

Naloxone in High Schools



Purpose of this Presentation

Educate High School officials
on opioid overdose signs and symptoms,
safety precautions, and initial treatment

South Dakota Naloxone Project Overview

Collaborative effort between

**The Department of Social Services and
The Department of Health**

CDC Funded Opioid Abuse Grant

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

State Opioid Response (SOR)

South Dakota Naloxone Project Overview

Continued

- Educated First Responder agencies including local Sherriff Offices, local Police Departments, and Emergency Medical Services
- Provided Naloxone nasal spray to participating agencies
- Created a platform for reporting Naloxone use by first responders

Senate Bill 84

- ENTITLED, An Act to authorize the possession and administration of opioid antagonists by school district and nonpublic school personnel, and to declare an emergency
- The governing board of a school district and the governing board of a nonpublic school may acquire opioid antagonists in accordance with current state law and administrative rule, and make the medication available to personnel who are trained in accordance with section 2 of this Act
- SB84 is strictly voluntary; there is no requirement of schools to have Naloxone

Participating Schools

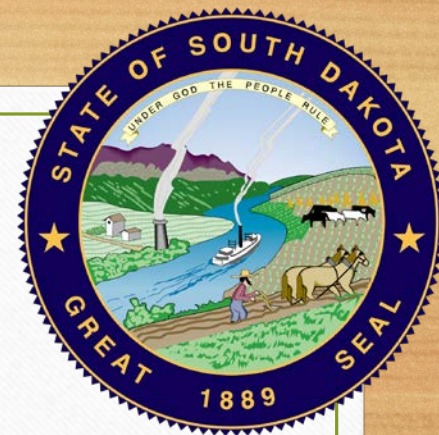
- Pros
 - Rapid identification and treatment of a suspected opioid overdose
 - Readily available Naloxone for school to use at their discretion
- Cons
 - Treatment of a suspected overdose may be delayed
- Alternative solutions
 - Rely on Law Enforcement and/or Emergency Medical Services

Senate Bill 84

- Before school personnel may administer an opioid antagonist in the event of a suspected opioid overdose, training must be provided by an individual qualified to do so. The training must include:
 - (1) Symptoms of an opiate overdose;
 - (2) Protocols and procedures for administering an opioid antagonist;
 - (3) Symptoms of adverse responses to an opioid antagonist;
 - (4) Protocols and procedures for stabilizing the patient if an adverse response occurs; and
 - (5) Procedures for transporting, storing, and securing an opioid antagonist.

Senate Bill 84 — Liability

- SB 84 contains broad immunity protections for schools and school personnel regarding the administration of naloxone in a school setting
- Please contact your school district's legal counsel for further questions about liability



Drug-Related Overdose Defined

- 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.

Source: SL 2017, ch 154, § 1.

School Official Overdose Response Training



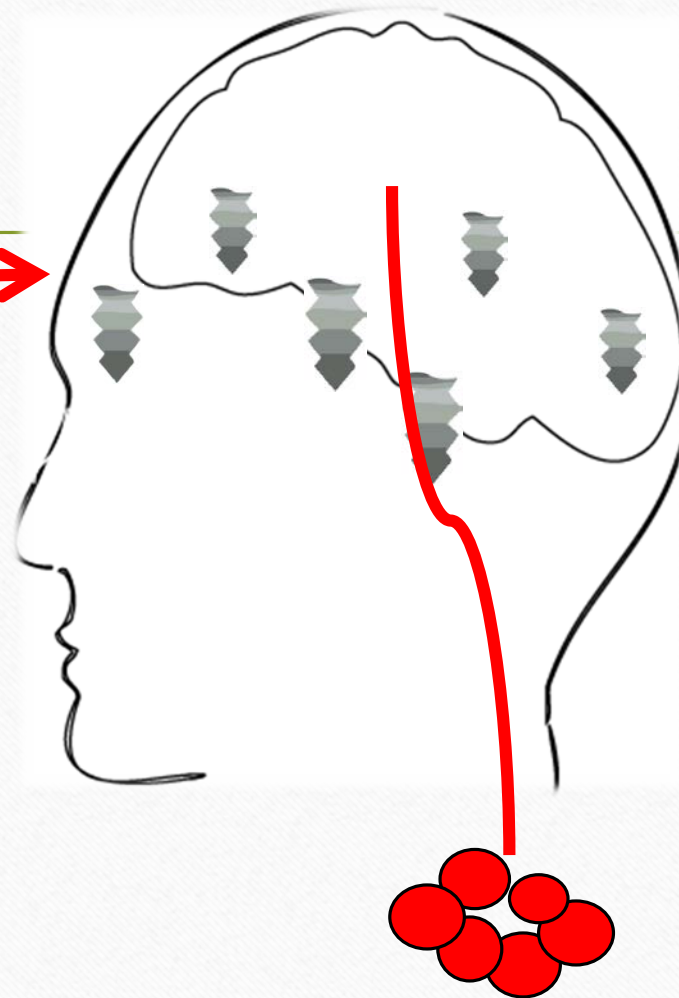
Learning objectives

- Understand how opioids work and overdose risk factors
- Recognize an opioid overdose
- Respond to an opioid overdose

How do opioids affect breathing?

