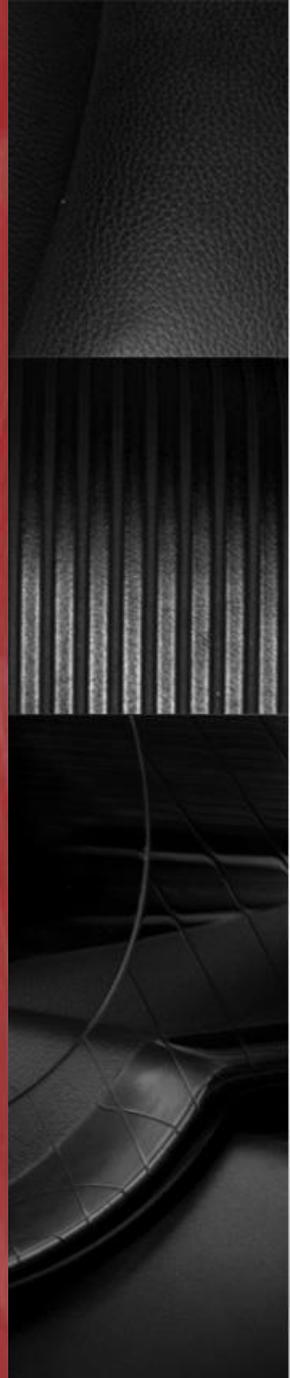


# Stakeholders Group

December 12<sup>th</sup>, 2017

Pierre, SD



# DOH Strategic Plan

***Vision*** **Healthy** People  
**Healthy** Communities  
**Healthy** South Dakota

***Mission*** To promote, protect and improve the health of every South Dakotan

***Guiding Principles*** **Serve** with integrity and respect  
**Eliminate** health disparities  
**Demonstrate** leadership and accountability  
**Focus** on prevention and outcomes  
**Leverage** partnerships  
**Promote** innovation



# Stakeholder Group Charge

In January, Governor Dugaard filed Executive Reorganization Order No. 2015-01 which moved the Office of Emergency Medical Services (EMS) from the Department of Public Safety to the Department of Health. In order to begin to address challenges being faced by the EMS industry, the Department of Health formed a stakeholders' workgroup to study the current EMS system. This workgroup consisted of representatives from the EMS industry, state legislature, related associations, hospitals, local government, etc. The group met four times over the course of the summer of 2015 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.*

Begin with the End in Mind!



# How do you see the Future



# The Process



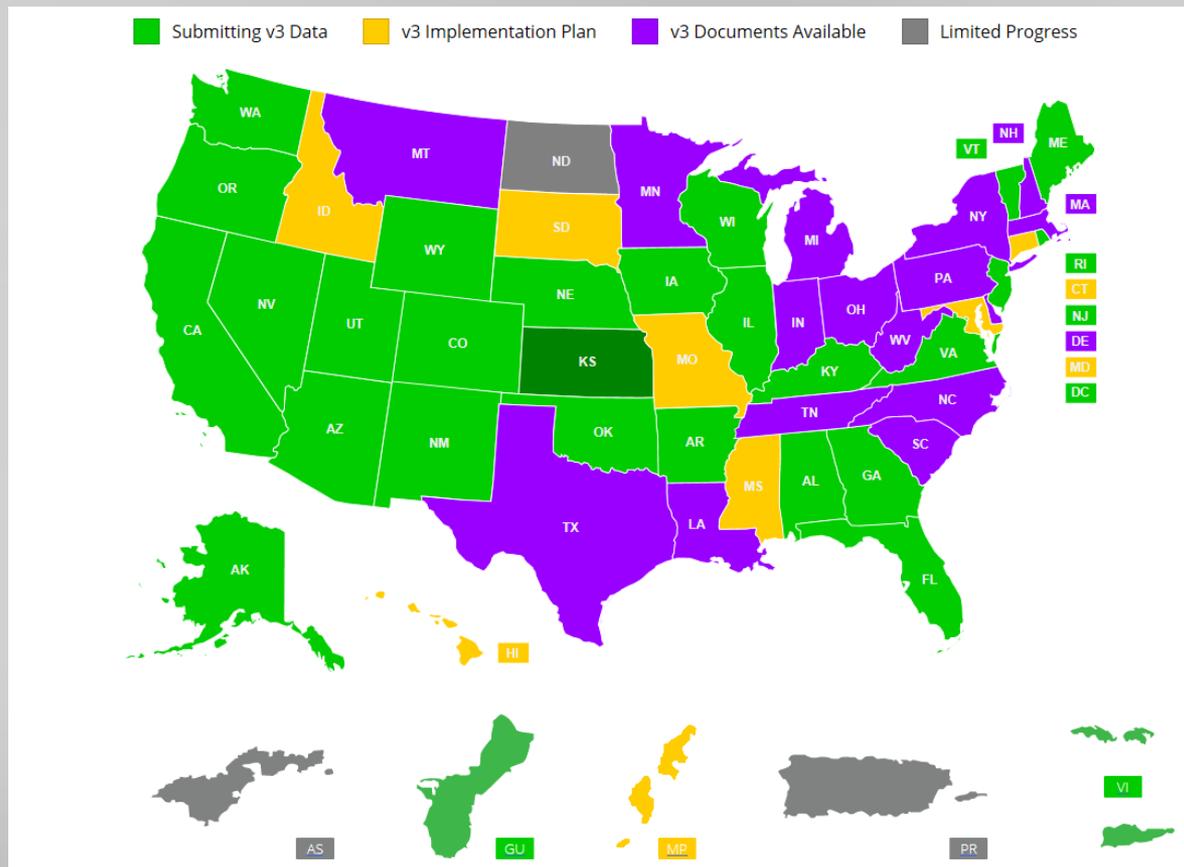
# Multifactorial



# A Year Review—Chronological order!



# National EMS Information System (NEMESIS) V3





# Electronic Patient Care Report (ePCR)

- Intermedix transition—Required Immediate Priority
- EMS Data Requirements
  - National Highway Traffic Safety Administration
  - National EMS Information System (NEMSIS) v2, v2.2, v3.3.4, discussion of v3.5
- The Process
  - September 1<sup>st</sup>, 2016—Began RFP IT Build
  - December 1<sup>st</sup>, 2016—RFP Published
  - February 27<sup>th</sup>, 2017—Proposal Submissions Closed COB
  - June 13<sup>th</sup>, 2017—ImageTrend contract signed
  - June 13<sup>th</sup>, 2017—Work begins with ImageTrend



# ImageTrend Build—Effective June, 2017

- Estimated over 2800 combined hours between Lance, Lindsey, and Marty
  - Weekly Conference calls with ImageTrend Implementation Coordinator
  - All 585 Data Elements within V3.3.4 dataset required review, customization
  - Validity Rules, Visibility Rules, and Form flow all required customization
  - Two multi-day trips to ImageTrend Headquarters and ImageTrend Convention
  - Daily communication from EMS Industry on potential refinements



# ImageTrend—Customization

- Customization was/continues to be the biggest challenge
    - All Hospitals, Nursing Homes, Assisted Living Center, etc. added statewide
    - All Fire Departments added statewide
    - Pro's:
      - We have the ability to make changes in 5 minutes that took previous vendor months
- Supplemental Questions

# ImageTrend—Form Manager

The screenshot displays the ImageTrend Form Manager interface. At the top, a browser tab shows 'Tools - Form Manager' and the URL 'https://southdakota.imagetrendelite.com/Elite/Organizationsouthdakota/Agencysystem/FormManager/Build/Type1/Form4'. The navigation bar includes 'IMAGE TREND ELITE', 'South Dakota System...', and dropdown menus for 'Incidents', 'Resources', 'Tools', and 'Community'. The main header indicates 'Currently Building: SD Run Form' with a 'Back' button and a 'More' dropdown. Below the header, there are four tabs: 'Form', 'Times', 'Mileage', and 'Worksheets'. The 'Form' tab is active, showing a search bar 'Find field...' and a table of sections and panels. The 'Mileage' tab is also visible, showing a list of fields with their data types. The 'Dataset' panel on the right lists various fields with their IDs.

