

OVERDOSE REVERSAL, DRUG TRENDS, HARM REDUCTION





Getting Started

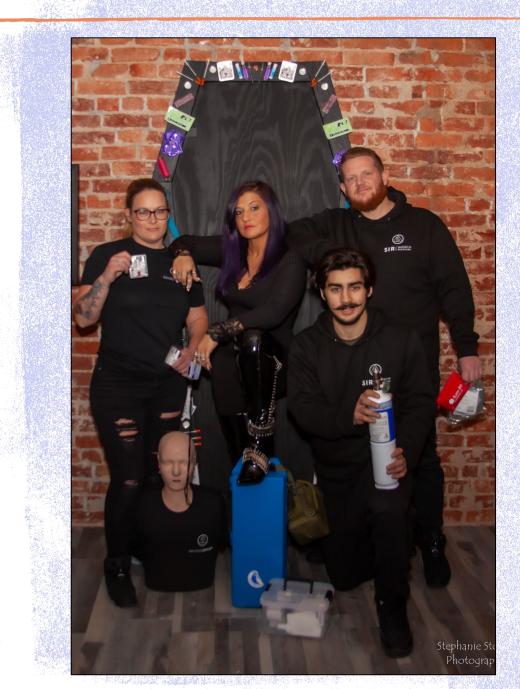
- Our story & harm reduction
- Our mission
- The opioid epidemic? *PUBLIC HEALTH CRISIS*
- Nationwide/statewide statistics
- Updates on current drug supply
- Reversal training
- I encourage you to ASK QUESTIONS!
 Just shout them out!





Harm Reduction

- Harm reduction refers to policies, programs and practices that aim to minimize the negative health, social and legal impacts associated with drug use, drug policies/laws and other potentially dangerous behaviors.
 - Harm reduction is grounded in justice and human rights. It focuses on positive change and on working with people without judgement, coercion, discrimination, or requiring that people stop using drugs or engaging in certain practices as a precondition of support.
 - Harm reduction services save lives by being available and accessible in a matter that emphasizes the need for humility and compassion toward people who use drugs. Harm reduction plays a significant role in preventing drug-related deaths and offering access to healthcare, social services, and treatment. These services decrease overdose fatalities, acute life-threatening infections related to unsterile drug injection, and chronic diseases such as HIV/HCV.





What is an Opioid?

- Opioids are a class of drugs that include the illegal drug heroin, synthetic opioids such as fentanyl, and pain relievers available legally by prescription, such as oxycodone (OxyContin[®]), hydrocodone (Vicodin[®]), codeine, morphine, and many others.
- Opium is a highly addictive non-synthetic narcotic that is extracted from the poppy plant, Papaver somniferum. The **opium poppy** is the key source for many narcotics, including morphine, codeine, and heroin.







The Most Common Types of Prescription Opioids

- Hydrocodone (Vicodin, Lortab)
- Oxycodone (OxyContin, Roxicodone, Percodan, Percocet)
- Hydromorphone (Dilaudid)
- Morphine
- Codeine
- Fentanyl (Duragesic, Antiq, Sublimaze)
- Tramadol (Ultram, ConZip, Ryzolt)
- Methadone (Dolophine)
- Buprenorphine (Buprenex, Suboxone)





MAT Medication Assisted Treatment for Opiate Use Disorder, OUD

Prescribed to those who are physically dependent on opioids as well as chronic pain patients

Language matters!

Always use person first language PWUD, OUD, SUD



BUPRENORPHINE

- daily medication as a film or tablet
- curbs opioid craving

VIVITROL

- Monthly injection
- Binds and blocks opioid receptors to reduce cravings
- Daily pill form (Naltrexone)

METHADONE

- Daily medication as pill or liquid
- Curbs opioid cravings & manages withdrawal



Why Heroin or Fentanyl

People who have misused opioid pain

relievers are 19x more likely than

others to start using heroin.

For someone who uses opioids from the street,

heroin/Fentanyl may be the most economic choice.





Illicit Opioids: Heroin & Fentanyl





Myth about Fentanyl



You can overdose by touching fentanyl



Fentanyl powder in the air can be inhaled and cause an overdose

Narcan cannot reverse a fentanyl overdose

Fentanyl powder can NOT be absorbed through the skin

It would take large amounts over a long period of time to have any impact & is highly unlikely

Narcan can reverse any opioid overdose including fentanyl

Fentanyl Test Strips

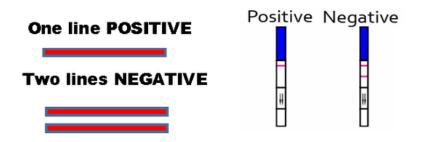
decriminalized in PHL County

- Decriminalized in PHL County
- Fentanyl is being found in many different types of drugs. We advocate all people who use drugs to test their products before consumption.
- Fentanyl has been found in: coke, crack, MDMA, ecstasy, pressed pilled, marijuana, K2

 Add sterile water to your empty baggie or the cooker you just prepped – mix well!

