THE NALOXONE PROJECT
SOUTH DAKOTA STATE TARGETED RESPONSE TO THE OPIOID CRISIS

Opioids are substances produced medically to produce morphine-like effects but are abused for their psychoactive and euphoric effects.
WHAT BRINGS US TOGETHER?

Nationwide opioid epidemic

The Impact Realized in South Dakota
NALOXONE PROJECT STAFF AND TRAINERS

• Tom Martinec, Deputy Secretary Department of Health
• Amy Iversen-Pollreisz, Deputy Secretary Department of Social Services
• Tiffany Wolfgang, Director, Division of Behavioral Health

• Marty Link
  • Assistant Administrator, Office of Rural Health
  • Director of EMS and Trauma

• Eugene Taylor
  • DOH Consultant—Eastern SD Lead Educator
  • Critical Care Paramedic

• Shawn Fischer
  • DOH Consultant—Western SD Lead Educator
  • Critical Care Paramedic
OPIOID GRANTS

Department of Health
Department of Social Services
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 purpose of the grant program is to:

(a) Increase access to treatment;
(b) Supplement current opioid activities; and
(c) Support a comprehensive response to the opioid epidemic.
NALOXONE TRAINING AND DISTRIBUTION

• Office of Rural Health—Lead Agency
  • Purpose:
    • Train and Equip First Responders on Naloxone Use
      • Hospital
      • EMS
      • Law Enforcement
    • Training through Eight Regional Sessions
    • Initial goal of training 500 responders between October and December of 2017
NALOXONE TEAM MEMBERS

Department of Social Services
Department of Health
Office of Rural Health, EMS Program
Project Super-Trainers
Evaluation Team
Data Collection
Project Medical Director
CDC DEATH DATA BY STATE

2015 Age-Adjusted Drug Overdose Death Rates per 100,000 by State
SD DOH VITAL STATISTICS:
AGE ADJUSTED RATES OF DRUG OVERDOSES
SD DOH VITAL STATISTICS: 2006-2015
DRUG ASSOCIATED DEATHS

![Graph showing drug associated deaths from 2006 to 2016.](image-url)
SD DOH VITAL STATISTICS: 2006-2015
DRUG ASSOCIATED DEATHS BY RACE, GENDER, AGE

[Charts showing data on drug-associated deaths by race, gender, and age]

- White American Indian: 79.3% White, 19.5% American Indian
- Female: 48.9%, Male: 51.1%
- Age groups: <1, 1-4, 5-14, 15-24, 25-34, 35-44, 45-54, 55-64, 65-74, 75-84, 85+ with respective percentages.
SD ASSOCIATION OF HEALTHCARE ORGANIZATIONS:
HOSPITALIZATIONS ATTRIBUTABLE TO OR ASSOCIATE WITH
DRUGS BY YEAR

![Bar chart showing hospitalizations by year from 2006 to 2015 with numbers: 202, 233, 224, 278, 345, 317, 349, 363, 321, 330]
SD ASSOCIATION OF HEALTHCARE ORGANIZATIONS: PERCENT OF HOSPITALIZATIONS OR ASSOCIATED WITH DRUGS BY AGE GROUP
34-20A-109. Definitions related to reporting person in need of emergency assistance for drug-related overdose. Terms used in §§ 34-20A-110 to 34-20A-113, inclusive, mean:

(1) "Drug-related overdose," an acute condition, including mania, hysteria, extreme physical illness, coma, or death resulting from the consumption or use of a controlled substance, or another substance with which a controlled substance was combined, and that a person would reasonably believe to be a drug overdose that requires medical assistance.

34-20A-98. Possession and administration of opioid antagonists by first responders. Any first responder trained in compliance with § 34-20A-101 and acting under a standing order issued by a physician licensed pursuant to chapter 36-4 may possess and administer opioid antagonists to a person exhibiting symptoms of an opiate overdose.


