PULSE*SD*

South Dakota Office of Rural Health
Emergency Medical Services

December 2015

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Greetings from the DOH/ORH

By Halley Lee—Administrator, Office of Rural Health

Greetings from the Department of Health! First off, I would like to take this opportunity to 'welcome' you to our first edition of PULSE*SD*. Our plans are to prepare and distribute this newsletter on a quarterly basis to the EMS industry and other interested parties. Secondly, a special thank you to Lance Iversen with EMS for preparing this document.

As most of you are aware, the Office of EMS was transitioned from the Department of Public Safety to the Department of Health through an executive reorganization order this past legislative session. In a way, it's a case of "welcome home" to EMS, as they were housed in the Health Department up until 2003, when they moved to DPS. The Department is excited for the opportunity to collaborate with EMS to work to ensure access to emergency medical care across the state. For many South Dakotas, healthcare begins with EMS, transitioning from EMS through tertiary care. The current mission of the Department is "To promote, protect, and improve the health of every South Dakotan". EMS is often times the entry point into the healthcare system in the state.

In response to the transition of EMS into the Department of Health, a Stakeholders' Group of interested parties was formed in the spring of 2015. This group consisted of individuals from the EMS industry, state legislators, association representatives, local government representatives, hospital leadership, etc. The group met four times over the course of the summer with the following goal:

> *"To provide recommendations to the Department of Health on EMS sustainability and ensuring access to quality EMS in South Dakota, particularly in rural South Dakota, by identifying key issues and suggesting strategies."*

Meeting materials from this effort can be found by visiting http://doh.sd.gov/providers/ruralhealth/EMS/StakeholdersGroup.aspx.

Once again, welcome to the newsletter. And welcome, EMS, to the Department of Health. I look forward to working with all of you!

Halley Lee

Administrator, Office of Rural Health

Office of Rural Health / EMS Restructure

By Halley Lee—Administrator, Office of Rural Health

In response to the transition of EMS to the Department of Health and to Stakeholder recommendations, the Department of Health, Office of Rural Health (ORH) is restructuring to accommodate this forward movement.

Marty Link was recently named as an Assistant Administrator in the Office of Rural Health. In addition, he has assumed the duties of EMS Director. He will work directly with EMS staff: Bob Hardwick, Lance Iversen, Al Johnson and Marilyn Rutz. Marty will also continue to oversee the statewide Trauma Program. These changes were effective 11/5/15.

Many of you already know Marty as a fellow paramedic. Marty has been employed with the State of South Dakota since 2002. He started with the Department of Health, Office of EMS. For 10 years, Marty served EMS personnel through positions such as the state training coordinator, National Registry representative, mobile testing administrator, and field specialist. Marty also worked extensively with ambulance services around the state implementing the patient care reporting system. For the past three and a half years, Marty has transitioned back to the DOH as the trauma program manager. When asked what Marty is most passionate about in his job, Marty stated, "The people—I admire those who look beyond themselves, those who unselfishly care and serve others—they are a very special group." Marty's expertise in EMS and trauma will be invaluable in moving EMS forward across the state.

The Department of Health remains committed to supporting EMS across South Dakota and will work with staff and the industry to continue to identify and implement innovative solutions to challenges currently facing EMS. We appreciate the opportunity for a continued partnership.

If you have any questions, feel free to direct them to Halley Lee at 605.773.3361 or via email at Halley.Lee@state.sd.us

Transition From EMStat5 to TripTix4 / CDX Client

By EMS

The SD Office of Rural Health / EMS and Intermedix are working on transitioning from Med-Media EMStat5 to their newest electronic patient care record (ePCR) version, TripTix4. With this transition, we will also be moving from WebCur to CDX Client.

At this time, we are estimating to be 100% transitioned (both CDX Client and TripTix4) by the end of December, 2016.

Intermedix TripTix4 and CDX Client have received the National Emergency Medical Services Information System (NEMSIS) Version 3 compliance certification and will also be ICD -10 compliant.

