient report with one or more clinical alerts to read and apply the following included disclaimer: The SD PDMP encourages practitioners to closely review a patient's report with one or more 'Clinical Alerts' to determine their significance relative to patient diagnosis, prescriber specialty, and location of multiple providers. The patient report is based on data entered from pharmacies and may not be accurate or complete. Please contact the dispensing pharmacy with prescription questions or the SD PDMP regarding potentially inaccurate information.

Respectfully Submitted for the Board,
KARI SHANARDKOENDERS
Executive Director



SOUTH DAKOTA ASSOCIATION of PHARMACY TECHNICIANS

Jerrie Vedvei // SDAPT President



Fall Greetings from SDAPT!

Our annual conference & CE day was held Sat., Oct. 6th, featuring three locations using DDN Network. Our main location was in Pierre with satellite locations to Rapid City Regional in Rapid City and Avera in Sioux Falls. Our numbers were great with lots of new faces. We look forward to continuing to hold this

conference using the three locations again in the future and look forward to more growth.

Thank you to Hope Showalter for all the extra hours working with the technology to assure a great conference!

Your pharmacy technicians received 5 CE's, the required Law and Safety of course which was presented by the SD Board of Pharmacy Executive Director Kari Shanard-Koenders, R.Ph, with the help of Dana Darger RPh and his staff Cindy & Ashley from Rapid City Regional.

Melissa Gorecki, Pharm.D., Board Certified in Psychiatric Pharmacy, Presented on Anti-Anxiety & Antipsychotic Medications, Sandy Jacobson, retired R.Ph and former Director of Pharmacy presented on Fibromyalgia, and then the last presenters were from the Department of Criminal Investigation.

The SDAPT Scholarship winner is Jean Masaro, a student from Southeast Technical Institute in Sioux Falls. Jean takes her education very serious and wants to make a difference in the pharmacy world. Her \$250 Scholarship will be paid directly to Southeast Technical Institute.

A big thank you to our Scholarship Committee chaired by Deb Mensing. Her committee members were Jodi Sterrett, Julie Kulesza and Deb Cummings.

Thank you to SDPHA for your generous sponsorship again this year along with our other sponsors SDSHP, Avera in Sioux Falls & Pierre and Rapid City Regional.

The SDAPT officers are: **President** Jerrie Vedvei, **President Elect** John Thorns, **Treasurer** Connie Mullett, **Secretary** Hope Showalter, **Past President** Sue Dejong.

Wishing everyone a great Fall!

JERRIE VEDVEI

SDAPT President



SOUTH DAKOTA STATE UNIVERSITY COLLEGE of PHARMACY and ALLIED HEALTH PROFESSIONS





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



Greetings from the College of Pharmacy and Allied Health Professions!

It has been an exciting start to the academic year as we welcome 80 P1 students to our College with a new curriculum and new lab facilities. To begin with the new curriculum features greater integration of material, team work, and hands on activities. All of these features are supported

by our new lab space. I know it seems like just yesterday that we finished our new building, but curricula change and practice evolves. Our new pharmacy care lab features six small group/counseling rooms, a hospital room complete with SimMan and observation area, a community pharmacy with our robot housed within the pharmacy and order entry computers throughout the lab, and a dynamic state-of-the-art classroom area. Our compounding lab also has state-of-the-art classroom space complete with movable tables, television screens for projection of work by individual groups, and various compounding areas (sterile simulation and non-sterile). We would enjoy giving you a tour, so please stop by if you are in Brookings!

On October 11th we held the investiture ceremony to honor Dr. Sharrel Pinto, our Hoch Endowed Professor in Community Pharmacy Practice. While Dr. Pinto has only been with us for six months, she has already obtained a multi-million dollar, five year contract with the South Dakota Department of Health to create a statewide community-based practice model to improve the health of Americans through prevention and management of diabetes, heart disease, and stroke. This is by far the largest contract or grant obtained by the College. We look forward to the transformational impact her work will have on the education we provide, the grants we are awarded, and the collaborative work we undertake with our community partners.

In other faculty news, Sarah McGill joined the College in a joint appointment with Avera Medical Group Brookings clinic. Sarah was previously an ambulatory care pharmacist at the Mayo Clinic Health System in Sparta, Wisconsin.

Searches are underway for the Associate Dean for Academic Programs, Assistant to the Dean, and a Pharmacy Administration faculty member.

Our focus over the coming five years will be on achievement of our new strategic plan – Imagine 2023. Through the following 11 goals and their accompanying 34 strategies, we will fulfill our mission: The College of Pharmacy and Allied Health Professions provides high-quality, interprofessional, student-centered education; fosters discovery through innovative research and scholarship; and advances the provision of health care and our vision: To be a premier college for innovative, high-quality pharmacy and allied health professions education, research, scholarship, service, and patient care.



IMAGINE 2023 STRATEGIC GOALS

- **Goal 1:** Meet the workforce needs with new or expanded high quality MLS programs.
- **Goal 2:** Grow MPH program to respond to public health challenges.
- **Goal 3:** Evolve the PharmD curriculum to meet the changing needs of patients and the profession.
- **Goal 4:** Build on excellence in the PhD program to meet the needs of the discipline.
- Goal 5: Expand postgraduate educational opportunities.
- Goal 6: Recruit a high quality and diverse student body.
- Goal 7: Enhance student academic success.
- **Goal 8:** Recruit, develop, and retain high quality faculty and staff.
- **Goal 9:** Increase pharmaceutical sciences based innovative and translational research and scholarship.