34-20A-99. Opioid antagonist defined. For the purposes of §§ 34-20A-98 to 34-20A-103, inclusive, the term, opioid antagonist, means naloxone hydrochloride or any other similarly acting and equally safe drug approved by the federal Food and Drug Administration for the treatment of drug overdose.


34-20A-100. First responder defined. For the purposes of §§ 34-20A-98 to 34-20A-103, inclusive, the term, first responder, includes:

1. A law enforcement officer as defined by subdivision 22-1-2(22);
2. A driver and attendant responding to an emergency call as part of an ambulance service licensed pursuant to chapter 34-11; and
3. A firefighter.

Source: SL 2015, ch 179, § 3.
34-20A-101. Training of first responders. Each first responder authorized to administer an opioid antagonist shall be trained in the symptoms of an opiate overdose; the protocols and procedures for administration of an opioid antagonist; the symptoms of adverse responses to an opioid antagonist, and protocols and procedures to stabilize the patient if an adverse response occurs; and the procedures for storage, transport, and security of the opioid antagonist. The training shall comply with the criteria established pursuant to § 34-20A-102, and may be provided by the employer of first responders at the employer’s discretion.


34-20A-102. Promulgation of rules for training, possession, and administration of opioid antagonists. The Board of Medical and Osteopathic Examiners shall promulgate rules, pursuant to chapter 1-26, establishing:

1. The criteria for training a first responder to comply with the provisions of § 34-20A-101; and
2. The requirements for a physician's issuance of a standing order to a first responder authorizing a prescription for the first responder’s possession of an opioid antagonist and the protocols and procedures to be followed in administering an opioid antagonist.

34-20A-103. Immunity from civil liability for injuries or death associated with administration of opioid antagonists. A physician who issues a standing order under the rules established pursuant to § 34-20A-102, a first responder acting under a standing order who administers an opioid antagonist in good faith compliance with the protocols for administering an opioid antagonist, and the first responder's employer, are not civilly liable for injuries, and may not be held to pay damages to any person, or the person's parents, siblings, children, estate, heirs, or devisees, for injuries or death associated with the administration of an opioid antagonist.


34-20A-104. Possession and administration of opioid antagonists by person close to person at risk of overdose. A person who is a family member, friend, or other close third party to a person at risk for an opioid-related drug overdose may be prescribed, possess, distribute, or administer an opioid antagonist that is prescribed, dispensed, or distributed by a licensed health care professional directly or by standing order pursuant to §§ 34-20A-104 to 34-20A-108, inclusive.

• 34-20A-105. Prescription for opioid antagonist. A licensed health care professional may, directly or by standing order, prescribe an opioid antagonist to a person at risk of experiencing an opioid-related overdose, or prescribe to a family member, friend, or other close third party person the health care practitioner reasonably believes to be in a position to assist a person at risk of experiencing an opioid-related overdose.
  
  • Source: SL 2016, ch 174, § 2.

• 34-20A-106. Health care professional immunity from liability. A health care professional who is authorized to prescribe or dispense an opioid antagonist is not subject to any disciplinary action or civil or criminal liability for the prescribing or dispensing of an opioid antagonist to a person whom the health care professional reasonably believes may be in a position to assist or administer the opioid antagonist to a person at risk for an opioid-related drug overdose.
  
  • Source: SL 2016, ch 174, § 3.
34-20A-110. Immunity from arrest or prosecution for reporting person in need of emergency medical assistance for drug-related overdose. No person may be arrested or prosecuted for any misdemeanor or felony offense of possession, inhalation, ingestion, or otherwise taking into the body any controlled drug or substance if that person contacts any law enforcement or emergency medical services and reports that a person is in need of emergency medical assistance as the result of a drug-related overdose. A person qualifies for the immunities provided in §§ 34-20A-109 to 34-20A-113, inclusive, only if:

1. The evidence for the charge or prosecution was obtained as a result of the person seeking medical assistance for another person;
2. The person seeks medical assistance for another person who is in need of medical assistance for an immediate health or safety concern; and
3. The person seeking medical assistance for another person remains on the scene and cooperates with medical assistance and law enforcement personnel.


