



Law Enforcement – Responding to an Opioid Overdose

Naloxone Administration Training

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Nevada Board of Pharmacy

Learning Objectives

- ▶ Understand the scope of the opioid epidemic
- ▶ Understand pain and how opioids work in the body
- ▶ Explain how to recognize and respond to an opioid overdose
- ▶ Understand the role of naloxone in an opioid overdose and how it can prevent an overdose death
- ▶ Demonstrate how to administer intranasal naloxone
- ▶ Discuss how to respond to a suspected xylazine overdose

Good Samaritan Drug Overdose Act

- ▶ Senate Bill 459
 - ▶ Signed into law May 5, 2015
 - ▶ Effective October 1, 2015
- ▶ Prevents punitive actions against health professionals and any person who administers naloxone or calls 911 to assist someone who may be overdosing on opiates.
- ▶ Provides immunity to persons seeking medical treatment for an opioid overdose for themselves or someone else.
- ▶ Allows greater access to naloxone, an opioid overdose reversal drug.

Good Samaritan Drug Overdose Act

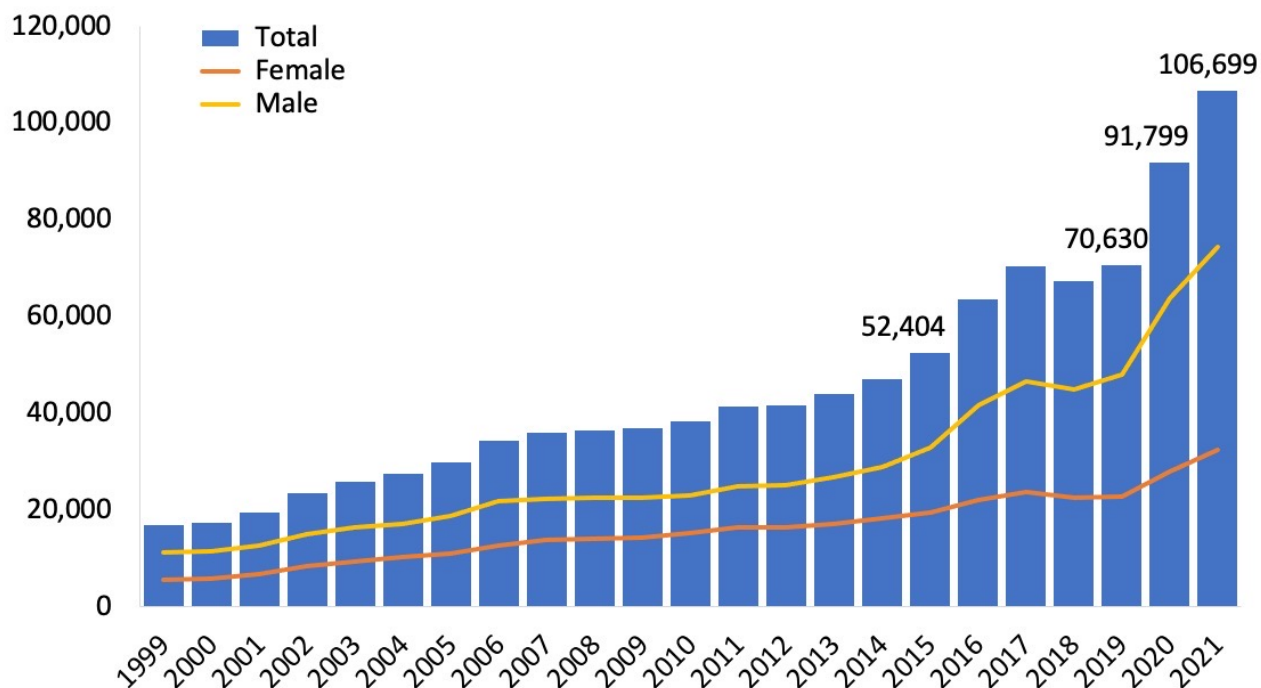
- ▶ Established 4 channels a patient may obtain/receive naloxone
 1. Law enforcement officers may possess and administer naloxone
 2. Prescribers may prescribe naloxone to a person other than the patient such as a family member/friend/other person
 3. Unlicensed person or entity may store and/or dispense naloxone without charge or compensation under a standing order from an authorized prescriber
 4. Pharmacists may dispense naloxone under a pharmacy standardized procedure or physician written protocol without RX

Good Samaritan Drug Overdose Act

- ▶ **Built-in protection from liability**
 - ▶ A person who, acting in **good faith** and with **reasonable care**, prescribes, dispenses, or administers naloxone pursuant is **not subject to any criminal or civil liability** or any **professional disciplinary action** for: (a) Such prescribing or dispensing; or (b) Any outcomes that result from the eventual administration of naloxone.

Scope of Problem

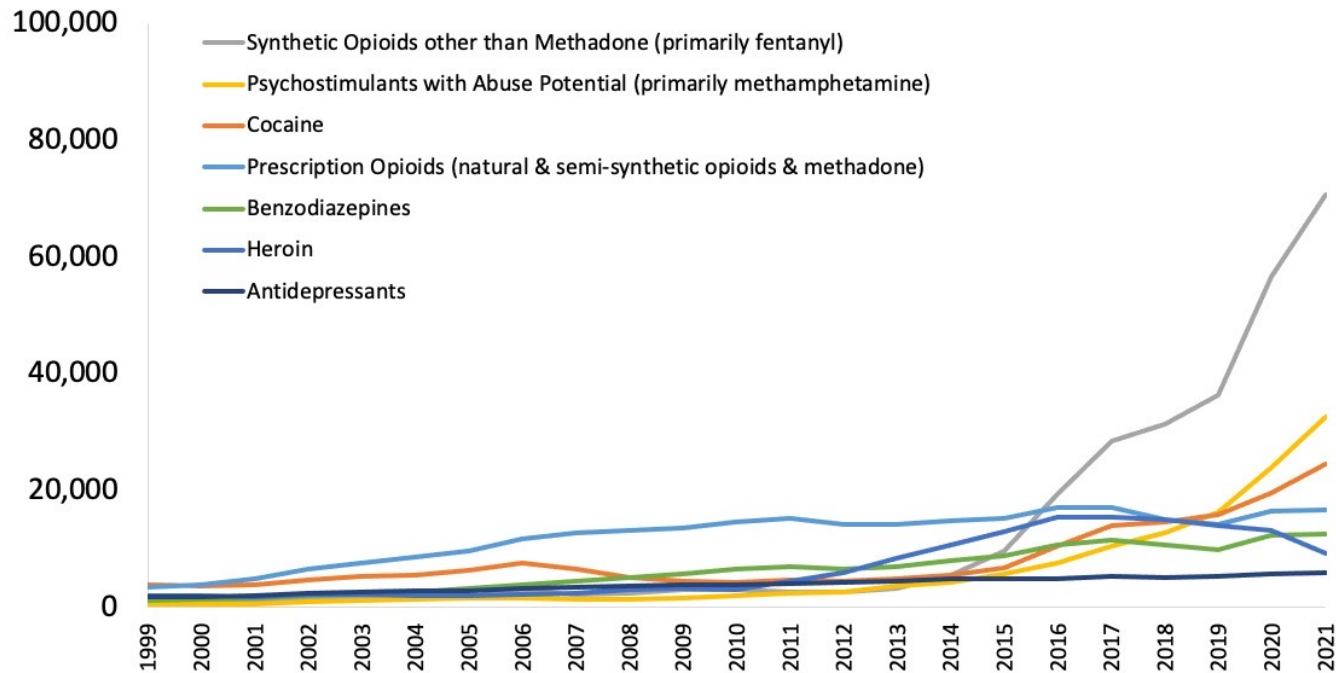
Figure 1. National Drug-Involved Overdose Deaths*, Number Among All Ages, by Gender, 1999-2021



*Includes deaths with underlying causes of unintentional drug poisoning (X40–X44), suicide drug poisoning (X60–X64), homicide drug poisoning (X85), or drug poisoning of undetermined intent (Y10–Y14), as coded in the International Classification of Diseases, 10th Revision. Source: Centers for Disease Control and Prevention, National Center for Health Statistics. Multiple Cause of Death 1999-2021 on CDC WONDER Online Database, released 1/2023.