Goal 10: Increase practice-based research and scholarship. Goal 11: Innovate pharmacy practice.

This is exciting work and we look forward to reporting on our progress over the coming years. Again, if you are in Brookings, stop by and let us give you a tour of our new facilities. We would enjoy seeing you.

Warm regards,

JANE MORT

Dean,

College of Pharmacy & Allied Health Professions





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.

ACADEMY of STUDENT PHARMACISTS

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



Happy American Pharmacist Month! The fall semester is in full swing at SDSU. SCAPP is just closing our membership drive and our committees have been busy hosting events. We recently hosted the APhA-ASP National Member At-Large, Mark Gilliam who provided our chapter with feedback and many new ideas. Throughout the day, Mark elaborated on how well our chapter has been doing in

comparison to other chapters in the nation. Mark also presented about the benefits of joining APhA-ASP as well as other state and national organizations.

Earlier this fall, we returned to the South Dakota State Fair Day Sponsor Tent with the Pharmacy at the Fair health screenings. This event started last year with the More Than a Count campaign. Members of our chapter performed 718 screenings that reached 339 patients. This year we added opportunities for young kids to learn more about the role of a pharmacist and the importance of knowing the difference between candy and medicine. Additionally, Walmart generously provided DisposeRx packets to be handed out at our opioid epidemic education booth. We were able to advocate for the profession and continue the More Than a Count campaign. We greatly appreciate your help in spreading the message and advocating for our profession. Continue to watch for updates on the campaign!

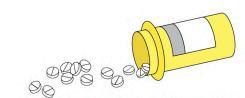
More recently, our chapter has been working hard to collaborate with the various pharmacy organizations to build the Hobo Day float for the College of Pharmacy and Allied Health Professions. The tagline for Hobo Day this year is "Together in Tradition," and our float incorporates a large mortar and pestle as well as a Campanile made out of prescription vials.

Our committees will continue to plan innovative events and are encouraged to collaborate with other committees, organizations, and community groups throughout the year. We are also looking forward to hosting speakers and exposing members to different possibilities within pharmacy. Our chapter success would not be possible without your support!

Respectfully,

BAILEY BUENGER

SCAPP/APhA-ASP SDSU Chapter President



STUDENT COLLABORATION
for the advancement and promotion of
PHARMACY



SOUTH DAKOTA SOCIETY of HEALTH-SYSTEM PHARMACISTS

Aaron Larson, PharmD, BCPS // SDSHP President



Greetings from the South Dakota Society of Health-System Pharmacists! It has been a busy summer, and I can't believe we are already half way through fall!

GARY VAN RIPER SOCIETY OPEN GOLF CLASSIC

The 17th Annual Gary Van Riper Society Golf Classic was held at

the Central Valley Golf Course in Hartford on Friday, July 27. It was a great day for golfing! We raised over \$1,700 for pharmacy student scholarships and funding for student travel to the ASHP Clinical Skills Competition! SDSHP would like to extend a special thank you to our Platinum Sponsors: SDPhA, SDSU College of Pharmacy and Allied Health Professions, Pharmacists Mutual, Gary and Sharon Van Riper, David and Laura Van Riper, Jim Schoessler, Tyler and Kristin Turek, and Steve Statz. Also thank you to all of the participants and especially to Tyler Turek for planning and coordinating the event!

STATEWIDE RESIDENCY CONFERENCE

The 6th Annual SDSHP Statewide Residency Conference was held on Friday, July 13 at Cedar Shore Resort in Oacoma. All of the pharmacy residents across the state were invited to this conference. The conference provided the residents an opportunity to network with fellow residents in the state and to gain knowledge on topics that will benefit them throughout the residency year.

RESIDENT LIAISON

We would like to thank Jenna Welu, outgoing SDSHP Resident Liaison, for her time and commitment to SDSHP during the past year. Jenna organized the SDSHP Statewide Residency Conference and will continue to play an active role on the promotions committee. We would also like to welcome our new Resident Liaison, Avery Aldridge (PGY1

Resident at the Black Hills VA). We look forward to working with her during her term!

SOUTHEAST TECHNICAL INSTITUTE PHARMACY TECHNICIAN SCHOLARSHIPS

SDSHP is pleased to announce that we are now sponsoring two \$150 scholarships for students in the pharmacy technician program at Southeast Technical Institute! The scholarship will cover the cost of the PTCB Pharmacy Technician Certification Exam for each recipient. Applications were due in early October and recipients will be chosen soon.

UPCOMING EVENTS

Pharmacy Month Social Events: Two social events will be held in the month of October to help celebrate Pharmacy Month. The east river event will be held at Monks House of Ale Repute in Sioux Falls on October 23 starting at 6 pm, and the west river event will be held at Dakota Point Brewing in Rapid City on October 25 starting at 6 pm.

Dakota Night Reception: ASHP Midyear Clinical Meeting will take place on Monday, December 3, 2018 from 5:30 pm to 7:30 pm at the Clarion Hotel in Anaheim, CA. Pharmacists, technicians, and students are welcome to enjoy refreshments during this evening of networking and socializing.