**Load your shot FIRST! Only test your rinse water!

- 2. Dip the test strip in the water, in up to the first line & hold for 15 seconds
- 3. Place test strip on sterile surface or across top of cooker.



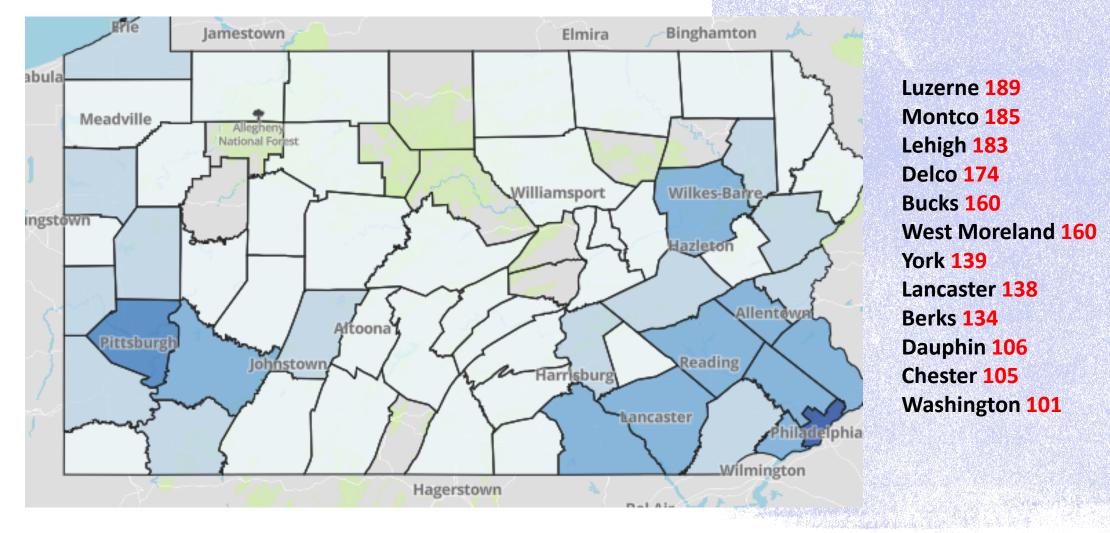






Overdose Deaths Per County in Pennsylvania 2021 – 5,224 total

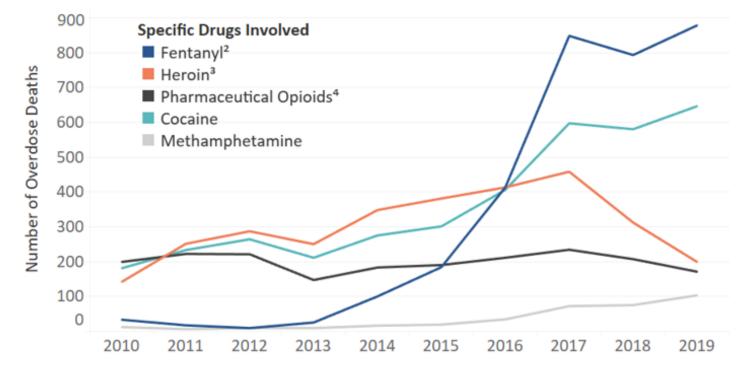
- Philadelphia 1240
- Allegheny 700





Number of Overdose Deaths by Specific Drugs Involved

2019-2019¹



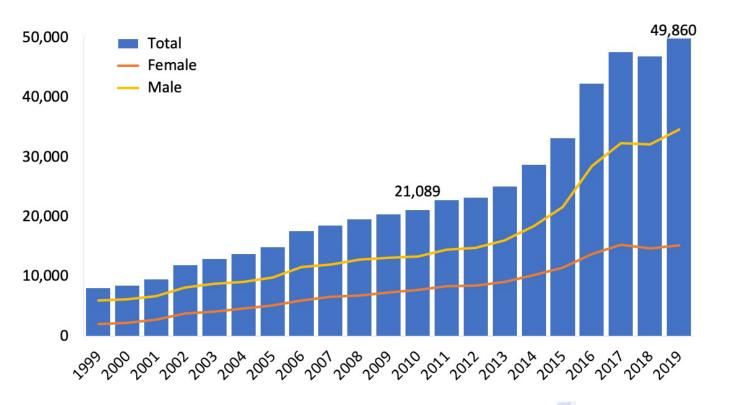
¹Specific drugs involved are not mutually exclusive ²Includes both illicit and pharmaceutical fentanyl ³May include morphine only deaths ³Includes methadone



National Drug Overdose Deaths

Involving any Opioid

- Number among all ages
- By gender
- 1999-2019



*Among deaths with drug overdose as the underlying cause, the any opioid subcategory was determined by the following ICD-10 multiple cause-of-death codes: natural and semi-synthetic opioids (T40.2), methadone (T40.3), other synthetic opioids (other than methadone) (T40.4), or heroin (T40.1). Source: Centers for Disease Control and Prevention, National Center for Health Statistics. Multiple Cause of Death 1999-2019 on CDC WONDER Online Database, released 12/2020.



