

Naloxone: The Gift of Time

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Objectives

- Describe the current national overdose concerns associated with opioids
- Identify signs and symptoms of opioid overdose
- Identify proper candidates for naloxone
- List and describe the available naloxone formulations including proper administration techniques
- Demonstrate the ability to properly counsel patients and caregivers on naloxone use
- Describe the current naloxone access laws and how these access laws are directed at improving patient access to naloxone.

Pain Management

Proper Assessment

Nonpharmacological Treatment Options

Nonopioid Options

Adjuvant Options

Opioid Options

Opioid Analgesics

- Treatment option for select patients
- Careful consideration of risks vs. benefits
- Constant monitoring needed
- Continued education
 - Safe Use
 - Proper Storage
 - Proper Disposal
 - Side effects

Signs of Opioid Overdose

- Unusual drowsiness, unable to wake with loud voice or firm sternal rub
- Body is limp
- Skin appears pale and/or clammy to the touch
- Fingernails or lips have blue cast
- Pinpoint pupils
- Patient is vomiting or making gurgling noises
- Breathing is very slowed, shallow, or has stopped

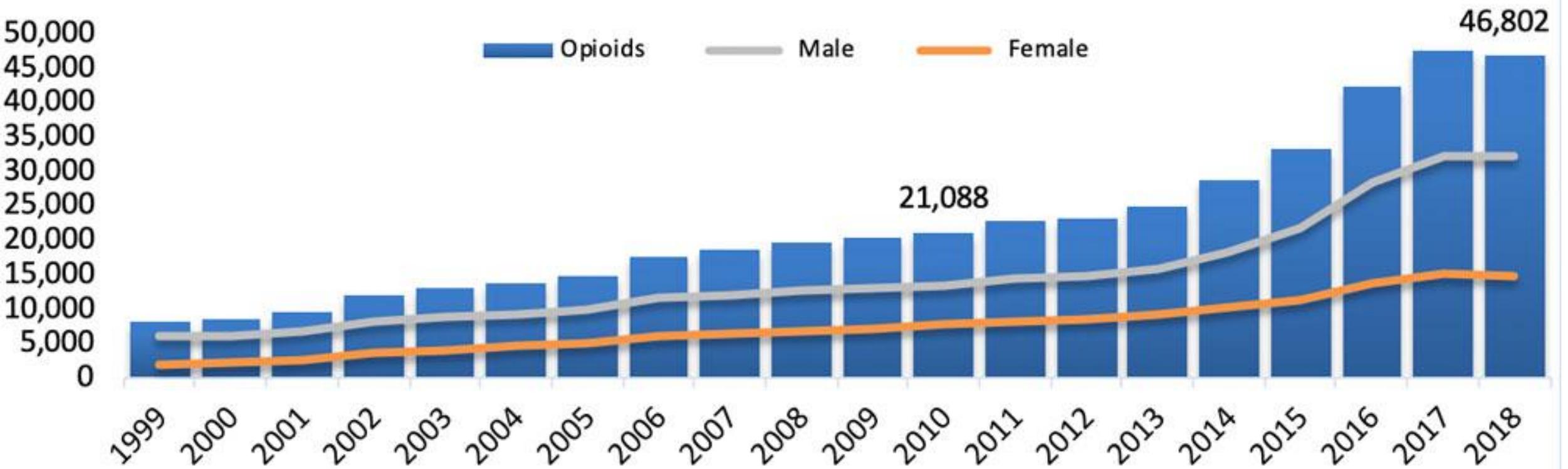
Opioid Induced Respiratory Depression (OIRD)



- Increased risk:
 - Opioid abuse
 - Opioid overdose
 - Opioid use in combination with illicit substances
 - Opioid use in combination with sedatives
 - Benzodiazepines
 - Other sleep agents
 - Opioid use in combination with alcohol
- Potentially lethal

