Welcome to PULSESD!

There are a number of important topics we wish to share with you in this edition of PULSESD. Our long term goal within the EMS Program is to ensure long-term sustainable, reliable, and viable ambulance service in South Dakota. We believe this can be accomplished in time but it will take a coordinated effort at a state, regional, and local level. In order for this vision to come to fruition, it is important that we all focus on one vision, one common goal, and one end result.

As many of you know, communication is the single greatest and most powerful of tools ensuring this vision is achieved without distraction. The first step is putting the vision to paper. As we approach our fall season, the EMS Program will focus efforts on clearly articulating the vision for the future. Those who have been following the Program’s efforts since 2015 have noted some significant changes in our general philosophies.

First and foremost, we truly believe in and support the great work you are doing within your own communities. We believe that your commitment, passion, and willingness to help perfect strangers in the midst of their darkest hours is one of the most humbling and honorable attributes of servanthood. We, at the Department of Health, see this service and are grateful to countless providers willing to serve.

We also have similar values as we work to craft the future of EMS in SD. This starts with understanding challenges and successes found at the local level. We have surveyed the EMS industry extensively in recent years and are now gathering information from community leaders outside of the EMS workforce. We feel this is essential to identify real and perceived knowledge of EMS at the local level and use this information as part of our visioning process. I’ll explain each of these concepts in later articles.

Be Blessed!

Marty
**SD Naloxone Project Update**

By Marty Link—EMS Director

As many of you know the Department of Social Services and the Department of Health have combined efforts to strengthen South Dakota’s response to the opioid crisis. The EMS Program has been charged with leading the Naloxone Project’s efforts and has now entered year two of the grant cycle. We continue to provide one-on-one training to law enforcement agencies and other first responders who were unable to attend one of our regional sessions last fall.

As of this writing, we have trained over 880 first responders and have distributed over 1800 doses of naloxone to first responders across South Dakota. According to our electronic Patient Care Reporting System, approximately 158 administrations of Naloxone have been reported between November of 2017 through September of 2018.

**EMS Strategic Planning**

By Marty Link—EMS Director

Strategic Planning is an essential part of any business model. Strategic planning effectively preformed produces a living breathing document used by a company or organization to ensure values, goals, and objectives are effectively achieved. This roadmap ensures suitable resources are committed to high priority objectives. Within the realm of EMS, these priorities include workforce, sustainability, infrastructure, and quality.

In October, the EMS Program will host the first of several strategic planning sessions with a small stakeholder group. This group has representation from medical directors, hospital administrators, ED directors, the Board of Medical and Osteopathic Examiners, and ambulance service directors from variously sized services. The workgroup will be facilitated by a national leader in Rural EMS, John Becknell, who many of you have met during EMS Leadership coursework. The goal of this workgroup is to develop a strategic plan for the future of EMS.

**SIM-SD OB Simulators**

By Marty Link—EMS Manager

The Helmsley Charitable Trust has graciously awarded grant dollars for Simulation in Motion—SD to receive high fidelity OB simulators. The three partners, Avera Health, Sanford Health, and Rapid City Regional will receive the simulators in late September of 2018. If you wish to receive OB simulation, please reach out to your respective SIM-SD partner to schedule a training session.
Community Survey and Regional Sessions
By Marty Link—EMS Director

As noted in my opening remarks, the EMS Program in conjunction with SafeTech Solutions LLC is in the process of surveying community leaders outside of the EMS industry. The target audience for this survey includes hospital administrators, city and county officials, business owners, and medical directors.

The goal of this survey is to collect information on realities and perceptions of community leaders regarding EMS. Our goal from this survey is to gather information on how community leaders currently see EMS and how we can all work together to ensure a long-term sustainable, reliable, and viable EMS system across South Dakota.

Much like the EMS survey conducted in 2016, we will follow this community leader survey up with eight regional sessions specific to this audience. I do not want you to feel left out of the conversation. We simply need to start a statewide conversation with these stakeholders. We, in turn, will share the results of the survey and regional sessions with you. In addition, the results of this survey will play a pivotal role in our strategic planning for the future.

