

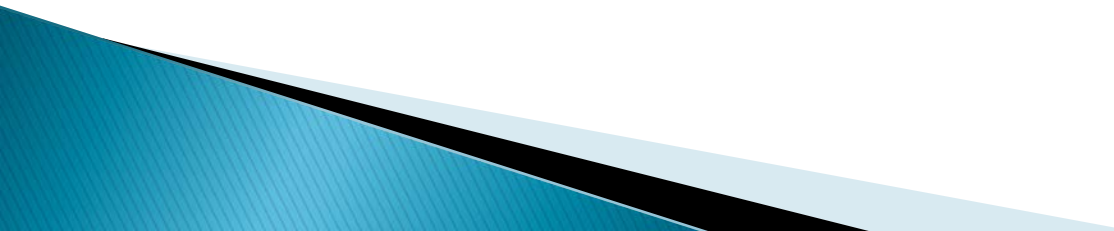
# Naloxone Training Program for Public Safety Officers

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Sacramento Regional Fire Service Medical Director

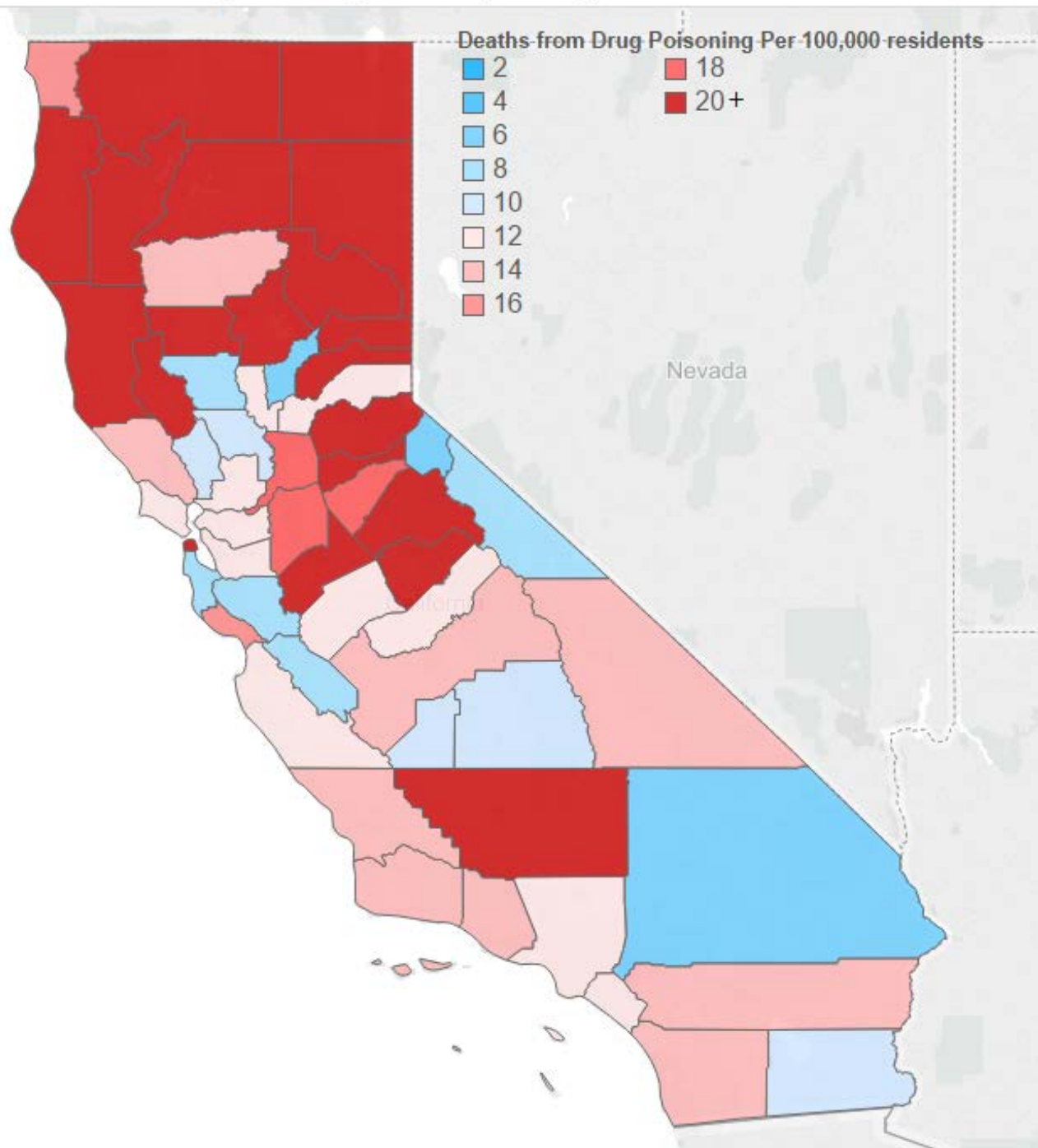
Add name of Law enforcement trainer here