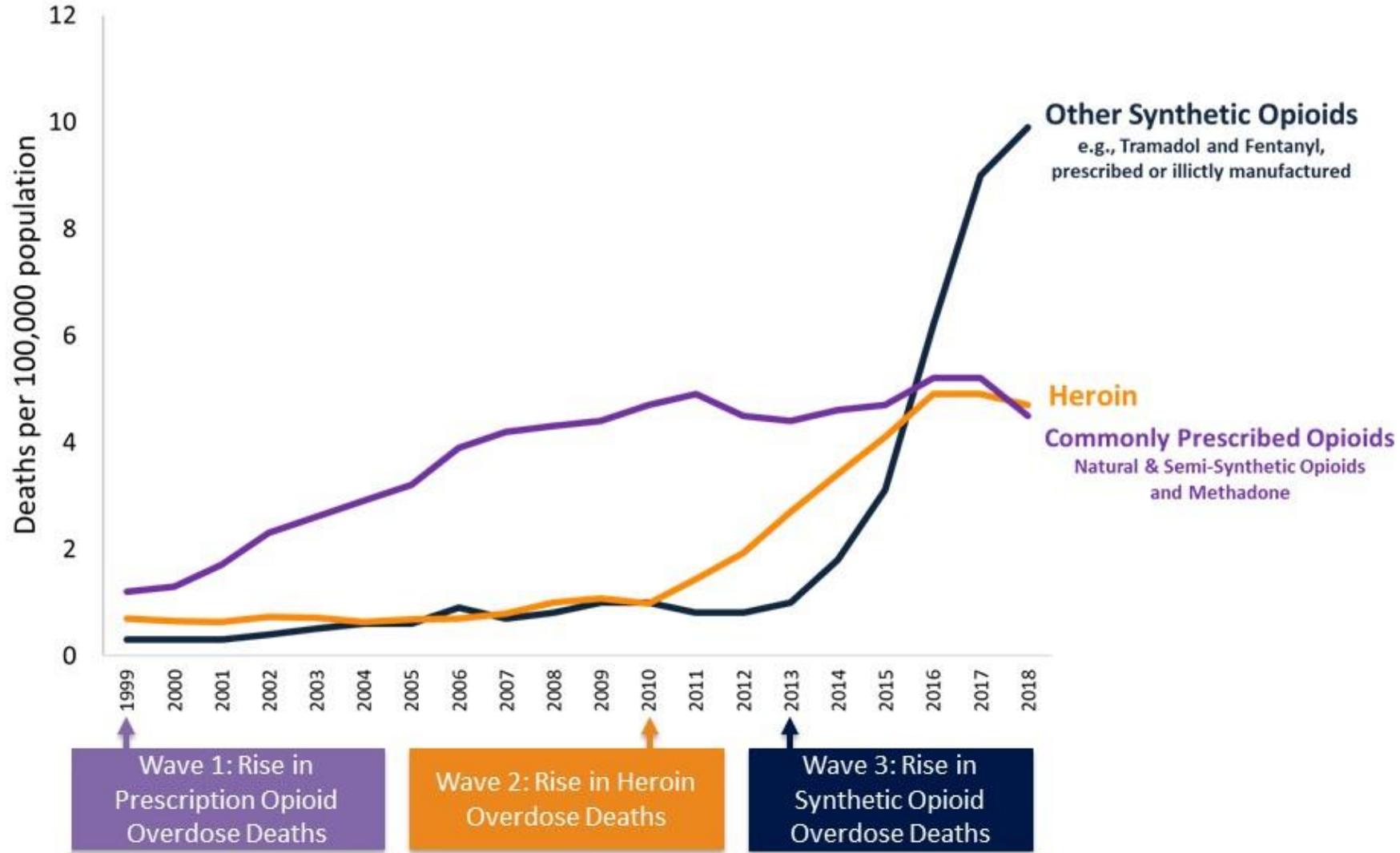
National Drug Overdose Deaths Involving Any Opioid