Xylazine

Sarah Laurel, Executive Director, Savage Sisters

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Xylazine – History

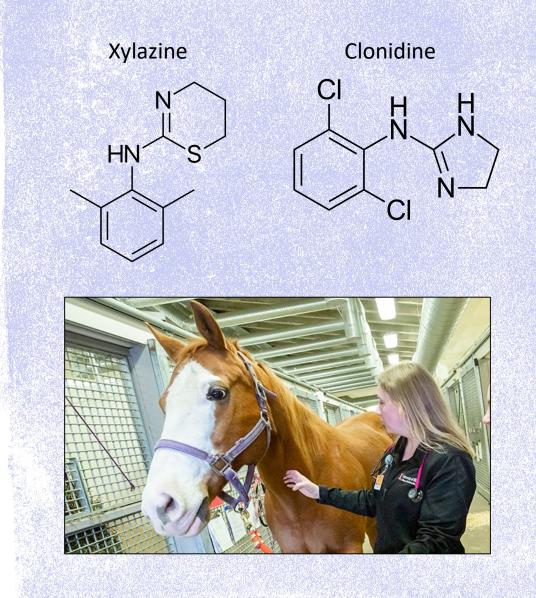
- veterinary drug used as a sedative, analgesic and muscle relaxant.
- Xylazine is NOT a controlled substance, only NY state passed legislation in 2017 making it a controlled substance
- Commonly used to adulterate heroin, fentanyl and cocaine
- In humans, it can cause central nervous system depression, respiratory depression, bradycardia, hypotension, and even death.
- Illicit use of xylazine as an additive has been well documented in Puerto Rico since the early 2000s
- Been found in 91% of the 'dope supply' in Philadelphia





Pharmacology of Xylazine

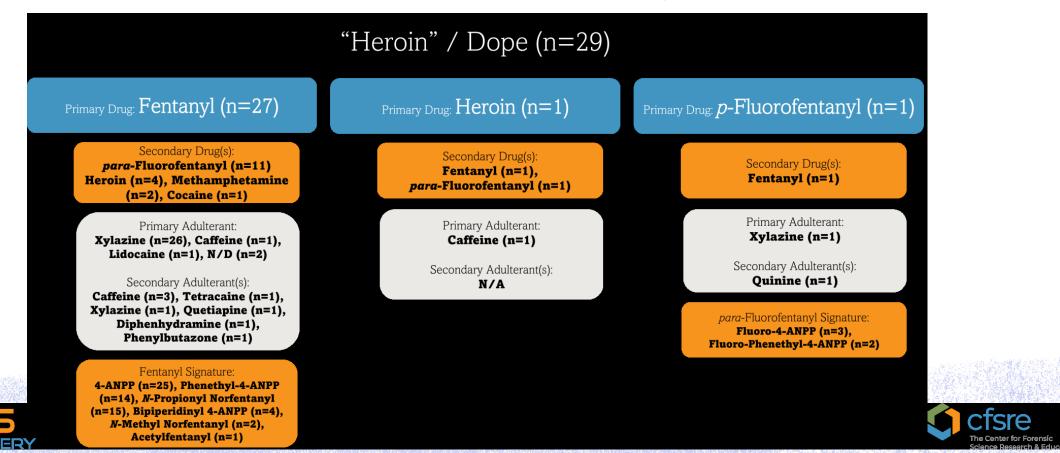
- Xylazine is an α2-adrenergic agonist that acts via stimulation of central α2-receptors.
- Exerts sedative effects by acting as an alpha-2 receptor agonist, similar to clonidine and dexmedetomidine. It is given IV, IM, or orally either alone or in combination with ketamine or barbiturates.
- Its chemical configuration is similar to tricyclic antidepressants, phenothiazines, and clonidine. Xylazine inhibits neurotransmitter release of both dopamine and norepinephrine at the neuronal synapse, resulting in depression of the central nervous system (7).
- In animals, it has been studied to provide analgesia for 15-30 minutes and sedation for 1-4 hours.
- Due to the drug's secondary site of action, xylazine use as an adulterant may potentiate the effects of heroin, leading to increased risk of overdose. The dose of xylazine required to produce toxicity in humans is between 40 to 2400 mg. Serum concentrations of xylazine in fatal overdose cases were seen from trace to 16 mg/L. This significant overlap between fatal and non-fatal doses indicates that there may be no defined "safe" blood concentration of xylazine. (7)





Summary and Key Findings:

- 36 samples were reported between January and February 2022
- Most "heroin" samples contained fentanyl cut with xylazine
- Fentanyl combinations with methamphetamine and cocaine were observed in this sample set, however, not commonly
- Cocaine samples were not adulterated in this sample set*
- para-Fluorofentanyl continues increasing in prevalence, being
- identified as the primary opioid in some "heroin" samples
- A counterfeit tablet was found to contain an NPS benzodiazepine



Date	Suspected	Drugs Identified	Date	Suspected	Drugs Identified
3/1/2022	Dope	Fentanyl (1p), Heroin (1p), Xylazine (0.3p) [Fentanyl and Heroin Byproducts]	3/31/2022	Dope	Fentanyl (1p), Xylazine (3p) [Fentanyl Byproducts]
3/1/2022	Dope	Fentanyl (1p), Caffeine (0.2p), Xylazine (trace) [Fentanyl Byproducts] → ④	4/14/2022	Dope	Fentanyl (Ip), Xylazine (14p)
3/1/2022	Dope	Fentanyl (1p), Xylazine (1p) [Fentanyl Byproducts] ←	4/14/2022	Dope	Fentanyl (1p), Xylazine (2p) [Fentanyl Byproducts] ← ①
3/1/2022	Dope	para-Fluorofentanyl (1p), Fentanyl (0.7p), Xylazine (16p) [Fentanyl and para-Fluorofentanyl Byproducts]	4/14/2022	Dope	Fentanyl (lp), Xylazine (4p)
3/1/2022	Dope	Fentanyl (lp),paro-Fluorofentaryl (trace), Xylazine (l5p), Lidocaine (2p), Caffeine (lp)/(Fentaryl Byproducts)	4/14/2022	Dope	Fentanyl, Xylazine [Residue]
3/1/2022	Dope	Fentanyl (1p), Caffeine (0.25p), Xylazine (0.2p) [Fentanyl Byproducts]	4/14/2022	Dope	Fentanyl (lp), Xylazine (4p)
3/1/2022	Dope	Fentanyl (1p), Xylazine (2p) [Fentanyl Byproducts] → ⑤	4/14/2022	Dope	Fentanyl (lp), Xylazine (4p) → ①
3/1/2022	Dope	Fentanyl (1p), Caffeine (0.3p), Xylazine (trace) [Fentonyl Byproducts]	4/14/2022	Dope	Fentanyl (lp), Lidocaine (4p), Xylazine (50p)
3/1/2022	Dope	Fentanyl (1p), Xylazine (1p), Quetiapine (0.1p) ← ④	4/14/2022	Dope	Fentanyl (Ip), Xylazine (5p)
3/1/2022	Dope	Fentanyl (lp),poro-Fluorofentanyl (0.6p), Xylazine (18p), Lidocaine (trace) (poro-Fluorofentoryl Byproducte)	4/14/2022	Dope	Fentanyl (lp), Xylazine (Sp)
3/15/2022	Dope	Fentaryl (lp), para-Fluorofentaryl (0.7p), Xylazine (10p), [Fentaryl and para-Fluorofentaryl Byproducts]	4/14/2022	Dope	Fentanyl (lp), Xylazine (l2p) ← 😢
3/15/2022	Dope	Fentanyl (1p), Xylazine (1p) [Fentanyl Byproducts]	4/14/2022	Dope	Fentanyi (Ip), para-Fluorofentanyi (Sp), Xylazine (S0p)(para-Fluorofentanyi Byproducts) → ②
3/15/2022	Dope	Fentary/ (lp),para Fluorofentary/ (trace), Xylazine (Op),/Fentary/ and para Fluorofentary/ Byproducts?	4/14/2022	Dope	Fentanyl, Xylazine [Residue]
3/15/2022	Dope	para-Fluorofentanyl (1p), Fentanyl (0.5p), Xylazine (3p)	4/14/2022	Dope	Fentanyl, Xylazine [Residue]
3/15/2022	Dope	Fentanyl (1p), Xylazine (0.3p), Caffeine (trace) [Fentanyl Byproducts] → 6	4/14/2022	Dope	Fentanyl (Ip), Xylazine (2p)
3/15/2022	Dope	Fentanyl (Ip), Xylazine (0.5), Canenie (dacer) entanyl Sypiodocca y (4/14/2022	Dope	Fentanyl (1p), Xylazine (1p)
3/15/2022			4/14/2022	Dope	Fentanyl, Xylazine [Residue]
	Dope	Fentanyl (1p), Xylazine (1.3p) [Fentanyl Byproducts] ←	4/14/2022	Dope	Fentanyl [Ip],para-Fluorofentanyl (trace), Xylazine [IIp)[Fentanyl Byproducts] → ③
3/15/2022	Dope	Fentanyl (1p), Xylazine (1.5p) [Fentanyl Byproducts]	4/14/2022	Dope	Fentanyl (lp), Xylazine (Sp)
3/24/2022	Dope	Fentanyl (1p), Xylazine (1.5p) [Fentanyl Byproducts]	4/14/2022	Dope	Fentanyl (1p), Xylazine (10p) [Fentanyl Byproducts] ←
3/24/2022	Dope	Fentanyl (1p), Xylazine (7p) [Fentanyl Byproducts]	5/3/2022	Dope	Fentanyl (1p), para-Fluorofentanyl (0.6p), Xylazine (5.3p), Caffeine (trace), (Fentanyl Byproducts)
3/24/2022	Dope	Heroin (1p), Fentanyl (0.4p), Quinine (trace)[Heroin and Fentanyl Byproducts] $\rightarrow \bigcirc$	5/3/2022	Dope	Fentanyl (1p), Xylazine (3.2p) [Fentanyl Byproducts]
3/24/2022	Dope	Fentanyl (1p), Xylazine (3p), Heroin (0.1p), Caffeine (0.3p), Lidocaine (0.2p) (Fentonyl Byproducts)	5/3/2022	Dope	Fentanyl (1p), Xylazine (2.5p) [Fentanyl Byproducts] → ④
3/24/2022	Dope	Fentanyl (1p), Xylazine (8p) [Fentanyl Byproducts]	5/3/2022	Dope	Fentanyl (1p), Xylazine (2.4p) [Fentanyl Byproducts]
3/31/2022	Dope	Fentanyl (1p), Xylazine (4p) [Fentanyl Byproducts]	5/3/2022	Dope	Fentanyi (lp), Xylazine (l.5p) [Fentanyi Byproducts]
3/31/2022	Dope	Fentanyl (lp), para-Fluorofentanyl (0.1p), Xylazine (0.3p), Cocaine (trace) (Fentony/ Byproducts)	5/3/2022	Dope	Fentanyl (1p), Xylazine (0.5p) [Fentanyl Byproducts]
3/31/2022	Dope	Fentanyl (lp),para-Fluorofentanyl (0.2p), Xylazine (3p) [Fentanyl Byproducts] 🗧 🌀	5/3/2022	Dope	Fentanyl (lp), Xylazine (lp) [Fentanyl Byproducts] ← ④



