



WAR AGAINST DRUGS

**Indiana Opioid
Antagonist Program:
Naloxone Administration Training Module**

Objectives

- Learn about SB 227, signed into law 3/26/14
- Recognize the signs and symptoms of an opioid overdose and some common opioid drug names
- Identify how to use naloxone
- Identify the possible responses to naloxone
- Be able to prepare and administer naloxone
- Know how to provide continued support to the opioid overdose victim

SB 227

- Allows an EMT, an advanced EMT, an emergency medical responder, a paramedic, a firefighter or volunteer firefighter, or a law enforcement officer:
 - To administer an overdose prevention drug to a person suffering from an overdose
- Allows certain health care providers to prescribe, and a pharmacist to dispense, an overdose prevention drug to any of these professionals

SB 227

- Overdose prevention drug, for purposes of IC 16-31, means naloxone or any other drug that:
 - Is an opiate or morphine antagonist and
 - Prevents or reverses the deleterious effects of
 - Opioids
 - Opiates
 - Morphine
 - These effects include respiratory depression, sedation, and hypotension

What is my liability for administration?

- Section 9 states
 - Except for an act of gross negligence or willful misconduct, an EMR, EMT, LEO, etc, etc.....
 - Who administers an overdose prevention drug
 - Is immune from civil liability for acts or omissions when administering the drug

Opiates and Opioids

- Morphine is the prototypical opioid
 - Decreases the feeling of and reaction to pain
 - Acts as a nervous system depressant (which can depress breathing)
 - Provides comfort and may cause euphoria
- Opioids are used as a treatment for acute and chronic pain and as anesthetic agents (during surgeries or painful procedures)
- Both opiates and opioids are often abused resulting in significant health risk

Opioids versus Opiates

- ***Opioids*** are both natural and synthetic substances with morphine-like activity
- ***Opiates*** include a subclass of opioids consisting of compounds specifically extracted and purified from the opium (poppy) plant
- Opiates and opioids act on the same receptors in the brain



Opioids & Opiates Include

- Heroin
- Buprenorphine (Suboxone)
- Butorphanol (Stadol)
- Codeine
- Fentanyl (Duragesic patch)
- Hydrocodone (Vicodin, Norco)
- Hydromorphone (Dilaudid)
- Meperidine (Demerol)
- Morphine
- Nalbuphine (Nubain)
- Oxycodone (Percocet/Percodan)
- Oxymorphone
- Pentazocine (Talwin)
- Paregoric
- Propoxyphene (Darvon)

Opioids & Opiates

- After prolonged use of these substances, tolerance develops
 - This means that the person needs increasing amounts to achieve the same effects
- Common side effects include
 - Nausea and vomiting
 - Drowsiness
 - Lethargy
 - Itching & flushing
 - Dry mouth
 - Small pupils
 - Constipation or difficulty having bowel movements



Heroin

- Heroin is an opiate that may be inhaled, snorted, smoked, injected, or swallowed
 - “Snorting, sniffing, shooting up, mainlining, skin-popping, or muscling”
- Heroin has many street names
 - Smack, H, Tar, Chiba
 - Junk, Brown Sugar, Skag, Mud
 - Dragon, Dope
 - White, China White, White Nurse, White Lady, White Horse, White Girl, White Stuff, White Boy
 - Boy, He
 - Black, Black Tar, Black Pearl, Black Stuff, Black Eagle
 - Brown, Brown Crystal, Brown Tape, Brown Rhine
 - Mexican Brown, Mexican Mud, Mexican Horse
 - Snow, Snowball
 - Scat, Sack, Skunk
 - Number 3, Number 4, Number 8



Opioid Addiction & Treatment Drugs

- Methadone is a synthetic opioid that can be used as a pain reliever, but is also commonly prescribed in addiction treatment as a substitute for other opioids
 - It is very long-acting
- Suboxone and Subutex are trade names for the opioid buprenorphine, which may be used as a pain reliever, but is also commonly prescribed in addiction treatment
 - All of these drugs are long-acting and can help reduce the craving for opiate and opioids for whole days

What is NOT an Opiate?