EMR Certification Renewal
By Bob Hardwick — Central EMS Specialist

Beginning July 1\textsuperscript{st}, the South Dakota EMS Program will be accepting EMR recertification applications for those expiring at the end of September. EMRs can renew two ways. Online at EMS.sd.gov or by mailing in the paperwork to: SD DOH, ORH/EMS, 600 East Capitol Ave, Pierre SD 57501.

Please ensure all training meets the new NCCP standards.

Recertification Requirements:

- Applicant Information
- Mandatory Hours or National Registry card
- Record of Additional Continuing Education Hours or National Registry card
- CPR/AED Verification

Please note: Renewing your National Registry does not auto-renew your State EMT Certification. You must still recertify your State EMR.

More information at EMS.sd.gov

Questions? Call Bob at 605-773-4031 or email at Bob.Hardwick@state.sd.us
National Violent Death Reporting System (NVDRS)
By Marty Link—EMS Manager

The Department of Health has recently received a Centers for Disease Control and Prevention (CDC) grant to establish a National Violent Death Reporting System (NVDRS). The purpose of the NVDRS is to collect information on all homicides, suicides, deaths from legal intervention, deaths of undetermined intent, and unintentional firearm deaths.

According to a CDC publication, “more than 19,000 people were victims of homicide and almost 45,000 people died by suicide in 2016 alone”. Violence is a major public health problem in the U.S. and South Dakota is not immune to this problem. The total number of violent deaths occurring in South Dakota over the past ten years was 1,900 including 1,464 (77%) suicides, 269 (14.2%) homicides, and 112 (5.9%) undetermined intent.

I share this article with you to raise awareness to the high number suicides or suicide attempts across SD. Unfortunately, these numbers continue to rise. The EMS Program is looking at ePCR data specific to suicide related EMS responses. This data will help efforts in decreasing suicides and attempted suicides across SD through partnerships and the NVDRS.

Sepsis
By Sepsis Alliance

Sepsis is the body’s overwhelming and life-threatening response to infection that can lead to tissue damage, organ failure, and death. In other words, it’s your body’s over active and toxic response to an infection.

September is Sepsis Awareness Month. This would be a great time to review Sepsis during EMS training or provide information to your communities. The Sepsis Alliance has put together some great resources for this purpose.

- *Sepsis: First Response* is an educational video and training module that provides Emergency Medical Service (EMS) personnel with the tools to rapidly identify and begin treating sepsis cases in the field, as well as how to effectively coordinate with the emergency department and in-hospital colleagues. [https://www.sepsis.org/sepsis-first-response/](https://www.sepsis.org/sepsis-first-response/)

- *Sepsis 911* is an educational toolkit to raise awareness in your communities. [https://www.sepsis.org/sepsisawarenessmonth/sam-public-toolkit/](https://www.sepsis.org/sepsisawarenessmonth/sam-public-toolkit/)

Grassroots initiatives like this help more people learn about this life-threatening condition and we know that being knowledgeable about sepsis can help save lives.
South Dakota Trauma System-Then and Now
By Rebecca Baird, RN SD Trauma System Manager/Eastern EMS Specialist

Regulations established in 2008 give the South Dakota Department of Health the authority to designate South Dakota hospitals as trauma centers based on trauma care resources. Trauma centers are ranked by the level of resources they have available from Level I to Level V.

The goal of the South Dakota Trauma System is to provide an organized response in managing and improving care of severely injured people. As you can see on the maps below, the South Dakota Department of Health has been working hard to ensure hospitals meet criteria to be designated as a trauma center. All hospitals on the maps below have been verified and meet explicit criteria under article 44:66.

THEN

NOW

Level I trauma centers provide the highest level of trauma care, in-house trauma research, and prompt availability of varying specialties. South Dakota has no Level I trauma centers.

