

Yolo County EMS Agency

Public Safety
Intranasal (IN)
Naloxone (Narcan)
Training





All Public Safety Personnel Administering Narcan Must:

- Be employed by a Public Safety Agency
- Be authorized by your agency to provide this skill
- Received approved training



Learning Points for Intranasal Narcan

- Review opioid use and overdose
- Describe the indications for the use of intranasal Narcan
- Describe administration procedures
- Describe post administration care and documentation



The Opioid Epidemic

- Drug overdose is the leading cause of unintentional death in America.
- Opioids include prescription and illegal drugs.
- More young adults and teens are using Opioids.
- 63,000 fatal opioid overdoses in 2016.

Opioids vs. Opiates

- **Opioids** are synthetic drugs that produce opiate-like effects.
 - Fentanyl
 - Hydromorphone
 - Methadone
 - Heroin
 - And many more
- **Opiates** are naturally derived from the opium poppy plant.
 - Opium
 - Morphine
 - Codeine

****Opioid** is often used interchangeably for both*





Opioid Mechanism and Use

- Depressant
 - Central nervous system (CNS) - brain
 - Respiratory system - lungs
 - Cardiovascular system - heart
- Why are they abused?
 - Euphoria (to “get high”)
 - Pain control



People at Risk for Overdose

- Young adults experimenting with drugs
- Opiate naïve (people who are newly prescribed or people trying illegal opioids for the first time)
- Chronic users recently released from jail or detox or recent history of relapse (tolerance has decreased, they take a dose they used to take when tolerance was higher)
- People with chronic illness and chronic pain who are placed on high dose opioids; includes all ages and demographics (consider for cancer patients or other chronic illness)
- First Responders exposed during a call



Effects of Overdose

- Respiratory drive is taken away
- Lack of oxygen (hypoxia)
- Cardiac arrest
- Increased incidence when combined with alcohol, benzodiazepines, or other medications

How Opioids Kill

- “Slows” everything down
 - Decreases level of consciousness - decreased brain function
 - Decreases respiratory drive – normal breathing rate is 12-20 breaths/minute
 - Decreases pulse rate and blood pressure – normal pulse rate is 60-100 beats/minute

**Practice counting breathing rate and pulse rate on a co-worker or family member*



Most Commonly Used Opioids

- Heroin
- Oxycodone (Percocet, Oxycontin)
- Hydrocodone (Vicodin, Norco, Lortab)
- Hydromorphone (Dilaudid)
- Methadone
- Morphine
- Fentanyl
- Codeine
- Buprenorphine (Subutex)
- Carfentanil & Sufentanil

Methods of Opioid Administration

- Oral (pills)
- Intravenous (IV)
- Snorting
- Smoking
- Subcutaneous, e.g. under skin (skin popping)
- Per rectum (PR) – “boofing”
- Transcutaneous (ie. Fentanyl patches)

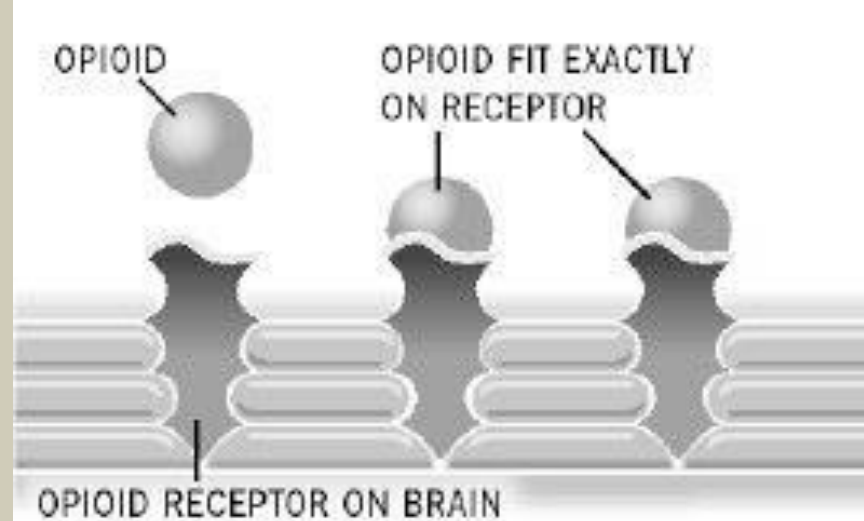


Narcan

- Blocks the effects of opioids in the Central Nervous System (brain)
- Temporarily reverses respiratory depression
 - Respiratory rate should increase within 1 - 6 minutes
 - Narcan only lasts for approximately 45 minutes, strong opioids may outlast Narcan
- Narcan does not reverse other drugs such as cocaine, methamphetamine, benzodiazepines, alcohol, etc.
- In a person dependent on opioids it may produce withdrawal symptoms

