

# Naloxone

## Administration Training Module for Initial Responders

West Virginia Office of Drug Control Policy



# Objectives

- By the end of this course, the participant will have learned about available types of naloxone for opioid overdoses and be able to:
  - Recognize the signs and symptoms of an opioid overdose
  - Understand how to use naloxone (both auto-injection and intranasal administration)
  - Prepare and administer naloxone
  - Identify the possible responses to naloxone
  - Describe how continued support should be provided to the overdose victim

# What Does an Opioid Overdose Look Like?

- **The person is:**
  - Not awake, talking, or walking
  - Not responsive when shaken
  - Not breathing well (less than 6 breaths per minute), or not breathing at all
  - Possibly having a bluish color to the skin, nails, or lips
  - Possibly having small pupils

# Why is Naloxone Used?

- Naloxone temporarily blocks opioid effects which decreases the amount of time oxygen levels are too low in the blood.
  - This prevents brain damage or death.
- Prolonged reduced breathing can also result in injury to organs like the kidney and liver.
  - Naloxone can prevent this by making the person breathe well again.
- Lung injury can occur when stomach contents get into the lungs.
  - By blocking opioid effects, naloxone decreases this risk.

**Naloxone reverses breathing problems in time to save lives!**

# When to Use Naloxone

- If a person is not responding to you.
- If a person is breathing less than 6 times per minute or they look bluish.
- If bystanders report suspected drug use and the person is not responding to you.
- If there are drug bottles nearby or signs of injection of drugs on the skin (“track marks”), and the person is not responding to you.



- Call 911 to activate Emergency Services.
- Even if illegal activity was going on, the call provides some protection from criminal charges.

# What are Opioids?

- **Drugs that act in the brain to:**
  - Decrease feeling or intensity of pain. For example:
    - Following an injury or procedure (e.g., surgery)
    - As the result of cancers or other life-threatening diseases causing constant pain
  - Decrease reaction to the pain.
- Used when other options to manage pain do not work and addiction risk is thought to be less than possible benefits.
- In addition to pain relief, opioids can cause people to feel suddenly happy and positive about things.
  - This can lead to increased use resulting in overdoses and/or addiction.

# Opiates versus Opioids

- **Opiates** are made from the poppy plant's seed pod.
  - Only heroin, morphine, and codeine are opiates.
- **Opioids** is the term that describes BOTH opiates (heroin, morphine, codeine) AND man-made drugs that act the same way in the brain that opiates do to manage pain.
  - For example: hydrocodone, oxycodone, fentanyl
- The term “opioids” is used to make sure to include ALL of the drugs that naloxone can reverse.



- After prolonged use of these substances, increased amounts are needed for the same effects (tolerance).
- **Common side effects include:**
  - Nausea and vomiting
  - Drowsiness
  - Itching
  - Dry mouth
  - Constipation
  - Decreased breathing (breathe fewer times every minute)
  - Pupils may stay small in a dark room

# Opioid Examples

- Heroin
- Carfentanil
- Codeine (in Tylenol #3)
- Fentanyl (prescription and homemade)
- Hydrocodone (in Vicodin)
- Hydromorphone (Dilaudid)
- Meperidine (Demerol)
- Morphine
- Oxycodone (in Percocet/Oxycontin)
- Oxymorphone (Opana)
- Tramadol (Ultram)
- U47700 (street name, Pink)



# Heroin

Heroin is an opiate which may be injected, snorted (inhaled), or smoked. It has many street names.



# Naloxone is Only Used for Opioid Overdose

Remember, naloxone will NOT reverse the effects of drugs that are not opioids. Examples of common street drugs that are not opioids include: cocaine, methamphetamine, ecstasy (Molly), sedatives/tranquilizers, “bath salts,” and marijuana.