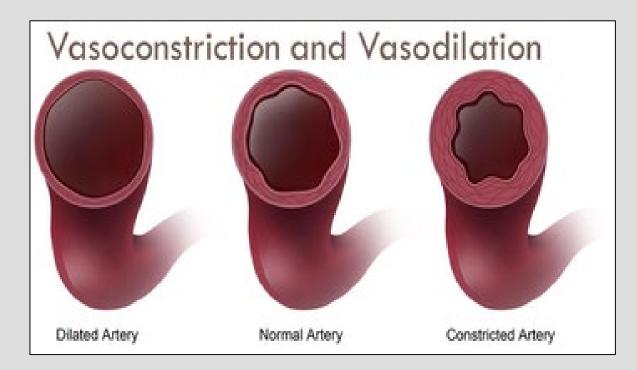
Xylazine Wounds

The following footage and images may be disturbing



Why wounds show up

• In the areas with a high prevalence of the use of xylazine mixed with fentanyl or heroin, abscesses, and painful skin ulcers are very often reported. The mechanism is thought to be due to its direct vasoconstricting effect on local blood vessels and the resultant decreased skin perfusion. Prolonged use can lead to decreased perfusion and impaired wound healing, leading to higher chances of infection of these ulcers. In addition to the topical effect of vasoconstriction, xylazine also leads to hypotension, bradycardia, and respiratory depression. A skin ulcer in a PWID, similar to the ones reported in our case, should raise clinical suspicion for the presence of xylazine in opiates and other substances.



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Wound Care Best Practices

DOs

- Wash hands with water+soap or sanitizer
- Wash the wound with water+soap or saline, gently remove dried drainage from skin
- Keep it moist but not wet: Keep it covered, soak up drainage with gauze, change dressing when soaked if possible
- Use ointment (A&D, Hexagen etc avoid triple antibiotic) or nonstick gauze to avoid sticking, or soak the dressing to take it off

DONTs

- Try not to pick or scratch: it can re-open the wound and set your healing back
- Don't rip anything off the wound: let tissue soften, dissolve, fall off by itself
- Don't press too much on abscesses: it can make them go deeper, or into a joint or your bloodstream
- Don't use alcohol, hydrogen peroxide, or iodine on open skin

Overdose Reversal Updates

- Xylazine or Tranqdope is NOT an opioid reversing overdoses has been more difficult. ALWAYS administer Narcan for the opioid present.
- We are dealing with a supply that is heavily cut with tranquilizer, which is a sedative.
- We have updated overdose reversal methods to include rescue breathing with a key alert regarding the extended time it takes to be revived.
- Savage Sisters now carries Oxygen tanks covered by the Good Samaritan Act to assist in reversing overdoses.