Sections	Panels
Response	Dispatch Information
Patient Encounter	Response Outcome
Transport	EMS Unit and Crew ...
Signatures	Incident Location
Billing	Response Delays

Field Name	Data Type
Unit Notified by Dispatch Date/Time	Date/Time
Type of Service Requested	Single Select
Complaint Reported by Dispatch	Single Select
Possible Injury	Single Select
Emergency Medical Dispatch Performed	Single Select
Dispatch Priority (Patient Acuity)	Single Select
Response Mode To Scene	Single Select
Number of Patients at Scene	Single Select
Was This The First EMS Unit on Scene	Single Select
Other Agencies On Scene	InlineListView Grid

**Dataset Fields:**

- Indications for Invasive Airway (eAirway.01)
- Airway Complications Encountered (eAirway.08)
- Suspected Reasons for Failed Airway Management (eAirway.09)
- Date/Time Decision to Manage the Patient with an Invasive Airway (eAirway.10)
- Date/Time Invasive Airway Placement Attempts Abandoned (eAirway.11)
- Cardiac Arrest (eArrest.01)
- Cardiac Arrest Etiology (eArrest.02)
- Resuscitation Attempted By EMS (eArrest.03)
- Arrest Witnessed By (eArrest.04)
- CPR Care Provided Prior to EMS Arrival (eArrest.05)
- Who Provided CPR Prior to EMS Arrival (eArrest.06)
- AED Use Prior to EMS Arrival (eArrest.07)
- Who Used AED Prior to EMS Arrival (eArrest.08)
- Type of CPR Provided (eArrest.09)
- First Monitored Arrest Rhythm of the Patient (eArrest.11)
- Any Return of Spontaneous Circulation

# ImageTrend—Dataset Manager

The screenshot displays the ImageTrend Dataset Manager interface. The browser address bar shows the URL: <https://southdakota.imagetrendelite.com/Elite/Organizationsouthdakota/AgencySystem/DataManager#6e151960-ee13-4ecd-9cbd-42b8d92af00f.fieldProperties.general.6e151960-ee13-4ecd-9cbd-42b8d92af00f>. The interface includes a navigation menu on the left with categories like eHistory, eInjury, eLabs, eMedications, eNarrative, eOther, eOutcome, ePatient, ePayment, and eProcedures. The 'eProcedures' category is expanded, showing a list of procedure-related fields. The 'Procedure' field is selected, and its properties are shown in the main area.

**Dataset Manager**  
Current Dataset: EMS Incident

**Field Properties**  
eProcedures.03

**Procedure**

General Usage Mappings

Active  Yes  No Patient Identifiable  Yes  No

Sync with other common lists  Yes  No

NEMSIS Element: Procedure Definition: The procedure performed on the patient.  
Data Type: SnoMed value

**Active Values & Codes**

Search... Contains 1 - 100

Order	Code	Value	Label	Active
0	404996007	Airway patency status (observable entity)	Airway - Assess Patency	<input checked="" type="checkbox"/>
0	230040009	Airway suction technique (procedure)	Airway - Clear/Suction	<input checked="" type="checkbox"/>
0	232707004	Removal of foreign body from airway (procedure)	Airway - Foreign Body Removal	<input checked="" type="checkbox"/>
0	424979004	Laryngeal mask airway insertion (procedure)	Airway - Laryngeal Mask Airway Insertion	<input checked="" type="checkbox"/>
0	182692007	Nasopharyngeal airway insertion (procedure)	Airway - Nasopharyngeal Insertion	<input checked="" type="checkbox"/>
0	232664002	Manual establishment of airway (procedure)	Airway - Open/Position	<input checked="" type="checkbox"/>
0	7443007	Insertion of oropharyngeal airway (procedure)	Airway - Oropharyngeal Insertion	<input checked="" type="checkbox"/>
0	232708009	Removal of device from airway (procedure)	Airway - Removal of Adjunct (non-ETT)	<input checked="" type="checkbox"/>
0	427753009	Insertion of esophageal tracheal double lumen supraglottic airway (procedure)	Airway - Supraglottic Airway Double Lumen Insertion	<input checked="" type="checkbox"/>
0	116865006	Administration of albumin (procedure)	Albumin	<input checked="" type="checkbox"/>

# One Data Element

https://nemsis.org/media/nemsis\_v3/release-3.4.0/DataDictionary/PDFHTML/DEMEMS/index.html

File Edit View Favorites Tools Help

**NEMSIS Data Dictionary**  
Version 3.4.0

Overview & Summary  
Sample Element Page

**Dataset Grouping**  
DEMDataSet  
EMSDataset

**DEMDataSet Sections**  
dAgency  
dConfiguration  
dContact  
dCustomConfiguration  
dCustomResults  
dDevice  
dFacility  
dLocation  
dPersonnel  
dState  
dVehicle

**EMSDataset Sections**  
eAirway  
eArrest  
eCrew  
eCustomConfiguration  
eCustomResults  
eDevice  
eDispatch  
eDisposition  
eExam  
eHistory  
eInjury  
eLabs  
eMedications  
eNarrative  
eOther

**eDisposition**

Grouping

**Elements**  
eDisposition.01 - Destination/Transferred To, Name  
eDisposition.02 - Destination/Transferred To, Code  
eDisposition.03 - Destination Street Address  
eDisposition.04 - Destination City  
eDisposition.05 - Destination State  
eDisposition.06 - Destination County

**eDisposition.20**  
State National

**eDisposition.20 - Reason for Choosing Destination**

Definition

The reason the unit chose to deliver or transfer the patient to the destination

National Element	Yes	Pertinent Negatives (PN)	No
State Element	Yes	NOT Values	Yes
Version 2 Element	E20_16	Is Nillable	Yes
Usage	Required	Recurrence	1 : M

Associated Performance Measure Initiatives  
Cardiac Arrest Pediatric STEMI Stroke Trauma