Level II trauma centers provide comprehensive trauma care. Trauma surgeons are required at all trauma team activations and neurosurgery is promptly available. South Dakota has 3 Level II trauma centers Avera McKennan, Sanford USD Medical Center, Rapid City Regional

Level III trauma centers have continuous surgical coverage of the emergency department and orthopedic surgeon on-call 24/7. South Dakota has 2 Level III trauma centers. Avera St. Luke’s, Aberdeen; Avera Sacred Heart, Yankton

Level IV trauma centers are located in more rural areas and provide surgical coverage for all trauma activations 80% of the calendar year. South Dakota has 9 Level IV trauma centers. See complete listing on website…

Level V trauma centers are in the most rural communities with a primary role of identifying severe injuries, stabilization, and transfer if appropriate. South Dakota has 35 Level V trauma centers. See complete listing on website…

For a complete listing of South Dakota Trauma Centers visit https://doh.sd.gov/providers/ruralhealth/trauma/

EMS.sd.gov
South Dakota Scope of Practice
By Lance Iversen—EMS Data Manager / Ed. & Prof. Standards Coordinator

A while back, the South Dakota Board of Medical & Osteopathic Examiners and the SD EMS Program announced the implementation of a defined Scope of Practice for SD ALS and BLS Providers.

Some people have asked if, or heard that, the SD Board of Medical & Osteopathic Examiners has now taken over the BLS or EMT Level, as well as other rumors. Nothing has changed. BLS and ambulance services are still regulated by the EMS Program as it has always been.

As the Board pointed out, as well as in the document itself, the Scope of Practice for each level is part of a sequence that begins with the Scope of Practice of an EMT, then, each ALS level is built upon the knowledge, skills, and competencies of the lower levels.

The EMS Program and the SDBMOE, as well as many stakeholders over a long period of time, worked hand in hand to develop the defined South Dakota Scope of Practices for all the provider levels.

The South Dakota BLS Scope of Practice includes the EMR and EMT levels (the EMT Scope is the same as you will find in the ALS Scope of Practice document). The BLS Scope of Practice can also be found on our website, EMS.sd.gov (sdbmoe.gov for the ALS Scope of Practice).

It is important that all the certified or licensed providers in South Dakota study and know what they are allowed to do and not do at their level, which is laid out in the BLS and ALS Scope of Practice documents. It is also important that your service’s Medical Director has this information to ensure that no one is practicing outside their scope, as the providers are practicing under his/her license.

The service’s Medical Director may limit the scope of practice/skills for any level of BLS and ALS provider, however, the Medical Director cannot expand the scope. All changes to any BLS scope of practice must be approved in advance by the EMS Program (SD Dept. of Health). All changes to any of the ALS scopes of practice must be approved in advance by the SD Board of Medical & Osteopathic Examiners.

Both the South Dakota BLS and ALS Scopes of Practice also pertain to SD Licensed Out-of-State agencies/providers who will be transporting into or out of South Dakota facilities, mutual aid, etc. (while in SD borders).
The State’s new ePCR system, ImageTrend Elite, has been operational since late October 2017. As of this writing, we have over 47,000 EMS records in our repository.

We have 132 in-state licensed South Dakota Ambulance Services (including air). Out of those 132 services, one ground service is not using our ePCR system yet or a different vendor, and two air medical companies have not begun reporting.

There have been some challenges for the 20 services using a ePCR company (vendor) other than the State’s ImageTrend Elite system.

For years, South Dakota was on NEMSIS 2.2.1 dataset. Due to circumstances outside our control with our previous ePCR vendor, we were unable to update NEMSIS versions as they came online. When we changed vendors to ImageTrend Elite, we jumped from NEMSIS 2.2.1 to NEMSIS 3.4. Version 2.2.1 and 3.4 are as different as night and day when it comes to the data elements and building the system (Dataset, Demographic File Set, National Data Elements, mapping, etc.). With all these changes, the services using their own ePCR vendors had to look at our Schematron and move all their data elements from version 2.2.1 to what we require in version 3.4. As you can imagine, this is extremely time consuming. Once the conversion and mapping was completed, we then had to do test imports. Anything that failed had to be looked at individually for correct mapping to what we (SD) have in our system for NEMSIS 3.4.