Inpatient treatment for opioid withdrawal may be more difficult than standard opioid withdrawal protocols and require additional pharmacologic treatments if the patient is also withdrawing from xylazine. While the literature on treatment protocols is still emerging, local addiction medicine and toxicology experts recommend the following medications be considered for inpatient management of xylazine withdrawal:

• Dexmedetomidine

- Tizanidine
- Clonidine
- Guanfacine
- Ketamine
- Gabapentin
- Pentobarbital
- Benzodiazepines (with caution)

What does this mean for people seeking treatment?

- Treatment facilities and emergency rooms are NOT currently testing for the presence of Xylazine
- The detox from xylazine is different from opioids
- People are not comfortable during the acute withdrawal stages due to the symptoms not being treated
- People we engage with are less than willing to enter into a medical setting/detox due to the lack of comfort meds





What NEEDS to happen?

- Treatment facilities need to begin testing for the presence of Xylazine
- Case studies needed for acute withdrawal treatment
- Update withdrawal protocols
- Increase wound care preparedness
- Increased availability for medical rehab beds
- Increased street side clinicians and wound debridement accessibility



OVERDOSE 101

RISK | SIGNS OF OVERDOSE | USING NARCAN | AFTER-CARE



Who is at risk of an Overdose? Anyone

Ы Beneficial Problematic Substance No Use Non-Potentially Problematic Use Harmful Use Use Disorder e.g. use without e.g. episodic e.g. use under e.g. patterns and types of use use that can any physical medical supervision. or mental that have a and may be leading to harmful higher risk of health impacts. physical and impacts.

mental health impacts.

TYPES OF USE

- Experimental
- Situational
- Abuse
- Severely & Chemically Dependent
- Binge-Use
- Social & Ritual Use Dependence

Substance Use Continuum



What puts people at risk for overdose?

- Mixing drugs
- Variations in strength , content
- Mode of administration oral, smoking, injection
- Previous overdose
- Tolerance changes 24-48 hours without use, people recently released from jails/institutions
- Using alone 8 out of 10 OD's happen in the home, people outside the city are not provided the correct resources
- Physical health (dehydration, breathing conditions, liver/kidney function, weight loss, immune system)

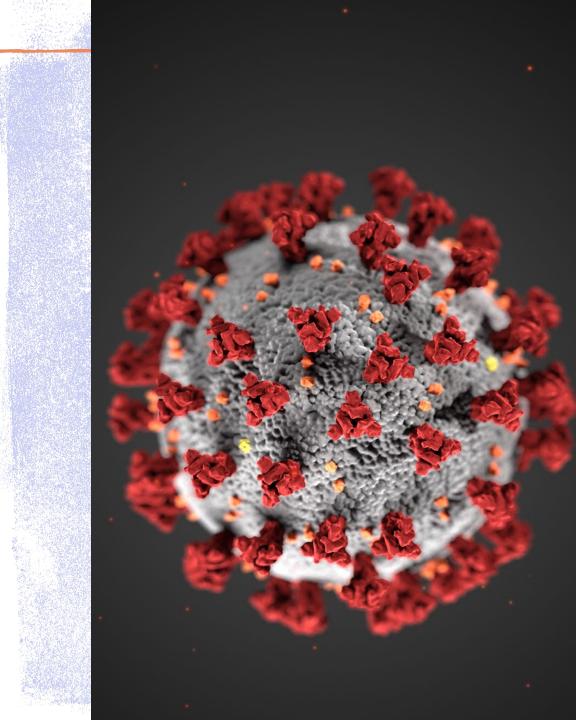






COVID-19 and Increased Risk for Overdose

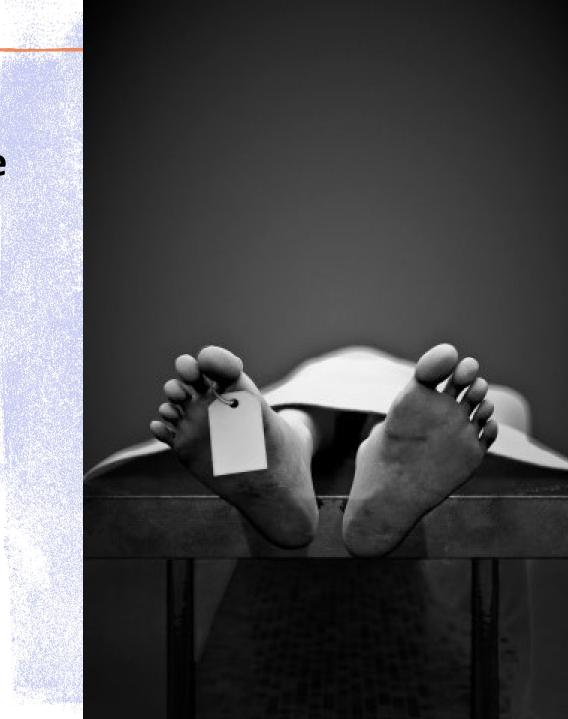
- **Physical distancing:** impossible when responding to an overdose. Wear protective gear & always call 911 first
- Decreased access to services: many people have to overcome higher barriers for healthcare, recovery supports, sterile supplies
- Impaired breathing: may have weaker immune systems, increased risk of severe covid. Covid also increases breathing effects of opioids, benzos, alcohol