34-20A-111. Immunity from arrest or prosecution for reporting one's own need for emergency medical assistance for drug-related overdose. A person who experiences a drug-related overdose and is in need of medical assistance may not be arrested, charged, or prosecuted for any misdemeanor or felony offense of possession, inhalation, ingestion, or otherwise taking into the body any controlled drug or substance if that person contacts law enforcement or emergency medical services and reports that he or she is in need of medical assistance as the result of a drug-related overdose. A person qualifies for the immunities provided in this section only if the evidence for the charge or prosecution was obtained as a result of the drug-related overdose and the need for medical assistance.

Source: SL 2017, ch 154, § 3.
34-20A-113. One-time immunity. Any person seeking medical assistance or who reports a person is in need of medical assistance shall only qualify once for immunity under §§ 34-20A-109 to 34-20A-112, inclusive.

First Responder
Overdose Response
Training
LEARNING OBJECTIVES

• Understand the overdose crisis

• Know how opioids work and overdose risk factors

• Recognize an opioid overdose

• Respond to opioid overdose
AMERICA LEADS THE WORLD IN DRUG OVERDOSE DEATHS — BY A LOT

• America has about 4 percent of the world’s population — but about 27 percent of the world’s drug overdose deaths.

• Americans are relatively wealthy, so they can afford to buy drugs.

• In 1999, fewer than 17,000 people died from drug overdoses.

• In 2015, that grew to more than 52,000
THE OPIOID EPIDEMIC, EXPLAINED

• In 2015, more Americans died of drug overdoses than in any other year on record — more than 52,000 deaths in just one year.

• That’s higher than the more than 38,000 who died in car crashes, the more than 36,000 who died from gun violence, and the more than 43,000 who died due to HIV/AIDS during that epidemic’s peak in 1995.
HOW DO OPIOIDS AFFECT BREATHING?

OVERDOSE
Respirations
Slow/Stop
HOW OVERDOSE OCCURS

- Breathing Slows
- Breathing Stops
- Lack of oxygen may cause brain damage
- Heart Stops
- Death
The term opiate is often used as a synonym for *opioid*, however the term *opiate* refers to just those opioids derived from the poppy plant either natural or semi-synthetic.
WHICH MEDICATIONS ARE CONSIDERED OPIOIDS?

- **Morphine** is often used before and after surgical procedures to alleviate severe pain. It is often used as a palliative drug for end-stage terminal cancer.
- **Hydrocodone** products are most commonly prescribed for a variety of painful conditions, including dental and injury-related pain.
- **Codeine** is often prescribed for mild pain, can be used to relieve coughs and severe diarrhea.
- **Oxycodone** (OxyContin, Percocet)
- **Fentanyl**
WHAT ARE OPIOIDS/OPIATES?

• Medications that relieve pain

• Attach to the opioid receptors in the brain and reduce the intensity of pain signals reaching the brain.
HOW HAS THIS HAPPENED?

• Back in the 1990s, doctors were persuaded to treat pain as a serious medical issue. There’s a good reason for that: About 100 million US adults suffer from chronic pain.

• Pharmaceutical companies took advantage of this concern. Through a big marketing campaign, they got doctors to prescribe products like OxyContin and Percocet in droves — even though the evidence for opioids treating long-term, chronic pain is very weak (despite their effectiveness for short-term, acute pain), while the evidence that opioids cause harm in the long term is very strong.

• Painkillers proliferated, landing in the hands of not just patients but also teens rummaging through their parents’ medicine cabinets, other family members and friends of patients, and the black market.