Opioid 

Opioid Receptors



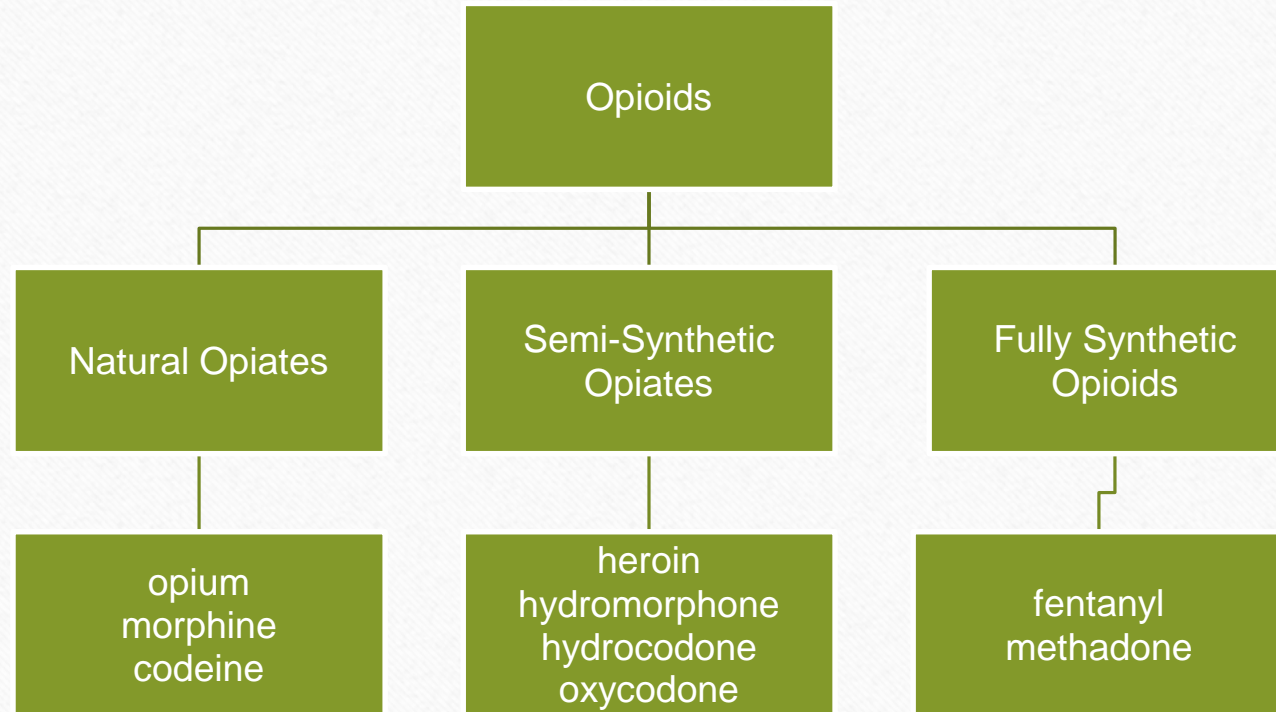
OVERDOSE

Respirations

Slow/Stop

Progression Of An Opioid Overdose

1. Breathing slows
2. Breathing stops
3. Lack of oxygen may cause brain damage
4. Heart stops
5. Ultimately death ensues



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.
- Codeine is often prescribed for mild pain, can be used to relieve coughs and severe diarrhea.
- Hydrocodone products are most commonly prescribed for a variety of painful conditions, including dental and injury-related pain.
- 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

Fentanyl

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



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
- Look for overdose
 - Slow or absent breathing; may be gasping or making a snoring sound
 - Pinpoint pupils
 - Blue/gray lips and nails
- Ensure Emergency Medical Services have been called