Progression of an Opioid Overdose

- Breath is suppressed
- Respiratory rate slows
- Brain not getting enough oxygen
- Heart stops
- Death



High vs Overdose

Be aware many people do not want to be "Narcanned." Paying attention and knowing

when to act is very important

HIGH

- Relaxed muscles
- normal skin tone
- Slowed/slurred speech
- Drowsy appearance
- Responsive to stimuli
- Normal heartbeat
- I will show you the rescue position so you can help with blood flow & clearing the airways

OVERDOSE

- Unresponsive or unconscious
- Shallow or no detectable breathing
- Skin, especially fingertips/lips, appear pale blueish purple, or gray/ashy
- Snoring/gurgling
- Slow or irregular heartbeat
- Stiffened body/seizure like activity
- Strange behavior prior to becoming unconscious



Good Samaritan Law

Any person who renders emergency care, first aid or rescue at the scene of an emergency, or moves the person receiving such care, first aid and rescue to a hospital or other place of medical care, shall not be liable to such person for any civil damages as a result of any acts or omissions in rendering the emergency care, first aid or rescue, or moving the person receiving the same to a hospital or other place of medical care, except any acts or omissions intentionally designed to harm or any grossly negligent acts or omissions which result in harm to the person receiving the emergency care, first aid or rescue or being moved to a hospital or other place of medical care.

• Always RESPOND!

- They cannot prosecute you!
 - You cannot be prosecuted by the law and you are also covered by college review

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Pulse Oximeter

- Used to measure the oxygen level (oxygen saturation) of the blood
- A tool to help you determine if someone is overdosing or just heavily sedated
- %Sp0² normal oxygen saturation levels are in the 90s
- Respond when lower than 90 or steadily decreasing
- At 70 oxygen is not getting to the brain

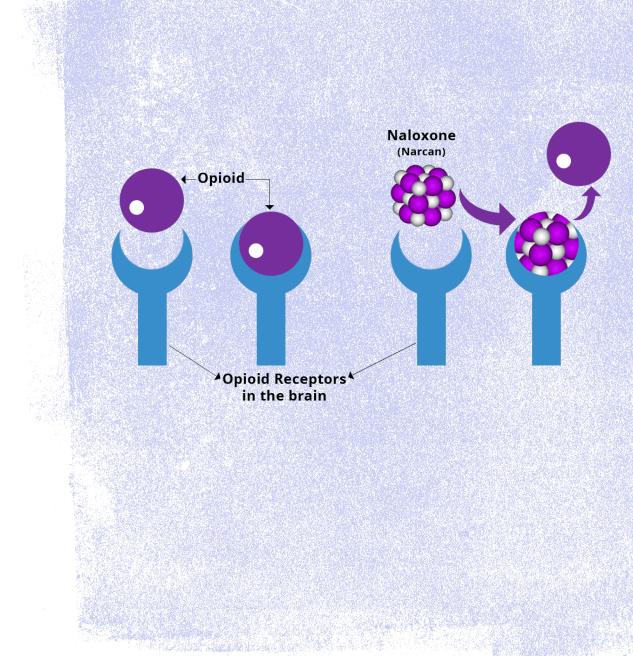




How does Naloxone work?

Naloxone is used to temporarily reverse the affects of an opioid overdose

- Naloxone only has an effect if there is an opioid in the body
- Works for 20-90 minutes



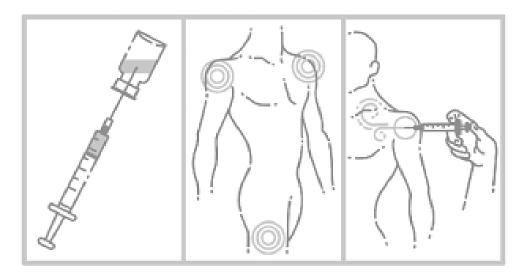


Types of Naloxone



NASAL NARCAN

 This nasal spray needs no assembly & can be sprayed up one nostril by pushing the plunger. One time use.



INTERMUSCULAR NARCAN

• The most rapid onset of action is achieved by intravenous administration, which is recommended in emergency situations.



First Steps in Reversing an Overdose

TRY TO WAKE THE PERSON

- Ask if the person is ok
- Offer help
- Introduce yourself have good bedside manner
- Apply pressure/slight pain
- If they reply, offer to put them in the rescue position
- If no response continue.