Scope of Problem

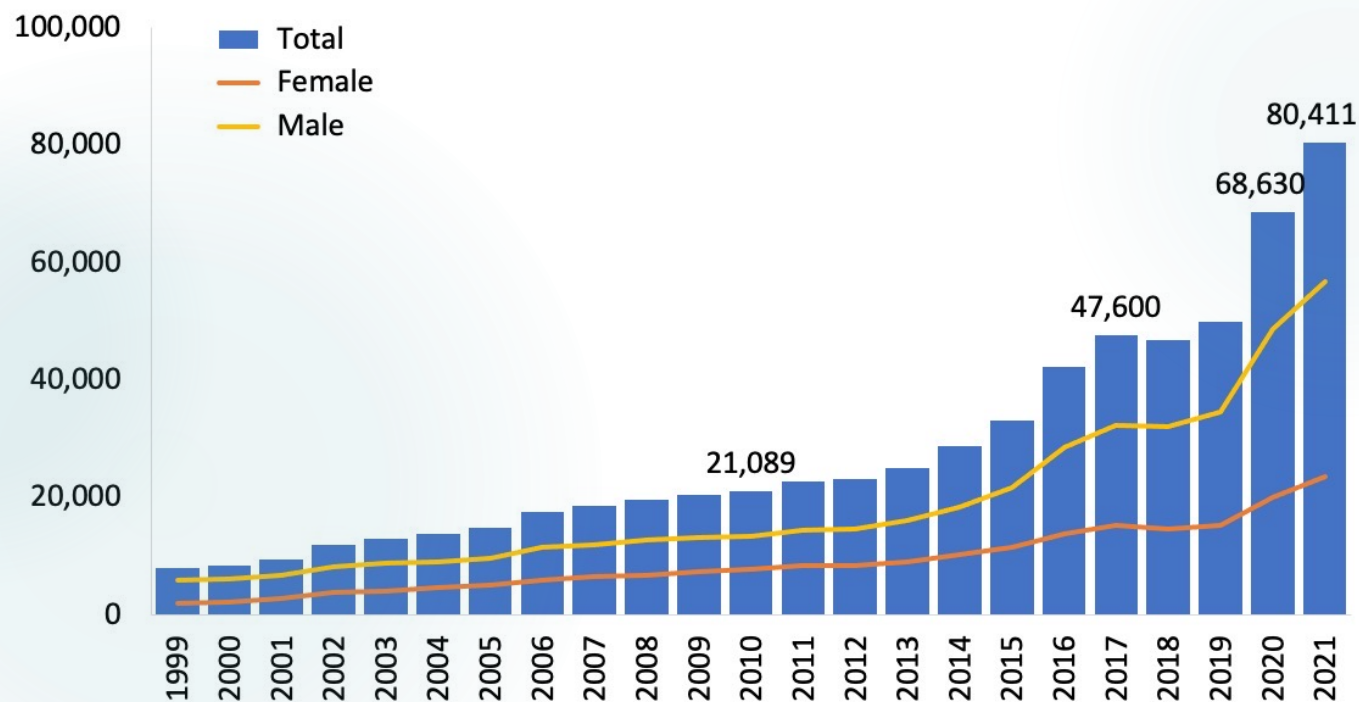
Figure 2. National Drug-Involved Overdose Deaths*, Number Among All Ages, 1999-2021



*Includes deaths with underlying causes of unintentional drug poisoning (X40–X44), suicide drug poisoning (X60–X64), homicide drug poisoning (X85), or drug poisoning of undetermined intent (Y10–Y14), as coded in the International Classification of Diseases, 10th Revision. Source: Centers for Disease Control and Prevention, National Center for Health Statistics. Multiple Cause of Death 1999-2021 on CDC WONDER Online Database, released 1/2023.

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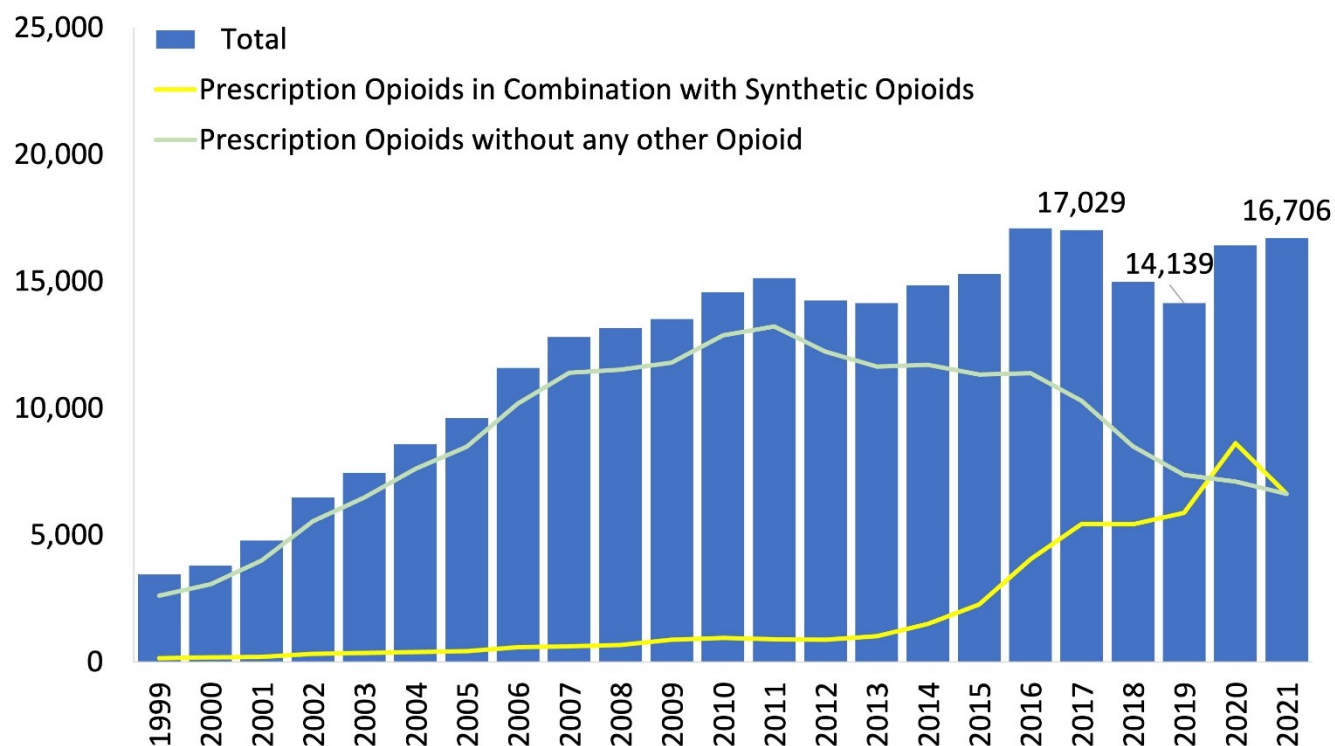
Figure 3. National Overdose Deaths Involving Any Opioid*, Number Among All Ages, by Gender, 1999-2021



*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 1999-2021 on CDC WONDER Online Database, released 1/2023.

