

Fast Facts Opioids and Naloxone

Anita Mudan, MD 29 March 2023

Why does this matter?

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

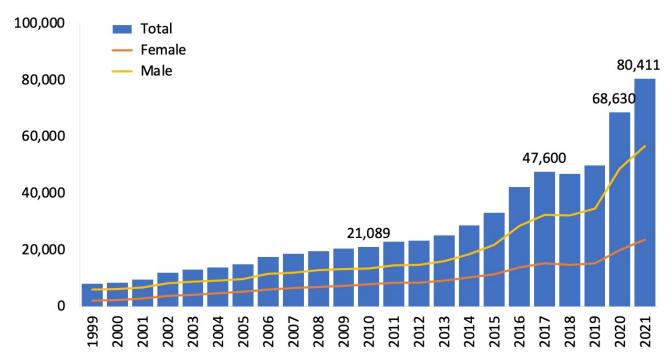


Figure 3. National Overdose Deaths Involving Any Opioid—Number Among All Ages, by Gender, 1999-2021. The figure above is a bar and line graph showing the total number of U.S. overdose deaths involving any opioid from 1999 to 2021. Any opioid includes prescription opioids (natural and semi-synthetic opioids and methadone), heroin, and synthetic opioids other than methadone (primarily fentanyl). Opioid-involved overdose deaths rose from 21,089 in 2010 to 47,600 in 2017 and remained steady through 2019. This was followed by a significant increase in 2020 with 68,630 reported deaths and again in 2021 with 80,411 reported overdose deaths. The bars are overlaid by lines showing the number of deaths by gender from 1999 to 2021 (Source: CDC WONDER).

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

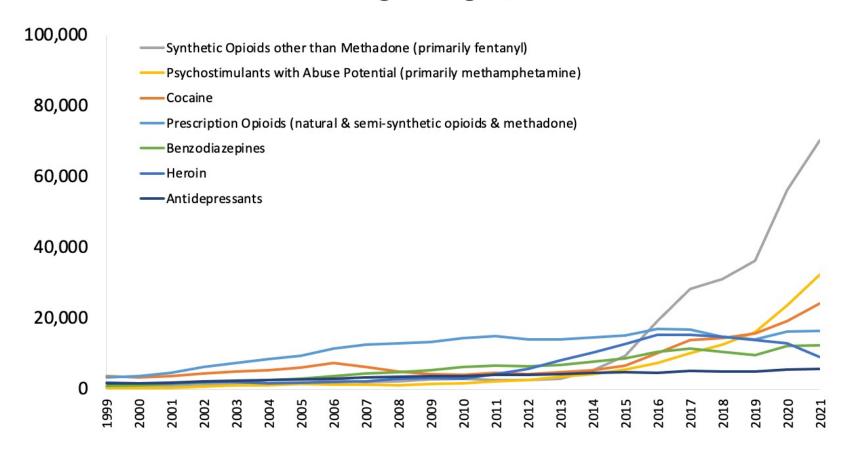


Figure 2. National Drug-Involved Overdose Deaths—Number Among All Ages, 1999-2021. Overall, drug overdose deaths rose from 2019 to 2021 with more than 106,000 drug overdose deaths reported in 2021. Deaths involving synthetic opioids other than methadone (primarily fentanyl) continued to rise with 70,601 overdose deaths reported in 2021. Those involving stimulants, including cocaine or psychostimulants with abuse potential (primarily methamphetamine), also continued to increase with 32,537 overdose deaths in 2021 (Source: CDC WONDER).

These are ALL opioids









Mylafent[®]

100 microgram/hour Transdermal Patch fentanyl



Methadone Hydrochloride U Oral Concentrate, USP

(Dye-Free, Sugar-Free, Unflavored)

10 mg per mL

NDC 63481-623-70

100 tablets



5 mg/325 mg

Multiple strengths: Do not dispense unless strength is stated.

Dispense the accompanying Medication Guide to each patient.