43rd Annual SDSHP Conference: Mark your calendars! Our annual conference will be held west river on April 12-13 at the Lodge at Deadwood.

CE and Statewide Pharmacotherapy Forums (SPF): Dates for the resident CE events and SPF sessions have not been set yet. Please watch your email for more information!

We encourage you to visit SDSHP's website at **SDSHP.com** to learn more about upcoming events!

Respectfully submitted,

AARON LARSON

SDSHP President



PHARMACY TECHNICIANS UNIVERSITY

THE BEST-IN-CLASS TRAINING PROGRAM FOR PHARMACY TECHS

Take the headache out of technician training with the No. 1 provider of online learning. Simplify the educational experience, improve efficiency, and help reduce medication errors with *Pharmacy Technicians University (PTU)*.



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pharmacy **
technicians
university

Today, pharmacy technicians are increasingly important members of the pharmacy team. Skilled pharmacy technicians are critical for the economic and efficient function of a pharmacy. However, training requirements for pharmacy technicians change often and are becoming more complex, creating a shortage of qualified pharmacy technicians.

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- * Retail and community settings
- * Health and wellness institutions such as long-term care and physical therapy centers

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14 · South Dakota Pharmacist

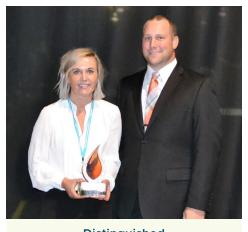




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CONTINUING EDUCATION for PHARMACISTS

Shingrix (Zoster Vaccine ecombinant, Adjuvanted [ZVR]) - The New Herpes Zoster Vaccine

(Knowledge-based CPE)

Course Author: Jamiey Brooks, Pharm.D. Community Practice Pharmacist, Sioux Falls, SD

Goal: To enhance pharmacists' understanding of herpes zoster infections and provide updated consulting information on shingles vaccines.

LEARNING OBJECTIVES:

- 1. Summarize the epidemiology, pathophysiology, clinical presentation, and complications associated with herpes zoster (shingles) infection;
- 2. Describe the differences between Shingrix (ZVR) and Zostavax (Zoster Vaccine Live (ZVL), including dosing schedules, efficacy, and safety profiles;
- 3. Explain Shingrix's place in therapy;
- **4.** Effectively counsel patients seeking Shingrix (ZVR) vaccination.

OVERVIEW

On October 20, 2017, the Food and Drug Administration (FDA) approved Shingrix (ZVR) for the prevention of herpes zoster (HZ) in individuals \geq 50 years of age.1 On October 25, 2017, the Centers for Disease Control and Prevention (CDC) Advisory Committee on Immunization Practices (ACIP) recommended use of this new recombinant vaccine for the prevention of HZ in individuals \geq 50 years of age.

Prior to this time, Zostavax (ZVL) had been the only recommended vaccine by ACIP for the prevention of HZ in individuals ≥ 60 years. Due to the marked differences in each vaccine's dos-ing schedule, administration, storage, efficacy, and safety profile, it is essential for pharmacists to understand the key differences of each vac-cine and be able to provide accurate and timely information to patients.

EPIDEMIOLOGY, PATHOPHYSIOLOGY, CLINICAL PRESENTATION, AND COMPLICATIONS ASSOCIATED WITH HERPES ZOSTER (SHINGLES) INFECTION

Background - Shingles, also known as herpes zoster (HZ), is caused by the reactivation of varicella zoster virus (VZV) that remains latent in a person's body after recovery from an initial varicella (i.e., chickenpox) infection.2 Each year, approximately one million cases of herpes zoster (HZ) will occur in the United States. The incidence of shingles significantly increases begin-ning at 50-60 years of age, with approximately one in three people in the general population developing the condition during their lifetime.

This number increases to approximately one in two people in individuals age 85 and older. This increase in incidence is associated with a natural age-related decline in immune system function.

Shingles typically presents as a painful rash on one side of the body lasting 7-10 days, with complete resolution within 2-4 weeks.2 Days to weeks before the rash appears, patients frequently report complaints of sensitivity to touch, pruritus, and pain, varying in severity, that is often described as aching, burning or stabbing in nature. Less common symptoms that may be reported include fatigue, headache, and fever. The rash most commonly occurs in the thoracic, cervical, or ophthalmic regions of the body.

Complications associated with a shingles infection include post-herpetic neuralgia (PHN), scarring, secondary infections, vision complications, and nerve palsies. PHN is the most common complication and is defined as a localized persistent neuropathic pain that continues after the resolution of the rash.

Pain associated with this condition is often described as excruciating, and may last for months to years following the active infection. The risk of developing PHN also increases with age.

SHINGRIX (ZVR) VS. ZOSTAVAX (ZVL): DOSING SCHEDULES, EFFICACY, AND SAFETY

Shingrix (ZVR) is an inactivated, recombinant vaccine that is given intramuscularly in a 2-dose series. Each dose is 0.5 mL with the second dose administered 2 to 6 months following the first injection.3 Shingrix (ZVR) is supplied as

a vial of lyophilized recombinant varicella zoster virus surface glycoprotein E (gE) antigen component that is reconstituted at the time of use with the accompanying adjuvant AS01B suspension component.