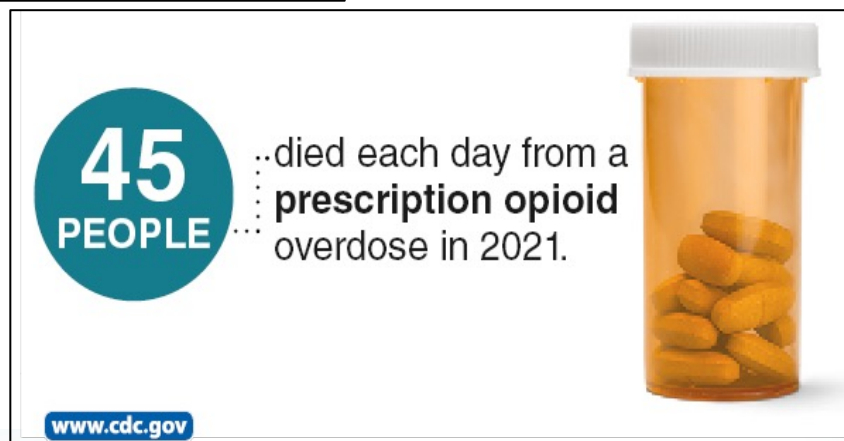
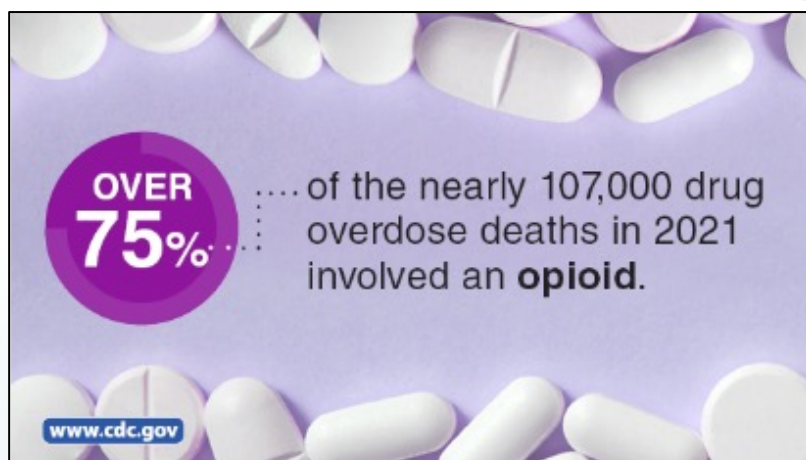
Scope of Problem

Figure 4. National Overdose Deaths Involving Prescription Opioids*, Number Among All Ages, 1999-2021



*Among deaths with drug overdose as the underlying cause, the prescription opioid subcategory was determined by the following ICD-10 multiple cause-of-death codes: natural and semi-synthetic opioids (T40.2) or methadone (T40.3). Source: Centers for Disease Control and Prevention, National Center for Health Statistics. Multiple Cause of Death 1999-2021 on CDC WONDER Online Database, released 1/2023.

Scope of Problem



Opioid Overdose Epidemic

- ▶ Overdoses are the leading injury-related cause of death in the United States and appear to have accelerated during the COVID-19 pandemic
- ▶ In 2021, nearly 107,000 people died from drug overdoses, a 51% increase from the approximately 71,000 overdose deaths in 2019.
- ▶ Among the 2021 overdose deaths, about 75% involved a prescription or illicit opioid.
- ▶ Research shows that people who have had at least one overdose are more likely to have another.

2015 Opioid Prescription Data in Nevada

- **2nd highest** for hydrocodone prescriptions (ARCOS)
- **2nd highest** for oxycodone prescriptions (ARCOS)
- **4th highest** for methadone prescriptions (ARCOS)
- **7th highest** for codeine prescriptions (ARCOS)



*****In 2015, Nevada had 419 opioid-related overdose deaths*****

2019 Opioid Prescription Data in Nevada

- **11th highest** for hydrocodone prescriptions (ARCOS)
- **4th highest** for oxycodone prescriptions (ARCOS)
- **23rd highest** for methadone prescriptions (ARCOS)
- **32nd highest** for codeine prescriptions (ARCOS)



*****In 2019, Nevada had 374 opioid-related overdose deaths*****

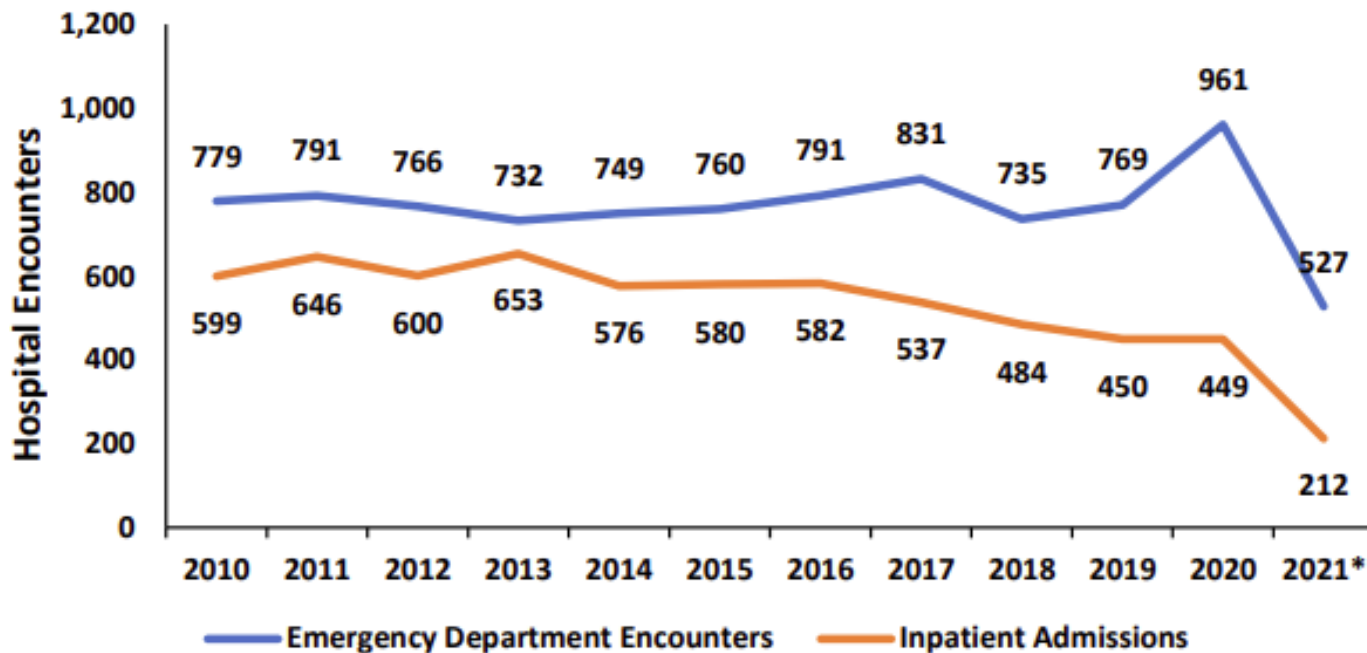
2022 Opioid Prescription Data in Nevada

- **12th highest** for hydrocodone prescriptions (ARCOS)
- **3rd highest** for oxycodone prescriptions (ARCOS)
- **32nd highest** for methadone prescriptions (ARCOS)
- **38th highest** for codeine prescriptions (ARCOS)