R_v only

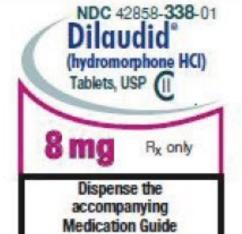
100 microgram/hour



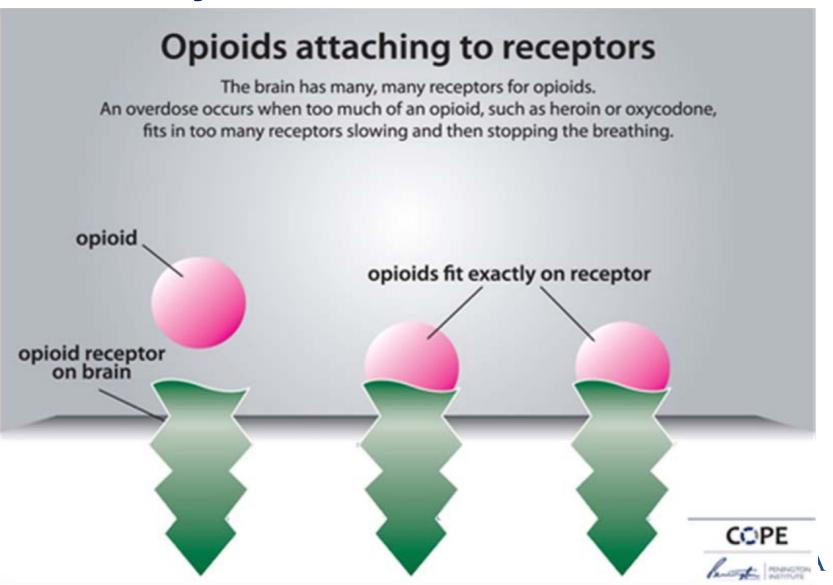
NDC 0074-3041-13

Vicodin® (Hydrocodone Bitartrate and Acetaminophen) Tablets, USP

5 mg / 300 mg



How do they work?



200mcg Oral Transmucosal Fentanyl Citrate 400mcg Oral Transmucosal Fentanyl Citrate 600mcg Oral Transmucosal Fentanyl Citrate 1200mcg Oral Transmucosal Fentanyl Citrate 1200mcg Oral Transmucosal Fentanyl Citrate 1200mcg

Fentanyl Oral Transmucosal Lozenges Mallinckrodt



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Pharmaceutical Fentanyl

LEGAL

Made by pharmaceutical company (quality control)

Forms: lozenges, patches, intravenous



Fentanyl

Lethal Dose 2mg



A lethal dose of fentanyl



With permission from Bruce Taylor/NHSP Forensic Lab 100x more potent

than Morphine 50x more potent COLUMBIA than Heroin

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FENTANYL: POTENT, POWERFUL, AND DEADLY

Comparing the Potency of Fentanyl With Other Common Opioids*

*All dosages are compared with 10 milligrams of morphine.



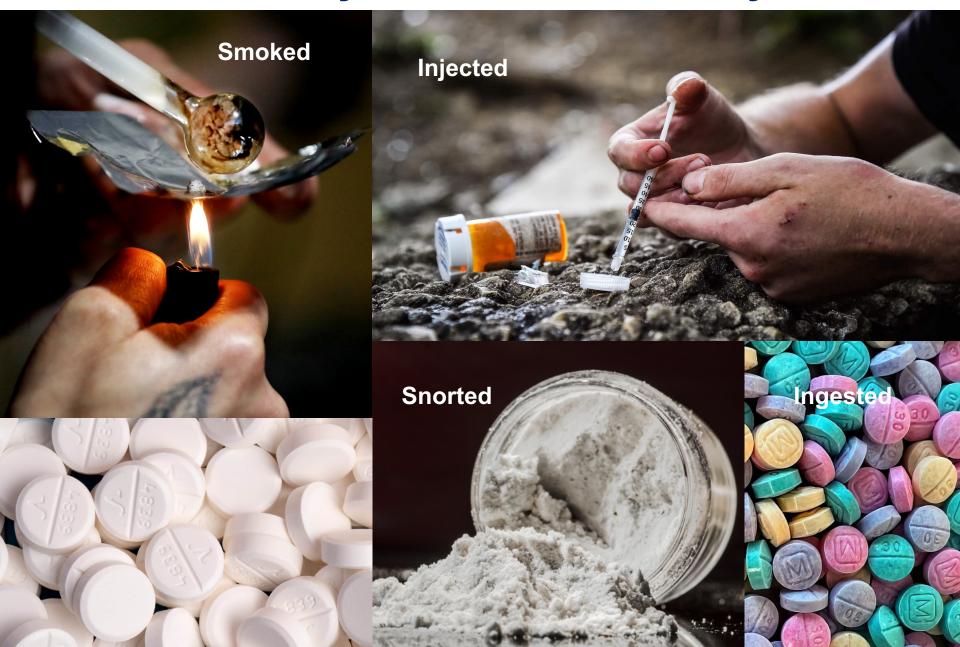
1.5x

3x

2.2x



How can you use illicit fentanyl?



Counterfeit Pills

WS

VS



Authentic Oxycodone



Counterfeit Oxycodone



Authentic Xanax®



Counterfeit Xanax®



WS



1BIA
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Authentic Adderall® Counterfeit Adderall®

The mystery "White Powder"



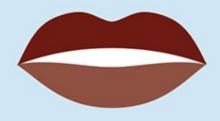
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Opioid Overdose: CLINICAL DIAGNOSIS

(no testing required)



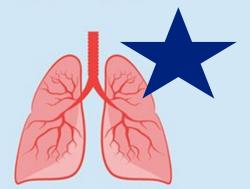


Unresponsiveness or unconsciousness.