# Side Effects to Naloxone

- **When used in people who have been taking opioids for a long time, naloxone can cause:**
  - Runny nose
  - Sweating
  - Racing heart
  - High blood pressure
  - Shakes
  - Nausea and vomiting
  - Rapid return of pain (if using for pain)
  
- **Fear of causing withdrawal should NEVER prevent use when the person is unresponsive.**



# Who is at High Risk for Overdose?

- Individuals seeking care from multiple doctors and are not following instructions about prescription use
- Users of prescriptions that belong to others
- Users who inject or snort drugs for greater effects
- Former users who are recently released from prison or entering/exiting from drug treatment programs
- Users taking other sedating drugs like prescription tranquilizers/anti-anxiety medications [e.g., lorazepam (Ativan), clonazepam (Klonopin)]

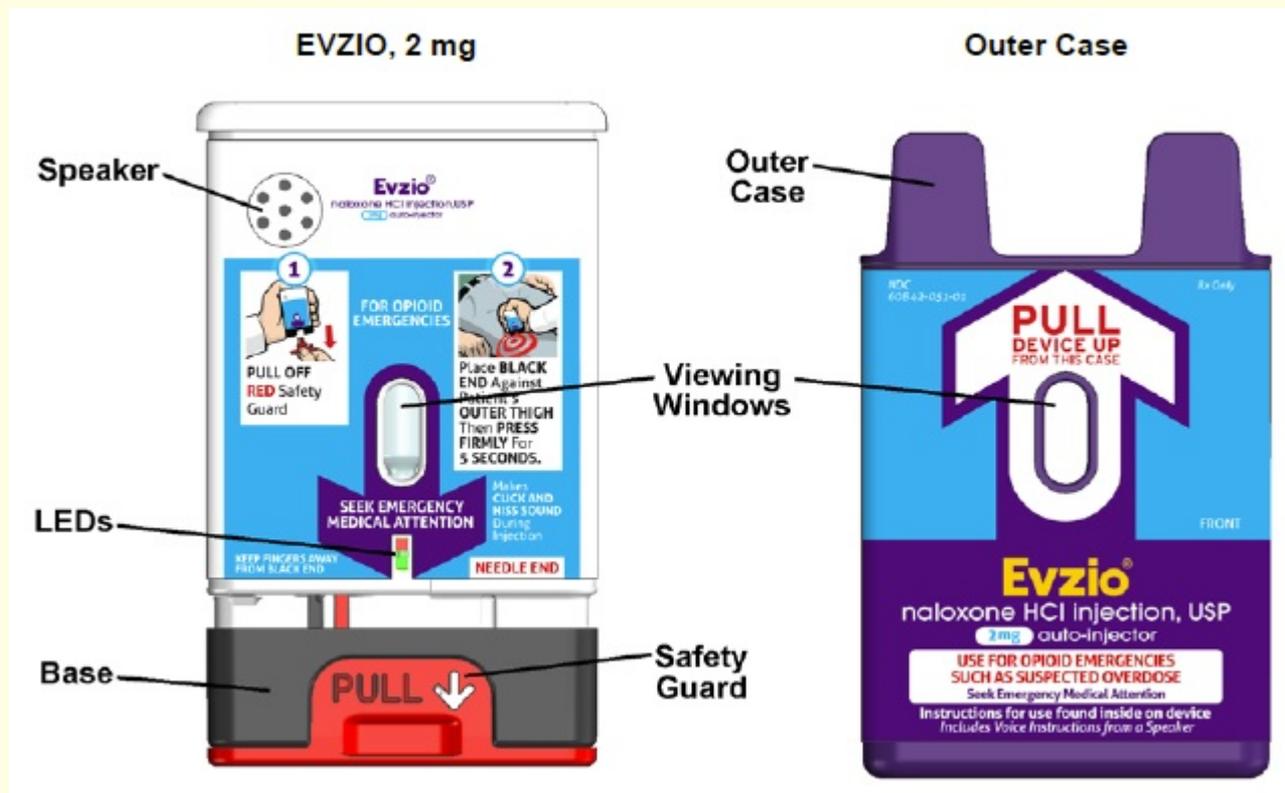
# Who Else is at Risk?

- Elderly patients who take opioids for pain
- Patients who take opioids for pain and then drink alcohol
- Children who accidentally ingest opioids



# Naloxone Auto-Injector

- Evzio is a brand of naloxone that delivers 2 mg of the drug via a hand-held auto-injector.
- It is designed to be a simple way to administer naloxone.