CONSENT

- Ask for consent before attempting to help
- Even if they appear to be unconscious, they still may be able to hear you
- The person may refuse, that is ok!
- Implied Consent
- If the person is unresponsive

CALL 911

- Put the phone on speaker on the floor
- Give the location
- Describe the symptoms
- Clear the area be aware of uncapped syringes, broken pipes or other items that may interfere while you work on the person overdosing



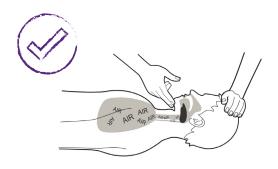
Administer Narcan

- Check the time when you first administer
 - Use your 911 call as a timer***
- It takes 2-3 minutes to kick in, check your time and administer a 2nd dose after 3 minutes.
- Rescue breaths are KEY after administering naloxone, as they have a high percentage of having tranq dope
- Works for 20-90 minutes





Rescue breaths are very Crucial!



STEP 1

- Clear the airway
- Tilt head back & lift chin

Even if you do not have naloxone, this can save a life.

Take precaution due to Covid19 and use mask if present or get creative!

If you aren't comfortable immediately put them into the rescue position

Due to the presence of Tranq, please continue rescue breathing until EMS

arrives!!!



STEP 2

- Pinch nose & give 2 strong breaths
- Wait 5 seconds, then give 1 breath every 5 seconds
- Ensure the chest is rising NOT the belly



STEP 3

- Do not give chest compressions unless the heart has stopped
- No pulse, no breathing



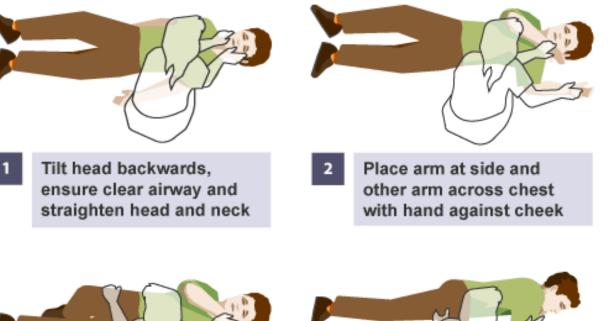
The Recovery Position

If a person starts breathing

but has not become

conscious yet, put them in

the Recovery Position



3 Bring far knee up to a 4 Roll person

Bring far knee up to a 90° angle a the second sec

Roll person over towards you with knee at angle and ensure head is supported



After-steps of an Overdose

PRECAUTIONS

- If anyone is starting to get up on their own, give them some space
- Introduce yourself and inform them of what happened in a gentle voice
- Be mindful that they may be confused, afraid or angry

OVERDOSE PREVENTION

- If the individual doesn't want to go with EMS, ensure they are monitored or remain in public space
- Encourage individual not to use again until naloxone wears off (2 hour minimum)

SUGGESTIONS

- If the person is willing to speak with you, make some self care suggestions.
- Stretch, hydrate sleep safely, connection, boundaries, ask for help



Review & Questions

Savage Sisters will happily facilitate future trainings. Don't hesitate to reach out for

Harm Reduction materials.

- Each situation is different, so be ready to respond intuitively.
- Always call 911 first to get professionals on site.
- Give yourself time to process after you've handled a reversal.
- Share this information with your friends & family.
- To obtain Narcan:
 - Contact your local health department
 - Ask your local pharmacy (there are several that will provide it; however, some require a co-pay).
 A doctor can also provide a prescription.
 - NextDistro
 - Savage Sisters can help!
- If you need fentanyl test strips, Narcan or additional harm reduction trainings reach out to Sarah Laurel at <u>sarah@savagesisters.org</u>
- Remember, harm reduction is for **everyone!**



How to get involved!



COME TO OUTREACH

- We have a big outreach every third Saturday of the month. It starts at our 30th street location and ends in Kensington!
- Join a smaller Thursday outreach at McPhersons Square.

CHECK OUT THE WEBSITE

- Our website is **savagesisters.org**
- Also, find us on social media where you can find more information on our outreach events as well as what we are currently fundraising for.



- All donations go a long way towards helping us achieve our goal of attacking addition ferociously with radical love through connection.
- Donate on our website!

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Review & Questions

- Thank you for taking the time out to learn about this public health crisis
- If you are an outreach worker or in the field I recommend sharing this info with those you encounter – both professionally and with our friends who use substances
- Testing the local drug supply is crucial to staying up to date on trends and possible public health consequences
- If you need further information or want to schedule a training contact <u>info@savagesisters.org</u>
- <u>SavageSistersRecovery</u> | Instagram, Facebook, <u>TikTok</u> | Linktree

To get involved, donate or volunteer visit:

www.savagesisters.org Stay Safe & always, Stay Savage!

people who use drugs