Pinpoint pupils.

Snoring or gurgling sounds coming from mouth.







Blue lips or fingernails.

Shallow, slowed or stopped breathing.

Cold or clammy skin.





NOT BREATHING = NALOXONE!

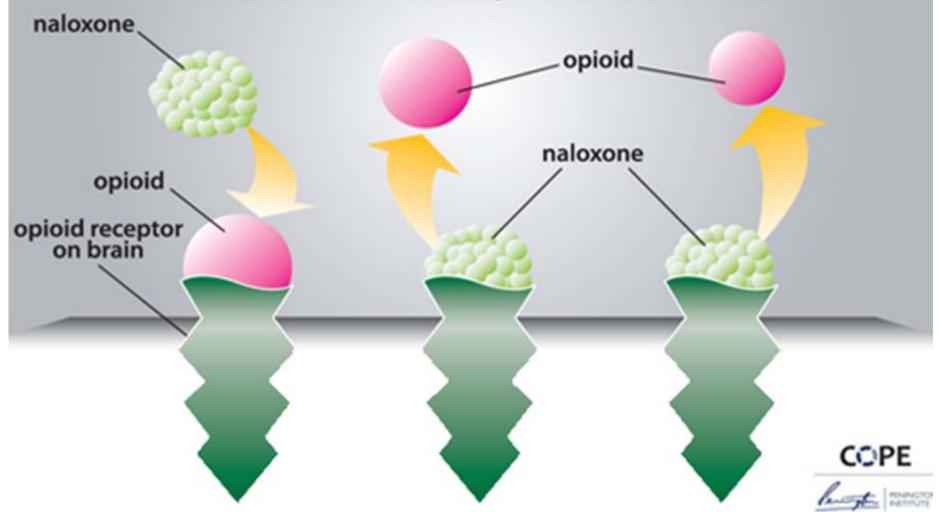


How does naloxone work?

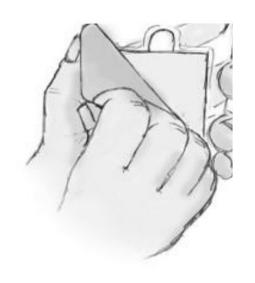
Naloxone reversing an overdose

Naloxone has a stronger affinity to the opioid receptors than opioids, such as heroin or oxycodone, so it knocks the opioids off the receptors for a short time (30-90 minutes).

This allows the person to breathe again and reverse the overdose.



How to administer naloxone







1) Peel 2) Place 3) Press

The entire dose of naloxone (4mg) will be administered as a single dose

Starts working in 2-3 minutes



Frequently Asked Questions

1. What if I give naloxone and there is no opioid on board?

 Nothing! If there is no opioid on board, naloxone will not have any clinical effect or harmful side effects.

2. Can you only use naloxone in adults?

Naloxone is safe for all age groups (including children).

3. What if the person used other drugs or alcohol with their opioid and I give them naloxone?

 Naloxone will only reverse the opioid effects but will not have any impact on the effects of the other drugs or alcohol in their system.

4. What do I do after giving naloxone?

 Call 911 either before or right after giving naloxone. All patients wo receive naloxone should be transported to the emergency department for monitoring as many opioids will remain in the system after the naloxone wears off, resulting in recurrent overdose symptoms.

5. How do I get naloxone?

As of 3/30/2023 it is over the counter!



Drug Testing

Standard Urine Drug Screen

- Amphetamines
- Barbiturates
- Benzodiazepines
- Cannabinoids
- Cocaine
- Opiates (morphine, codeine, heroin)
- PCP
- Methadone
- Oxycodone

Fentanyl is NOT detected on a standard urine opioid screening test!



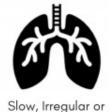
If it looks like an opioid overdose and responds to naloxone, it is an opioid.











Stopped Breathing



Clammy, Pale Skin

Blue Lips or Skin

Pinpoint Pupils

Slow Heart Beat

& RESCRIPTION THE







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Helpful Links

https://nida.nih.gov/research-topics/parents-educators

https://nida.nih.gov/research-topics/education/conversationstarters/10-questions-teens-ask-about-drugs-and-health

https://nida.nih.gov/research-topics/parents-educators/lesson-plans

https://nida.nih.gov/research-topics/parents-educators/lesson-plans/opioids-what-you-need-know

https://nida.nih.gov/publications/mind-matters-series

https://nida.nih.gov/research-topics/commonly-used-drugs-charts

https://store.samhsa.gov/product/Keeping-Youth-Drug-Free/sma17-3772

https://opa.hhs.gov/adolescent-health/substance-use-adolescence