• As a result, opioid overdose deaths trended upward — sometimes involving opioids alone, other times involving drugs like alcohol and benzodiazepines (typically prescribed to relieve anxiety). By 2015, opioid overdose deaths totaled more than 33,000 — close to two-thirds of all drug overdose deaths.
HOW ARE WE TRYING TO CORRECT THIS?

• Seeing the rise in opioid misuse and deaths, officials have cracked down on prescriptions painkillers.

• Physicians are now being told to give more thought to their prescriptions.

• Yet many people who lost access to painkillers prescriptions are still addicted.

• So some who could no longer obtain prescribed painkillers turned to cheaper, more potent opioids: heroin and fentanyl, a synthetic opioid that’s often manufactured illegally for nonmedical uses.
In 2016, South Dakota medical doctors prescribed supplies of painkillers that totaled more than 3.6 million days of Hydrocodone; more than 3.2 million days of Tramadol; more than 1 million days of Oxycodone; and nearly 700,000 days of Oxycodone with acetaminophen.

Enough doses of opiates were prescribed to South Dakotans in 2015 to medicate every SD adult around-the-clock for 19 straight days.

Between 2004-2011: 82 Opioid Deaths (approximately 10 per year)

2013: 17 Opioid Deaths

2014: 16 Opioid Deaths

Prescription Drug Monitoring Programs (PDMPs)
## Prescription Drug Monitoring Programs (PDMPs)

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NATIONAL & REGIONAL DRUG THREAT

(U) MAP A3. GREATEST DRUG THREAT REPRESENTED NATIONALLY AS REPORTED BY STATE AND LOCAL AGENCIES, 2013 - 2015

(U) MAP A4. 2015 NDTDS GREATEST DRUG THREAT REPRESENTED REGIONALLY AS REPORTED BY STATE AND LOCAL AGENCIES, 2013 - 2015

Overdose Deaths Involving Opioids, by Type of Opioid, United States, 2000-2015

Any Opioid

Heroin

Natural & Semi-Synthetic Opioids
(e.g., fentanyl, tramadol)

Other Synthetic Opioids

Methadone

Drug Deaths in America Are Rising Faster Than Ever

BY JOSH KATZ  JUNE 5, 2017

New data compiled from hundreds of health agencies reveals the extent of the drug overdose epidemic last year.

AKRON, Ohio — Drug overdose deaths in 2016 most likely exceeded 59,000, the largest annual jump ever recorded in the United States, according to preliminary data compiled by The New York Times.

The death count is the latest consequence of an escalating public health crisis: opioid addiction, now made more deadly by an influx of illicitly manufactured fentanyl and similar drugs. Drug overdoses are now the leading cause of death among Americans under 50.

Although the data is preliminary, the Times’s best estimate is that deaths rose 19 percent over the 52,404 recorded in 2015. And all evidence suggests the problem has continued to worsen in 2017.

Drug overdose deaths, 1980 to 2016

*Estimate based on preliminary data
DEA Official Blames Fentanyl-Heroin Mixture from Mexico for Recent Fatal Overdoses

The fentanyl-laced dope plaguing the northeastern United States is being made south of the border, according to officials.
Fentanyl: a synthetic short-acting opioid; 40-50x more potent than pure heroin

Illicitly manufactured fentanyl is sold in the illicit market often mixed with heroin and/or cocaine as a combination product — with or without the user’s knowledge — to increase its euphoric effects.

Fentanyl-related overdoses can be reversed with naloxone, however a higher dose or multiple number of doses per overdose event may be required due to its high potency.
WHY LAW ENFORCEMENT

First on scene of an overdose

Frequent interaction with high risk population

With the right tools, police can make a public health impact

Build bridges to active users and their social networks

Overdose is a true crisis and police can help
Hazardous as they may be for those who take them, opioids are also endangering police in this country. Officers respond to overdoses, they also try to arrest dealers. And as they come in contact with synthetic drugs, the risk of an accidental overdose is greater than in the past. Some drugs are now so potent that just a few grains can kill.

