



Pacific Southwest

RURAL OPIOID TECHNICAL

ASSISTANCE REGIONAL CENTER

Overdose Education

Harm Reduction and Intervention



Objectives

- By the end of this session, I hope you have:
 - Gained general knowledge about Good Samaritan Acts
 - Importance of the various opioid formulations and drug mixtures
 - Understand how naloxone fits into harm reduction strategies for opioids
 - Overdose Reversal Medications available
 - How to recognize and respond to an opioid overdose



Good Samaritan Acts

- As of March 2023, 48 States and the District of Columbia had some overdose focused Good Samaritan laws (CDC, 2023)
- Good Samaritan laws are designed to provide protection (civil & criminal) for individuals who act in good faith in the assistance of those they believe to be in distress
- Levels of protections vary by state



Common Limitations

- Good Samaritan vs Failure to Act Laws
 - Good Samaritan is voluntary, Failure to Act posits that bystanders have a legal duty to intervene
- Exceptions for specialized populations
 - Health care workers and First responders are often targeted or limited outside of specialized training
- Calling 911
 - Most states grant immunity to those who call 911



Opioids

- Opioids are psychoactive substances derived from the opium poppy, or their synthetic analogues
- Act on the central nervous system to relieve pain
- Due to their pharmacological effects, opioids in high doses can cause respiratory depression and death



Formulas

Natural Opiates	Semi-synthetic/manmade opioids	Fully synthetic/manmade opioids
Morphine	Oxycodone (OxyContin)	Fentanyl
Codeine	Hydromorphone (Dilaudid)	Methadone
Opium	Hydrocodone (Vicodin)	Tramadol
	Heroin	Meperidine (Demerol)