Prior to reconstitution, both the lyophilized gE and adjuvant vials should be stored in the refrigerator at a temperature between 2oC and 8oC. Once reconstituted, the vaccine must be admin-istered immediately or stored in the refrigerator and used within six hours.

Shingrix is recommended by the ACIP for use in immunocompetent individuals ≥ 50 years of age. It is contraindicated in individuals who happen to be hypersensitive to any component of the vaccine, or have experienced a hypersensi-tivity reaction following the first dose.

Active Learning Question: Shingrex (ZVR)

Prior to reconstitution, both the lyophilized gE and adjuvant vials should be stored in the refrigerator between a temperature of ___ and ___°C, and once reconstituted, the vaccine should be administered immediately or stored in the refrig-erator and used within ___ hours.

Efficacy. The efficacy of Shingrix (ZVR) was evaluated in two phase III, randomized, placebocontrolled, multicenter clinical trials.4,5

In the Zoster Efficacy Study in Adults 50 Years of Age or Older (ZOE-50), the efficacy of the ZVR vaccine in preventing HZ was 96.6% (95% CI: 89.6 – 99.3) in individuals 50-59 years of age and 97.4% (95% CI: 90.1 – 99.7) in individuals 60 to 69 years of age.

Four years post vaccination, the efficacy of the vaccine was maintained at 93.1% (95% CI: 81.3 – 98.2) in individuals \geq 50 years of age. In the Zoster Efficacy Study in Adults 70 Years of Age or Older (ZOE-70), the efficacy of ZVR in preventing HZ was 90.0% (95% CI: 83.5 – 94.3) for indi-viduals 70-79 years of age and 89.1% (95% CI: 74.7 – 96.2) for individuals \geq 80 years of age.

In a pooled analysis of data from both clinical trials, the overall efficacy of the vaccine in preventing HZ for individuals \geq 70 years of age was 91.3% (CI: 86.9 – 94.5). Four years post vaccination, the efficacy of the vaccine was maintained at 85.1% (95% CI: 64.5 – 94.8) for individuals \geq 70 years of age. The incidence of PHN was significantly reduced by 88.8% (95% CI: 68.7 – 97.1) as compared to placebo in individuals \geq 70 years of age.

In the Zoster-048, an open-label, multicenter, prospective study, the use of Shingrix (ZVR) in individuals who had previously been vaccinated with Zostavax (ZVL) \geq 5 years prior demonstrated similar immunogenicity, reactivity, and safety as compared to those who had never been previously vaccinated.⁶

Safety. The most common adverse events associated with Shingrix (ZVR) vaccination include pain at the injection site (69.2 – 88.4%), redness (37.7 – 38.4%), swelling (23.0 – 30.5%), myalgias (35.1 – 56.9%), fatigue (36.6 – 57.0%), headache (29.0 – 50.6%), shivering (19.5 – 35.8%), fever (14.3 – 27.8%), and gastrointestinal symptoms (13.5 – 24.3%).3 The adverse events associated with the injection are typically self-limiting lasting 2 to 3 days.

Zostavax (ZVL) is a live, attenuated vaccine that is given subcutaneously as a single 0.65 mL dose.7 Zostavax (ZVL) is supplied as a lyophilized vial that must be reconstituted with diluent prior to administration. The lyophilized vaccine vial must be kept frozen at a temperature of -50 to -15oC prior to reconstitution. The diluent vial may be stored at room temperature (20 to 25oC) or in the refrigerator (2 to 8oC).

Following reconstitution, the vaccine should be immediately administered. While its use is FDA approved for individuals \geq 50 years of age, the ACIP recommends its use in individuals \geq 60 years of age. Its use is contraindicated in individuals who are hypersensitive to any component of the vaccine, individuals who are immunosuppressed, and in pregnant women.

Efficacy - The efficacy of Zostavax (ZVL) was evaluated in a phase III randomized, double-blinded, placebo-controlled, multicenter clinical trial.⁸

In the Shingles Prevention Study, the efficacy of the ZVL vaccine in preventing HZ was 64% (95% CI: 56-71) in individuals 60-69 years of age, 41% (95% CI: 28-52) in individuals 70-79 years of age, and 18% (95% CI: 29-48) in indi-viduals \geq 80 years of age.

The overall efficacy of the ZVL vaccine is 51.3% (95 CI: 44-58) in individuals ≥ 60 years of age. At the same time, the duration of protection afforded by the ZVL vaccine has been an area of debate. Several studies have shown that the effectiveness of ZVL tends to wane within the first 5 years following vaccination and its effectiveness further declines to non-significant levels 9-11 years following vaccination.^{1,9}

18 · South Dakota Pharmacist = 19 · Fall Edition 2018

CONTINUING EDUCATION for PHARMACISTS

Shingrix (Zoster Vaccine ecombinant, Adjuvanted [ZVR]) - The New Herpes Zoster Vaccine

continued

(Knowledge-based CPE)

Safety. The most common adverse events associated with Zosatavax (ZVL) vaccination include pain at the injection site (53.9%), redness (48.1%), swelling (40.4%), pruritus (11.3%), and headache (9.4%).

Active Learning Question:

The adverse events associated with Shingrex (ZVR) typically resolve within ___ to ___ days.