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

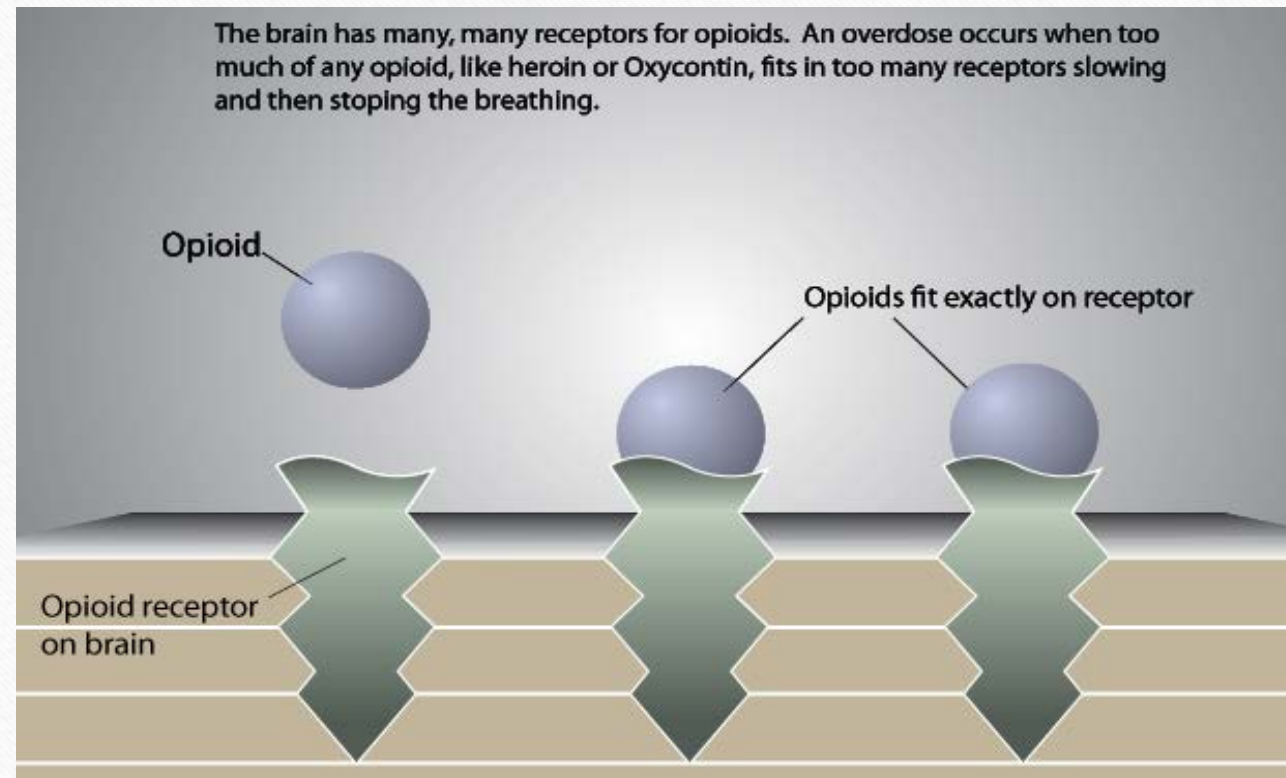
Stimulate and observe

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

Rescue breathe + Naloxone

What is an opioid overdose ?



Medications for opioid overdose and treatment

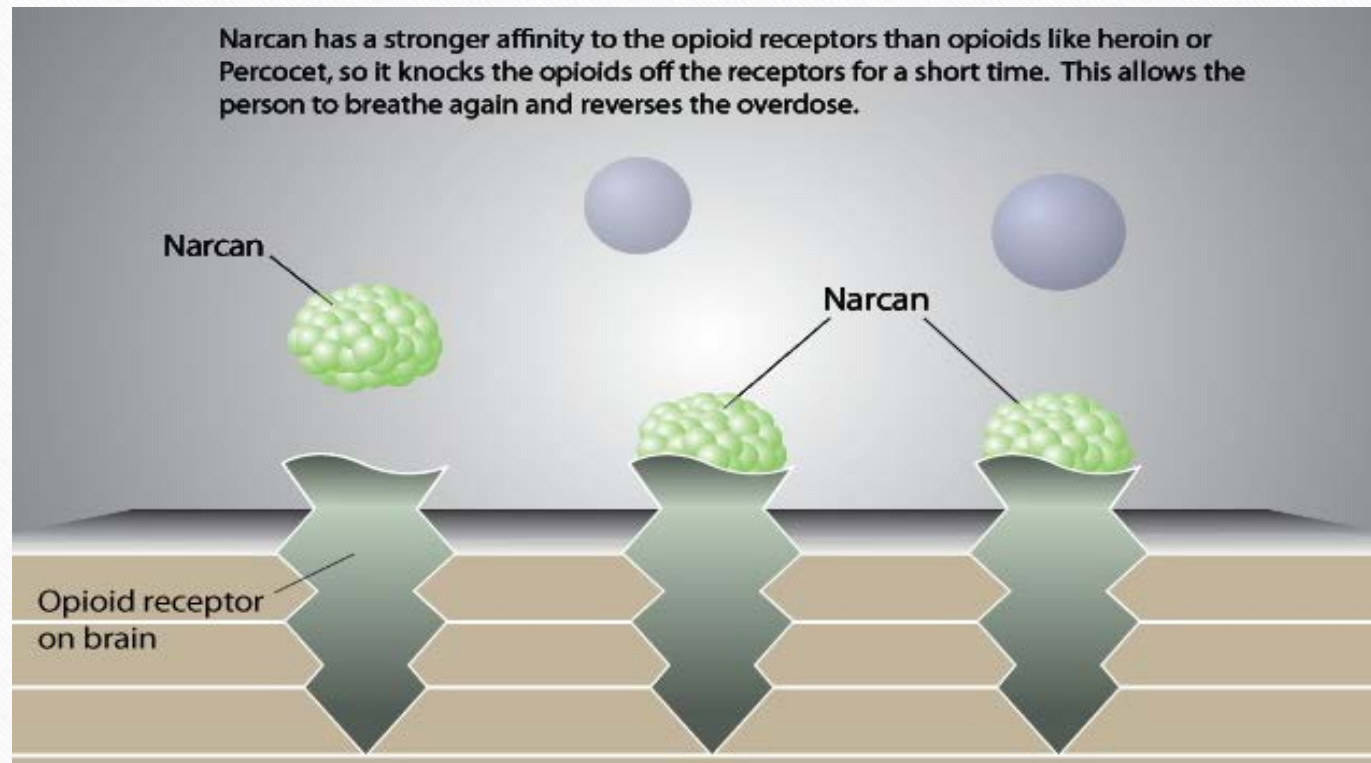
- Narcan = Naloxone
 - Reverses opioid overdoses
 - Short and fast acting opioid blockers