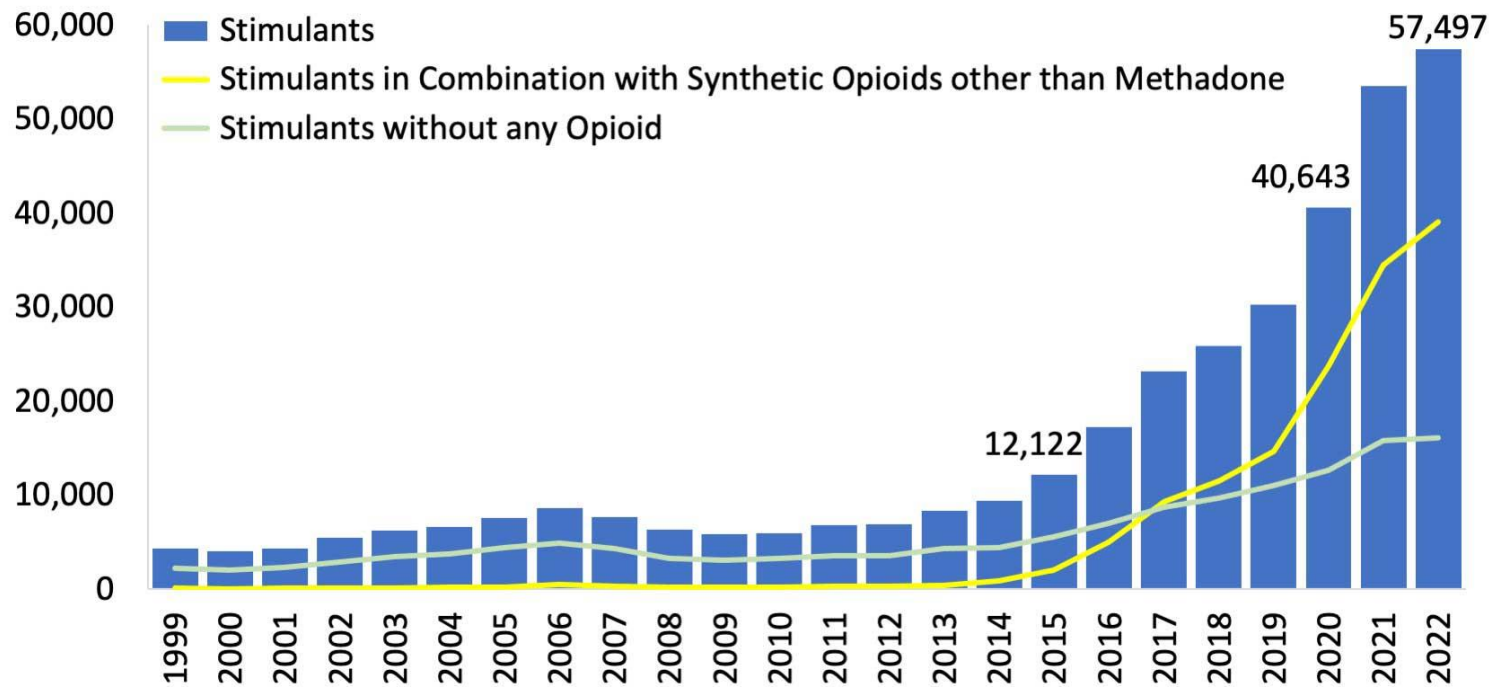


Common Opioid Polyuse Trends: Psychostimulants

- Methamphetamine use is increasing among those who use opioids
- The growing use of synthetic opioids in combination with cocaine and methamphetamine has resulted in significant increases in co-use-related overdose deaths
- It has been suggested that individuals who use concurrent opioids and stimulants believe:
 - stimulants are safer,
 - combining stimulants and opioids to offset the negative effects of opioids, such as withdrawal symptoms,
 - limiting opioid use,
 - finding cheaper substitutes for heroin,
 - relieving fatigue,
 - lethargy, and
 - some combining to enhance a “high”



Figure 6. National Overdose Deaths Involving Stimulants (Cocaine and Psychostimulants*), by Opioid Involvement, Number Among All Ages, 1999-2022



*Among deaths with drug overdose as the underlying cause, the psychostimulants with abuse potential (primarily methamphetamine) category was determined by the T43.6 ICD-10 multiple cause-of-death code. Abbreviated to *psychostimulants* in the bar chart above. Source: Centers for Disease Control and Prevention, National Center for Health Statistics. Multiple Cause of Death 1999-2022 on CDC WONDER Online Database, released 4/2024.



Common Opioid Polyuse Trends: Xylazine (Tranq)

- Is a large animal tranquilizer
- Is a depressant on the Central Nervous System
- Not an opioid but can lengthen the effects of opioids and increase the likelihood of an overdose
 - Opioid antagonists will not reverse effects of Xylazine
- Effects of Xylazine include:
 - Sedation
 - difficulty breathing
 - dangerously low blood pressure
 - slowed heart rate
 - wounds that can become infected and spread
 - severe withdrawal symptoms
 - death



(U) Figure 1. DEA Forensic Laboratory Identifications of Xylazine by Region

<i>Region</i>	<i>2020</i>	<i>2021</i>	<i>Percent Increase</i>
<i>Northeast</i>	346	556	61%
<i>South</i>	198	580	193%
<i>Midwest</i>	110	118	7%
<i>West</i>	77	163	112%

Source: DEA

(U) Figure 2. Number of Xylazine-Positive Overdose Deaths by Region

<i>Region</i>	<i>2020</i>	<i>2021</i>	<i>Percent Increase</i>
<i>Northeast</i>	631	1,281	103%
<i>South</i>	116	1,423	1,127%
<i>Midwest</i>	57	351	516%
<i>West</i>	4	34	750%

Source: DEA



Harm Reduction Strategies

- Common harm reduction strategies for opioid use and overdose risk
- Primarily tertiary prevention
 - Overdose medication & education
 - Test strips (fentanyl, xylazine)
 - Drug syringe programs
 - Safe consumption sites
 - Drug takeback programs, medication disposal
 - Medication lock boxes
 - Medications for OUD



Overdose Medications on the Market

Naloxone Based

- RiVive (OTC): 3 mg of naloxone HCl.
- Narcan (OTC) generic (Rx): 4 mg of naloxone HCl.
- Kloxxado (Rx): 8 mg of naloxone HCl.
- Rezenopy (Rx): 10 mg of naloxone HCl.