(ZVR) PLACE IN THERAPY

Place in Therapy - Prior to October 25, 2017, the ACIP recommended Zostavax (ZVL) for the prevention of HZ infection in adults >60 years of age.1 On October 25, 2017, ACIP announced their updated shingles prevention recommendation in favor of Shingrix (ZVR):

- Its use is recommended for the prevention of HZ and its related complications for immune competent adults ≥ 50 years of age.
- Its use is recommended for the prevention of HZ and its related complications for immune competent adults who previously received Zostavax (ZVL).
- Its use is preferred over Zostavax (ZVL) for the prevention of HZ and its related complications.

These recommendations became official with the publication of the Morbidity and Mortality Weekly Report (MMWR) on January 26, 2018, along with a further clarification that Shingrex (ZVR) should not be given within the first 2 months following vaccination with Zostavax (ZVL).

Use in Special Populations - Studies are on going regarding the use of Shingrix (ZVR) in immunocompromised patients and further recommendations from the ACIP are expected to follow at the conclusion of these studies.¹ Shingrix (ZVR) is not recommended in patients with an active shingles infection, and there is no data to support its safe use in pregnant or breastfeeding women.

PATIENT CONSULTATION FOR PATIENTS SEEKING SHINGRIX (ZVR) VACCINATION

Information for Patients - The pharmacist should advise a patient seeking shingles immunization of the benefits and risks of receiving the Shingrix (ZVR) vaccine. Each patient should also be provided with the vaccine information sheet for the patient to read, which is available from the CDC's website.

Since the Shingrix (ZVR) vaccine is a two-dose series, it will be important that the patient fully understand the significance of compliance with the two-dose series.

Finally, patients should be informed of the adverse events that are associated with the Shingrix (ZVR) vaccination.

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 Sciences.

Financial Disclaimer: The author of this course has had no relevant financial relationships with any commercial party having a vested interest in the content of this article.

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Table 1:

COMPARISON OF SHINGRIX (ZOSTER VACCINE RECOMBINANT, ADJUVANTED) VERSUS ZOSTAVAX (ZOSTER VACCINE LIVE)

•••••		
	SHINGRIX Zoster Vaccine Recombinant, Adjuvanted	ZOSTAVAX Zoster Vaccine Live
VACCINE FORMULATION	Inactivated, recombinant varicella zoster vaccine surface glycoprotein (gE) antigen	Live, attenuated
NUMBER OF DOSES IN SERIES	2 (2nd dose administered 2-6 months following the date of first dose)	2
ROUTE OF ADMINISTRATION	Intramuscular	Subcutaneous
STORAGE OF LYOPHI-LIZED POWDER	Refrigerator (2 to 8°C)	Frozen (-50 to -15°C)
ACIP AGE RECOMMENDATION	50 years of age or older	60 years of age or older
VACCINE EFFICACY	Approximately 91%	Approximately 51%
DURATION OF PROTECTION	Efficacy is shown to be maintained four years post vaccination	Protection wanes after 5 years, with no protection after 9 years
CONTRAINDICATIONS	Hypersensitivity	Hypersensitivity Immunosuppression Pregnancy
ADVERSE EFFECTS	Pain at injection site (69.2 – 88.4%) Redness (37.7 – 38.4%) Swelling (23.0 – 30.5%) Myalgias (35.1 – 56.9%) Fatigue (36.6 – 57.0%) Headache (29.0 – 50.6%) Shivering (19.5 – 35.8%) Fever (14.3 – 27.8%) Gastrointestinal symptoms (13.5 – 24.3%)	Pain at the injection site (53.9%) Redness (48.1%) Swelling (40.4%) Pruritus (11.3%) Headache (9.4%)
COST	Approximately \$280 for the two-dose series	Approximately \$212

20 · South Dakota Pharmacist = 21 · Fall Edition 2018

CONTINUING EDUCATION for PHARMACISTS

Shingrix (Zoster Vaccine ecombinant, Adjuvanted [ZVR]) - The New Herpes Zoster Vaccine

(Learning Assessment - Post Test)

- **1.** The incidence of shingles (herpes zoster) and its associated complications increases with age.
 - A. True
 - B. False
- **2.** The most commonly reported symptom(s) associated with a herpes zoster infection is/are:
 - A. Unilateral rash
 - B. Sensitivity to touch
 - C. Varying severity of pain
 - D. All of the above
- **3.** The most common complication of a herpes zoster infection is:
 - A. Scarring
 - B. Post-herpetic neuralgia
 - C. Vision complications
 - D. Nerve palsies
- **4.** Shingrix is approved for use in which of the following patient populations:
 - A. \geq 50 years of age
 - B. \geq 60 years of age
 - C. \geq 70 years of age
 - D. ≥ 80 years of age
- **5.** All of the following are correct regarding the Shingrix (ZVR) vaccination, **except**:
 - A. It is an inactivated, recombinant vaccine
 - B. It is a two-dose series
 - C. It is administered subcutaneously
 - D. All of the above are correct