Attributes

**NOT Values (NV)**  
7701001 - Not Applicable 7701003 - Not Recorded

CorrelationID  
Data Type: String minLength: 0 maxLength: 255

Code List

Code	Description
4220001	Closest Facility
4220003	Diversion
4220005	Family Choice
4220007	Insurance Status/Requirement
4220009	Law Enforcement Choice
4220011	On-Line/On-Scene Medical Direction
4220013	Other
4220015	Patient's Choice
4220017	Patient's Physician's Choice
4220019	Protocol
4220021	Regional Specialty Center

Data Element Comment  
Required if Patient Transported



# ImageTrend—Reporting

- Report Writer—a powerful tool
- Ad hoc reporting
- Scheduled Reports
  - Medical Directors
  - Service Directors

# South Dakota Run Form

The screenshot displays the South Dakota Run Form web application. The browser address bar shows the URL: <https://southdakota.imagetrendelite.com/Elite/Organizationsouthdakota/Agencydemoagency/EmsRunForm#/Incident2555/Form4>. The interface includes a top navigation bar with 'Save', 'Print', 'PDF', 'Messages', and 'Close' buttons. A left sidebar contains a 'Response' menu with sub-items: 'Dispatch Information', 'Response Outcome', 'EMS Unit and Crew Info', 'Incident Location', 'Response Delays', 'Patient Encounter', 'Transport', 'Signatures', and 'Billing'. The main content area is titled 'Dispatch Information' and contains several form fields:

- Unit Notified by Dispatch Date/Time:** Two text input fields.
- Type of Service Requested:** A dropdown menu.
- Complaint Reported by Dispatch:** A dropdown menu.
- Possible Injury:** Radio buttons for 'Yes', 'No', and 'Unknown'.
- Emergency Medical Dispatch Performed:** A grid of buttons: 'Yes, With Pre-Arrival Instructions', 'Yes, Without Pre-Arrival Instructions', 'Yes, Unknown if Pre-Arrival Instructions Given', 'No', and 'Unknown'.
- Dispatch Priority (Patient Acuity):** Radio buttons for 'Emergent' and 'Non-Emergent'.
- Response Mode To Scene:** A grid of buttons: 'Emergent (Immediate Response)', 'Non-Emergent', 'Emergent Downgraded to Non-Emergent', 'Non-Emergent Upgraded to Emergent', and 'Already on Scene'.
- Number of Patients at Scene:** Radio buttons for 'Single', 'Multiple', and 'None'.

At the bottom of the form, there is a 'Validation' indicator showing '39' errors, a 'Menu' icon, and a 'Status' dropdown menu currently set to 'Draft'. A footer bar indicates 'No Patient Name Entered'.



# Phase one—Establish Initial Training

- System 95% configured by target goal—October 1<sup>st</sup>, 2017
- Contracted eight “Super-trainers,”
  - Multiple meetings to acclimate to system
  - Held initial training October 10<sup>th</sup>
- Messaged EMS and Hospitals of change:
  - Transition timeline
  - Survey Monkey to sign up for training session
  - Naloxone Project
  - General Information Gathering



# Phase one—Initial Training

- Scheduled and held “Early-Bird” training sessions:
  - October 10<sup>th</sup> 7-10 PM (Pierre)
  - October 11<sup>th</sup>, 1-4 and 7-10 PM (Mitchell)
  - October 12<sup>th</sup>, 1-4 and 7-10 PM (Vermillion)
- Regularly scheduled training sessions: (In conjunction with Naloxone Project)
  - October 16<sup>th</sup>, 5-10 PM (Sioux Falls)
  - October 17<sup>th</sup>, 5-10 PM (Watertown)
  - October 18<sup>th</sup>, 5-10 PM (Aberdeen)
  - November 20<sup>th</sup>, 5-10 PM (Rapid City)
  - November 21<sup>st</sup>, 5-10 PM (Spearfish)
  - December 11<sup>th</sup>, 5-10 PM (Mitchell)
  - December 12<sup>th</sup>, 5-10 PM (Pierre)
  - December 13<sup>th</sup>, 5-10 PM (Mobridge)
- Several services will require one on one training—missed session



## To Date:

- Over 160 individuals have been trained during regional sessions
- 50+ ambulance services have entered “live” data: Total calls 743
- 1300+ “User” accounts established
- 638 Reports generated in “Demo” Agency



# Next Steps

## State

- Third party submissions
- NEMSIS Submission

## Trainings

- Phase two training
  - Some in-person training
  - Webinar sessions
- Phase Three
  - Mid-2018
  - Report Writer
  - Data Analytics

# Naloxone Project





# Naloxone Project

- July-October 2017
  - Searched/customized project training materials
  - Created all forms, handouts, etc.
  - Scheduled training sessions through Survey Monkey, initially
  - Entities expressing interest in the Naloxone Project training:
    - Hospitals
    - EMS
    - Sheriff's Offices
    - Police Departments
    - Department of Criminal Investigation
    - Department of Corrections
    - Game Fish and Parks staff





# The Department of Health CDC Funded Opioid Abuse Grant

## Grant Purpose

- To support and build efforts to track and understand the full impact of opioid use and abuse in SD
  - conduct a needs assessment;
  - complete a strategy plan to identify needs and strengthen South Dakota's capacity to prevent misuse/abuse of opioids; and
  - develop a data strategy to enhance and integrate current surveillance efforts for more accurate, timely data.



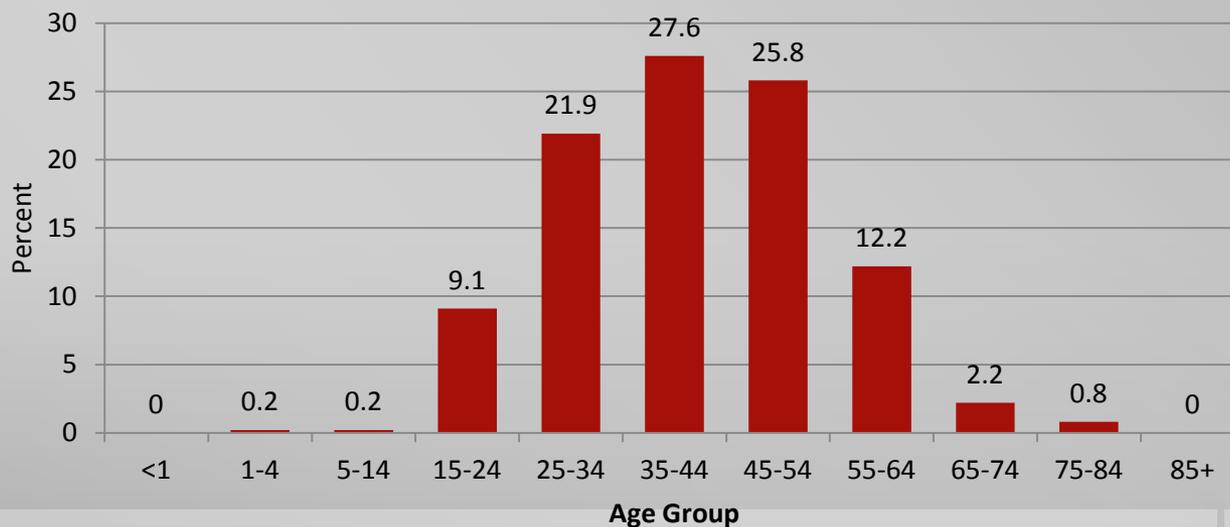
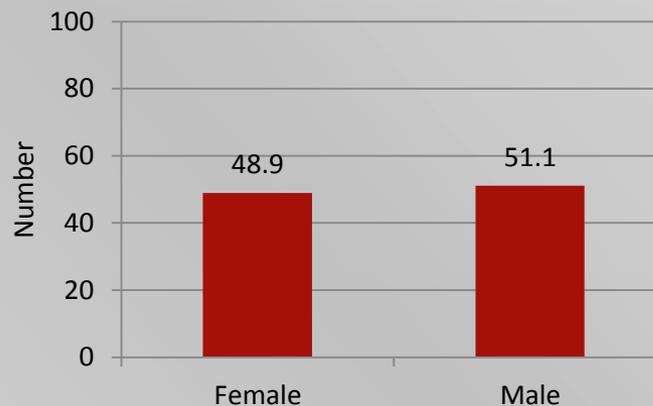
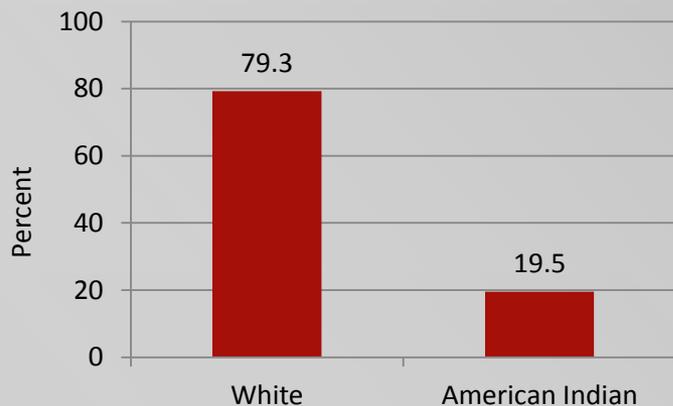
# The Department of Social Services CDC Funded Opioid Abuse Grant