- Evzio, Zimhi & Narcan (Injection, Rx)

Nalmefene Based

- Opvee (Rx)
- Revex (Injection, Rx)



Naloxone

- Naloxone is an opioid antagonist- it works by knocking the opioid off the receptors for 30-90 minutes-when naloxone wears off the overdose can return
- Naloxone only works to reverse opiate overdoses and will not work for stimulant, benzodiazepine, or any other drug or medication
- A second dose can be given within 2-3 minutes, if the first dose does not help
- Naloxone cannot be over administered



Naloxone Storage

- To make sure it lasts as long as possible, naloxone should be kept in a dark and dry place between 59°F to 77°F (15°C to 25°C) if possible
- It is important to have it at hand when an overdose might happen
- Do not freeze
- Spray before the expiration date on the box



Factors that Increase the Risk of Overdose

Reduced Tolerance

- Individuals are at increased risk after a period of abstinence, change in dose, released from prison or residential treatment

Actively Using Alone

- Individuals are at increased risk when they use illicit substances in the absence of others who can intervene if an overdose occurs



Factors that Increase the Risk of Overdose

Mixing Substances

- For example-mixing opioids with alcohol, benzodiazepines, stimulants (cocaine), prescription medications
 - Majority of opioid overdose deaths involve at least one other drug (CDC, 2013)

Medical

- Acute medical conditions such as HIV, liver or lung disease or suffer from depression (WHO, 2014)



Signs of an Overdose

Unresponsive

Unconscious

Breathing
slow/shallow (12
or fewer breaths
per minute)

Pale, clammy,
loss of color,
blue/gray –
especially lips
and nails

Loud/uneven
snoring/gurgling

Not breathing

Faint/no pulse



Intervention Steps

1

Call 911

2

Start rescue breathing and CPR
Perform CPR only if trained

3

Give naloxone
Give 2nd dose if 1st dose does not work within 2-3 minutes

4

Resume rescue breathing and CPR
Perform CPR only if trained

5

Monitor the person until help arrives



Overdose Myths

Some people have experience using these methods. However, these can cause harm.