- **6.** The Shingrix (ZVR) vaccine should be stored in which of the following environments:
 - A. At room temperature (20 to 25°C)
 - B. In the refrigerator (2 to 8°C)
 - C. In the freezer (-50 to -15°C)
 - D. There are no special storage requirements for the Shingrix (ZVR) vaccine
- 7. The overall efficacy of Shingrix (ZVR) in preventing herpes zoster infection for individuals ≥70 years of age is:
 - A. 51.3%
 - B. 89.1%
 - C. 91.3%
 - D. 96.6%
- **8.** The following adverse events associated with the Shingrix (ZVR) vaccination is/are: (select all that apply):
 - A. Pain at the injection site
 - B. Redness
 - C. Swelling
 - D. Headache
- **9.** Which of the following statements is/are correct regarding the recommendations put forth by the ACIP for the use of Shingrix (ZVR) vaccination: (select all that apply)
 - A. Its use is recommended in individuals ≥ 50 years of age
 - B. Its use is recommended over the use of Zostavax (ZVL)
 - C. Individuals who have been previously vaccinated with Zostavax (ZVL) should not receive the Shingrix (ZVR) vaccination.
 - D. Since Shingrix (ZVR) is an inactivated, recombinant vaccine, it may be used in immune-compromised individuals
- **10.** Pharmacists should include the following information when counseling patients who are seeking Shingix (ZVR) vaccination:
 - A. Explanation of the risk and benefits
 - B. Importance of completing the two-dose series
 - C. Potential adverse events associated with the vaccination
 - D. All of the above.

Shingrix (Zoster Vaccine Recombinant, Adjuvanted [ZVR]) - The New Herpes Zoster Vaccine

(Knowledge-based CPE)

To receive 1.0 Contact Hours (0.1 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.

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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: #0063-0000-18-037-H06-P.

Learning Objectives - Pharmacists: 1. Summarize the epidemiology, pathophysiology, clinical presentation, and complications associated with herpes zoster (shingles) infection; 2. Describe the differences between Shingrix (ZVR) and Zostavax (Zoster Vaccine Live [ZVL]), including dosing schedules, efficacy, and safety profiles; 3. Explain Shingrix's (ZVR) place in therapy; 4. Effectively counsel patients seeking Shingrix (ZVR) vaccination.

Circle the correct answer:	1. A B	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	
	4. A B C D	8. A B C D	

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Innovative Pharmacist-Doctor Collaboration Improves Rural Care for Couple

Editor's Note

Our thanks to Avera for sharing this story. It's a great look at the kind of innovation pharmacists bring to the table in their respective practice settings throughout the state.

By Jarett C. Bies

Teaming up to complete big jobs is part of life in rural areas, be it snow removal on country roads in the winter, planting in the spring or combining come fall – it's natural for folks to make light the work with many hands.

That same approach is taking place between health care professionals at Redfield Community Memorial Hospital Avera, too, where a clinical pharmacist is playing a more comprehensive role in medication management with patients. The approach allows for a more focused medication management, and it ensures the people who need this expertise are getting it.

Aly Howard, PharmD, serves as the clinical pharmacist at Redfield Community Memorial Hospital Avera, as well as Marshall County Healthcare Center Avera in Britton. At both sites, she provides a range of hospital pharmacy services, including patient-chart review, medication management and antibiotic stewardship efforts including dosing recommendations. She also consults with medical staff and serves to provide basic pharmacy-operation oversight.

In Redfield, she offers unique patient-centered services such as an anticoagulation clinic management, continuous glucose monitor placement and diabetic consults.

It is unique to have a clinical pharmacist in a smaller facility, said Howard. When we considered this model, I suggested we approach it collaboratively, with patients as the central focus, where I could lend my expertise and aid the medical staff at the hospital and clinic with a number of medication-related services.

So far, the program has been successful, and it helps patients like Marge and Dick Gallup, who spend time with Howard as well as their physician, Matthew Owens, MD. Marge Gallup said Howard's acute understanding of all things medication gives her a deep resource to address her husband's diabetes as well as her own condition.

I have had a few challenges, including a stroke and a pacemaker, so working with Aly (Howard) has been a real help, as she is quick to note changes and to try things out to help me with anticoagulant medication, as well as Dick's insulin, Marge said. She's a true professional, and she takes the time to personally review the information so I feel I am in good hands. She and Dr. Owens work together really well.

STARTING NEW, CREATING COLLABORATION

As a pharmacy student, Howard spent time at Redfield Community Memorial Hospital Avera and came to realize the need for her discipline in this rural setting. A physician who worked with her also saw her gifts and championed the idea of developing a clinical pharmacist position in the small Spink County community.

Medication management can really make a big difference for many patients, including people like Marge who use anticoagulants to avoid blood clots. Diabetes patients, as well as those using hypertension meds, also can benefit when they have extra time and expertise in their care teams, she said. The patient gets more time one-on-one with me, and that clinical time can give advanced practice providers and doctors another 'brain' to pick when considering medication approaches. It can also help them in terms of time management. Medical care is growing more complex, almost every day, and to provide it effectively, we're required to offer more specialization. This service is another example of these efforts to provide that best possible care.

Dick Gallup said Howard's insight has helped him to evaluate insulin monitors he uses to address his diabetes. I was having some low glucose issues, and she was able to help me straighten those out, he said. She and Dr. Owens worked together, and they helped both Marge and I with our medication use. She's a great resource.

Dick and Marge's physician, Matthew Owens, MD, said Howard's support of his care has been beneficial to all the medical staff in Redfield.

Having another professional you can collaborate with on complex cases always helps, and Aly's expertise gives me an advantage that many providers may not have, Owens said.