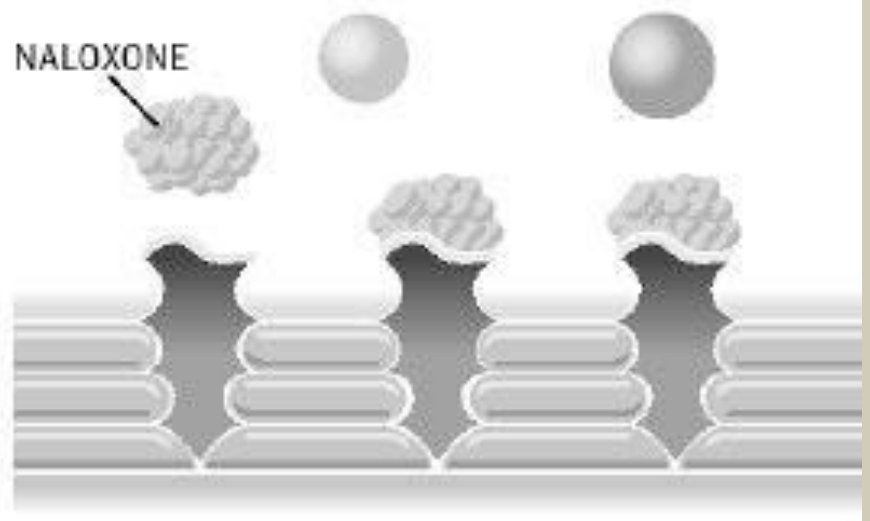
OPIOID OVERDOSE

The brain has many receptors for opioids. An overdose occurs when too much of an opioid, such as heroin or Oxycodone, fits in too many receptors, slowing and then stopping breathing.



NALOXONE REVERSING AN OVERDOSE

Naloxone has a stronger affinity to the opioid receptors, so it knocks the opioids off the receptors for a short time. This allows the person to breathe again and reverses the overdose.



Benefits of Intranasal Administration of Narcan

- Works quickly
 - Nasal mucosa has a large absorptive area
 - Drug goes directly into the bloodstream
- Nose is an easy access point
- Facilitates quick administration
- Painless
- Decreased risk for infectious disease exposure to responders



Impaired vs. Overdose

Impaired	Overdose
Muscles become relaxed	Pale, clammy skin
Speech is slow or slurred	Infrequent or no breathing
Sleepy	Deep snoring (death rattle)
Responsive to stimuli (shaking, yelling, sternal rub, trap pinch etc.)	Not responsive to stimuli
Normal heart rate/pulse	Slow heart rate/pulse
Normal skin tone	Blue lips and/or finger tips

**Narcan is for treating overdose*



Mimics of Opioid Overdose

- Cardiac Arrest – be sure to assess for a pulse if victim is not breathing and begin CPR if no pulse is felt. (You may still give Narcan)
- Low blood sugar – Low blood sugar produces similar skin signs
- Head injury – Decreased brain function and irregular breathing
- Stroke – Similar to head injury
- Shock – Similar skin signs and slow pulse
- Hypoxia (low oxygen) – can be related to asthma, severe allergic reactions, or other respiratory diseases

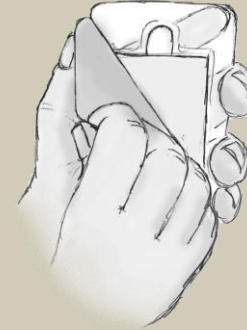


When to Administer Narcan

- Altered level of consciousness
- Decreased breathing or no breathing
 - Slow, shallow breathing (<10 breaths/minute)
 - Apnea (not breathing)
- No response to painful stimuli
- With associated signs
 - Constricted (pinpoint) pupils
 - Profuse sweating
 - Pale or cyanotic (blue) skin
 - Signs of opioid abuse (track marks, pill bottles, family or friend report etc.)

Narcan Administration

1. Peel back the package to remove the device. Hold the device with your thumb on the bottom of the plunger and 2 fingers on the nozzle.
2. Tilt the persons head back and provide support under the neck with your hand. Place the tip of the nozzle in either nostril until your finger touches the bottom of the persons nose.
3. Press the plunger firmly to release the dose into the persons nose.



PEEL



PLACE



PRESS

Signs of Improvement

- Breathing
 - Person starts breathing
 - Breathing gets faster
- Circulation
 - Pulse present and normal
- Skin
 - Skin color improves, pale/blue tint goes away
 - Person stops sweating
- Consciousness
 - Person wakes up and is able to talk to you

Recovery

- Place person in the recovery position.
- People wake up from an overdose differently and may be agitated or confused.
- Often, the person does not realize they overdosed, keep them calm and explain what happened.
- Sometimes they can have withdrawal symptoms and will feel sick (sweating, fever, body aches, nervousness, diarrhea, nausea, vomiting, cramping, and weakness).





Documentation

- Inform the ambulance unit of your treatment and victim response.
- Send the Administration Form to YEMSA for documentation purposes. (See your training officer for paperwork)

A few last details

- Protect Narcan from direct sunlight and extreme temperatures (59-86 degrees).
- Check the expiration date regularly.
- AB 635 Overdose Treatment Act, in effect as of January 2014 protects carriers, distributors and users of Narcan.