The first part of the transition will be to move the state from WebCur to CDX Client, then set all the EMS Data Elements both in TripTix4 and NEMSIS. Once we are 100% transitioned to CDX, we will work on a plan for Intermedix to move all the ambulance services in SD to TripTix4 as well as a training plan for everyone who will be using this software.

As we continue working on the implementation plan with Intermedix, we will share any new information on the transition, timeframe changes, etc. with the ambulance service directors/managers.

Recommended Minimal Computer Specs to run TripTix4/CDX Client:

- Core i5 or greater processor
- Windows 7 or 8.x
- 4 GB RAM
- 20 GB Hard Drive
- XGA 1024x768 Resolution
- IE, FireFox, Chrome or Safari (Intermedix recommends Chrome or FireFox)

EMT Online Recertification

By Marilyn Rutz—EMS Resource Director

If you are an EMT and are due to recertify this year, remember the recertification process is now online. You will need to go to: http://EMS.sd.gov and click on the link.

You can log into your account to recertify 90 days or less from when you are set to expire. Please note that once you have completed the online recertification process, you will receive a message that states "Complete." This means you have completed your recertification successfully and the EMS office has received it to review and process. Once you have submitted your recertification online, you will not be able to get back into your profile until after the new certification cycle begins.

Please continue to retain your paper documentation of continuing education including a copy of your current NREMT card and your CPR card in case you get audited by our office or by the NREMT. If you do get audited by our office, you will need to turn in all continuing education documentation if you are not certified with the NREMT.

If you are certified with NREMT and get audited by our office, you will only need to send us a copy of your NREMT card and your CPR card.

For more information, please contact Bob Hardwick at 605-773-3361 or email bob.hardwick@state.sd.us.

Online Ambulance Service Licensing/Relicensing

By Marilyn Rutz—EMS Resource Director

Beginning in 2016, ambulance services will relicense online. Because this will be the first year filling out the application online, all services will need to fill in all sections of the application for approval. Applications for the next ambulance licensing period are due before July 1, 2016. Once completed, the only need to enter information is to update information such as contact information, change in staffing, new vehicle information, etc. There will be more news coming in the future concerning this application and when it will be available.

Physio Control Transition from 2G to 3G Modem Notice

Editor's Note: EMS is reprinting this notice from Physio Control and questions should be directed to Physio Control.

2G cellular technology is nearing end-of-life and is actively being replaced by 3G technology across the telecommunications industry. Though different mobile carriers may have different dates for discontinuation of 2G service, the industry as a whole will end 2G support within a relatively short timeframe.

Physio-Control has ended support for 2G modem technology and is no longer able to repair or replace 2G modems that are beyond the original warranty period. In addition, we want to inform you that, due to a Microsoft policy change, we will be updating our Microsoft server certificate on **February 14, 2016**. Any currently deployed 2G modems will no longer be able to communicate with the LIFENET System after this date.

Due to this industry-wide technology shift and the need to consistently update our server certificates to keep your sensitive data secure, we are encouraging all of our customers to transition to 3G modem technology as soon as possible.

We know our customers depend on their LIFEPAK devices and that any technology change can be challenging. To help ease the transition, we are pleased to offer our loyal customers promotional pricing on 3G modems when you trade in your 2G models. Please contact your local sales representative for further information about the cellular technology transition and to learn more about this trade-in offer.

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Simulation In Motion—SD

By Jill Dean—Rural Health Specialist

The South Dakota Department of Health Office of Rural Health, along with Avera Health, Regional Health and Sanford Health partner together to offer one-of-a-kind mobile education through SIM-SD (Simulation in Motion, South Dakota). SIM-SD was designed to implement statewide outreach training for pre-hospital and hospital personnel. The SIM-SD state-of-the-art human patient simulators are used to deliver hands-on education so that emergency care personnel can repeatedly practice their skills. The goals of SIM-SD are:

- To provide increased outreach educational opportunities for emergency care personnel in rural communities,
- To enhance competence and confidence among rural emergency care personnel, and
- To strengthen relationships between pre-hospital and hospital emergency care personnel to facilitate consistency of care.