## State Targeted Response to the Opioid Crisis Grant (Opioid STR)

- The purpose of the grant program is to:
  - Increase access to treatment;
  - Supplement current opioid activities; and
  - Support a comprehensive response to the opioid epidemic

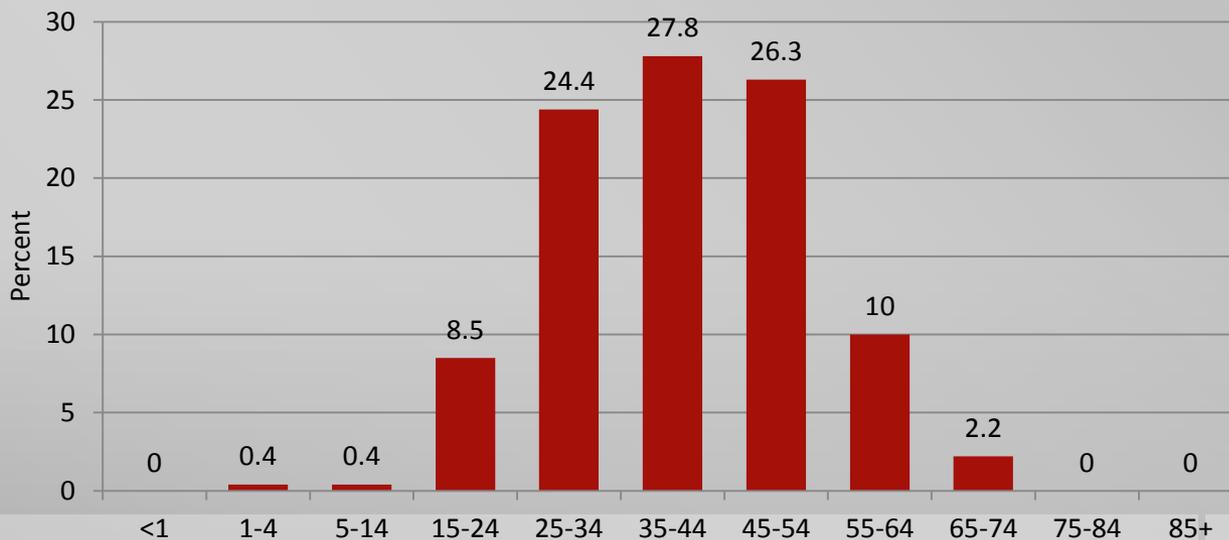
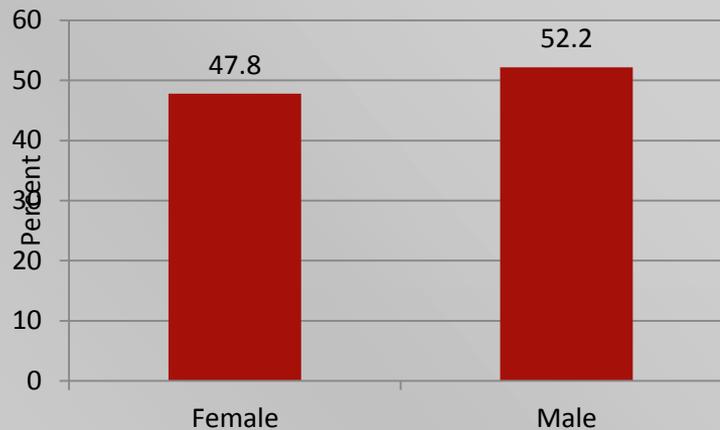
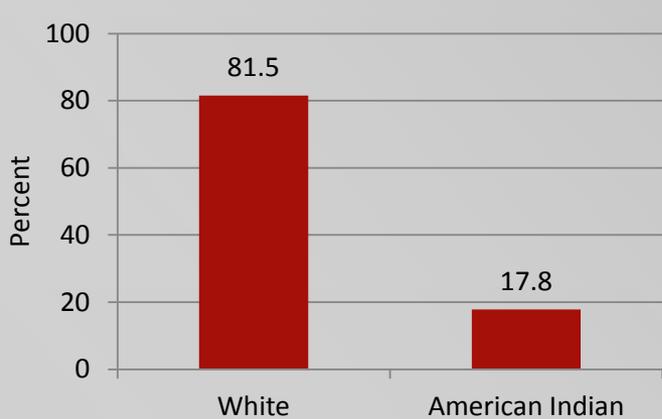
# SD DOH Vital Statistics: 2006-2015

## Drug Associated Deaths by Race, Gender, Age



# SD DOH Vital Statistics: 2006-2015

## Opioid Associated Deaths by Race, Gender, Age





# Naloxone Project Training and Distribution

Scheduled training sessions: Average 1.5 hrs.