# Learning Objectives

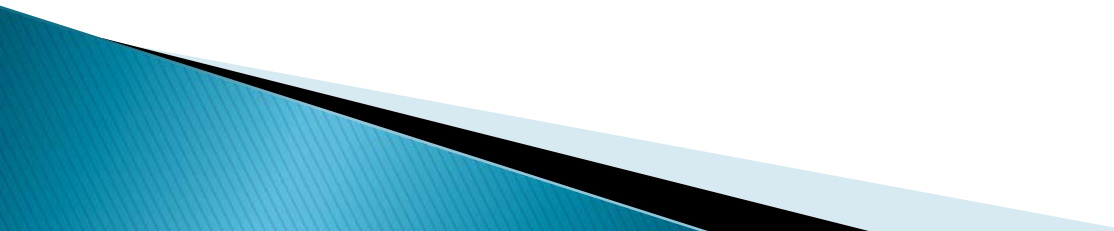
- 1) Recognize the national and local opioid overdose epidemic
  - 2) Know how opioids work
  - 3) Recognize an opioid overdose
  - 4) Respond to opioid overdose
    - Getting help
    - Rescue Breathing
    - Administering naloxone
    - Documentation
- 

# Drug Poisoning Deaths by County, 2014



# Opioids and Opiates

# Opioids & Opiates

- ▶ Valuable medications that relieve pain
  - ▶ Over prescribing and diversion of unused medications at historically high levels
  - ▶ Side effect of narcotics = depressed respirations, cessation of breathing = death
  - ▶ Seen with illegal drugs such as heroin
  - ▶ Prescription drug abuse also a major issue.
- 

# Opioids versus Opiates

- ▶ Opiates = Natural = Morphine, Codeine, Heroin
  - are concentrated from the opium poppy plant fluids, purified from the plant like maple sugar
- ▶ Opioids = Synthetic = Fentanyl
  - are manufactured and do not come from plants
- ▶ Opiates and Opioids act the same in the brain, BUT carry vastly differing potencies
- ▶ 1 milligram of Fentanyl is 100x more potent than 1 milligram of morphine

# What is Fentanyl

- Most potent opioid for use in medical treatment
- Used to treat severe cases of pain
  - Terminally ill
  - Cancer
- Administered for pain to patients with opiate addiction or tolerance

# Fentanyl

- Physically can have the appearance of other narcotics
- Distributed in tablet, capsule, and powder





# Fentanyl Effects

- Rapidly crosses the blood-brain barrier
  - Highly lipid soluble
- Readily absorbs through the skin
- Gives an intense euphoric feeling
  - Indistinguishable from morphine or heroin



# Fentanyl Exposure

First Responder Precautions

# Law Enforcement Personnel exposures have been reported

- ▶ **Seattle: DEA raids suspected fentanyl lab in Seattle neighborhood: 'It's 50 times more potent than heroin'**



# Fentanyl

- ▶ Extreme danger to all responders
  - Skin absorption
  - Accidental inhalation
  - Ocular exposure

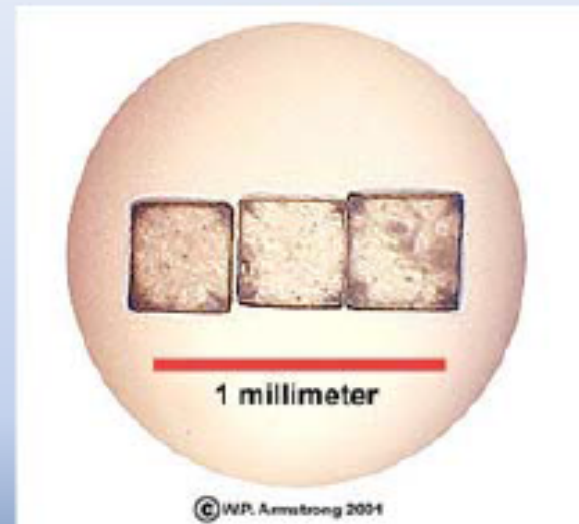
Figure 81. Hotel Room Contaminated with Heroin and Fentanyl Powder