Dick and Marge Gallup of Redfield, left, discuss their medication and treatment plans with Alyssa Howard, PharmD, who serves as pharmacist coordinator at Community Memorial Hospital Avera. Howard teams with providers in Redfield to provide enhanced patient care, and will soon do the same in Britton, SD

Beyond the expertise and professionalism, she is a natural with patients and really makes them feel more comfortable because she explains our medication approaches clearly and in ways that allow patients to feel included in their own treatment plans. That's really important for overall success.

Dick Gallup serves as the vice president of the governing board for Redfield Community Memorial Hospital Avera; he said he's been impressed with Howard's contributions.

Doctors and advanced practice providers are busy, and as a member of the team, she can see quite a few patients and that gives our doctors time to see others, Dick Gallup said. Doc Owens has been instrumental in getting this program working, and Aly's started things mostly from scratch, so there's been a little shaking up – for the good. We're excited to see how things will unfold in Britton.

EXPANSION TO BRITTON

Howard will continue to expand her innovative approach to rural clinical pharmaceutical care, as she'll work with providers and patients to implement anticoagulation clinical services as well as other consultation in Britton at Marshall County Healthcare Center Avera.

Sharing resources between two locations allows us to apply the lessons we've learned in both locations, which provides more effective, collaborative care said Howard. In facilities without clinical pharmacists, much of the research and medication management falls to the physicians and advanced practice professionals. We have great resources in the Avera eCARE® Pharmacy service, but having a person who is on the ground, talking to nurses and medical staff, meeting with patients – that eyes-on paradigm becomes a critical part to seeing more success and continuing to improve outcomes.

For patients like Marge, there's more to it than just outcomes.

Aly is great about making you feel like she understands what you're facing and she's never afraid to talk to the doctor about approaches or considerations, she said. I know Dr. Owens feels she's a great addition, and I think the other physicians appreciate having her on the team. I sure know she helps both of us with our care.

24 · South Dakota Pharmacist = 25 · Fall Edition 2018

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.

Marijuana Development

Back in 2014, this series explored the legality of marijuana, medical and otherwise, as state laws diverged from Federal law. This divergence started with California in 1996. Two concepts discussed in that article have not changed; the Supremacy Clause and Enforcement Discretion.

The Supremacy Clause is a provision in the United States Constitution and it states that Federal law is supreme to state law. Generally, states may enact laws that are more stringent than Federal laws, but not more lenient. For example, a state can move a Schedule III up to a Schedule II or move a non-controlled drug into Schedule IV within their borders. But a state is unable to move a Schedule II down to Schedule III. This is a basic tenet in the relationship between Federal and state laws. However, this tenet seems to have been forgotten as states moved to legalize marijuana and associated products within their borders.

One reason that this has occurred is another concept known as Enforcement Discretion. This occurs when an agency responsible for the enforcement of a law decides to not enforce that law. An earlier example of this concept was the importation of prescription drugs from Canada. The Food & Drug Administration (FDA) stated that all importation was illegal, but they exercised their discretion and would not prosecute those bringing in these drugs for their own use. In essence, the activity is still illegal, but the agency chooses to do nothing about it. The Drug Enforcement Administration (DEA) has been following this course since at least the publication of the Ogden memo in 2009.

The caveat here is that the agencies always have the ability to change their minds.

Two recent developments have the potential to radically change the marijuana discussion. The first is the publication of a DEA internal directive on May 22, 2018. The clarification provided in this directive is that products and materials made from the parts of the marijuana plant that are not included in the definition of marijuana under the Controlled Substances Act (CSA) are not themselves controlled under the CSA. The directive goes on to say, "the mere presence of cannabinoids is not itself dispositive as to whether a substance is within the scope of the CSA..." This is a reversal from the position taken by DEA in a news release in 2001 that stated that any product that causes THC to enter the human body is a Schedule I substance. Essentially they were saying at that time was that any product that has any THC in it is a controlled substance. What this change in direction might mean for future enforcement actions by DEA is uncertain at this time.

The second recent development was the introduction of a bill by Senator Charles Schumer of New York on June 28, 2018. This bill may render the previous discussions moot. The main objective of the bill is the removal of marijuana and THC from Schedule I of the CSA. The bill also amends a number of U. S. Code sections to remove marijuana and THC from them. Examples of these include removing them from the definition of felony drug offense and from the mandatory sentencing guidelines. If marijuana and THC are no longer Schedule I substances, there is no longer any disconnect between state and Federal law. The states would clearly be free to regulate marijuana as they see fit.

The law also creates some other related funds and requirements. First, the bill creates a fund to provide small business loans to women and socially and economically disadvantaged people who want to operate a marijuana business. It also directs the National Highway Traffic Safety Administration to study the impact of driving under the influence of THC on highway safety. The bill goes on to direct the Secretary of Health and Human Services to conduct research on various health issues involving marijuana, such as the effects of THC on the brain, efficacy of marijuana as treatment for specific conditions, and the identification of additional medical uses for marijuana. The bill would also restrict advertising of marijuana products if needed for the protection of the public health, especially for individuals who are 18 years old or younger. Lastly, the bill would provide funds for grants to states to allow them to set up programs to expunge previous marijuana convictions.

If passed, this bill would completely change the conversation on marijuana in the United States. There has been a huge shift in public opinion on this issue, especially in the last 20 years or so. It is too early to tell if the bill has enough support in Congress to get passed. If anything gets in the way, it may be the additional requirements and studies that are created in the bill. Each of them comes with their own appropriations, so the fight may come down to the budget. Stay alert for new developments – there will almost assuredly be more coming!