- 1:30 PM and 3:30 PM Session for Law Enforcement; 5:30 PM to 10 PM Session for EMS
- Sign-in, handouts, project discussion, formal training, Naloxone distribution, evaluation, adjourn

Dates and Locations:

- October 3<sup>rd</sup>, Mitchell—special session
- October 5<sup>th</sup> Sioux Falls –special session
- October 16<sup>th</sup>, 5-10 PM (Sioux Falls)
- October 17<sup>th</sup>, 5-10 PM (Watertown)
- October 18<sup>th</sup>, 5-10 PM (Aberdeen)
- November 20<sup>th</sup>, 5-10 PM (Rapid City)
- November 21<sup>st</sup>, 5-10 PM (Spearfish)
- December 11<sup>th</sup>, 5-10 PM (Mitchell)
- December 12<sup>th</sup>, 5-10 PM (Pierre)
- December 13<sup>th</sup>, 5-10 PM (Mobridge)



# Naloxone Project—To Date:

- 400+ individuals have been trained in Naloxone
  - 83 DOC staff
  - 36 sheriff's office staff
  - 52 police officers
  - 233 healthcare providers including EMS and hospitals-based professionals
  
- 479 Boxes of Naloxone Distributed
  - 101 medical personnel
  - 73 police departments
  - 93 DOC
  - 70 DCI
  - 12 BIA
  - 129 sheriff's offices
  - 1 North Sioux City fire department (new ambulance)



# Next Steps

## Naloxone Data Collection

- Vital Statistics—Hospital Discharge Data
- ImageTrend ePCR data
- Law Enforcement usage through ePCR



# EMS Communications Project

- June of 2016—Received notification of a traumatic death
- Hospital contact concerned—something was not right about this case
- Decided to research the case:
  - Bob, Misty B. and Marty met with ambulance service
  - Reviewed recorded communications and EMS trip report
  - Determined there was a system related communication issue that needed attention
  - Issue involved:
    - 2 Public Safety Answering Points
    - 3 EMS agencies
    - 1 rotor-wing aircraft



# EMS Communications Project

- Formed Ad-Hoc Workgroup, members included:
  - Flight Communications Directors from Sanford and Avera
  - Metro Communications Interim Director
  - Lincoln County Dispatch
  - Ambulance Directors from Paramedics Plus and Med-Star
  - Trauma coordinators from Sanford and Avera
  - 4 EMS Directors from around the region
  - State Radio



# EMS Communications Project

- Year long workgroup
- Identified the problem, identified potential solutions
- Recommended three Air to Ground Dedicated Digital Radio Frequencies
- Request approved
- Informed Industry of change
  - Air Services
  - EMS
  - Hospitals
  - Law Enforcement





# In the News!

- Ambulance Closures

- Burke, Gregory, and Bonesteel
- Bob, Marty, SDAA conducted focused visit with each service (September 2017)
- Held Public Meeting with approximately 15 folks in attendance:
  - Burke's Mayor, County Commissioner, Medical Director, Hospital CEO, Ambulance Director
  - Gregory's EMS Director and other interested parties
  - Bonesteel's EMS Director and other interested parties
- Great meeting with quality discussion
- Only Burke had significant workforce issues; EMR/EMT class pending
- Radio communication issues addressed



# Digital Radio Infrastructure

- Facing Significant update prior to 2023
- Major issues remaining
- Next Steps—potentially
  - Bob and Marty to solicit ad-hoc workgroup



# EMR Legislation and Administrative Rules

- SB48 Emergency Medical Responder Legislation
  - Established Authority to Promulgate Administrative Rules
- Administrative Rules Hearing Successful
  - Established EMR certification, recertification, reciprocity, etc. language
  - Defined EMR Scope of Practice
- To date
  - 53 certified EMR's; DOH Strategic Planning goal of 80 certified by January 2018
  - 5 EMR class requests approved with a student count of 75 (since July)



# EMS Administrative Rules

- In conjunction with EMR AR, updated EMT Language to reflect
  - Clearly defined EMT, certification, recertification, reciprocity, etc.
  - Defined EMT Scope of Practice
  - General Cleanup
    - Recognized NREMT, Education Standards, redefined “Response, “ age requirement
- Secondary Administrative Rules Package
  - General Cleanup
  - Primary focus on Equipment Standards
  - Medical air transport, air ambulance minimum staffing requirements
  - Primary and Secondary response to “Ground Ambulance”
  - Enhanced user friendliness of rule sections
  - Trip reports required monthly—prior discrepancy



# South Dakota Cardiac Collaborative

## Mission:

- Improve quality of life of all South Dakotans through prevention and control of heart disease and stroke
  
- Two year ongoing effort
  - Highly involved from strategic planning process
  - Increase number of EMT's in SD from 3,281 to 3,850 by 2021
  - Explore innovative strategies to sustain EMS services
  - Decrease EMS chute times
  - Develop pilot program for cardiac ready communities
  - Ensure utilization of community based resources ML: LUCAS for EMS
  - Utilize results of needs assessment to address infrastructure and sustainability of EMS

# South Dakota Cardiac Collaborative

## South Dakota Cardiovascular Collaborative

### Strategic Plan 2017-2021

Download the entire South Dakota Cardiovascular Collaborative Strategic Plan at [doh.sd.gov/diseases/chronic/heartdisease](http://doh.sd.gov/diseases/chronic/heartdisease)

**Vision:** Healthy people, Healthy communities, Healthy South Dakota

**Mission:** Improve quality of life of all South Dakotans through prevention and control of heart disease and stroke

Goals			
<b>I. IMPROVE DATA COLLECTION</b> Drive policy and population outcomes through improved data collection and analysis for heart disease and stroke.	<b>II. PRIORITY POPULATIONS</b> Address prevention and treatment needs of priority populations in South Dakota for heart disease and stroke.	<b>III. CONTINUUM OF CARE</b> Coordinate and improve continuum of care for heart disease and stroke.	<b>IV. PREVENTION &amp; MANAGEMENT</b> Enhance prevention and management of heart disease and stroke.
Objectives			
1. Identify and track data to support at least one heart disease and stroke policy change or recommendation by 2021. <sup>1</sup> 2. Increase input into at least 4 data collection tools by organizations and/or individuals by 10% by 2021. <sup>2</sup>	1. Increase the number of EMTs in South Dakota from 3,281 EMTs in 2016 to 3,850 EMTs by 2021. <sup>3</sup> 2. Decrease the age-adjusted death rate due to heart disease in the American Indian population from 212.5 per 100,000 to 202.0 per 100,000 by 2021. <sup>4</sup> 3. Decrease the age-adjusted death rate due to stroke in the American Indian population from 48.5 per 100,000 to 46 per 100,000 by 2021. <sup>4</sup>	1. Decrease emergency response times by decreasing average ambulance chute times from 7.5 minutes to 6.5 minutes by 2021. <sup>5</sup> 2. Reduce 30-day readmission rate for heart disease and stroke from 6.09% to 5.9% by 2021. <sup>5</sup>	1. Decrease prevalence of heart attack from 4.7% (2015) to 4.45% (5% decrease) by 2021. <sup>6</sup> 2. Decrease prevalence of stroke from 2.6% (2015) to 2.47% (5% decrease) by 2021. <sup>6</sup>
Strategies			
A. Explore a process to identify and track cardiovascular indicators available from the HIE (Health Information Exchange) and other nationally recognized data sources. B. Convene priority stakeholders to identify potential for policy action, i.e. potential legislation, to support the use of HIE. C. Encourage providers who have access to HIE to contribute data into the system. D. Educate members of the HIE to help them more fully utilize the services and incorporate health information technology into workflows. E. Develop a process to disseminate data to stakeholders.	A. Promote the different models of team-based, patient-centered care (health cooperative clinic, health homes, patient-centered medical home). B. Support policies that increase access to heart disease and stroke care for priority populations. C. Improve collaboration with tribal communities. D. Maximize community-clinical linkages (e.g. CHW, different sectors). E. Explore innovative strategies to sustain EMS services (ex: funding, training).	A. Develop pilot program for cardiac ready communities. B. Ensure utilization of community-based resources and programs such as Mission: Lifeline and LUCAS for EMS services. C. Engage non-physician providers in team-based approach to care. D. Utilize results of needs assessment to address infrastructure and sustainability of EMS.	A. Encourage the implementation of quality improvement processes in health systems. B. Expand prevention and lifestyle interventions in communities and for all ages across the lifespan. C. Promote patient-centered disease management that engages patient and family in their own care and links them to community resources. D. Promote awareness, detection and management of high blood pressure (clinical innovations, team-based care and self-monitoring of blood pressure).