- Remember, the following common street drugs are not opioids/opiates and therefore overdoses on them is not treated with naloxone
 - Cocaine, LSD, ecstasy (Molly), sedatives/tranquilizers, marijuana
 - Benzos, downers, nerve pills, tranks
 - Valley girl (Valium), barbs
- Naloxone is only used for opioid overdose

Who's at high risk for overdose?

- Individuals seeking narcotics from multiple providers or who are not taking their medicines as prescribed
- Users of drugs that were prescribed for others
- Users who inject drugs for greater effects
- Former users who are recently released from prison or who entering and exiting from drug treatment programs

Who else is at risk?

- Elderly patients using opiates or opioids for pain
- Patients using pain-relieving patches incorrectly
- Children who accidentally take unsecured pain-killers in their homes or the homes of others

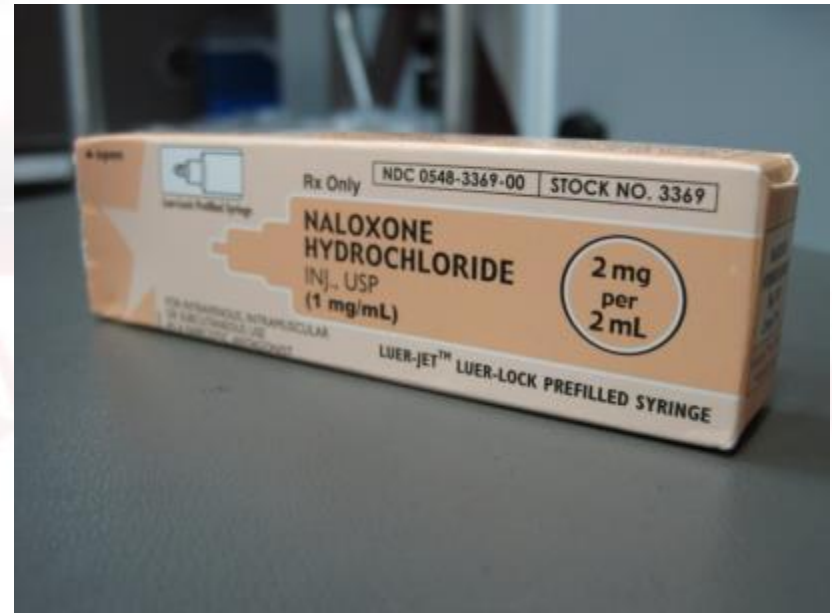


What does Opioid/Opiate Overdose Look Like?

- The person is
 - Not responsive when shaken
 - Not breathing well or not breathing at all
 - Breathing less than six breaths per minute (normal would be more than 12 breaths per minute)
 - Having a bluish (cyanotic) color of the skin, nails or lips
 - Having small pupils
- Ultimately, opioids kill by suppressing the drive to breath!

Naloxone

- Naloxone (Narcan) is an antidote that can reverse overdose of opioids/opiates
- Naloxone is **NOT** effective against respiratory depression due to non-opioid drugs (or other causes)



Overview of Naloxone Use

- Opioids decrease breathing, which results in injury to the brain because of low oxygen
- Naloxone blocks opioid effects and can reduce the duration of low oxygen in the blood
- In addition, opioids can cause a person who has overdosed to inhale stomach contents into the lungs, which can cause significant injury or death
- Reversing the overdose quickly is very beneficial

Overview of Naloxone Use

- Contact EMS (dial 911) or send for help
- Provide respiratory support (rescue breathing) to the limit of your skills and reverse the cause of failed breathing (naloxone!)
- Summary:
 - Use of naloxone is for when the person is not responsive and not effectively breathing

When Do you Use Naloxone?

- If a person is not responding to you
- If bystanders report drug use and the person is not responding to you
- If there are drug bottles or signs of injection of drugs on the skin (“track marks”) and the person is not responding to you

When do you NOT use Naloxone?