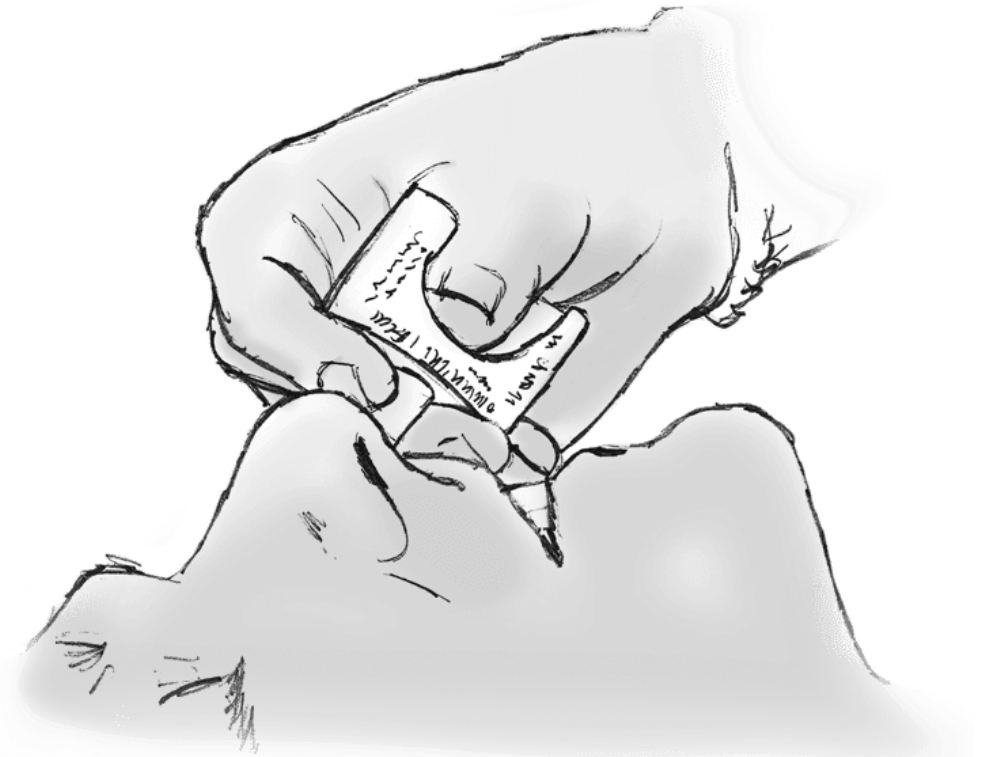
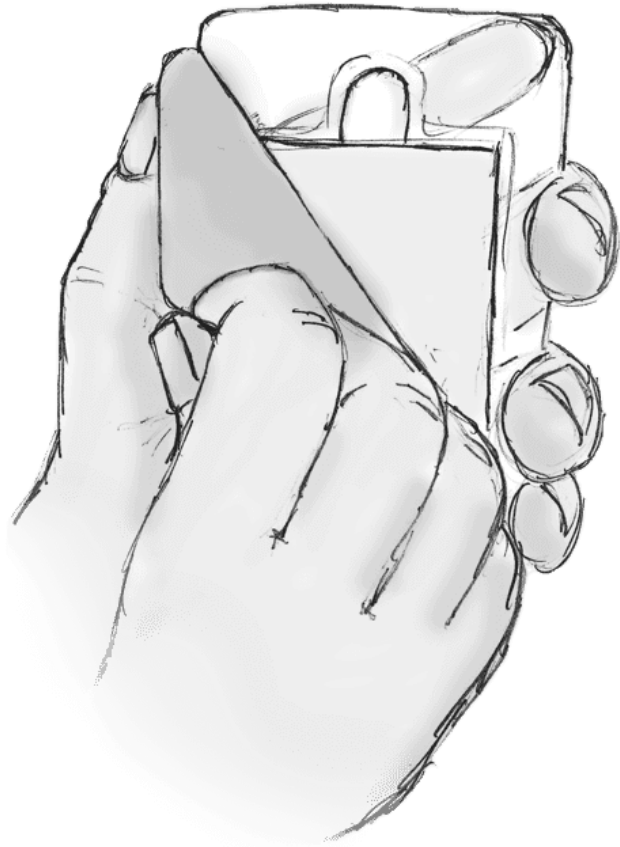
Do Not: Slap or punch and individual to resuscitate, it may lead to the bruising or breaking of the nose/jaw.

Do Not: Place an unconscious individual in cold water or use ice, this makes the body cold, slow even more, and can lead to hypothermia

Do Not: Provide an individual with any milk product. Milk increases mucus production further compromising lung function



Narcan Nasal Spray Instructions



Responses after Naloxone Administered

- People may respond differently after naloxone has been administered.
- For those who come back to consciousness
 - Individuals may become agitated when they regain consciousness
 - Ensure that there are no objects that are within immediate reach of the individual
- For those who remain unconscious
 - Monitor that they continue breathing
 - Place in rescue position to keep airways open



Personal Safety

- If you see any powder present, cover with wet cloth
- Wash skin with soap and water
 - NOT with hand sanitizer