What is naloxone (Narcan) ?

- Naloxone/Narcan knocks the opioids off the opioid receptors, blocking opioids from the receptors
- Temporarily takes away the “high,” giving the person the chance to breathe
- Naloxone/Narcan works in 1 to 3 minutes and last 30 to 90 minutes
- Naloxone/Narcan can neither be abused nor cause an overdose effect
 - *Only contraindication is known sensitivity, which is extremely rare*
- Too much Naloxone/Narcan can cause withdrawal symptoms such as:
 - Nausea/vomiting
 - Discomfort
 - Diarrhea
 - Chills
 - Combativeness
 - Disorientation

Naloxone reversing overdose



Nasal spray naloxone



Remember prior to medication administration

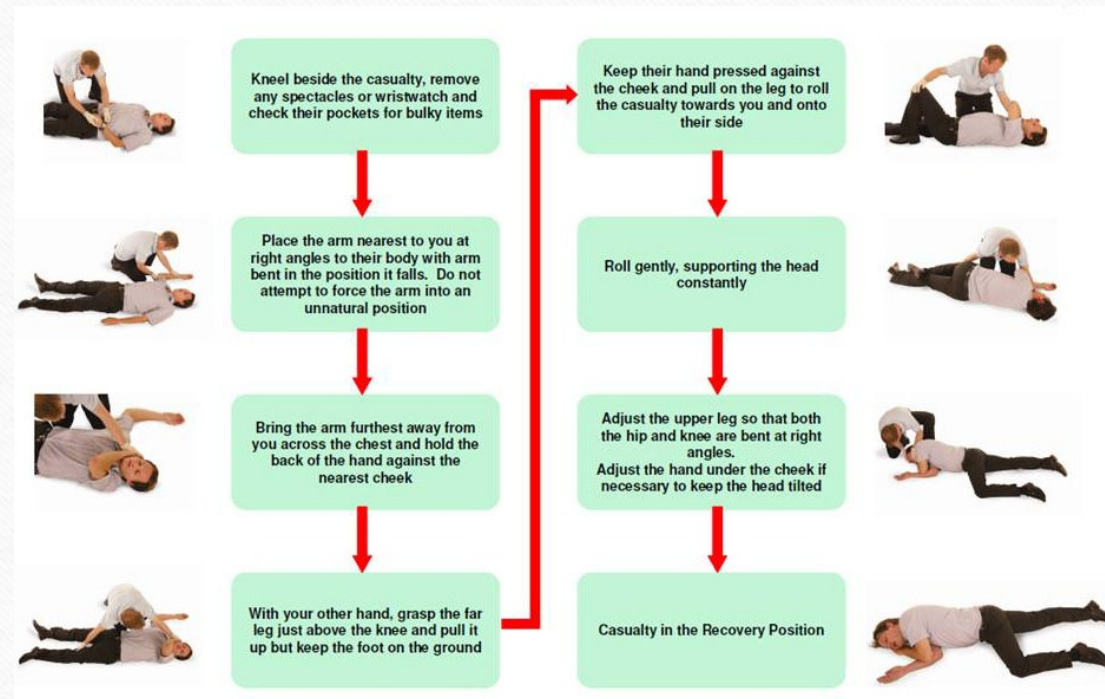
- Right Patient (opioid overdose) | Right Date (check expiration)
- Administration of Naloxone
 - Lay person on their back and remove Narcan Nasal Spray from box
 - Hold applicator with your thumb on bottom of the plunger and first and middle fingers on either side of the nozzle
 - Tilt the person's head back and provide support under the neck with your hand
 - Gently insert tip of nozzle into one nostril and press plunger firmly