Source: DEA

# Dangers of Fentanyl

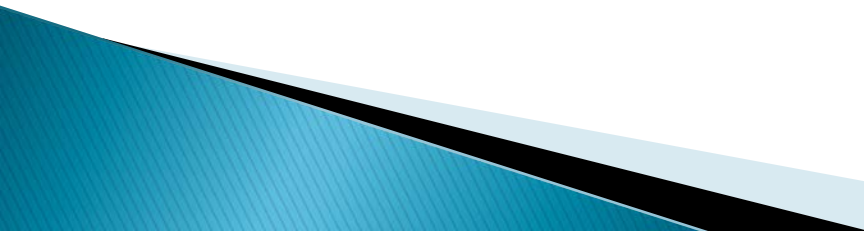
- Single dose of fentanyl by IV is approximately 125 micrograms
- 1 grain of salt = 60 micrograms



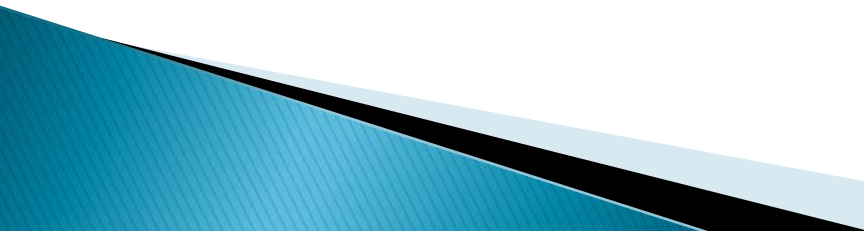
**Single dose of fentanyl = 2 grains of salt**

# Recent Changes to State Laws

# AB 636

1. Allows distribution of naloxone to friends, family of those at risk
  2. Also, other persons who can assist, including law enforcement
  3. Requires training
  4. Legal protection for good-faith actions, from:
    - Professional review
    - Civil action
    - Criminal prosecution
- 

# AB 472: CA 911 Overdose Calls

1. Protects callers & patient from charges related to being under the influence or possession for personal use of drugs or paraphernalia.
  2. Fear of law enforcement response is a principal barrier to bystanders calling 911 in the event of overdose
  3. This “911 Good Sam” law designed to minimize fear and increase likelihood bystanders call for help.
  4. Does not provide immunity against:
    - Sales or distribution
    - Forcibly administering a drug against a person’s will
    - DUI or drugged driving
    - Violation of probation / parole conditions
- 



Naloxone (Narcan<sup>®</sup>)