Sources: 1) TBD; 2) Data from healthcare facilities; 3) DOH EMT database; 4) Vital Statistics, 2015; 5) O

Note on Goal 3: Chute time is a measurement of time from the notification of the crew until the arrival of the ambulance services in SD were surveyed in the summer of 2016. Out of the 130 services on increasing the awareness of monitoring chute times locally. Of course, many other contributing



showed an average of 7.5 minutes for a 911 response. EMS directors from 130 ground and air increase awareness of and reduce chute times by 2021, the EMS Program will focus strategies



# EMT Classes in High Schools

- Partnership effort between:
  - Office of Rural Health's EMS Program
  - South Dakota Area Health Education Center
  - Department of Education
  - Dr. Matt Owens
  - University of South Dakota
  - Lake Area Tech
- Goal: Provide EMT classes for High Schoolers
  - Increase EMS workforce
  - Allow for Dual Credit Options
- Spring of 2018 class scheduled: 5 interested students in Lennox area



# Special Projects/Ongoing Efforts

- Simulation in Motion—SD
- HRSA—Planning Grant
  - St. Luke’s Hospital, Redfield Hospital, Mid-West Medical Ambulance
  - Exploration of Community Paramedicine
- Sepsis Project—conception phase
- Seatbelt Committee; partnership between DPS and DOH



# Workforce

One of the most pressing issues facing the EMS industry today is sustaining a qualified workforce. In South Dakota, nearly 85% of EMS personnel are volunteer in nature. Similarly, seventy five percent of EMS agencies also operate in this manner. Recommendations recognize the need to assist EMS in recruiting and retaining workforce.



# Workforce Legislative Efforts/Promotion

2016

- Minimum Staffing/Hardship Legislation—SB27
- Drivers Competencies
- EVOC Courses

2017

- Emergency Medical Responder (EMR)
- EMT classes in High Schools/Dual Credit Options



# Workforce Promotion

- **Recruitment and Retention Efforts—RHFRAP**

  - 2015, 1 participating to date; 2016—8 applications received 4 participating to date; 2017 0 apps

- **Build Dakota Scholarship Program**

- **Pipeline Efforts | EMS in Camp Med/Scrubs Camps**

  - **School Year 2015-2016**

    - 9 Camp Meds/5 Camp Meds included EMS

  - **School Year 2016-2017**

    - 20 Scrubs Camps/13 Scrubs Camps EMS attended (17 different locations/12 locations included EMS)

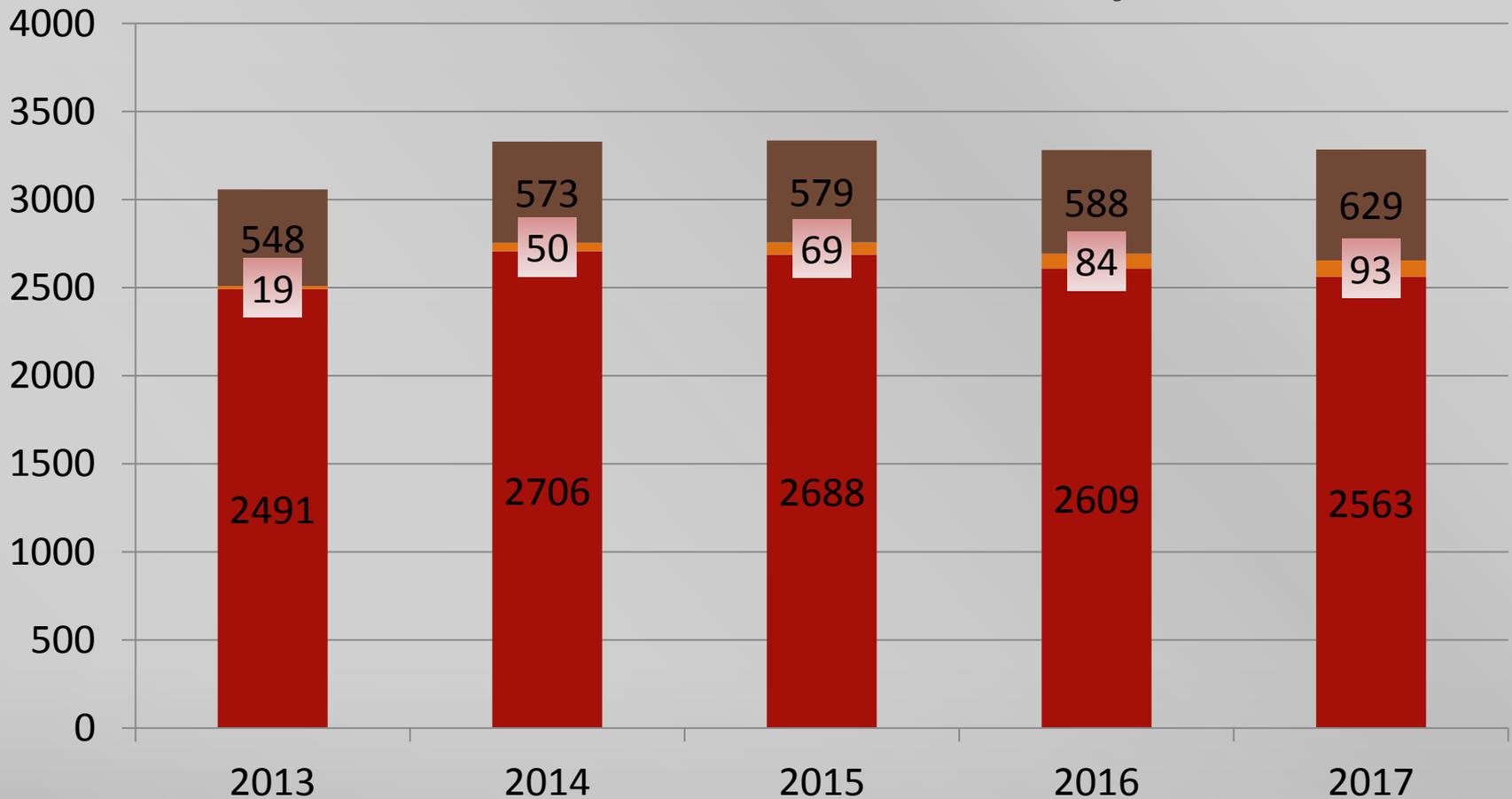
    - 9 Camp Meds/4 Camp Meds included EMS