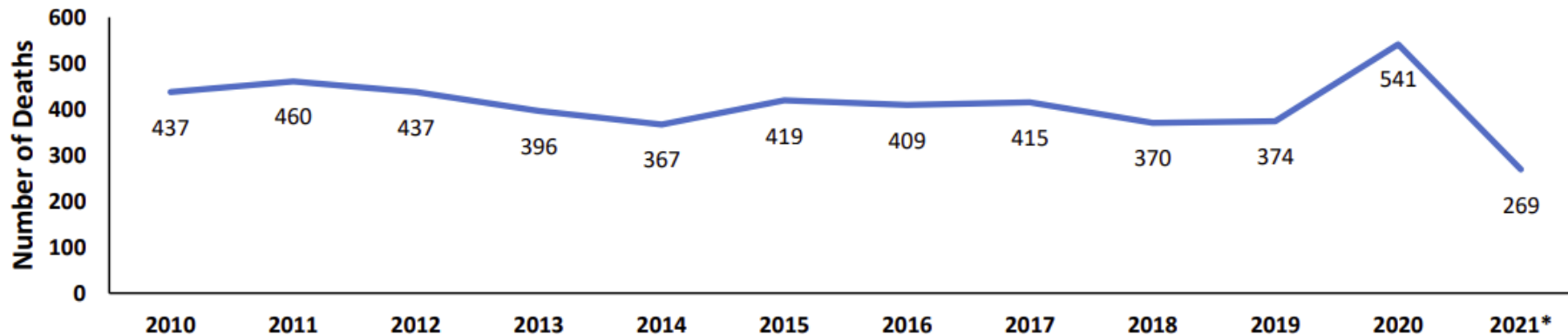
Scope of Problem in Nevada

Opioid-Related Poisonings (ED and IP), Nevada Residents, 2010-2021*



Scope of Problem in Nevada

Opioid-Related Overdose Deaths, Nevada Residents, 2010-2021*

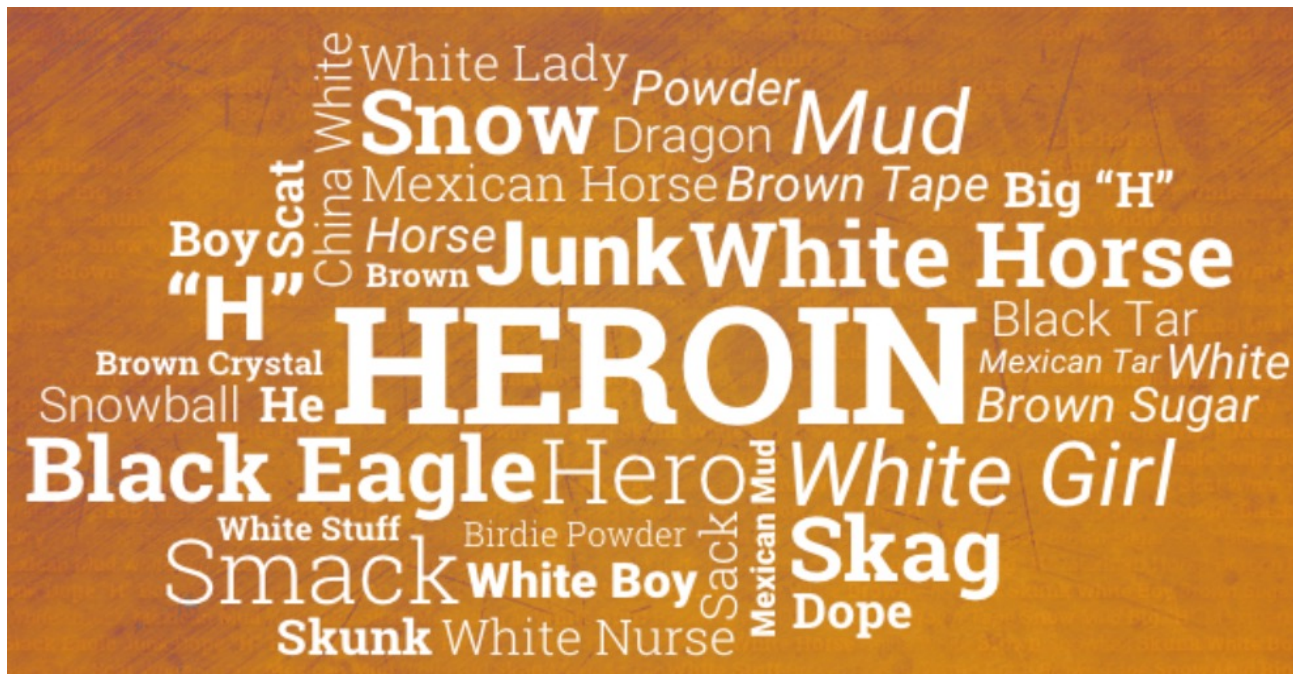


Offending Agents (Prescription)

- ▶ **Buprenorphine** Suboxone®, Subutex®, Butrans®
- ▶ **Codeine** Phenergan with codeine, Fioricet/Fiorinal with codeine
- ▶ **Fentanyl** Duragesic®, Actiq®, Fentora®, Sublimaze®, Subsys®
- ▶ **Hydrocodone** Zohydro ER®, Hysingla ER®, Vicodin®, Norco®, Hycet®
- ▶ **Hydromorphone** Dilaudid®
- ▶ **Methadone** Methadose®
- ▶ **Morphine** Avinza®, Kadian®, MS Contin®
- ▶ **Oxycodone** Percocet®, Oxycontin®, Endocet®, Roxicet®
- ▶ **Oxymorphone** Opana®
- ▶ **Tramadol** Ultram®, Ultracet

Offending Agents (Illicit)

► Heroin



Common street names used by dealers and addicts to describe heroin in its various forms (cut with cocaine, marijuana, Fentanyl, MDMA, methamphetamine)

Offending Agents (Illicit)

► Fentanyl

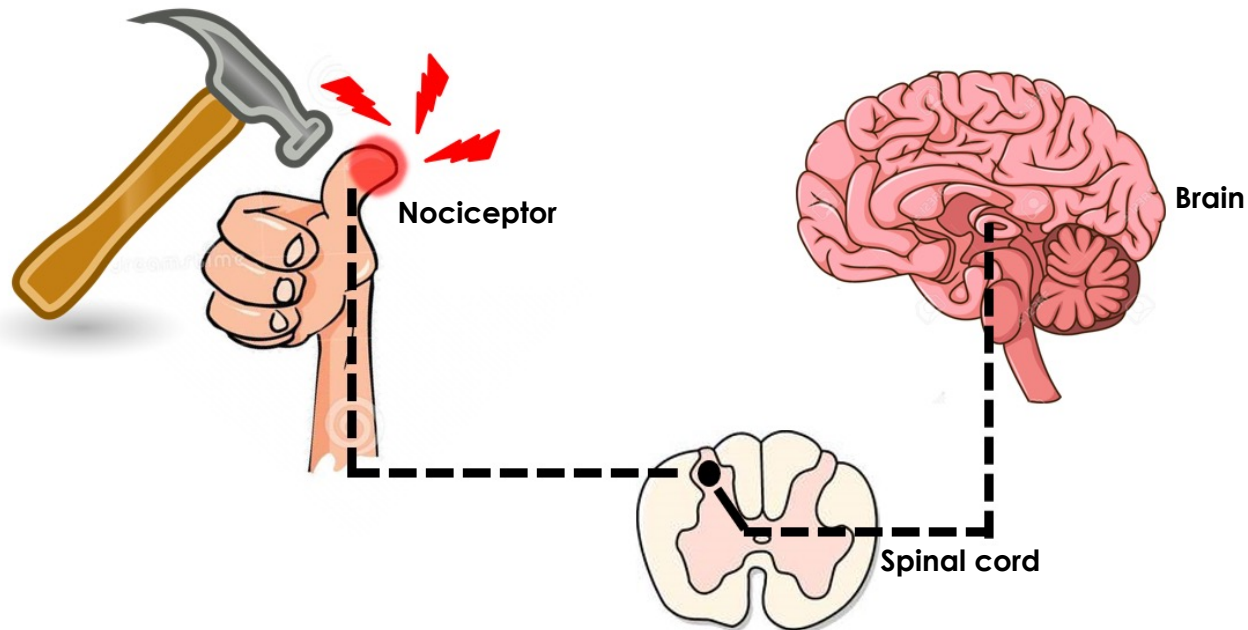


Common slang for fentanyl mixed (cut into) with other drugs. This is common practice, however, most people do not realize their drugs have been cut with fentanyl, which has led to fentanyl becoming the number one cause of overdoses in the U.S.