CITATIONS:

- 1 Article 6 This Constitution, and the Laws of the United States which shall be made in Pursuance thereof, and all Treaties made, or which shall be made, under the Authority of the United States, shall be the supreme Law of the Land; and the Judges in every State shall be bound thereby, any Thing in the Constitution or Laws of any State to the Contrary notwithstanding
- 2 https://www.deadiversion.usdoj.gov/schedules/marijuana/dea_internal_directive_ cannabinoids_05222018.html
- 3 Marijuana Freedom and Opportunity Act https://www.congress.gov/bill/115th-congress/senate-bill/3174/text?q=%7B%22search%22%3A%5B%22schumer+marijuana%22%5D%7D&r=1

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Are Too Many Baby Boomers _____ Too Indebted? _____

Financial burdens could alter their retirement prospects.

Imagine retiring with \$50,000 of debt. Some new retirees owe more than that. Outstanding home loans, education debt, small business loans, and lingering credit card balances threaten to compromise their retirement plans.

How serious is the problem? A study from the University of Michigan's Retirement Research Center illustrates how bad it has become. Back in 1998, 37% of Americans aged 56-61 shouldered recurring debt; the average such household owed \$3,634 each month (in 2012 dollars). Today, 42% of such households do – and the mean debt load is now \$17,623.1

Are increased mortgage costs to blame? Partly, but not fully. Quite a few homeowners do trade up or refinance after age 50. The Consumer Financial Protection Bureau notes that between 2001-2011, the percentage of homeowners 65 and older carrying a mortgage went from 22% to 30%. The data for homeowners 75 and older was more alarming. While 8.4% of this demographic had outstanding home loans in 2001, 21.2% did by 2011.²

Education debt is weighing on boomer households.

According to the Motley Fool, the average recent college graduate has \$30,000-\$35,000 in outstanding student loans. It would take monthly payments of \$300-\$400 over a decade to eradicate that kind of debt.³

As good debts have risen, bad debts have also grown. MagnifyMoney, a financial analytics website, pored over the most recent round of UMRRC data and determined that 32% of older consumers now contend with revolving debt each month. The average recurring non-mortgage debt for these seniors: \$12,490, of which \$4,786 is attributed to credit cards. A staggering 22% of older Americans have more than \$10,000 in revolving credit card debt – pretty painful when you consider that the average credit card carries 14% interest.¹

One school of thought says that retiring with a mortgage is okay. Interest rates on home loans are rising, but they are still not far from historic lows, and homeowners who have bought or refinanced recently could be carrying loans at less than 4% interest. While carrying mortgage debt into retirement may be bearable, owning a home free and clear is better.

How about you? Can you retire debt-free? It may seem improbable, but if small steps are taken, that goal may come within reach. Every year you delay retirement is another year you have full financial power to attack debt. Working longer may not be ideal, but it can give you the potential to start retirement owing less. Cutting off financial support for young adult children can also free up money to pay down debt. They have many more years to pay off what they owe than you do. You could also think about moving to a cheaper home, driving a cheaper car, or living in a cheaper state; any linked short-term financial expenses might pale in comparison to the potential savings. Whether you pay off your smallest debts first or your highest-interest ones, you are subtracting burdens from your financial life. The fewer financial burdens you have in retirement, the better.

ITATIONS:

- 1 forbes.com/sites/nextavenue/2017/09/20/how-debt-is-threatening-retirement-dreams/
- 2 cbsnews.com/news/mortgage-tips-for-retirees-and-near-retirees/ [10/20/17]
- 3 tinyurl.com/ybgvt7po [9/29/17]

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OBITUARY

Larry V. Detmers



Sioux Falls - Larry V. Detmers, 79 of Sioux Falls died Saturday, August 18, 2018. He was born in Lennox, SD on November 12, 1938, the son of William and Mina (Hendrix) Detmers. He grew up in Canton, SD, graduating from Canton High School in 1956. He attended South Dakota State University graduating with a Pharmacy Degree in 1960. He

served in the South Dakota Air National Guard from 1961 to 1967 retiring as a Staff Sergeant. He was united in marriage to Karen Warren on June 12, 1965 in Lake Wilson, Minnesota. They made their home in Sioux Falls where Larry worked for

Lewis Drug Store for 42 years especially at the "Old Southgate Store". Larry and Karen enjoyed traveling, they travelled to all 50 states, 55 different countries and six continents. He loved watching SDSU sports, the Minnesota Twins and the Minnesota Vikings. He also enjoyed socializing and talking with people wherever they travelled.

Larry is survived by his wife Karen of Sioux Falls; a sister, Bonnie Bell (Detmers) Olson of Canton; one brother-in-law, Wes Kock of Canton; and a sister-in-law, Nellie Detmers of Canton; along with many other relatives and friends.

The family wishes that memorials be directed to either SDSU College of Pharmacy of Our Saviors Lutheran Church. www.heritagesfsd.com.



SDPhA ANNUAL MEETING

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LEGISLATIVE DAYS January 22-23, 2019

Legislative Update and Dinner

January 22, 2019, 6 p.m. at RedRossa Italian Grill

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

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