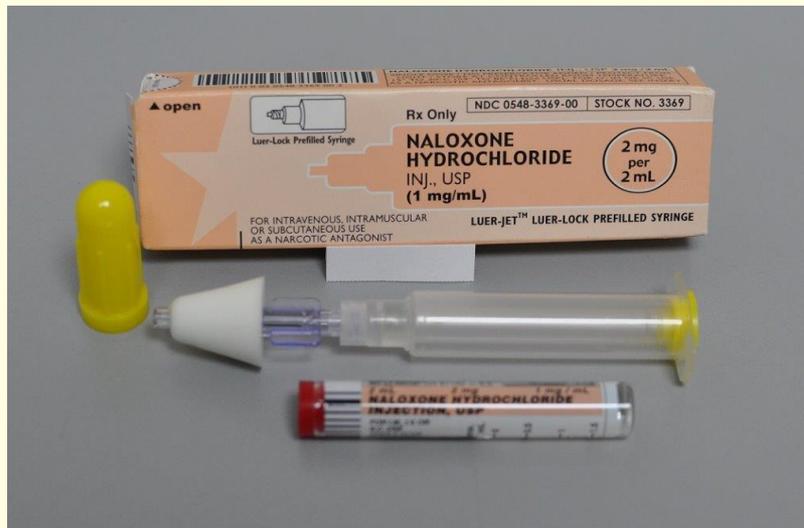


# Naloxone Auto-Injector (Evzio)

- The approved device has step-by-step audible directions.
- Auto-injection should be administered into the outer thigh through clothing if necessary.
  - The dose may be repeated if no response after 3 minutes.
- Auto-injection deploys a spring-loaded needle to deliver the medication.
- Universal precautions should always be used as blood and body fluid exposure is likely.
- Although the dose is pre-set, Evzio can be used in pediatric patients if needed.
- There is a training device available for this product.
- The device must be given to EMS or placed into a sharps container after use.

# Intranasal Naloxone

- Very low-risk of exposure to blood (no needle)
- Can be administered quickly and with little training
- Onset of action is quick
  - Works quickly since the nose has a large area for absorbing drugs directly into the blood stream
- Very effective when used



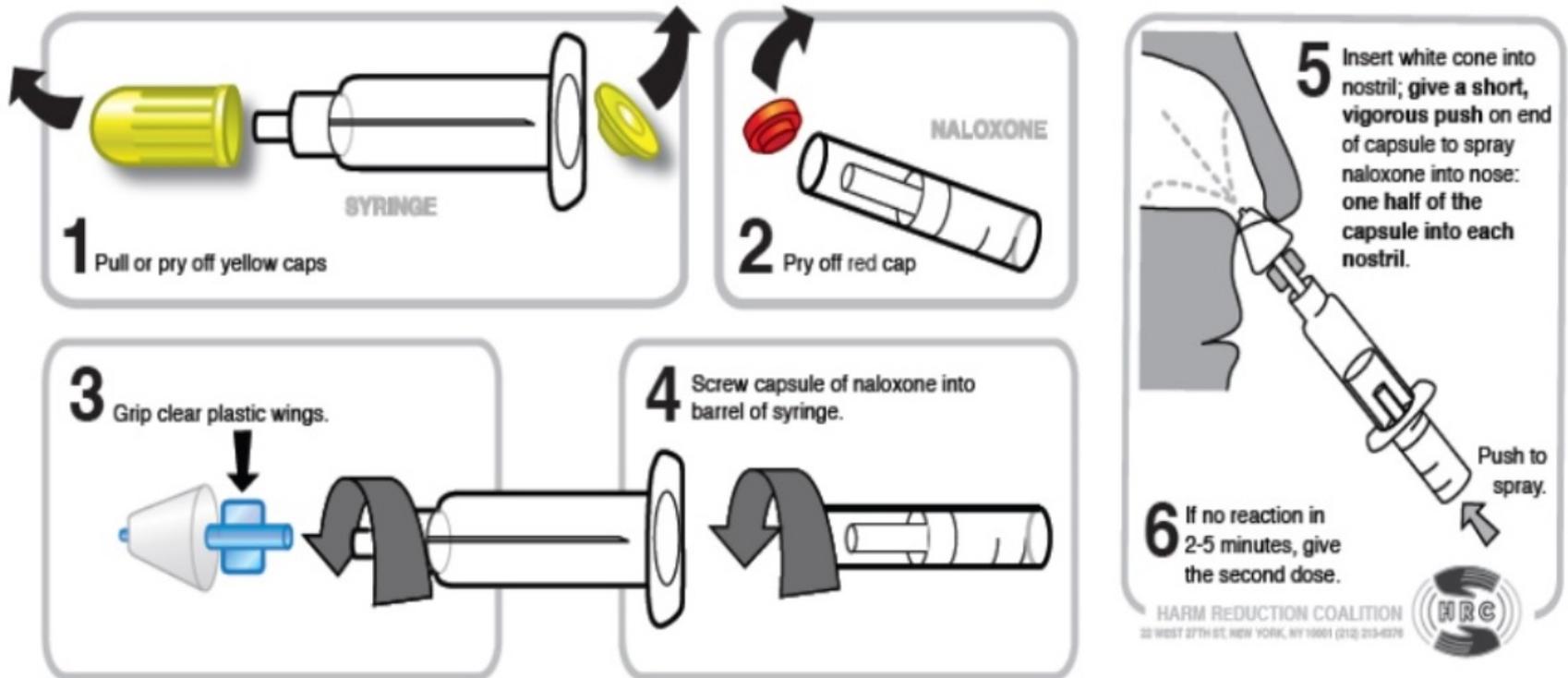
# Why is Naloxone Used With an Atomizer?