# Naloxone (Narcan®)

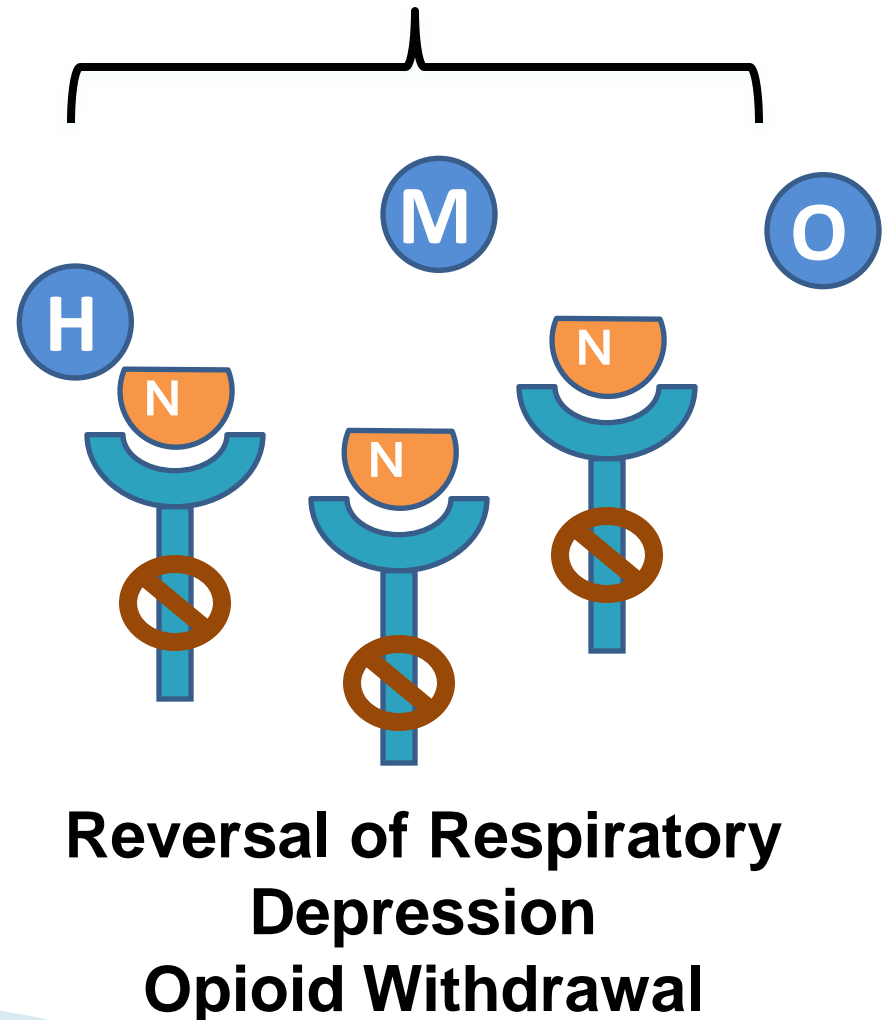
- Naloxone **displaces** (or “kicks out”) the opioids from the receptors, and then **blocks** the receptors (and the effects of the opiate) for roughly 30–90 minutes
  - Narcotic antagonist or reversal agent
  - Reverses narcotic induced apnea (lack of breathing)
  - Does not affect other types medications – non narcotics
  - Few side effects of use, rare if no narcotic overdose
  - Impact on opioid dependent pain management patient
    - e.g. terminal cancer, severe pain

# Naloxone ( ) in the Brain

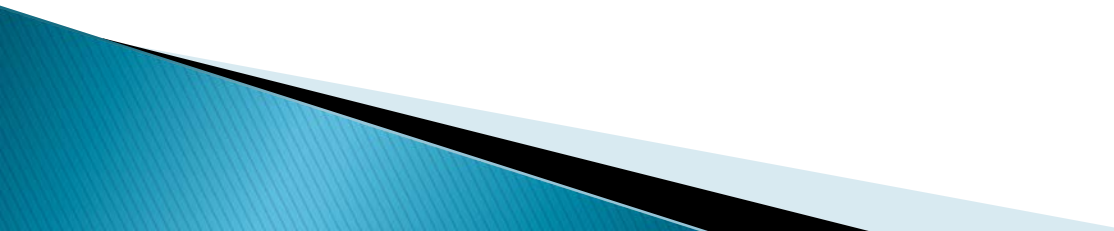
*opioid receptors activated  
by heroin and prescription opioids*



*opioids broken down and excreted*

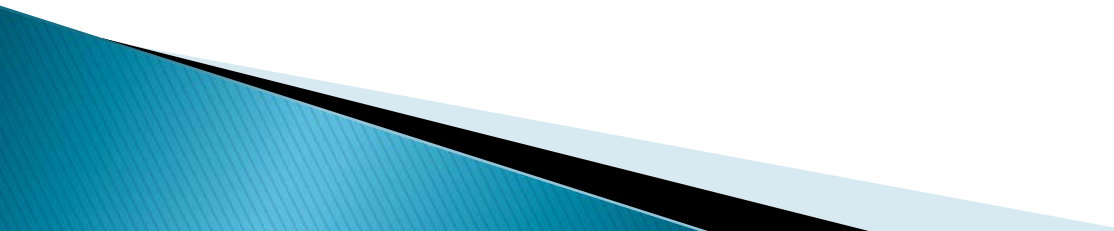


# Is Naloxone harmful?


- ▶ Allergy to Naloxone is extremely rare
  - ▶ Toxicity from Naloxone is also very rare (minimal risk to give higher doses)
- 

# The Overdose

# Why Law Enforcement ?

1. Out on streets, first responder
  2. May be first on-scene, before EMS
  3. Trained in CPR
  4. New law allows it
- 

# What does an O/D look like ?

- ▶ No breathing or slow breathing
- ▶ Miosis (pinpoint pupils) 
- ▶ Lips and fingertips are blue or gray in color
- ▶ Is the person turning blue? (Never a good thing)
- ▶ Can't talk or walk?
- ▶ Unresponsive/ Level Of Consciousness? call their name, shake them, or rub their sternum (rub your knuckles hard up and down their breastbone)
- ▶ Slow or no pulse (Another bad thing)
- ▶ Eyes rolled back?