And it's making cops rethink their tactics. For instance, SWAT teams - when they raid drug operations, they often start out by tossing in flash-bangs, stun grenades to disorient anyone who might have a gun. But what happens when one of those grenades hits a stash of opioids?
RECOGNIZE OVERDOSE
SIGNS/SYMPTOMS

• If a person is not breathing or is struggling to breath: call out their name and rub knuckles of a closed fist over the sternum (Sternum Rub)

• Signs of drug use?
  • Pills, drugs, needles, cookers

• Look for overdose
  • Slow or absent breathing
    • Gasping for breath or a snoring sound
  • Pinpoint Pupils
  • Blue/Gray lips and nails

• Ensure EMS is en route/activated
# JUST HIGH/OVERMEDICATED VS OVERDOSE

## Just High/Overmedicated
- Small Pupils
- Drowsy, but arousable
  - Responds to sternal rub
- Speech is slurred
- Drowsy, but breathing
  - 8 or more times per minute

## Overdose
- Small Pupils
- Not arousable
  - No response to sternal rub
- Not speaking
- Breathing slow or not at all
  - < 8 times per minute
  - May hear choking sounds or a gurgling/snoring noise
  - Blue/gray lips and fingertips

**Stimulate and observe**

**Rescue breathe + administer Naloxone**
WHAT IS AN OPIOID OVERDOSE?

The brain has many, many receptors for opioids. An overdose occurs when too much of any opioid, like heroin or Oxycontin, fits in too many receptors slowing and then stopping the breathing.
Common Risks for Opioid Overdose

- **Opioid dose and purity**
- **Mixing substances**
  - Alcohol, stimulants, marijuana, and prescription medications
- **Polypharmacy**
  - Prescribed or non-prescribed
- **Addiction history**
- **Overdose history**
- **Social Isolation**
  - Using alone
- **Chronic Medical Illness**
  - Lung, liver, and kidney compromise
- **Abstinence**
  - Release from incarceration
  - Completion of detoxification
  - Relapse after abstinence
REVOLVING DOOR???

• As it is for tobacco and weight loss, it takes multiple attempts before achieving success
  • By definition, addiction is a chronic condition where people make risky choices despite negative consequences
• With time, treatment works - people get better
• With treatment, crime is less common and therefore they interact with police less often
  • Law enforcement because its law enforcement is more likely to see the relapses than recovery
MEDICATIONS FOR OPIOID OVERDOSE AND TREATMENT

• Narcan = Naloxone
  • Reverses opioid overdoses
  • Short and Fast acting opioid blockers

• Vivitrol = Naltrexone
  • Treatment for opioid and alcohol addiction

• No Street Value because they cause withdrawal symptoms
MEDICATIONS FOR OPIOID OVERDOSE AND TREATMENT

- Surboxone = Buprenorphine + Naloxone
  - Treatment of opioid addiction
  - The naloxone is added to discourage injecting or sniffing

- Subutex = Buprenorphine Only
  - Treatment of opioid in pregnant women

- Methadone aka Dolophine and Methadose
  - Treatment of opioid addiction or pain

- These do have Street Value because they can relieve withdrawal symptoms
UPDATED OPIOID-ASSOCIATED LIFE THREATENING ALGORITHM

American Heart Association Guideline
October 2015
When to use Naloxone

1. Suspected overdose
2. Unresponsive to sternal rub
3. Breathing status
   - Normal or fast: monitor patient
   - Slow (<10/min): naloxone
   - None/gasping: naloxone/rescue breathing/CPR
AFTER ADMINISTERING NALOXONE

• Continue to provide rescue breathing with 1 ventilation every 5 seconds until EMS arrives

• After 3-5 minutes, if the patient is still unresponsive with slow or no breathing, administer another dose of Naloxone
IF VICTIM IS BREATHING, BUT UNRESPONSIVE
PLACE IN **RECOVERY POSITION**

Kneel beside the casualty, remove any spectacles or wristwatch and check their pockets for bulky items.