- Opioid use alone (without other symptoms or signs of ineffective breathing) is NOT an indication for naloxone
- Other drug (non-opioid) overdoses will not respond to naloxone
- Otherwise, hypersensitivity or allergy to the drug is extremely rare

Naloxone

- Can be administered two ways:
 - Via a spray in the nose
 - Intranasally
 - Via injection
 - Auto-injector



Naloxone Auto-Injector

- EZVIO (naloxone) is a take home auto-injector
- FDA approved April 3rd, 2014
- Each dose contains 0.4 mg naloxone/0.4 ml
- Comes in a box of two single dose auto-injectors plus a training injector



EVZIO

- Pull naloxone auto-injector from case
 - Device will now provide voice-prompt guidance
- Grasp firmly and pull off red safety guard



EVZIO

- Place black end against patient's outer thigh
- Press firmly against patient's outer thigh and hold in place for five seconds.
- Remove auto-injector and dispose of in sharps container
- Continue to support patient's breathing, as within your abilities

Intranasal Naloxone

- Very low risk of exposure to blood (no needle)
- Can be administered quickly and with little training
- Onset of action is quick
- Very effective when used properly



Intranasal Naloxone

- Works quickly since the nose has a large area for absorbing drugs directly into the blood stream



Why use an atomizer?

- Squirting the liquid drug as a fine mist covers more of the surface inside the nose (like a spray paint nozzle works) and increases entry of the drug into the bloodstream



Adult Nasal Atomizer Use

- Support the breathing of the patient, if you know how
- Administer naloxone 2.0 mg nasal via atomizer (half in each side of the nose)
- If you know how, continue to support the breathing of the person
- Consider contacting poison control



Nasal Atomizer Use



DRUGS

Preparation: Step 1



DRUGS

Preparation: Step 2



Preparation: Step 3



Preparation: Step 4



One Luer Attached Atomizer



DRUGS

Summary

- Do rescue breathing if you know how
- Look to see if the nose is free of blood or mucous
- Assemble kit
- Gently, but firmly, place the atomizer in one side of the nose and spray half the medication, while occluding the other side of the nose
- Repeat on the other side
- If only one side of the nose is available, put all of the medication on that side

Adverse Reactions

- When used, intranasal naloxone can cause symptoms of opioid withdrawal:
 - Runny nose & sweating
 - Nausea & vomiting
 - Fast heart rate
 - Shakes
 - Agitation, irritability, restlessness
 - Fear of causing withdrawal should not prevent use when the person is unresponsive
 - Ultimately, withdrawal is NOT life-threatening, but overdose IS



Children Can Also Overdose

- When an opioid overdose is suspected in a child, use less of the liquid and repeat as needed
 - Very small child: use one quarter in each side of the nose and consider using the other half in five minutes if the ambulance has not arrived and the child is still unresponsive



Naloxone & Children

- Remember, children have smaller noses and some of the drug may run out of the nose and down the back of the throat
- This will not do any harm



Naloxone

- Remember that the duration of action of naloxone is much shorter than most opioids
- So, sometimes it will wear off and you may need to repeat the dose

Skills Practice

- Given a scenario
 - Prepare a intranasal naloxone atomizer using the required equipment
 - Demonstrate administration of intranasal naloxone on an adult intubation head
 - Demonstrate use of the EZVIO auto-injector using the training device
 - Demonstrate as well as explain how you would provide continued support
 - Always request Emergency Medical Services, dial 911

Course Summary

- What we learned:
 - Why naloxone is available as an option for opioid overdose
 - What an opioid overdose looks like
 - When to use naloxone
 - How to prepare an intranasal atomizer
 - How and when to use the intranasal atomizer
 - How to utilize the EZVIO auto-injector

Credit and Acknowledgements

- VT EMS/VDH/DPS
- Central MA EMS Corp.
- Northwestern Medical Center
- VT Department of Health
- VT Department of Public Safety

References

- IN Department of Health
- IN Department of Public Safety
- Centers for Disease Control
- Drugs.com
- Federal Drug Administration
- MDPH Bureau of Substance Abuse Services
- N.O.M.A.D. (Not One More Anonymous Death Overdose Prevention Project)