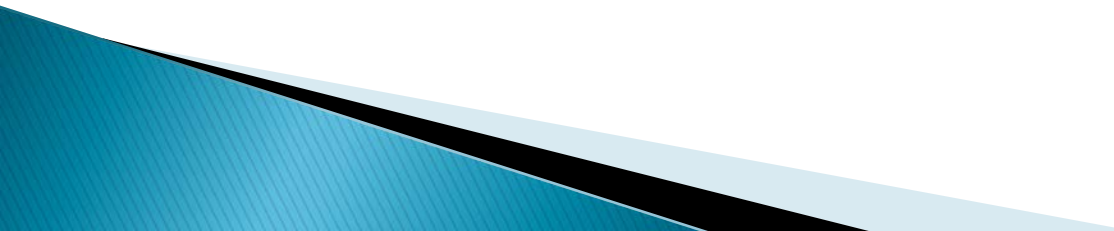


# Remember Scene Safety

- ▶ **Be aware of potential hazards:**
  - Maintain universal precautions; assume bodily fluids present risk of infection
  - Needles/Hazardous materials
  - Other people and/or nearby traffic

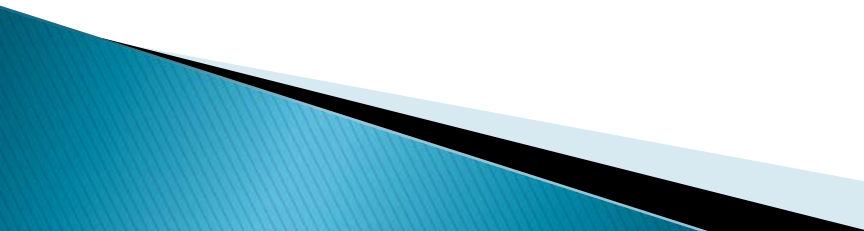


# Support Breathing

1. Open airway—Head tilt
  2. One breath every 5 seconds – 12 breaths/minute
  3. Rescue breaths
    - Over 1 second
    - Visible chest rise – not too much
- 

# Responding Officer Assessment

## Breathing

- . Assess for chest rise.
  - . Assess for signs of opiate/heroin overdose (paraphernalia, history from family/friends, prescription drug bottles)
  - . If normal respiratory rate or 12 breaths/minute or greater, monitor patient till EMS arrives
  - . If evidence of overdose from opiates/heroin **and** breathing less than 12 breaths/minute:
    1. Give intranasal naloxone, check response
    2. No response: continue ventilation, check pulse if able.
    3. If no pulse: start and continue CPR till EMS arrives and place AED device on patient
- 



NDC 69547-053-02

0.1 mL intranasal spray per unit  
For use in the nose only

Rx Only



# NARCAN<sup>®</sup> (naloxone HCl) NASAL SPRAY 4 mg

**DO NOT TEST DEVICES OR OPEN BOX BEFORE USE.**  
Use for known or suspected opioid overdose in  
adults and children.

This box contains two (2) 4-mg doses of naloxone HCl  
in 0.1 mL of nasal spray.

## Two Pack

**CHECK PRODUCT EXPIRATION DATE BEFORE USE.**

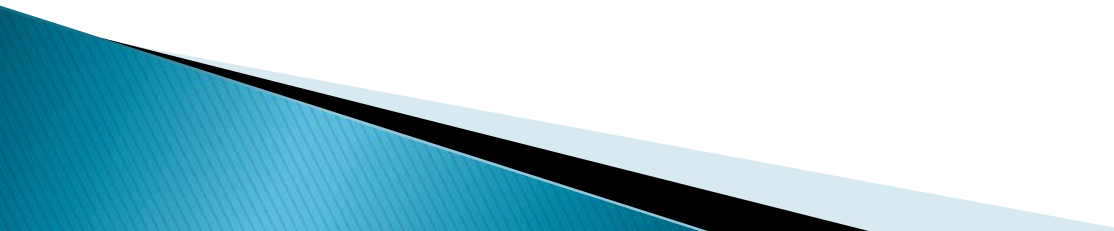
**OPEN HERE FOR QUICK START GUIDE**



**INDICATIONS AND USAGE**  
NARCAN is indicated for the treatment of acute or chronic opioid overdose in adults and children.