Place the arm nearest to you at right angles to their body with arm bent in the position it falls. Do not attempt to force the arm into an unnatural position.

Bring the arm furthest away from you across the chest and hold the back of the hand against the nearest cheek.

With your other hand, grasp the far leg just above the knee and pull it up but keep the foot on the ground.

Keep their hand pressed against the cheek and pull on the leg to roll the casualty towards you and onto their side.

Roll gently, supporting the head constantly.

Adjust the upper leg so that both the hip and knee are bent at right angles. Adjust the hand under the cheek if necessary to keep the head tilted.

Casualty in the Recovery Position.
WHAT IS NARCAN (NALOXONE)?

• Narcan knocks the opioids off the opioid receptors, blocking opioids from the opioid

• Temporarily takes away the “high”, giving the person the chance to breathe

• Narcan works in 1 to 3 minutes and last 60 minutes

• Narcan can neither be abused nor cause an overdose effect
  • Only contraindication is known sensitivity, which is extremely rare

• Too much Narcan can cause withdrawal symptoms such as:
  • Nausea/Vomiting
  • Diarrhea
  • Chills
  • Muscle Discomfort
  • Disorientation
  • Combativeness
NALOXONE REVERSING OVERDOSE

Narcan has a stronger affinity to the opioid receptors than opioids like heroin or Percocet, so it knocks the opioids off the receptors for a short time. This allows the person to breathe again and reverses the overdose.
HOW DOES NARCAN AFFECT OVERDOSE?

Restores Breathing
CONSIDERATIONS TO ALWAYS REMEMBER

• Always keep the scene safety as your top priority

• Make sure EMS has been dispatched and keep them updated

• If the patient does not have a pulse, immediately begin CPR along with administration of Narcan

• If the patient is gasping or is not breathing, initiate CPR/Rescue breathing as necessary in addition to Naloxone administration

• Naloxone is quick (1-3 minutes) and typically lasts 60 minutes
ADMINISTERING NALOXONE
NASAL SPRAY NALOXONE
REMEMBER “FOUR RIGHTS” FOR MEDICATION ADMINISTRATION

• Right Patient (Opioid Overdose)

• Right Medication (Naloxone – Check for Clarity)

• Right Date (Check Expiration)

• Right Dose (Spray entire contacts into nostril)
EXPECTED RESPONSE
FROM NALOXONE

• 1. Gradually improves breathing and becomes responsive with 3 – 5 minutes

• 2. Immediately improves breathing, responsive and is in withdrawal

• 3. Starts breathing with 3-5 minutes but may remain unconscious

• 4. Does not respond to first dose and Naloxone must be repeated in 3 – 5 minutes (Continue to provide Rescue Breaths)

• 5. No response to multiple doses of Naloxone
NALOXONE STORAGE

- 59 – 77 degrees Fahrenheit
- Replace prior to expiration date
QUESTIONS AND ANSWERS

• Will Naloxone work on an alcohol overdose?
  • No. Naloxone only works on opioids

• What if it is a crack/cocaine or speed/methamphetamine overdose?
  • No. Naloxone only works on opioids

• What is the risk period for an overdose to reoccur after giving Naloxone?
  • Depends on how long acting the opioid is and how much they took

• If the person isn’t overdosing and I give Naloxone will it hurt the person?
  • No. If in doubt give Naloxone
WHAT IF A PERSON REFUSES CARE AND TRANSPORT AFTER NALOXONE IS ADMINISTERED?

• Inform the person of the risk of re-overdosing
• Inform the person naloxone is only temporary
• If person still refuses consider the mechanism of injury or Illness
  • Do you believe he/she can refuse treatment with a sound mind and clear understanding of the circumstances? Remember they just overdosed!
• If no, the person can not refuse treatment
SPECIAL THANKS

To the Massachusetts Office of EMS
For their assistance and use of the Opioid content.