Number Among All Ages, by Gender, 1999-2018



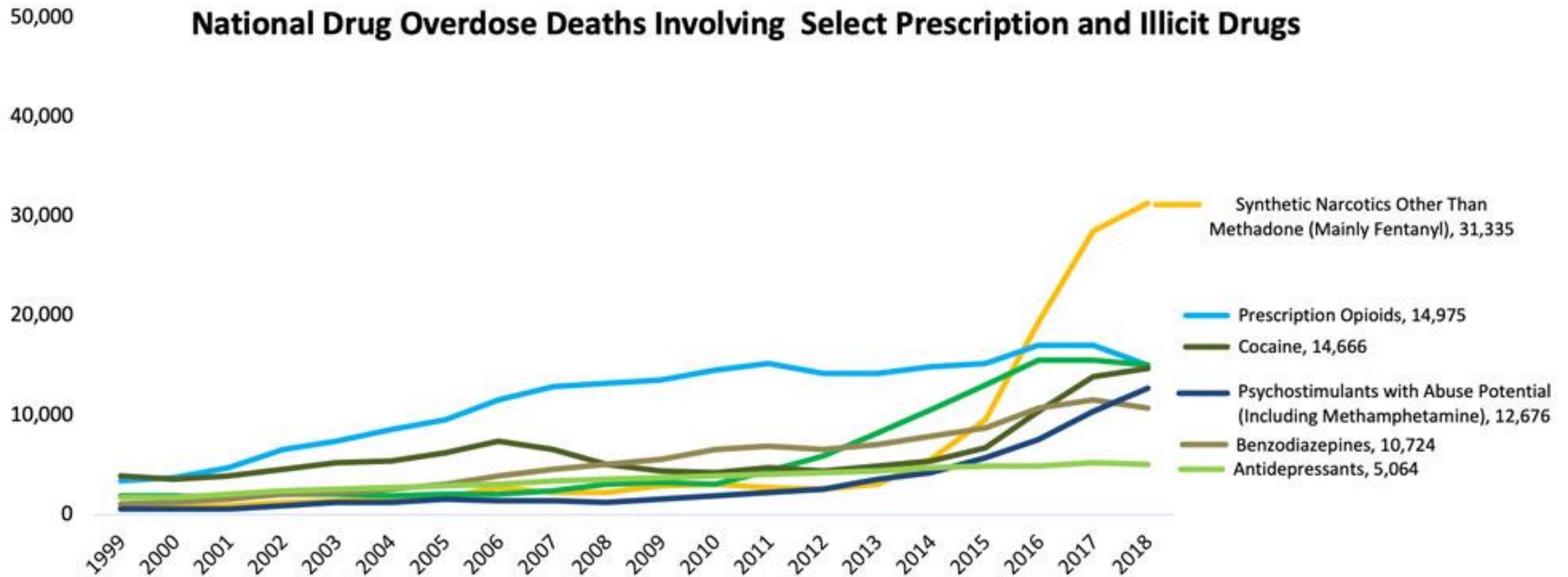
Source: Centers for Disease Control and Prevention, National Center for Health Statistics.
Multiple Cause of Death 1999-2017 on CDC WONDER Online Database, released January, 2020
<https://www.drugabuse.gov/drug-topics/trends-statistics/overdose-death-rates>

3 Waves of the Rise in Opioid Overdose Deaths

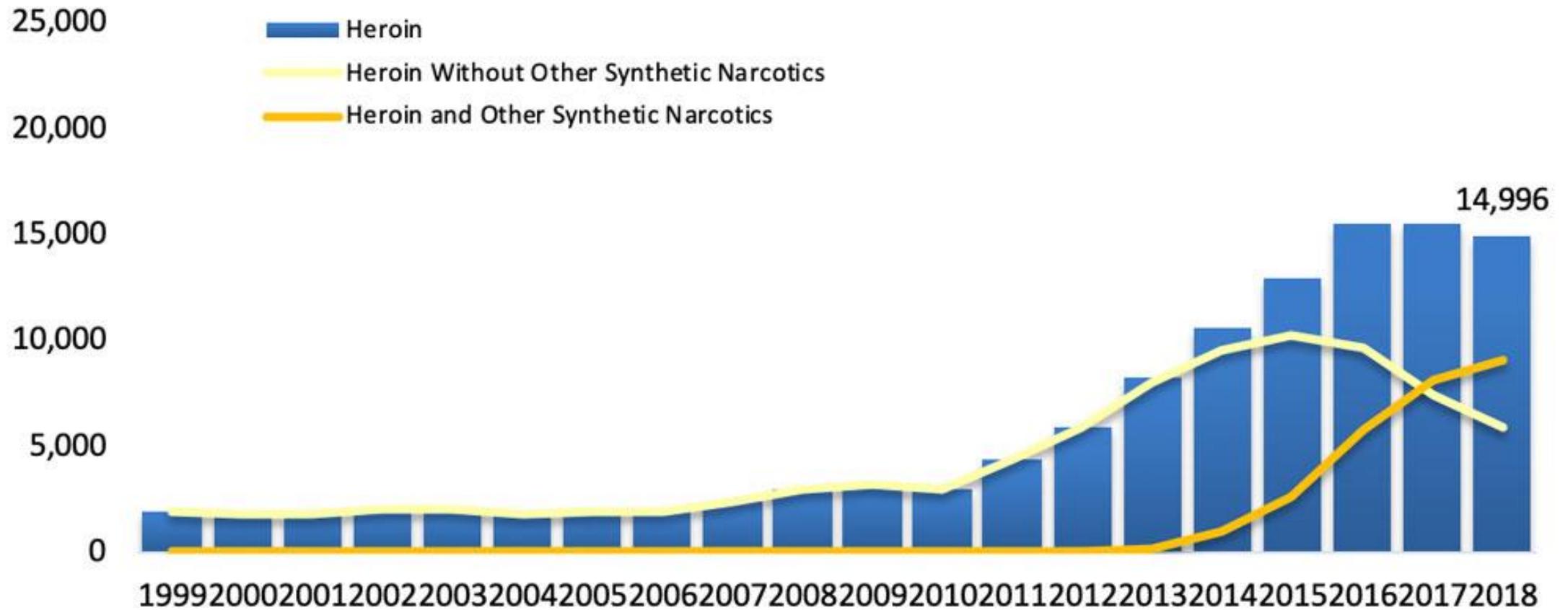


SOURCE: National Vital Statistics System Mortality File.