Since many Emergency Medical Services personnel in South Dakota only encounter a critically ill or injured patient once or twice a year, the SIM-SD mobile education program gives the chance to encounter a similar 'patient' multiple times with focused feedback in a managed-stress environment. SIM-SD 'patients' are some of the most technologically advanced training tools available to the medical community today. The human-like, computerized mannequins are crucial in helping emergency care personnel improve their skills as providers, communicators and team members, which ultimately impacts patient care for all South Dakotans in a positive manner.

The SIM-SD partners at Avera, Sanford and Regional Health have a variety of human patient simulators available for training purposes: an adult (**iStan**), a child (**PediaSIM**) and an infant (**BabySIM**). Scenario programming has been developed for each of the human patient simulators. iStan has internal robotics that mimic human cardiovascular, respiratory and neurological systems. When iStan bleeds, his blood pressure, heart rate and other clinical signs change automatically, and he responds to treatment with minimal input from an instructor. **PediaSIM** supports a wide range of clinical interventions and offers risk-free practice for pediatric clinical care. PediaSIM offers the integrated physiology in a smaller practice patient with full trauma features for both nursing and emergency response. **BabySIM** is an infant-sized simulator with advanced physiology for the practice of life-saving care. BabySIM generates automatic responses to clinical interventions to prepare healthcare professionals for emergency and critical infant care in a low-risk setting.

In 2014, SIM-SD partners reported summary data on 227 trainings events to 2,909 participants. Through June 2015, there have been 85 training events to 910 participants. To schedule a training session or for more information about SIM-SD, please visit our website at www.sim.sd.gov.

SD Cardiac System of Care Conference

By EMS

The American Heart Association and the South Dakota Dept. of Health sponsored the SD Cardiac System of Care Conference held in Pierre on Sept. 9th. There was a good turn out of hospital and EMS staff from around the state who attended.

Guest speakers included Gary Myers, Marty Link, Dr. Ralph Renger, Travis Spier, Sr. Tom Stys, Jil Cruz, Shila Thorson, Julie Poppe, Eric Rupe, Nancy Fisher, Chrissy Meyer, Deb Hamilton, Tanya Truitt, Hafia Sarma, and Dr. Steve Schroeder.

Topics covered during the conference included: Cardiac System of Care, Pre-Hospital Cooling, Case Studies, MI: Measure-Improve! Mission Not Impossible, Cardiac Ready Community, Community Awareness and Engagement-Panel Discussion, EMS: Completing the Feedback Loop within the System of Care, Inpatient: Closing the Gaps on Inhospital Resuscitation, Combined Mission: LifeLine and LUCAS Data Presentation, and Time Critical Decision Making.

Helpful Grant Tips & Resources

By EMS

One place that many EMS agencies have success with grants is emsgrantshelp.com and ems1.com/grants/

For additional EMS related resources, please visit our "Resources" page located at http://doh.sd.gov/providers/ruralhealth/EMS/Links.aspx

Below are some helpful tips for applying for grants provided by emsgrantshelp.com.

1 DEFINE The first step is to identify your community and department's current needs during your strategic planning sessions. Where would your community benefit from grant funding? The best way to do that is to give priority to those areas that will produce the most measurable impact on your department and your community. Be prepared to explain how the requested funding will solve a problem.

2 RESEARCH How can you find a grant that will fit your needs? The best way is to use the EMSGrantsHelp grant database. You can perform a search by grant category (Federal, state, or corporate), keywords (such as ambulance or equipment), or by your department's state.

3 PREPARE The number one reason why grant applications are denied is failure to follow directions. So, once you have found a grant you want to apply for and are sure you meet the eligibility requirements, read the current RFP very carefully.
Some grants sponsor workshops or provide written guides which can be helpful in keeping your grant application process on-track. When looking at a guidance document, go through and look for items that are "must do's," "should do's," and "could do's."

4 APPLY You have been gathering all the information you need, and now it's time to put it together. Throughout this process it is important that you remain mindful of the grant application submission deadline. You wouldn't want your hard work to go to waste because you missed a single deadline.