  - **School Year 2017-2018**

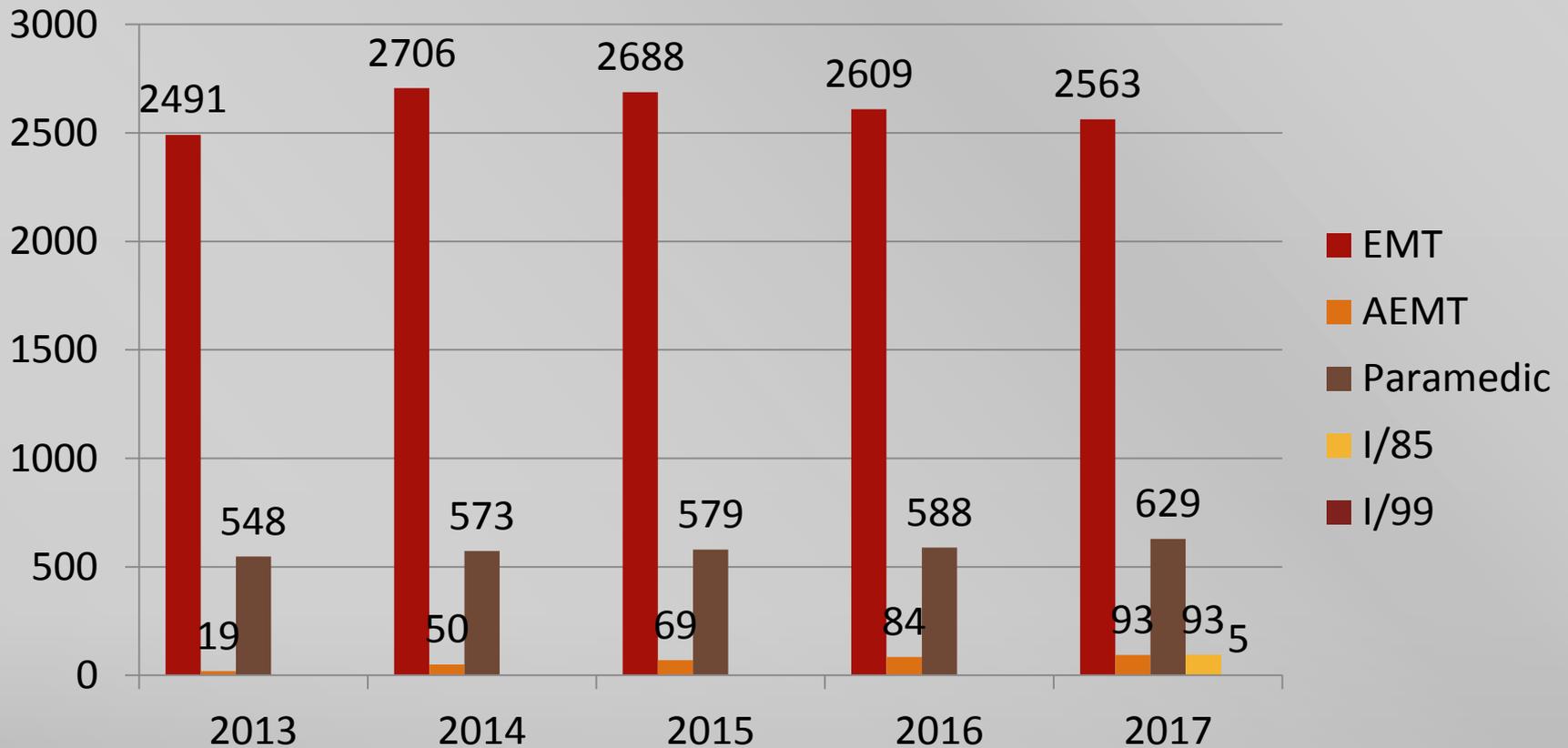
    - 12 Scrubs Camps/8 Scrubs Camps EMS attended (12 different locations/8 locations included EMS)

    - 1 Camp Med/1 Camp Med included EMS (Only 1 camp has been held so far this year)

# Certified EMT Providers by Year



# Total Workforce Numbers—3,383





# Quality

In order to ensure South Dakota has effective, efficient ambulance services, the stakeholders' group recognizes the need for quality measures in EMS agencies.



# Quality

## Recommendation A

- Leadership Focus
  - Continue to support ongoing Leadership Education
  - Ambulance Service Directors need formal education in:
    - Recruitment and Retention
    - Quality Initiatives
    - Budgeting and Billing
    - Medical Direction
    - Regulations both state and federal
    - Etc.



# SafeTech Solutions LLP Leadership Training

- The South Dakota Office of Rural Health, EMS Program is providing 2-day EMS Leadership Workshops in Rapid City, Pierre and Sioux Falls in early 2018. These workshops are for ambulance service leaders and managers and will be a time of learning, discovery and networking.
  - These engaging interactive sessions will:
    - Strengthen your ability to lead your agency
    - Provide a format for exchanging ideas and best practices
    - Create an opportunity to present and work on specific challenges
    - Explore the latest in EMS workforce development
    - Host a forum for dialogue between ambulance service leaders and state leaders
    - Provide important information on the Naloxone program

# Quality—ePCR Reporting

- Data Quality
  - Utilize ImageTrend Validation Rules to promote real-time data quality
  - Develop reporting tools for service directors and medical directors to review
  - Utilization of Quality Review “tools” within ImageTrend software allowing MD review

Totaled Statewide Results for 2015**			
		2015 (N=65330)	
Column Title (Variable)	Definition of Unacceptable Values	n	%
Patient Age	Blanks	182	0.28
Patient Sex	N/A; N/K; N/R; N/P; Blank*	1432	2.19
Ethnicity/Race†	N/A; N/K; N/R; N/P; Blank*	15970	24.45
Time of Dispatch	Blanks	1	0.00
Time Enroute	Blanks	311	0.48
Time Arrived Scene	Blanks	340	0.52
Time of Patient Contact	Blanks	1817	2.78
Time Departed Scene	Blanks	977	1.50
Time Arrived Rec Facility	Blanks	1060	1.62
Time Available	Blanks	332	0.51
Response Mode	N/A; N/K; N/R; N/P; Blank*	4374	6.70
Transport Mode	N/A; N/K; N/R; N/P; Blank*	24807	37.97
Incident Location	N/A; N/K; N/R; N/P; Blank*	6736	10.31
Location of the Incident	N/A; N/K; N/R; N/P; Blank*	32591	51.42
Destination Determination	N/A; N/K; N/R; N/P; Blank; Other*	2583	3.95
Dispatch Type	N/A; N/K; N/R; N/P; Blank*	150	0.23
Primary Symptom	N/A; N/K; N/R; N/P; Blank*	18667	28.57
Provider Impression	N/A; N/K; N/R; N/P; Blank*	19289	29.53
Complaint Reported by Dispatch	N/A; N/K; N/R; N/P; Blank; Strings*	14751	22.58