- Birria (mixed with heroin)
- Chiva Loca (mixed with heroin)
- Facebook (mixed with heroin in pill form)
- Dirty Fentanyl (mixed with cocaine)
- Takeover (mixed with cocaine)

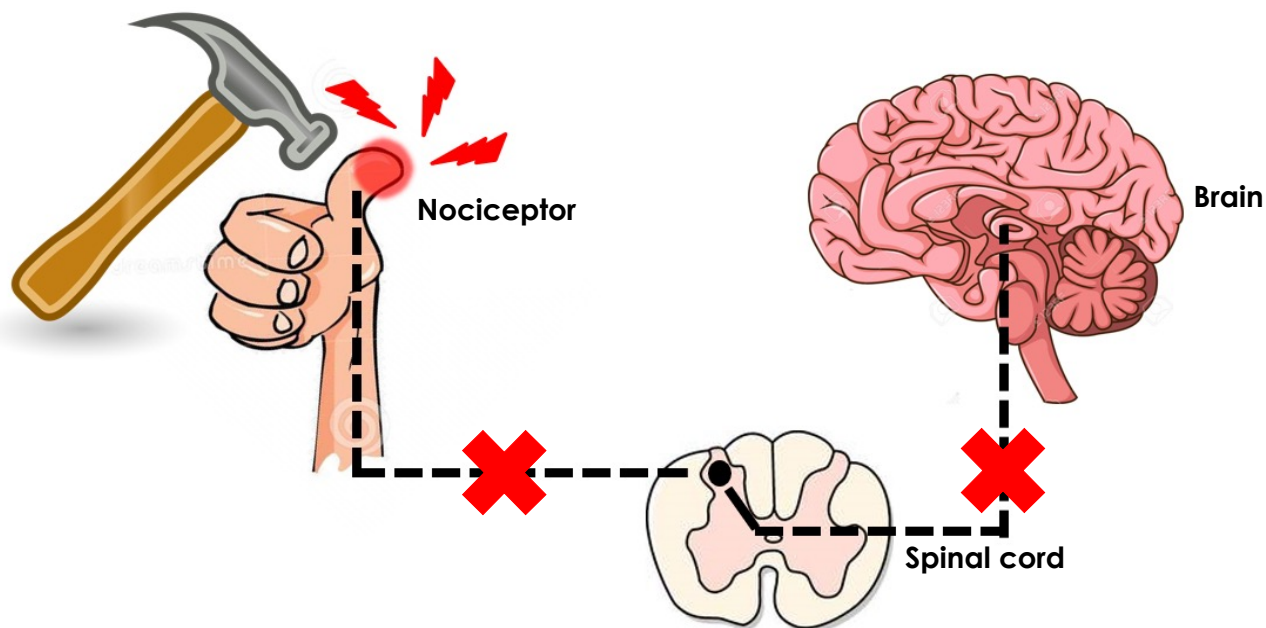
Pain

- ▶ Pain receptors (nociceptors) in skin, walls of organs, deep tissues, muscles and joints sends pain signals → spinal cord → brain



How Opioids Work

- ▶ Opioid receptors found in brain, spinal cord, gastrointestinal (GI) tract
 - ▶ Mu (μ), Kappa (κ), δ (delta)
- ▶ Opioids bind to opioid receptors inhibiting pain signaling



How Opioids Work

- ▶ Binding of opioid to opioid receptors also causes side effects
- ▶ Side effects are worsened and can even lead to death if large amounts of opioids are consumed (**overdose**)

- ▶ Mu (μ)

- ▶ **Analgesia**
- ▶ **Euphoria**
- ▶ **Tolerance**
- ▶ **Dependence**
- ▶ **Constipation**
- ▶ **Nausea/vomiting**
- ▶ **Respiratory depression**

- ▶ Kappa (κ)

- ▶ Analgesia
- ▶ Sedation

- ▶ Delta (δ)

- ▶ Analgesia
- ▶ **Respiratory depression**

Risk Factors for Opioid Overdose

- ▶ High-dose opioid prescription
- ▶ Substance use disorder
- ▶ Using opioids with other central nervous system depressants
 - ▶ Benzodiazepine
 - ▶ Muscle relaxants
 - ▶ Alcohol
 - ▶ Sleep aids
 - ▶ Xylazine “Tranq”
- ▶ Decreased kidney, liver function
- ▶ History of overdose
- ▶ Reduced tolerance
 - ▶ Detoxification from hospital
 - ▶ Release from incarceration
- ▶ Mental Health Disorder
- ▶ Illicit fentanyl or heroin use
- ▶ Changes in quality or purity of street heroin and fentanyl

Signs and symptoms of an **Opioid Overdose**



Breathing
slow or absent



Cannot be woken up
or not moving



Choking
or coughing, gurgling,
or snoring sounds



Dizziness
and disorientation



Cold
or clammy skin



Pupils
extremely small



Discolouration
of lips and nails

If someone is making unfamiliar sounds while “sleeping” it is worth trying to wake him/her up. Many think this person is snoring, when in fact the person is overdosing.

Vast majority of opioid overdoses are accidental and result from taking inappropriate doses of opioids or mixing with other substances. These poisonings typically take **45-90 minutes** to turn fatal, creating an opportunity to intervene.

What is Naloxone?

- ▶ Opioid antagonist:
 - ▶ Approved by FDA to rapidly reverse opioid overdose. It is an opioid antagonist—meaning that it binds to opioid receptors and can reverse and block the effects of opioids such as heroin, morphine, and oxycodone.
 - ▶ Administered when a patient is showing signs of opioid overdose.
 - ▶ Naloxone is a temporary treatment and its effects do not last long. Therefore, it is critical to obtain medical intervention as soon as possible after administering/receiving naloxone.
 - ▶ Naloxone is effective if opioids are misused in combination with other sedatives or stimulants. It is not effective in treating overdoses in which opioids are not involved such as a benzodiazepines or stimulant overdoses involving cocaine and amphetamines.

<https://www.narcan.com/pdf/NARCAN-Prescribing-Information.pdf>








<https://www.bjatraining.org/tools/naloxone/Naloxone-Background>

http://prescribetoprevent.org/wp2015/wp-content/uploads/Naloxone-product-chart.17_04_14.pdf

[What is Naloxone? | SAMHSA](#)

What is Naloxone?

- ▶ Adults/Pediatrics/Geriatric/Pregnant:
 - ▶ Adults and pediatrics over age one year: use as instructed
 - ▶ Geriatric over age 65 years: clinical experience has not identified differences in responses between the elderly and younger patients.
 - ▶ Pregnant: limited data on naloxone use in pregnant women. Naloxone crosses placenta, may cause withdrawal to the fetus. Consider benefits to mother and risk to fetus before administration.
 - ▶ Pediatrics less than one year: neonatal opioid withdrawal syndrome, unlike opioid withdrawal syndrome in adults, may be life-threatening. Consider use of a naloxone product that can be dosed according to weight and titrated to effect.

Opioid Overdose Reversal Medication	Brand	Formulation	Dosage	Availability	Considerations	
Naloxone	N/A	Single-dose vial: Intramuscular, intravenous, subcutaneous injection		0.4 mg/ml	RX	Has been studied and used in the real world to reverse overdoses for decades; cheapest naloxone available; easy to use.
Naloxone	Zimhi® (approved October 15, 2021)	Auto-injector: Intramuscular, subcutaneous injection		5 mg/ml	RX	Accessible product format that auto-injects the medication; high dose compared to other products; may cause severe withdrawal symptoms in people with opioids in their body.
Naloxone	N/A	Adaptable Nasal Spray		2 mg/ml	RX	Assembly required to attach nasal spray adapter to needle-less syringe. Not approved by FDA. Possible to titrate to meet the needs of the patient and facilitate a gentler overdose reversal with potential for less severe withdrawal in people with opioids in their body.
Naloxone	Kloxxado® (approved April 30, 2021)	Single-use Nasal Spray		8 mg/0.1 ml	RX	High dose compared to other products; may cause severe withdrawal symptoms in people with opioids in their body.
Nalmefene	Opvee (approved May 22, 2023)	Single-use Nasal Spray		2.7 mg/0.1 ml	RX	Longer lasting than naloxone but may cause severe extended withdrawal in people with opioids in their body.
Naloxone	Narcan, generic (approved in 2015)	Single-use Nasal Spray		4 mg/ 0.1 ml	RX, OTC	May cause withdrawal symptoms in people who have opioids in their body.
Naloxone	RiVive™ (approved July 28, 2023)	Single-use Nasal Spray		3 mg	RX, OTC	Lower dose can facilitate a gentler overdose reversal with less severe withdrawal in people with opioids in their body

Intranasal Narcan® vs RiVive™

Narcan®

- ▶ Active ingredient: naloxone hydrochloride **4 mg**
- ▶ Administration: intranasal
- ▶ Onset: 2-3 min
- ▶ Duration: 30-90 min depending on administration
- ▶ Dosage (adults): **4 mg** (every 2-3 min) or until improvement in respiratory function
- ▶ Storage: **store at room temperature or refrigerated, between 2°C to 25°C (36°F to 77°F)**, do not freeze, avoid excessive heat above 40°C (104°F), **protect from light**
- ▶ March 29, 2023 – FDA approved Narcan for OTC, nonprescription, use – the first naloxone product approved for use without a prescription. Approximately \$44.99 OTC.