Squirting the liquid through the atomizer creates a fine mist. The mist covers more surface of the nasal cavity quickly so that the drug can be absorbed before the liquid dose drips out of the nose.



<https://www.medpagetoday.com/publichealthpolicy/publichealth/52118>

# Naloxone With Atomizer Preparation



# Nasal Atomizer Use

- Administer 2 mg of naloxone into the nose via an attached atomizer.
  - Spray 1 mg (1 mL of liquid) into each nostril.
  - Push the syringe quickly. If you push very slowly, drops will be administered instead of a mist and less of the drug will be absorbed.
  - It is OK if a little more or less of one-half of the dose is administered into the first nostril.
- If some liquid drips out of the nose after dosing, that is OK.
- The atomizer can NEVER be washed and re-used later.
  - Re-use is a risk for disease transmission.
  - The small pores will become clogged resulting in too small of a dose being given.



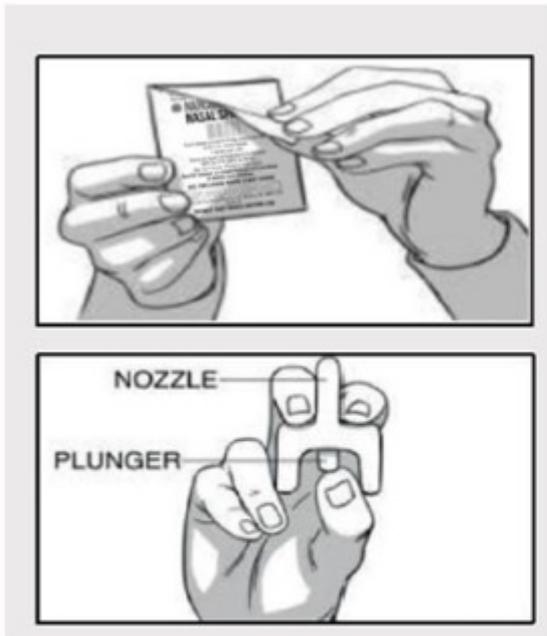
# Narcan Brand Nasal Spray

- Narcan is a brand name form of naloxone that comes in a spray device designed to deliver 4 mg into a single nostril.
- Like Evzio, each box contains two individual devices which deliver a dose of naloxone.