\*Abbreviations: N/A;N/K;N/R; N/P= Not Applicable, Not Available, Not Known, Not Recorded, Not Reported, Not Provided, N=Number of 911 calls/year; n= number of unacceptable values per each column; %= percentage of unacceptable values per each column; Strings are long and seemingly nonsensical codes that cannot be traced back to a valid entry.  
 †Other was included in Dest\_Determination because it is used more often than acceptable (1904), but was not used in Incident Location as it was used reasonably and is an acceptable response to describe a location (357)  
 ‡Field for race and ethnicity were simultaneously evaluated and this column represents blanks or null values from both columns



# Quality Recommendation

- Medical Director Consultant contract established
  - Dr. Jeff Luther
- Medical Direction Requests
  - Sound, Effective Communication Channels
  - Scope of Practice—what is it; how is it defined; who oversees the process
  - What is EMS Medical Direction—An Introduction to Rural EMS MD—SafeTech Solutions
  - Need for EMS MD Education and Guidance
  - Need for Standardized Guidelines/Protocols
  - Identifying Qualified MDs across the state
  - Establish Regular Ongoing Meetings
  - Listserv in development



# Quality Recommendation

- Enhance communications between EMS and BMOE
  - Regular meetings/communications established and ongoing
  - Positive Relationship
- Educational Programing
  - **Monthly training**
    - Avera e-Emergency Initiative



# Sustainability

Ambulance services across South Dakota are facing a variety of challenges ranging from recruitment and retention of staff, funding, leadership, etc. In an effort to assist services in addressing these issues, the stakeholders recommended the following:

**Recommendation A:** Develop the capacity to provide communities with assistance in transitioning from unsustainable to sustainable EMS models. This assistance should include:

- Assessing sustainability;
- Evaluating the full costs of providing EMS;
- Exploring various EMS delivery models that may fit the community's unique needs, desires and resources;
- Facilitating community discussions around matching needs with resources; and
- Guiding and coaching through the transitional process.



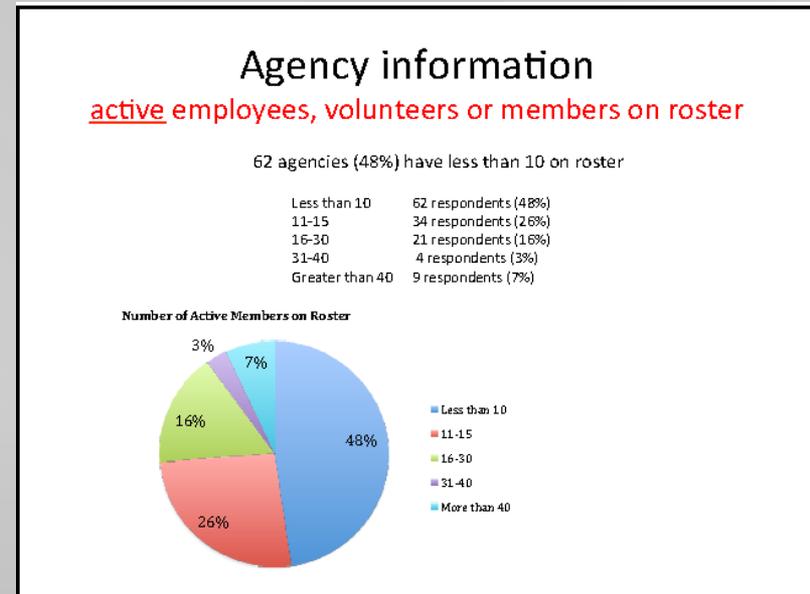
# Sustainability

- Ongoing Technical Assistance
  - TA Focus over sole regulation
  - Partnering with SDAA for TA visits
  - Realignment of Resources
  - Online EMS Ambulance Licensure
    - Completed second year
  - Online EMS Personnel Certification
    - Allows EMS Providers to complete all certification requirements online

# Sustainability

## 2016 Summer EMS Survey

- 36% Today we have enough staff
- 67% As operating today we are confident our agency will be providing services in 5-10 years





# Infrastructure

In order to continue to move EMS forward in South Dakota, recommendations were made to help build an infrastructure within the Department of Health to facilitate these ongoing efforts.

**Recommendation A:** Seek regular input from EMS stakeholders to help lead the South Dakota EMS system.

**Recommendation B:** Conduct a review and update of South Dakota's statutes and rules that pertain to EMS.



# Infrastructure Recommendation A

- Workgroups
  - Stakeholder group updated frequently—PULSESD
  - Internal and Externally Driven
- Communications
  - PULSESD Newsletter
  - Developed Listserv
  - Authored Monthly EMT Thoughts Articles
  - Streamlined Website
- Continue to Maintain Purposeful Partnerships with Key Organizations



# Infrastructure

## Recommendation B and C

- Conduct Internal Review of SDCL and AR
  - Significant progress made legislatively and through AR processes
  - Continual review of and thought towards future needs
- EMS Program and Board of Medical and Osteopathic Examiners
  - Host regular meetings
  - **Ongoing Review of ALS Scope of Practice**
  - Future needs of EMS



# Additional Office of Rural Health Work

- Continued support and promotion of SIM-SD
- Applied for and received FY18 Highway Safety and EMPG Grants
- Nearing completion of Year 4 of LUCAS Grant (\$3.7 million)
- Administrative LUCAS Conference Calls—7 state initiative
- Active member in Senior Advisory committee for homeland security and emergency management
- 9<sup>th</sup> Annual Trauma Symposium
- Competing year four of Regional Performance Improvement
- Negotiated RTTDC and PHTLS Grant Dollars and held numerous courses



# Future Projects

- Radio Communications Workgroup
- EMS treatment protocols
- Board legislation workgroup
- Epinephrine
- Quality metrics
- Medical direction
- Bridge course EMR to EMT
- Leadership classes



# Future Efforts—Workforce

- Workforce
  - EMS Educational Standards Group
  - Explore EMR to EMT bridge
  - Continued Recruitment and Retention Efforts



# Future Efforts—Sustainability

- Sustainability
  - Comprehensive Technical Assistance Visits
  - Continuous monitoring of the health of ambulance services
  - Simulation in Motion-SD and LUCAS Project Sustainability
  - Exploration and Development of Regional EMS Councils
  - Operating an EMS agency as a Business



# Future Efforts—Quality

- Quality
  - Medical Direction Education and Engagement
  - ePCR advancement and continued data quality metrics
  - Refinement of BLS Guidelines



# Future Efforts—Infrastructure

- Infrastructure
  - Continue to Develop Relationships with various Stakeholders
    - Highway Safety, Homeland Security, Fire Marshall, BMOE, Hospitals, etc.
  - Systems of Care Development
  - EMS Needs to be viewed as a Profession—that starts with EMTs
  - Continuous Internal Statue Review
  - Active engagement in SDAA, SDEMSA, and IC Society
  - Monthly LUCAS Administrative calls
  - Active engagement in NASEMSO Activities and Conference Calls



Questions?