5 AWARD The time from application submission to award notice varies for each grant. Some are up to 12 months while others can be as short as one or two weeks. On average however, a grant maker will have made their funding decisions in about 3–6 months.

6 MANAGE Once you have received your award, it's time to put it to use. Be sure that you follow all instructions given to you by the grant maker on post award management. These instructions are sent after the grant has been given. Also be sure to abide by any measures of success that you had outlined in your narratives. If you say that new equipment will decrease response times by 5% each month, be prepared to show that.

7 CLOSEOUT This is the time to tie up all the loose ends related to your award, and get prepared for the next year's grant application. If you do not complete the closeout process for the grant which you were awarded, you will likely not be able to apply for funding during the following cycle.
Many of the materials you prepared in the beginning of this process can be repurposed for the next year, so keep excellent records. This will make the grant process easier next year and provide a valuable resource.

Licensure Process for SD Advanced Life Support Personnel

By Margaret B. Hansen, PA-C, MPAS—Executive Director
SD Board of Medical and Osteopathic Examiners

The Board of Medical and Osteopathic Examiners (Board) is the licensing and regulatory agency for Advanced Life Support Personnel (ALS) professionals in South Dakota. All ALS professionals at any level are required to be licensed by the Board in order to work in South Dakota. The application process is conducted in accordance with South Dakota codified law and administration rule. Application is a web based online process. ALS students are also required to be approved for student status by the Board using the same application procedures.

The first step to apply for a South Dakota license or an ALS student status is to obtain an online account from the Board. The applicant may designate an authorized agent to assist them at any point in the process. Both the online account request form and the authorized agent forms can be found on the Board website. It is helpful for applicants and ALS program directors to review the Board's General Guidelines for Criminal History prior to making application.

The Board is required to perform due diligence and investigate all applications by obtaining "primary" (meaning directly from the source) verifications. After an application is submitted a checklist of applicant responsibilities is created. The current status of a license application can be viewed online by the applicant and the authorized agent at any time, night or day. The start date of the application is visible as well as any incoming items. By South Dakota administrative rule, all applications must be completed within 120 days and that date is also noted on the online status preview page.

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1 http://legis.sd.gov/rules/DisplayRule.aspx?Rule=20:78:03
2 http://sdbmoe.gov/ and http://sdbmoe.gov/content/forms-and-helpful-links
3 http://www.sdbmoe.gov/sites/default/files/General%20Guidelines%20on%20Criminal%20History_1.pdf

ALERT—New Synthetic Drugs "Orange Tesla" & "SnapChat"

By EMS

The Orange Tesla pill is shaped like a shield and has the Tesla Motors stamp. The pills reportedly will glow under a black light and have a MDMA (3,4 methylenedioxymethamphetamine) content up to 3 times stronger than most pills.

Users describe early effects of jaw clinching, eye wiggling and confusion. Next stage was elevated pulse, unsteady and feeling extremely euphoric. Hallucinations have been widely reported.

Seasoned abusers cautioned to only use half or a quarter of the pill as the content is extremely powerful. Symptoms coming down were recounted as non-existing and users were feeling "normal" the next day.

If you come in contact with someone you suspect is abusing one of these illegal drugs, contact your local law enforcement agency, and the South Dakota Fusion Center (1-866-466-5263)

The Snapchat pill is named after the smartphone messaging app and has the logo stamped on each pill.

These are believed to be a "pressed ecstasy tablets" made from a variety of notoriously dangerous ingredients.

Even in small doses, the pills have triggered a major adverse reaction. They become aggressive, disoriented and behave in an erratic and irrational manner after ingesting the drug.