# Naloxone Use

1. Nasal Spray rather than injection.
  2. Absorbed in body from nasal mucosa (thin tissue in nose).
  3. Spray safer than intravenous, intramuscular route using needle.
  4. Provides for slower, more even awakening than IV, IM.
- 

# Give Naloxone

For use in the nose only **Rx Only**  
NDC 69547-353-02

**NARCAN<sup>®</sup>** (naloxone HCl)  
**NASAL SPRAY 4 mg**



Each dose contains 4 mg naloxone HCl  
in 0.1 mL nasal spray  
1 spray per unit

Store at room temperature between  
59°F to 77°F (15°C to 25°C)  
Excursions permitted between  
39°F to 104°F (4°C to 40°C)  
Do not freeze. Protect from light.

**Use for known or suspected opioid overdose  
in adults and children**

**SEE ENCLOSED QUICK START GUIDE**

LOT\_00000 & EXP MMM/YYYY

Distributed by Adapt Pharma, Inc. Radnor, PA 19087 USA  
A1004.01

**DO NOT TEST DEVICE BEFORE USE**



Remove NARCAN Nasal Spray from the box.

Peel back the tab with the circle to open the NARCAN Nasal Spray.

# Hold the nasal spray

- ▶ Hold the NARCAN nasal spray with your thumb on the bottom of the plunger and your first and middle fingers on either side of the nozzle.



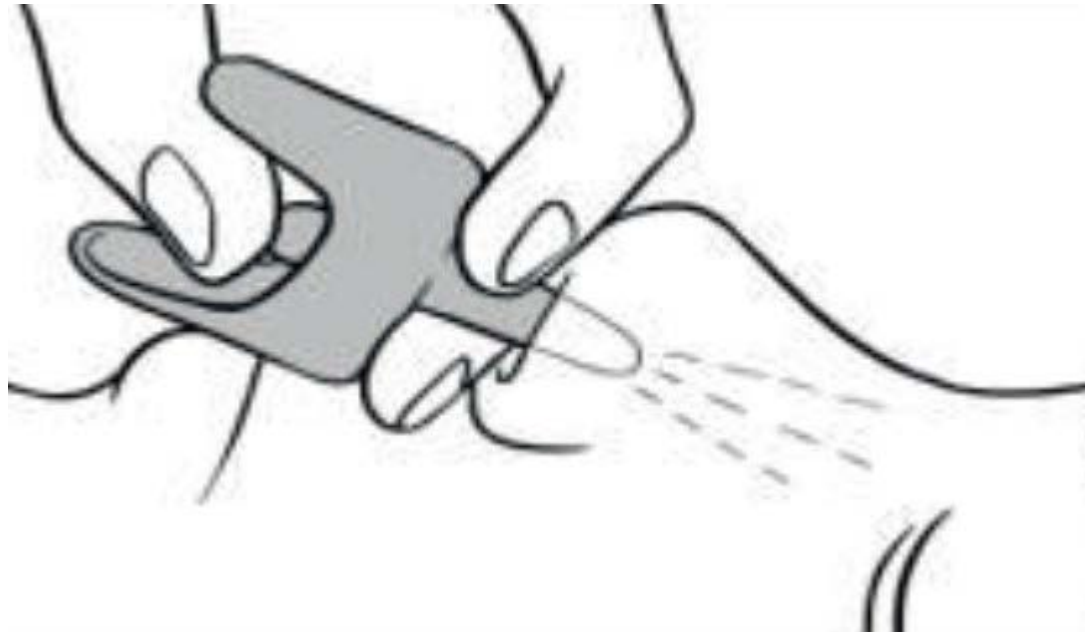
# Gently insert the tip of the nozzle into either nostril.

- ▶ Tilt the person's head back and provide support under the neck with your hand. Gently insert the tip of the nozzle into **one nostril**, until your fingers on either side of the nozzle are against the bottom of the person's nose.



**Press the plunger firmly to give the dose of NARCAN Nasal Spray.**

Remove the NARCAN Nasal Spray from the nostril after giving the dose.