RiVive™

- ▶ Active ingredient: naloxone hydrochloride **3 mg**
- ▶ Administration: intranasal
- ▶ Onset: 2-3 min
- ▶ Duration: 30-90 min depending on administration
- ▶ Dosage (adults): **3 mg** (every 2-3 min) or until improvement in respiratory function
- ▶ Storage: **store at 20°C to 25°C (68°F to 77°F), do not refrigerate**, avoid excessive heat above 40°C (104°F)
- ▶ July 28, 2023 – FDA approved RiVive for OTC, nonprescription use - the second naloxone product approved for use without a prescription. Cannot purchase OTC yet, likely available early 2024. RiVive is expected to be free or low-cost as the company, Harm Reduction Therapeutics (HRT), Inc., is a nonprofit pharmaceutical company.

Intranasal Narcan® vs RiVive™








- ✓ EMERGENCY TREATMENT OF OPIOID OVERDOSE
- ✓ ORIGINAL PRESCRIPTION STRENGTH
- ✓ EASY TO USE
- ✓ CAN SAVE A LIFE
- ✓ 2 SINGLE-DOSE NASAL SPRAY DEVICES



Administering Intranasal Narcan® vs RiVive™

 <p>1 CHECK</p>	<p>Step 1: CHECK if you suspect an overdose:</p> <ul style="list-style-type: none"> • CHECK for a <u>suspected overdose</u>: the person will not wake up or is very sleepy or not breathing well <ul style="list-style-type: none"> • yell "Wake up!" • shake the person gently • if the person is not awake, go to Step 2
 <p>2 GIVE</p>	<p>Step 2: Give 1st dose in the nose</p> <ul style="list-style-type: none"> • HOLD the nasal spray device with your thumb on the bottom of the plunger • INSERT the nozzle into either NOSTRIL • PRESS the plunger firmly to give the 1st dose • 1 nasal spray device contains 1 dose
 <p>3 CALL</p>	<p>Step 3: CALL 911</p> <ul style="list-style-type: none"> • CALL 911 immediately after giving the 1st dose
 <p>4 WATCH/GIVE</p>	<p>Step 4: WATCH & GIVE</p> <ul style="list-style-type: none"> • WAIT 2-3 minutes after the 1st dose to give the medicine time to work • if the person <u>wakes up</u>: Go to Step 5 • if the person does <u>not wake up</u>: <ul style="list-style-type: none"> • CONTINUE TO GIVE doses every 2-3 minutes until the person wakes up • it is safe to keep giving doses
 <p>5 STAY</p>	<p>Step 5: STAY</p> <ul style="list-style-type: none"> • STAY until ambulance arrives: even if the person wakes up • GIVE another dose if the person becomes very sleepy again • You may need to give all the doses in the pack

 <p>STEP 1 CHECK</p>	<p>Step 1: CHECK if you suspect an overdose</p> <ul style="list-style-type: none"> • CHECK for a <u>suspected overdose</u>: the person will not wake up or is very sleepy or not breathing well • Yell "Wake up!" • Shake the person gently • If the person is not awake, go to Step 2
 <p>STEP 2 GIVE</p>	<p>Step 2: GIVE 1st dose in the nose</p> <ul style="list-style-type: none"> • Hold nasal spray device with thumb on plunger and a finger on each side of the nozzle • Insert nozzle into one nostril and press plunger firmly • Each nasal spray device contains only one dose of naloxone
 <p>STEP 3 CALL 911</p>	<p>Step 3: CALL 911</p> <ul style="list-style-type: none"> • Get medical help <u>immediately</u> after giving the first dose • Call 911 now
 <p>STEP 4 WATCH/GIVE</p>	<p>Step 4: WATCH & GIVE</p> <ul style="list-style-type: none"> • WAIT 2-3 minutes after the 1st dose to give the medicine time to work • If the person <u>wakes up</u>: Go to Step 5 • If the person does <u>not wake up</u>: <ul style="list-style-type: none"> • Give a second dose of medicine using a new nasal spray device • It is safe to keep giving doses every 2-3 minutes until the person wakes up
 <p>STEP 5 STAY</p>	<p>Step 5: STAY</p> <ul style="list-style-type: none"> • STAY until ambulance arrives: even if the person wakes up • GIVE another dose if the person becomes very sleepy again • You may need to give all the doses in the pack



Responding to an Opioid Overdose

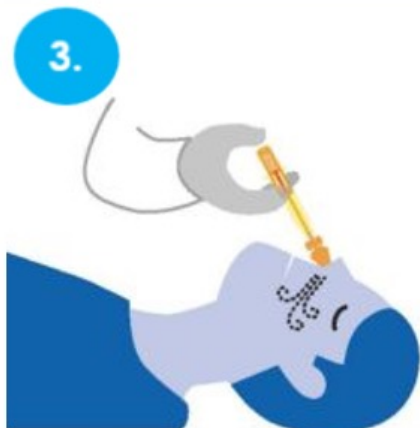
IT MAY BE HARD TO TELL IF A PERSON IS HIGH OR EXPERIENCING AN OVERDOSE. IF YOU AREN'T SURE, IT'S BEST TO TREAT IT LIKE AN OVERDOSE— YOU COULD SAVE A LIFE.

Responding to an Opioid Overdose



Assessment and stimulation

- If unconscious, try to wake the person, shake them, shout their name
- Sternal rub



Administer naloxone

- Repeat in 2-3 min if no or minimal response. Wears off in 30-90 min.



Check for breathing

- Give CPR if trained or do rescue breathing



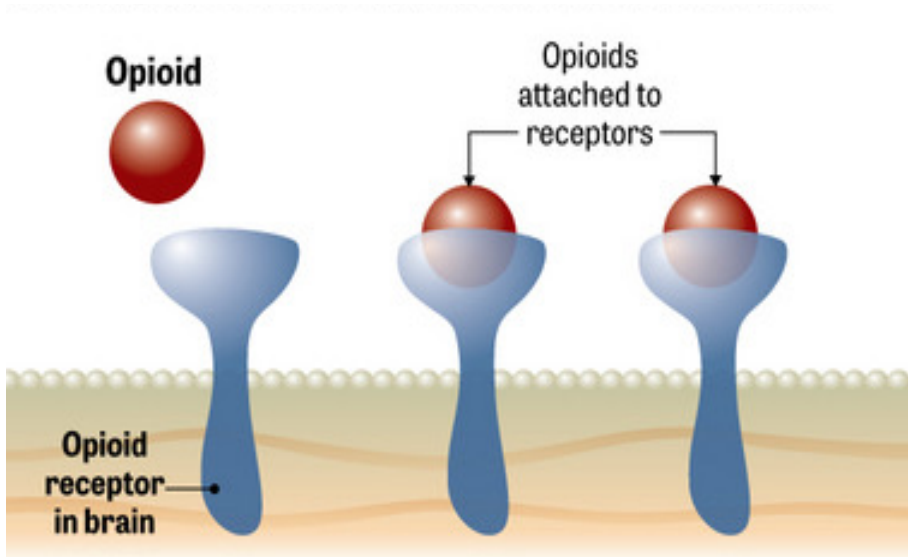
Stay with person

- Lay the person on their side to prevent choking.
- Stay with person until emergency workers arrive.

How does Naloxone work?