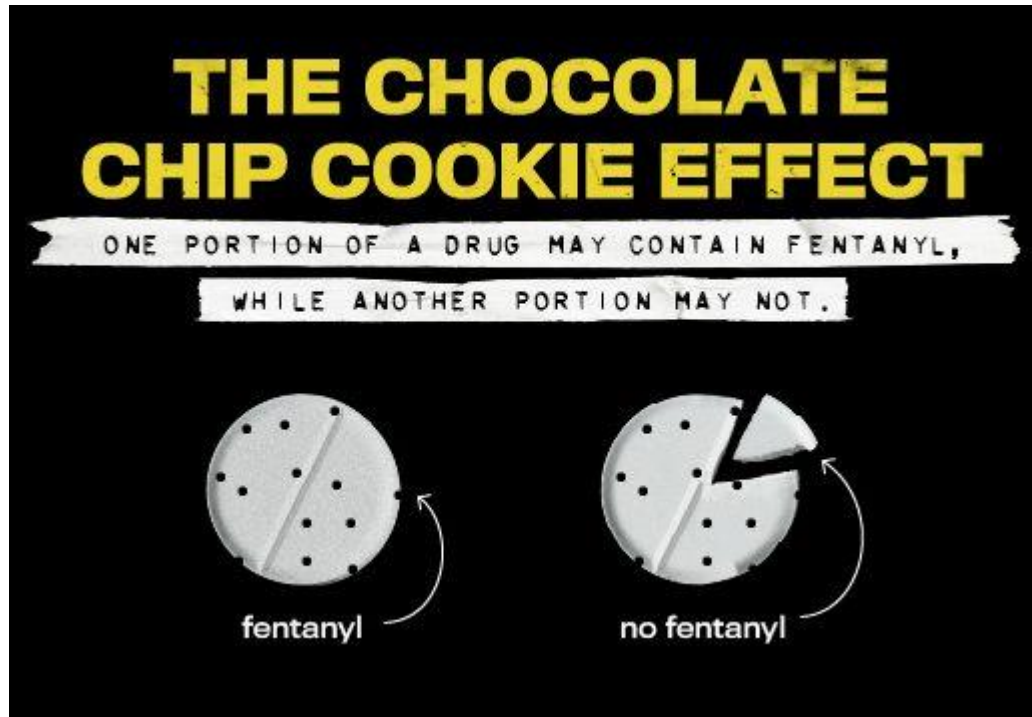


What are Test Strips?

- Fentanyl test strips ('FTS') are a form of inexpensive drug testing technology that has been shown to be effective at detecting the presence of fentanyl and fentanyl-analogs
- Xylazine test strips ('XTS') are shown to be effective at detecting the presence of Xylazine.
- Accurate detecting for fentanyl and/or xylazine when it is present in samples of street drugs and unlikely to produce false negative results.
- Empower the user with knowledge to inform decisions
 - Choose to use a different batch,
 - Use less of the current batch,
 - Use in the presence of others,
 - Or make sure naloxone is on hand



Limitations



- They do not measure the quantity or potency of fentanyl and/or xylazine present in a drug sample.
- They may detect incidental contamination of a drug sample – such as would be caused by different drugs being packaged in the same area – that does not represent a clinically significant quantity of fentanyl and/or xylazine.
- FTS may be cross-reactive with methamphetamine.
 - When methamphetamine drug samples are tested for fentanyl contamination, the sample needs greater dilution in water



How to Use

For Injection

- Add 10 drops of water to the remains of the substance mixture after you draw your shot
- Hold the solid blue end of the test strip and dip the other end into the water mixture
- Hold strip in the mixture for about ten (10) to fifteen (15) seconds. (You will know it's ready when the water is sucked up into the white part of the strip.)
- Remove from water mixture and wait for one minute (60 seconds)

For Powder/Pills

- Mix a match head size amount of powder into the water
- Hold the solid blue end of the test strip and dip the other end into the water mixture
- Hold strip in the mixture for about ten (10) to fifteen (15) seconds. (You will know it's ready when the water is sucked up into the white part of the strip.)
- Remove from water mixture and wait for one minute (60 seconds)
- View the strip and count the number of red lines visible (even very light red lines count)



Reading the Results

- **ONE (1)** red line means there **IS** fentanyl in the sample
- **TWO (2)** red lines mean there is **NO** fentanyl in the sample



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Thank you!

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