# Recovery Position

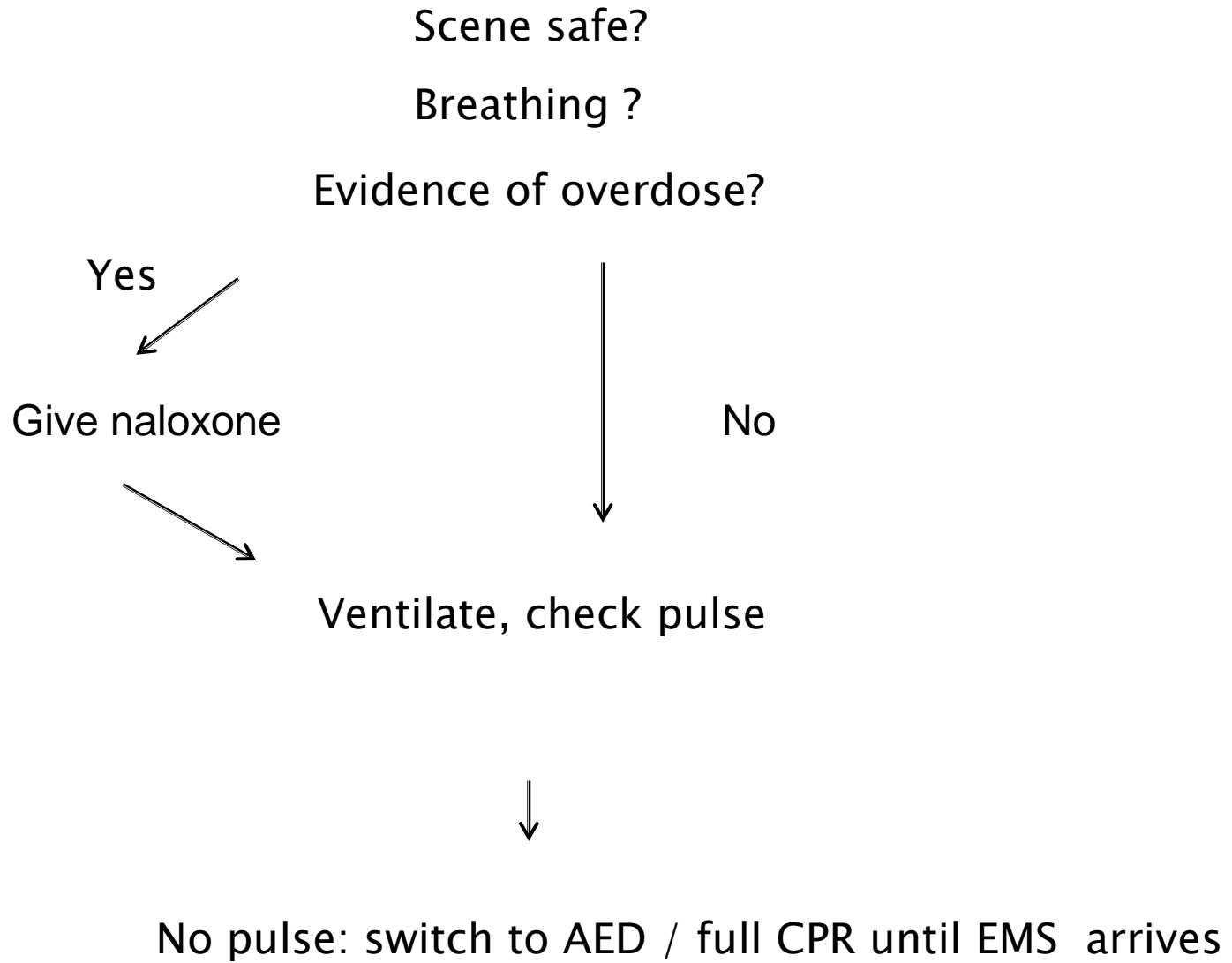


# Post Naloxone Care

1. If opioid, should see awakening
  2. Occasional rapid awakening
  3. Withdrawal symptoms possible if patient is dependent
  4. Pain patients will lose pain relief
  5. Naloxone lasts 20 – 60 minutes; opioids last hours
  5. Patient should not leave – important to be checked by EMS
  6. Treatment Referral important
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# Summary