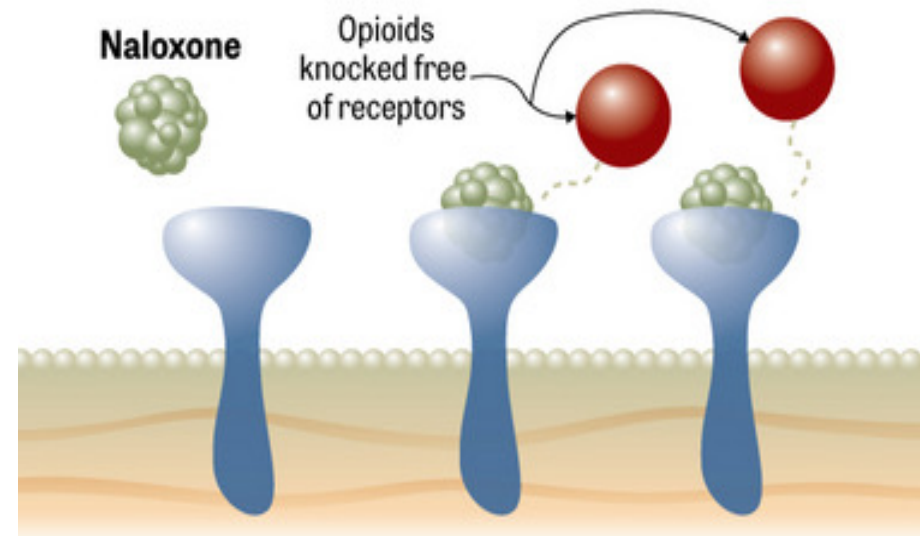
Opioid Overdose

The brain has many receptors for opioids. An overdose occurs when too much of an opioid (heroin, OxyContin, Percocet) fits in too many receptors, stopping the person's breathing.



Overdose Reversal

Naloxone has a stronger affinity to the opioid receptors than opioid drugs, so it knocks the opioids off the receptors for a short time. This allows the person to breathe again and reverses the overdose.



Naloxone Side Effects

- ▶ Sudden opioid withdrawal symptoms

- ▶ Acute pain
- ▶ Body aches
- ▶ Diarrhea
- ▶ Increased heart rate
- ▶ Fever
- ▶ Runny nose
- ▶ Sneezing
- ▶ Goose bumps

- ▶ Sweating
- ▶ Nausea and vomiting
- ▶ Nervousness, anxiety
- ▶ Restlessness or irritability
- ▶ Shivering or trembling
- ▶ Stomach cramping
- ▶ Weakness
- ▶ Increased blood pressure

Additional Naloxone Education

- ▶ Naloxone not a substitute for emergency medical treatment
- ▶ Naloxone will not harm anyone who is not on opioids
- ▶ Depending on extent of overdose, more than one naloxone dose may be needed
- ▶ Duration of naloxone is generally shorter than opioids, repeat dosing is likely required after naloxone wears off in 30-90 min if patient does not seek emergency medical treatment
- ▶ Naloxone has a shelf life ranging from 18-24 months depending on the formulation

FENTANYL[†]

SAFETY RECOMMENDATIONS FOR FIRST RESPONDERS

[†] For the purposes of this document, fentanyl, related substances, and synthetic opioids (herein after referred to as fentanyl[†]) includes fentanyl analogues (e.g., acetylfentanyl, acrylfentanyl, carfentanil, furanylfentanyl), novel synthetic opioids (e.g., U-47700), and other drugs that may be laced with these substances.

- ▶ **The abuse of drugs containing fentanyl[†] is killing Americans. Misinformation and inconsistent recommendations regarding fentanyl[†] have resulted in confusion in the first responder community.**
- ▶ You as a first responder (law enforcement, fire, rescue, and emergency medical services (EMS) personnel) are increasingly likely to encounter fentanyl[†] in your daily activities (e.g., responding to overdose calls, conducting traffic stops, arrests, and searches).
- ▶ This document provides scientific, evidence-based recommendations to protect yourself from exposure.

WHAT YOU NEED TO KNOW

- ▶ Fentanyl[†] can be present in a variety of forms (e.g., powder, tablets, capsules, solutions, and rocks).
- ▶ Inhalation of airborne powder is MOST LIKELY to lead to harmful effects, but is less likely to occur than skin contact.
- ▶ Incidental skin contact may occur during daily activities but is not expected to lead to harmful effects if the contaminated skin is promptly washed off with water.
- ▶ Personal Protective Equipment (PPE) is effective in protecting you from exposure.
- ▶ Slow breathing or no breathing, drowsiness or unresponsiveness, and constricted or pinpoint pupils are the specific signs consistent with fentanyl[†] intoxication.
- ▶ Naloxone is an effective medication that rapidly reverses the effects of fentanyl[†].

Actions to take . . .

To protect yourself from exposure

- ▶ Wear **gloves** when the presence of fentanyl[†] is suspected.
- ▶ **AVOID actions that may cause powder to become airborne.**
- ▶ Use a properly-fitted, NIOSH-approved **respirator ("mask")**, wear **eye protection**, and minimize skin contact when responding to a situation where small amounts of suspected fentanyl[†] are visible and may become airborne.
- ▶ Follow your department guidelines if the scene involves large amounts of suspected fentanyl[†] (e.g., distribution/storage facility, pill milling operation, clandestine lab, gross contamination, spill or release).

When exposure occurs

- ▶ Prevent further contamination and notify other first responders and dispatch.
- ▶ Do not touch your eyes, mouth, nose or any skin after touching any potentially contaminated surface.
- ▶ Wash skin thoroughly with cool water, and soap if available. **Do NOT use hand sanitizers as they may enhance absorption.**
- ▶ Wash your hands thoroughly after the incident and before eating, drinking, smoking, or using the restroom.
- ▶ If you suspect your clothing, shoes, and PPE may be contaminated, follow your department guidelines for decontamination.

If you or other first responders exhibit

- **Slow Breathing or No Breathing**
- **Drowsiness or Unresponsiveness**
- **Constricted or Pinpoint Pupils**
- ▶ Move away from the source of exposure and call EMS.
- ▶ Administer naloxone according to your department protocols. Multiple doses may be required.
- ▶ If naloxone is not available, rescue breathing can be a lifesaving measure until EMS arrives. Use standard basic life support safety precautions (e.g., pocket mask, gloves) to address the exposure risk.
- ▶ If needed, initiate CPR until EMS arrives.



Collaborative Support From:

- American College of Emergency Physicians
- American College of Medical Toxicologists
- American Industrial Hygiene Association
- Association of State and Territorial Health Officials
- Association of State Criminal Investigative Agencies
- Fraternal Order of Police

- International Association of Chiefs of Police
- International Association of Fire Chiefs
- International Association of Fire Fighters
- Major Cities Chiefs Association
- Major County Sheriffs of America
- National Alliance of State Drug Enforcement Agencies

- National Association of Counties
- National Association of County and City Health Officials
- National Association of Emergency Medical Technicians
- National Association of EMS Physicians
- National Association of State EMS Officials

NIOSH



- National Governor's Association
- National HIDTA Directors Association
- National Narcotic Officers' Associations' Coalition
- National Sheriff's Association
- National Volunteer Fire Council
- Police Executive Research Forum
- Police Foundation

<https://www.whitehouse.gov/ondcp/key-issues/fentanyl>

On November 1, 2017, the White House released the Fentanyl Safety Recommendations for First Responders.

Provides first responders with scientific, evidence-based recommendations to protect themselves when the presence of fentanyl is suspected. The recommendations are the result of a Federal Interagency Working Group coordinated by the White House National Security Council.

[Naloxone Background | Working with BJA NTAC \(ojp.gov\)
https://bjatta.bja.ojp.gov/sites/default/files/uploaded/Final%20STANDARD%20size%20of%20Fentanyl%20Safety%20Recommendations%20for%20First%20Responders.pdf](https://bjatta.bja.ojp.gov/sites/default/files/uploaded/Final%20STANDARD%20size%20of%20Fentanyl%20Safety%20Recommendations%20for%20First%20Responders.pdf)

Xylazine “Tranq”

- ▶ The monthly percentage of illegally manufactured fentanyl (IMF)-involved deaths with xylazine detected increased 276% (from 2.9% to 10.9%) between January 2019 and June 2022.