7th Annual State Trauma Symposium

By Marty Link—EMS Director / Trauma Program Manager

Trauma medical directors, trauma coordinators, and trauma registrars from around the state gathered in Mitchell for the 7th annual State Trauma Symposium; close to 100 attendees participated in the day and a half event. During this year's symposium, hospitals were provided a binder containing trauma treatment guidelines along with a golden hour poster to place in their ER bays. The trauma treatment guidelines are a combined effort between the ND and SD trauma systems for specific use within trauma centers across SD. Trauma surgeons Dr. Gary Timmerman (Sanford), Dr. Michael Person (Avera), Dr. Paul Bjordahl (Sanford) along with trauma surgeons from ND and program staff helped edit said documents for distribution. This document is considered a guideline for the care of the traumatized patient and will be used in conjunction with future Regional Performance Improvement.

The trauma system, for the past year and a half has conducted quarterly Regional Performance Improvement (PI) sessions via conference call/webinar mediums. EMS, Critical Access Hospitals (CAH), and tertiary centers review actual trauma cases that presented in South Dakota. The purpose of Performance Improvement is to retrospectively review, in the light of day, care provided to our patients. Of course, the ultimate goal of PI is to constantly improve how we care for our patients, learning from past opportunities, and instilling knowledge to optimize future care. Trauma is a surgical disease and communicating to hospitals the severity of our patients as early as possible is key to activating the trauma system.

The trauma system is currently working with ambulance services to update trauma transportation plans which are reviewed/updated every three years. These plans are critical to the early activation of the "system of care" ensuring patients receive prompt appropriate treatment as definitively as possible.

I would encourage every service director to meet with your local trauma coordinator to learn more about this process. A full listing of trauma coordinators can be found at https://doh.sd.gov/documents/Providers/Trauma/HospitalContactList.pdf.

LUCAS Project

By Marty Link—EMS Director / Trauma Program Manager

The Office of Rural Health is close to completing the second of a three year Helmsley Charitable Trust grant, which we've called LUCAS—"A Partnership for Cardiac Care." As many of you know, the Helmsley Charitable Trust provided $3.7 million to supply licensed ambulance services and hospitals in South Dakota with a LUCAS®2 Chest Compression System. Approximately 200 devices were distributed across SD in total. During the 18 regional training sessions, Physio-Control and program staff shared how cardiac arrest summaries could be transmitted to CODE STAT. CODE STAT is an annotation program that allows a code summary to be reviewed noting compression ratios, compression rates, compressions per minute, etc.

We encourage every ambulance service who runs a cardiac arrest case to transmit their code summary to CODE STAT, if you use the LUCAS device or not. The caveat is the transmitting monitor/defibrillator must be Physio Control; this is due to LIFENET receiving program. Once your case is received, our annotators will annotate/summarize same and return it to your service for feedback. We received feedback from one ambulance service surprised at the range of compressions per minute while performing manual CPR, 80 to 150. Use of the LUCAS device delivers approximately 102 compressions per minute, never tires, and basically provides another set of hands for resuscitation efforts.

If you have any questions regarding the project, annotations, or transmitting cases to CODE STAT, please contact Marty Link at marty.link@state.sd.us

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South Dakota Office of Rural Health
Emergency Medical Services
600 East Capitol Ave.
Pierre, SD 57501

Mission Statements:

Office of Rural Health - *Improving access to quality healthcare in South Dakota*

Our mission is to improve the delivery of health services to rural and medically underserved communities, emphasizing access. We work primarily at the local level.

Emergency Medical Services: *To assure quality out of hospital care for the sick and injured in South Dakota by licensing ambulance services and certifying emergency medical response personnel to operate the services. South Dakota Emergency Medical Services is committed to serving South Dakota ambulance services, EMS providers and the public in every way possible.*

SD Board of Medical & Osteopathic Examiners:

The mission of the South Dakota Board of Medical and Osteopathic Examiners is to protect the health and welfare of the state's citizens by assuring that only qualified doctors of medicine, doctors of osteopathy, physical therapists, advanced life support personnel, physician assistants, athletic trainers, occupational

For More Information, Contact:

South Dakota Office of Rural Health / EMS - please visit: http://ems.sd.gov or call 605-773-4031

SDBMOE, Please visit http://www.sdbmoe.gov/ or call 605-367-7781

SIM-SD, please visit www.sim.sd.gov or contact the South Dakota Office of Rural Health 605-773-3361