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



Considerations to always remember

- Always keep the scene safety as your top priority (use gloves)
- 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 30-90 minutes

Expected responses 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**

How To Receive Naloxone

- ADAPT Pharmaceutical will supply two free doses of Naloxone to high schools.
- Department of Health also supply High Schools with Naloxone, depending on need.

Resupply of Naloxone

- The Department of Health administers the state's Naloxone Project
- For additional Naloxone (while supplies last) contact Naloxone@state.sd.us
- Reporting—report any use of naloxone to Naloxone@state.sd.us

Questions

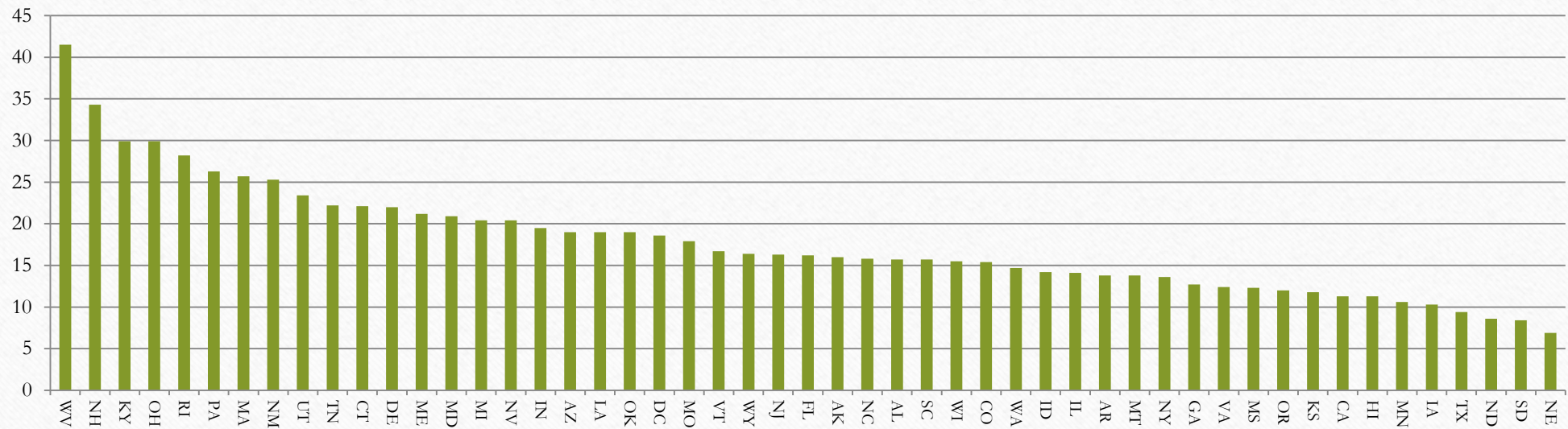
Please email Naloxone@state.sd.us for questions or concerns regarding the Naloxone in High School Project.