**NOT FOR USE BY CERTIFIED EMS PROVIDERS**

# Narcan Spray Administration



**1 PEEL** back the package to remove the device.

**2 PLACE** the tip of the nozzle in either nostril until your fingers touch the bottom of the patient's nose.

**3 PRESS** the plunger firmly to release the dose into the patient's nose.

**NOT FOR USE BY CERTIFIED EMS PROVIDERS**

# Children Can Also Overdose

- **When an opioid overdose is suspected in a child, naloxone can still be used.**
  - You cannot overdose a child with naloxone. You CAN save their life.
  - Evzio auto-injector, naloxone spray with atomizer, and Narcan Nasal Spray can all be administered to children.
    - If using Evzio in a child less than one year old, pinch the thigh between your finger and thumb and inject into the pinched area.
    - If using a spray, some may run out of their smaller noses. That is OK; they will still get the needed dose.



# Administration Videos

## Evzio Administration

- [https://www.youtube.com/watch?v=-B\\_ZO\\_MUGBE](https://www.youtube.com/watch?v=-B_ZO_MUGBE)

## Narcan Administration

- [https://www.youtube.com/watch?v=xa7X00\\_QKWk](https://www.youtube.com/watch?v=xa7X00_QKWk)

## Naloxone with Atomizer Administration

- <https://www.youtube.com/watch?v=BHNeIucT728>

- **Naloxone should be stored away from extreme temperatures:**
  - Avoid leaving naloxone in your car
  - Recommend keeping naloxone with you (purse, backpack, or bag that is carried with you)
  - May keep in a medicine cabinet or first aid kit/emergency kit
    - Make sure others know where it is stored in the event of an emergency

# Naloxone Administration Checklist

## Steps to administer naloxone:

- Place the person flat on their back. If you cannot move them safely, make sure their head is straight.
- Direct someone to CALL 911 or do it yourself.
- Administer a dose of naloxone.
  - If possible, rescue breathing should be done until the patient begins breathing again.
  - If the person is still not breathing well after 3 minutes, repeat the dose.
  - If the person starts to vomit, turn them onto their side so the vomit does not choke them.
  - If the person starts to breathe or wake up, move away to put some space between you. Waking up from an overdose can cause some people to get very agitated and confused. You may accidentally get hit if you are close.
  - Stay with the person until emergency medical services arrive.
- Provide the 1-844-HELP-4WV (1-844-435-7498) number to the person for follow-up.

# Reporting Naloxone Administration

**Law Enforcement** and **Fire Department** personnel must report all administration of naloxone to the West Virginia Poison Center.

Call: 1-800-222-1222

**OR** send the naloxone administration card by

Fax: (304) 347-1212

E-mail: [escharman@hsc.wvu.edu](mailto:escharman@hsc.wvu.edu)

Harm Reduction Programs or other naloxone distributors should complete a naloxone administration sheet when a naloxone refill is provided. Fax or e-mail the completed sheet to the contacts listed above.

**OR** fax or e-mail the completed card that was provided with the naloxone if the individual returns the card to the Harm Reduction Program.

# The Law Protects Whoever Calls for Help

**But only if they call for help. GET HELP: DIAL 911.**

Any person who administers an opioid antagonist in good faith to someone they believe to be suffering from an opioid-related overdose is not subject to criminal prosecution arising from the possession of an opioid antagonist or subject to any civil liability with respect to the administration of or failure to administer the opioid antagonist unless the act or failure to act was the result of gross negligence or willful misconduct.

*Source: § 16-46-5 (c)*

# If Naloxone is Given Call 911

## **Calling 911 is required.**

Any person who administers an opioid antagonist to a person they believe to be suffering from an opioid-related overdose is required to seek additional medical treatment at a medical facility for that person immediately following the administration of naloxone to avoid further complications from medical problems that are not obvious at the time.

*Source: § 16-46-5 (d)*

- **What you should have learned:**
  - What an opioid is
  - What an opioid overdose looks like
  - How naloxone works to save lives following an opioid overdose
  - When to administer naloxone
  - How to prepare and administer naloxone with the Evzio auto-injector, naloxone with atomizer, and Narcan Nasal Spray
  - What to do before and after naloxone is administered

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