All but two services have completed the conversion (not counting the one ground service not using a ePCR system yet) and are reporting. As services using third-party ePCR vendors came online, we began receiving their run report data. This explains why the numbers at this time are low (47,000). As we move closer to having 100% of the SD Ambulance Service’s reporting by the end of 2018, we will have accurate data for 2019 and on.

EMR to EMT Bridge Course
By Lance Iversen—EMS Data Manager / Ed. & Prof. Standards Coordinator

For those who are currently State and Nationally Registered Emergency Medical Responders (EMR), there is a path for you to transition to an EMT with approximately 70-80 additional hours of training.

Course Coordinators/Instructors who wish to hold an EMR to EMT Bridge course should be extremely knowledgeable in Emergency Medical Technician training and develop a bridge course to build upon what the EMR has already learned.

If your service would like to have an EMR to EMT Bridge Course, please contact Lance Iversen at 605-394-6027 or Lance.Iversen@state.sd.us
What the Heck is NEMSIS?
By Lance Iversen—EMS Data Manager / Ed. & Prof. Standards Coordinator

NEMSIS IS A NATIONAL EFFORT TO STANDARDISE THE DATA COLLECTED BY EMS AGENCIES.

The National Emergency Medical Services Information System (NEMSIS) is the national database that is used to store EMS data from the U.S. States and Territories. NEMSIS is a universal standard for how patient care information resulting from an emergency 9-1-1 call for assistance is collected. NEMSIS is a collaborative system to improve patient care through the standardization, aggregation, and utilization of point of care EMS data at a local, state, and national level. NEMSIS is a product of NHTSA’s Office of EMS and in collaboration with the University of Utah, which is the host of the Technical Assistance Center (TAC).

WHY THE NEED FOR A NATIONAL EMS DATABASE?

NEMSIS provides the framework for collecting, storing, and sharing standardized EMS data from states nationwide. The NEMSIS uniform dataset and database help local, state, and National EMS stakeholders more accurately assess EMS needs and performance, as well as support better strategic planning for the EMS systems of tomorrow. Data from NEMSIS is also used to help benchmark performance, determine effectiveness of clinical interventions, and facilitate cost-benefit analyses.

Benefits of a National EMS Database will be useful in:
- Developing Nationwide EMS Training Curricula
- Evaluating Patient and EMS System Outcomes
- Providing Valuable Information on Other Issues or Areas of Need Related to EMS care
- Addressing Resources for Disaster and Domestic Preparedness
- Facilitating Research Efforts
- Determining National Fee Schedules and Reimbursement Rates

To learn more about NEMSIS and NHTSA-EMS, please visit their websites at: www.nemsis.org and www.ems.gov

South Dakota EMS Patches
By Lance Iversen—EMS Data Manager / Ed. & Prof. Standards Coordinator

If you or your service are interested in purchasing SD EMS patches, you can send a check or money order, made out to ORH/EMS, and mail to 600 E, Capitol Ave, Pierre, SD 57501. The cost is $1.00 each.
2018 Sturgis Rally
By Julie Smithson—Western EMS Specialist

Another year of Sturgis’s Motorcycle rally is in the books. There were approximately 500,000 people who attended rally this year.

In an effort for South Dakota Department of Health Emergency Medical Service (SD DOH EMS Program) to improve our data collecting, a Supplemental Question was added to ImageTrend’s electronic Patient Care Report (ePCR). The question, “Was this incident Rally related?”, appeared during the Rally week and was only on the State’s ImageTrend ePCR system. The data showed 84 Rally related ems calls between August 3 – 12, 2018 from all around the state.

SD DOH EMS Program would like to thank the handful of western EMS departments who attended the Rally EMS conference every morning from August 3, 2018 through August 12, 2018. The call allowed South Dakota officials to gather Rally related information each day. We collected the following information from each service:

- How many EMS calls the previous day?
- Number of vehicle/aircraft available today?
- Number of vehicle/aircraft down for maintenance or repairs?
- Any hospital diversions?
- Any issues with Trauma/Stroke alerts?
- Any communication issues?
- Number of suspected Opioid overdose the previous day?
- Number of times Narcan was given the previous day?
- Any events happening today?