Supplemental data slides

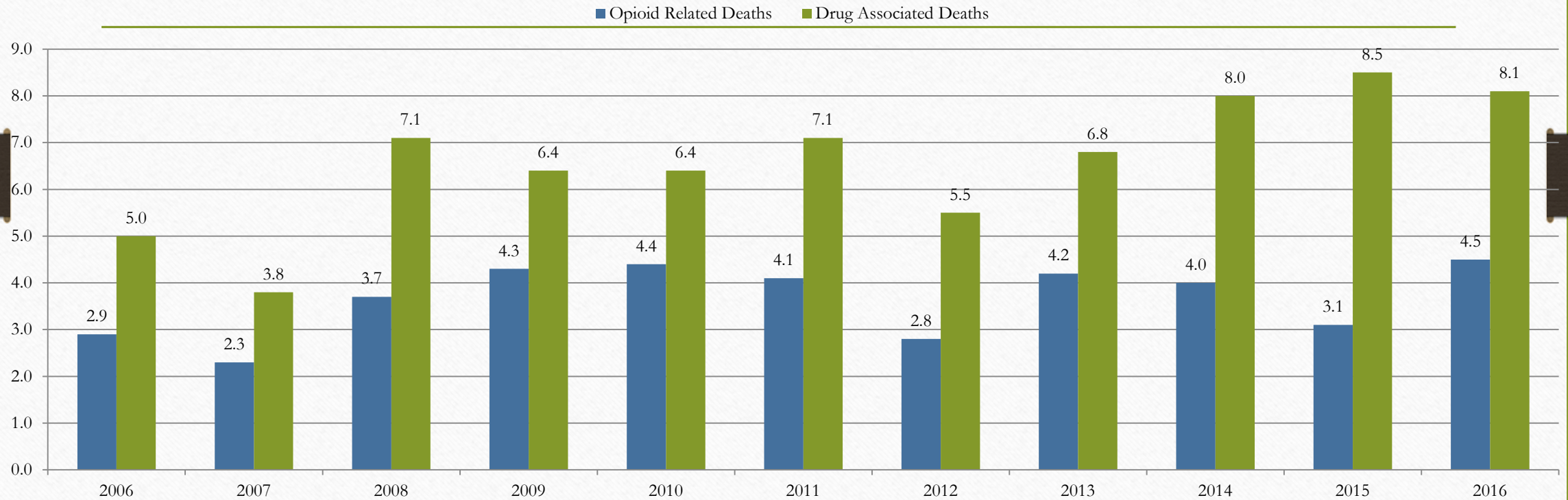
- The following slides are for informational purposes and are not a requirement of the Naloxone in High School training program.
- Additional opioid resources can be found at:
<https://doh.sd.gov/news/opioid.aspx>

CDC Death Data by State

2015 Age-Adjusted Drug Overdose Death Rates per 100,000 by State



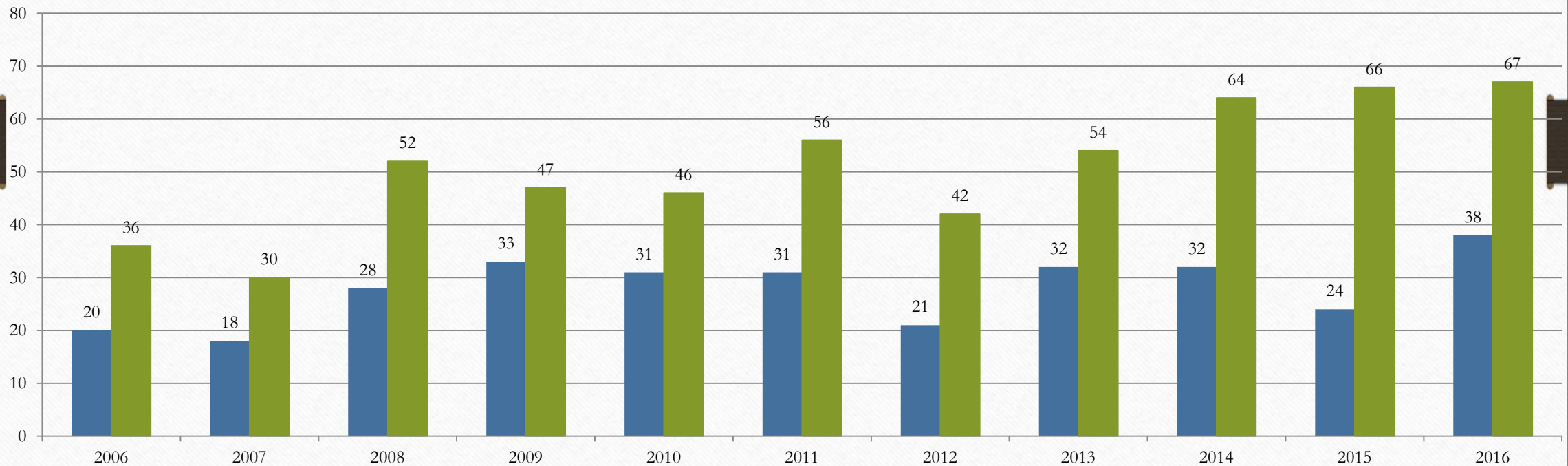
SD DOH Vital Statistics: Age Adjusted rates of drug overdoses