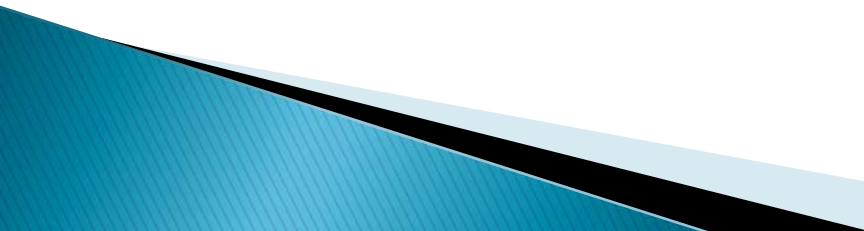
- All participating officers are required to be trained in the use of Naloxone
- Responding Officers should:
  1. Maintain universal precautions
  2. Perform patient assessment
  3. Determine unresponsiveness, absence of breathing or pulse
  4. Update dispatch of potential overdose and request EMS
  5. Follow protocol as outlined for administering the medication
  6. Immediately inform responding EMS/Paramedics that naloxone has been administered and number of doses administered
- Breathing Barriers
  - Every officer should have been issued a breathing barrier to use during rescue breathing
  - If you do not have a breathing barrier, ask your training officer



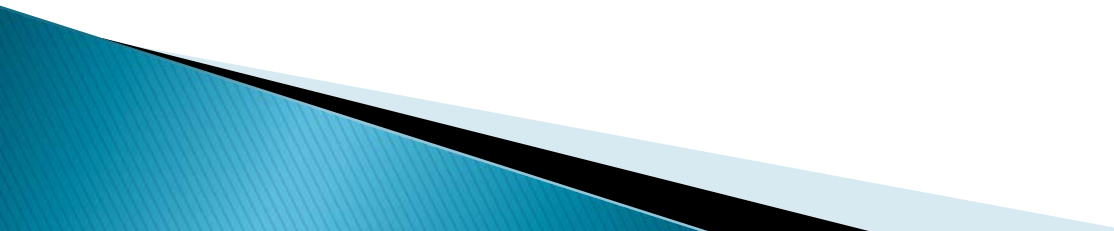
# CPR or Naloxone?

- ▶ Actually, BOTH!
- ▶ IF suspected opioid overdose (paraphrenalia, pinpoint pupils, witnesses state “he took something”), AND no pulse, then do the following:
  - 1. Open the airway
  - 2. Give 2 minutes of CPR
  - 3. Give naloxone intranasally
  - 4. Continue CPR

# Repeat Dosing

- ▶ In most cases, a single dose of naloxone is enough to regain normal breathing and consciousness.
  - ▶ In the rare instance when only a partial response is observed (not conscious but improved respirations), a single repeat dose of Naloxone may be required.
  - ▶ These instances should be very rare
  - ▶ The second dose should be given no sooner than 2 minutes after the first dose
- 

# No Response to Naloxone

- ▶ 1. May be overdose with non narcotic substance
  - ▶ 2. May not be overdose: cardiac, stroke, low blood sugar, foreign body, etc.
  - ▶ 3. Don't delay CPR / AED if condition appears to be heart attack
  - ▶ 4. Full CPR or Compression only
- 

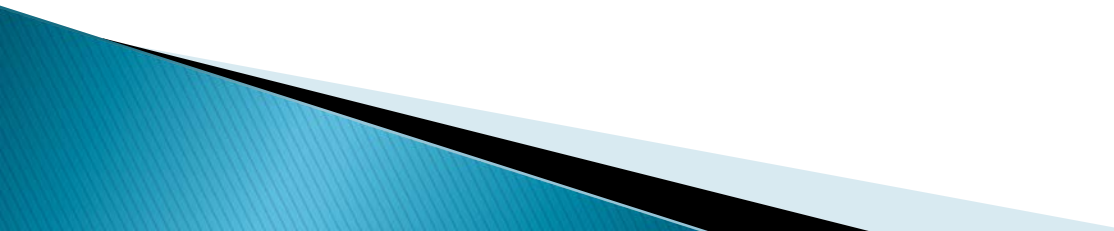
# Storage of Naloxone

- ▶ Naloxone is a perishable medication
- ▶ Extreme temperature changes may affect effectiveness of medication





# Don't Forget

- ▶ Advise EMS if Naloxone was administered, AND how many doses
  - ▶ Report the administration according to your department's reporting procedures
- 

Questions?