This information was very useful for EMS departments in the Black Hills area. The EMS departments also received a daily report from the weather service, the South Dakota Highway Patrol, and Regional Health Hospital.

During August 3 – 12, 2018, there were 4 rally related fatalities in the Black Hills area and approximately 106 accidents.
Custer Ambulance Service, Inc.

Greetings from Custer Ambulance Service, Inc. located in the Southern Black Hills of South Dakota.

We began serving the community of Custer and the surrounding area in 1978. Prior to that, ambulance service was provided by the local fire department. We are a private, not for profit organization with funding generated from billing and supplemented from the tax district established in September 2000. Our coverage area is approximately 800 square miles and covers most of western Custer County. While our year-round population of our coverage area may be about 8000, our tourist population is 6 to 8 times that at any point during tourist season.

Over the past 16 years, we have transitioned from an all-volunteer organization to a combination department of paid personnel and paid per call volunteers. We currently have an awesome group of 19 volunteers and 5 full-time paid personnel that range in levels from EMT to Paramedic. We are averaging over 900 calls per year with one-third of those being inter-facility transports, with 3 ALS capable ambulances.

We moved from our tiny garage on 3rd Street into our current facility with adequate crew quarters and lots of room for training in July 2007.

We are proud of our education program which offers monthly training sessions that are open to anyone on the third Wednesday of each month from 6 p.m. to 8 p.m. We also offer annual refresher training classes in February and other classes as they come up (CPR/First Aid, PHTLS, AMLS, ACLS, PALS, TECC). In the fall, we offer an entry level EMT class and if there is an interest, we will offer an Advanced EMT class in the spring.
SD EMS Conference
By SDEMSA - www.sdemsa.org

LEARNING GIVES YOU SUPER POWERS!

JOIN US AT OUR SOUTH DAKOTA EMS ANNUAL CONFERENCE

Conference Speakers:

Andrea Zickmund

JenaLu Simpson

Breanne Lane

Pre-conference Date:
October 25, 2018

Conference Dates:
October 26-28, 2018

Conference Location:
Best Western Ramkota Hotel
Sioux Falls, SD

SD EMSA DANCE AND COSTUME CONTEST
Saturday, October 27, 2018
8:00pm to Midnight.
Dress as your favorite superhero or come as you, as we are all superheroes.
Costume Contest will start at 10pm with prizes awarded.

EMS.sd.gov
Questions or More Information? Contact:

**Marty Link**
EMS Director  
7511 S. Louise Ave, Suite 102  
Sioux Falls, SD 57108-5998  
605-367-5372 (office)  
605-941-1209 (cell)  
605-367-5366 (fax)  
Marty.Link@state.sd.us

**Lance Iversen**
Educational & Professional Standards Coordinator  
State EMS Data Manager  
909 East St. Patrick Street, Suite 4  
Rapid City, SD 57701  
605-394-6027 (office)  
605-394-1677 (fax)  
Lance.Iversen@state.sd.us

**Rebecca Baird**
Trauma Program Manager  
Eastern EMS Specialist  
7511 S. Louise Ave, Suite 102  
Sioux Falls, SD 57108-5998  
605-367-8371 (office)  
605-295-3148 (cell)  
Rebecca.Baird@state.sd.us

**Bob Hardwick**
Central Specialist, Recertifications  
600 East Capitol Avenue  
Pierre, SD 57501  
605-773-4031 (office)  
605-773-5683 (fax)  
Bob.Hardwick@state.sd.us

**Julie Smithson**
Western Specialist  
909 East St. Patrick Street, Suite 4  
Rapid City, SD 57701  
605-394-5113 (office)  
605-941-0762 (cell)  
605-394-1677 (fax)  
Julie.Smithson@state.sd.us

EMS.sd.gov