SD DOH Vital Statistics: 2006-2015

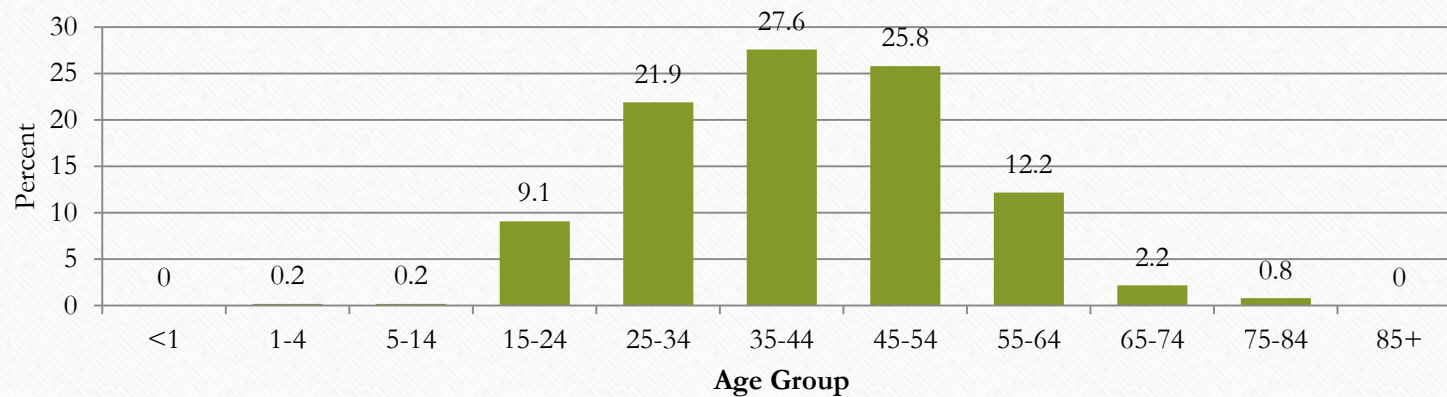
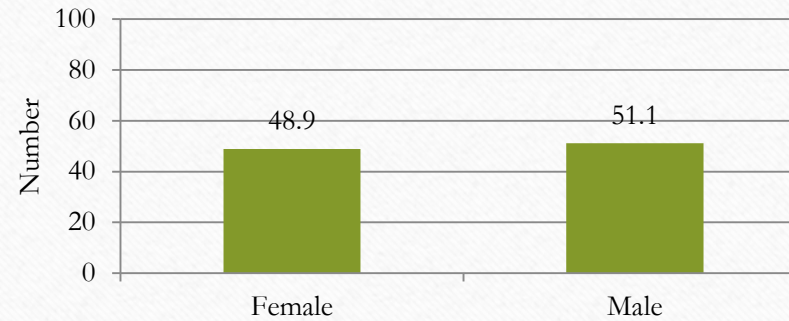
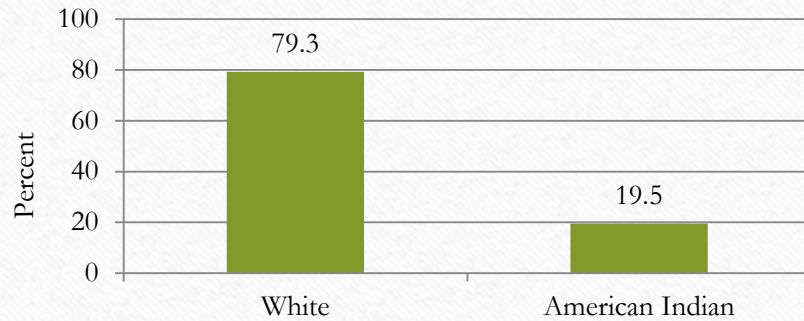
Drug Associated Deaths