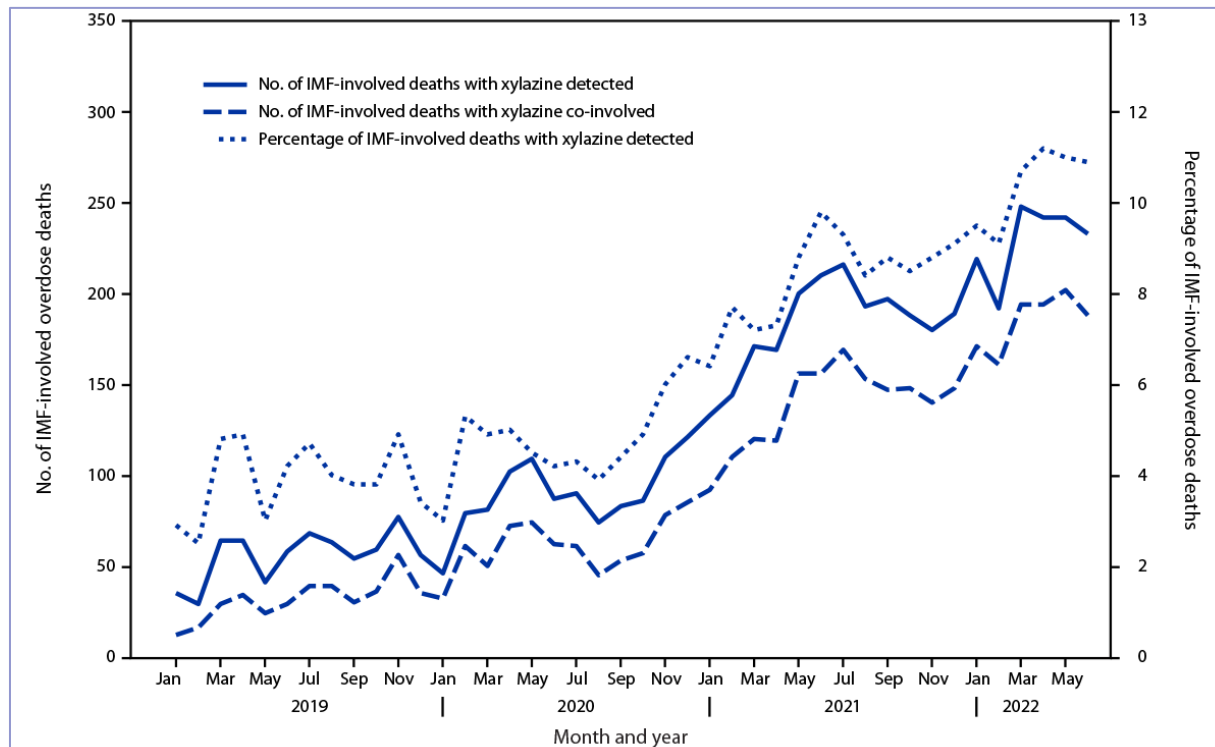


FIGURE 1. Number and percentage of drug overdose deaths involving* IMF,[†] by month and xylazine detection or co-involvement — State Unintentional Drug Overdose Reporting System, 21 jurisdictions,[§] January 2019–June 2022.

Xylazine “Tranq”

- ▶ April 12, 2023, due to its impact on the opioid crisis, fentanyl mixed (adulterated) with xylazine, the White House’s Office of National Drug Control Policy officially designated fentanyl adulterated or associated with xylazine as an emerging threat to the United States.
- ▶ July 11, 2023, the White House released a National Response Plan to address the emerging threat of fentanyl mixed with xylazine.

Xylazine “Tranq”

- ▶ A **non-opioid** sedative or tranquilizer used in **veterinary medicine**. Not approved for use in humans.
 - ▶ It is central nervous system (CNS) depressant
 - ▶ Used to sedate and provide analgesic effects on animals during procedures
 - ▶ Sold in powder or injectable solution
- ▶ **Illegal use of Xylazine**
 - ▶ It is often added to illicit opioids to lengthen the euphoric effects of opioids or increase the street value by increasing weight
 - ▶ DEA has seized xylazine and fentanyl mixtures in 48 of 50 states, and approximately 23% of fentanyl powder and 7% of fentanyl pills seized by the DEA in 2022 contained xylazine
 - ▶ Linked to an increasing number of overdose deaths
 - ▶ People who use illegal drugs may not be aware of the presence of xylazine.

Xylazine “Tranq” Overdose

- ▶ When combined with opioids, xylazine further depresses the CNS
- ▶ Effects of xylazine includes:
 - ▶ Difficulty breathing
 - ▶ Dangerously low blood pressure
 - ▶ Sedation
 - ▶ Slowed heart rate
 - ▶ Skin lesions
- ▶ A person who has taken xylazine may appear to have symptoms of opioid overdose

Treating a Xylazine “Tranq” Overdose

- ▶ In suspected xylazine overdose, experts recommend naloxone
- ▶ Naloxone will not reverse the effects of xylazine, however, because xylazine is often used with opioids, naloxone should still be given to reverse any **possible** opioid effects
- ▶ Responding to someone with signs and symptoms of a possible opioid overdose or an overdose involving opioids and xylazine?
 - ▶ **Call 911.** Stay with the person until first responders arrive. First responders can assess the situation and provide treatment.
 - ▶ **Give naloxone.** Naloxone can reverse the effect of opioids and will not cause harm if opioids are not involved in an overdose. However, because naloxone will not address the impact of xylazine on breathing, effects of xylazine may continue after naloxone is given. Consider xylazine as a contributor to overdose when naloxone administration is ineffective.
 - ▶ **Give rescue breaths.** Rescue breaths are especially helpful intervention for people who have used xylazine because it causes breathing to slow down.

Success Story

Nevada trooper saves man's life with anti-overdose drug

In 25 years working in law enforcement, Wayne Dice said, he's never used a stun gun, pepper spray or bullets — all common tools of the trade. But last week, the Nevada Highway Patrol sergeant used a new tool to save a life: a nasal spray with an opioid-overdose reversal drug.

"I was at the right place at the right time," Dice said Wednesday.

The Highway Patrol [announced in June](#) that it would equip officers who elect to train with the drug, naloxone. Dice volunteered.

On Sept. 17, Dice had just finished working a traffic stop south of Searchlight and was driving toward Laughlin when he saw a bus on the side of U.S. Highway 95 about 7:20 a.m. The bus driver waved him down and said a man in the bus was having a heart attack.

When Dice got on the bus, a passenger was performing CPR on an unconscious man.

"I didn't know what I had at the time," Dice said. "I didn't know it was a drug overdose."

Footage from Dice's body camera captured the encounter. The footage showed Dice trying to wake the man.

"Stay with me, that's it you're breathing, stay with me bud," Dice told the unconscious man while performing sternum rubs, a move used by first responders to elicit a response from patients by strongly pressing on their chest.

When Dice began to notice the signs: The man's skin was cold and clammy, and his pupils were pinpoint small. He still wasn't breathing.

"I pretty much knew at that point it was an overdose," Dice said. "He was basically, at that point, almost dead."

Dice and another passenger carried the man outside and lay him on a blanket. A volunteer firefighter from Cal-Nev-Ari and an off-duty firefighter from Laughlin stopped to help, but no medical personnel had arrived.

One of the two men helping Dice can be heard saying he doesn't "have that equipment on me."

"I got some Narcan if we need to use it," Dice said, referring to a brand name for naloxone. The he ran to get it.

A crying woman said she didn't know if the man had taken drugs. One of the men helping told Dice to use the naloxone because he was "not familiar with that, but it can't hurt him."

Dice used the spray on the man and performed CPR. When medical personnel arrived, Dice said, the man started breathing again. The footage showed Dice make a call over his radio that "the subject just came to."

"I could see him breathing better," Dice said. "After about five to seven minutes he actually opened his eyes. It was just a complete reversal of this overdose."

He said he didn't know what drugs the man had taken.

Naloxone restores normal respiratory function to someone whose breathing slowed or stopped due to a heroin or prescription-opioid overdose, according to the [National Institute on Drug Abuse](#). Naloxone can be used up to an hour and a half after a person has overdosed, the Highway Patrol said in June.

When the man was taken to a Henderson hospital for further treatment, Dice followed and brought the man's fiancée along.

Once at the hospital, the difference in the man's condition was "night and day," Dice said.

"He thanked me several times," Dice said. "He couldn't believe what I had done."

Dice said the nasal spray was simple to use, and his training consisted mostly of watching

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