■ Opioid Related Deaths ■ Drug Associated Deaths



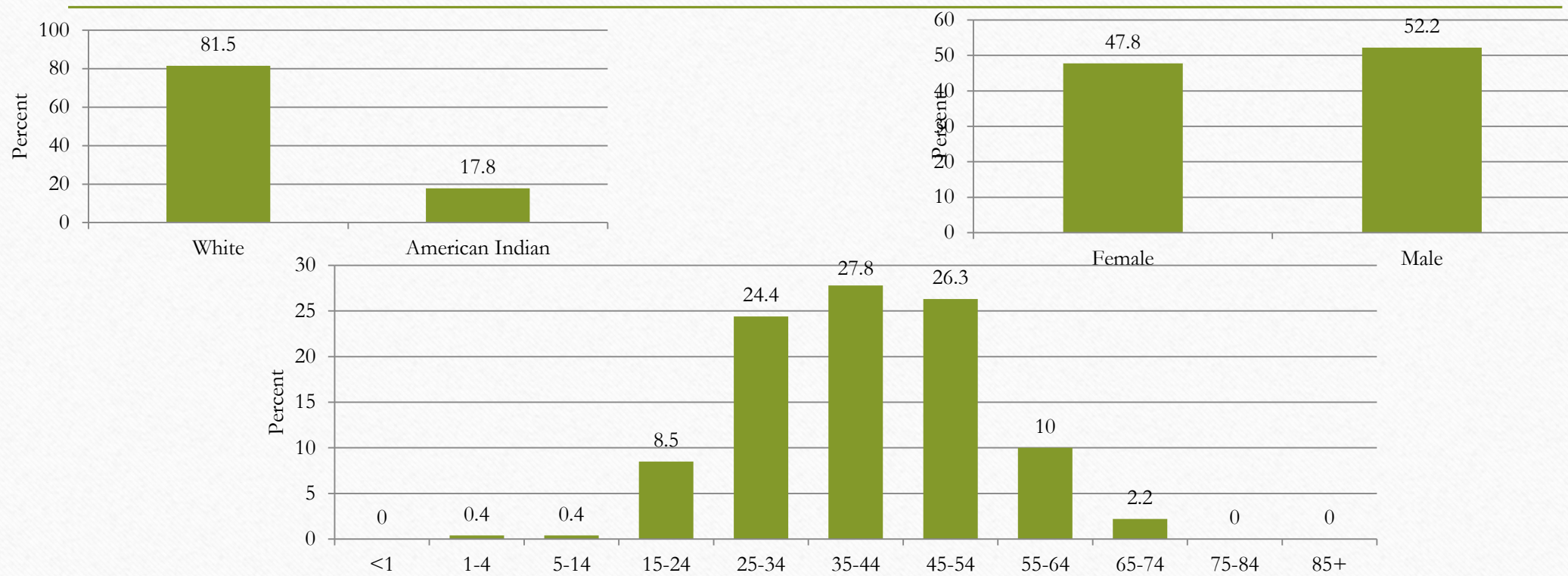
SD DOH Vital Statistics: 2006-2015

Drug Associated Deaths by Race, Gender, Age

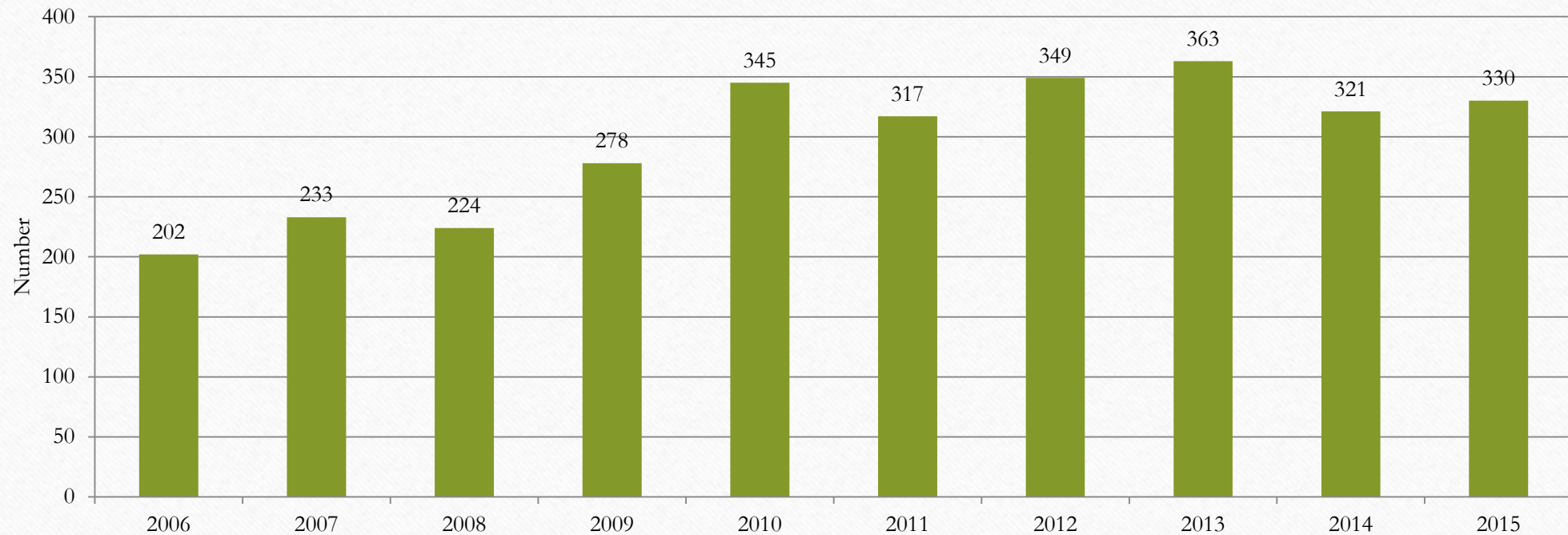


SD DOH Vital Statistics: 2006-2015

Opioid Associated Deaths by Race, Gender, Age



SD Association of Healthcare Organizations: Hospitalizations Attributable to or Associate with Drugs by Year



SD Association of Healthcare Organizations: Percent of Hospitalizations or associated with Drugs by Age Group