National Drug Overdose Deaths Involving Select Prescription and Illicit Drugs



National Drug Overdose Deaths Involving Heroin Number Among All Ages, 1999-2018



U.S. Department of Health and Human Services



130+

People died every day from
opioid-related drug overdoses³
(estimated)



10.3 m

People misused
prescription opioids in 2018¹



47,600

People died from
overdosing on opioids²



2.0 million

People had an opioid
use disorder in 2018¹



81,000

People used heroin
for the first time¹



808,000

People used heroin
in 2018¹



2 million

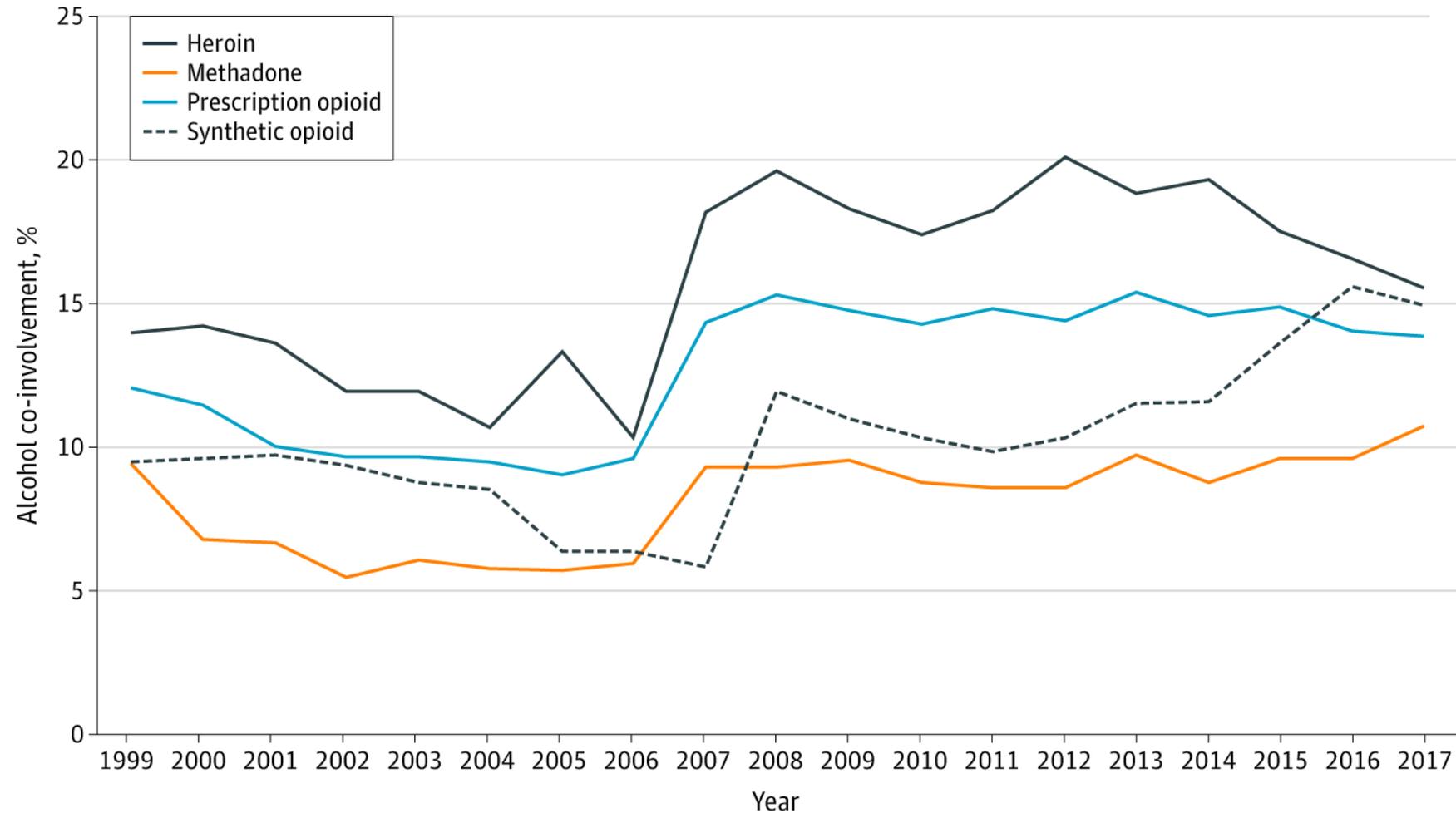
People misused prescription
opioids for the first time¹



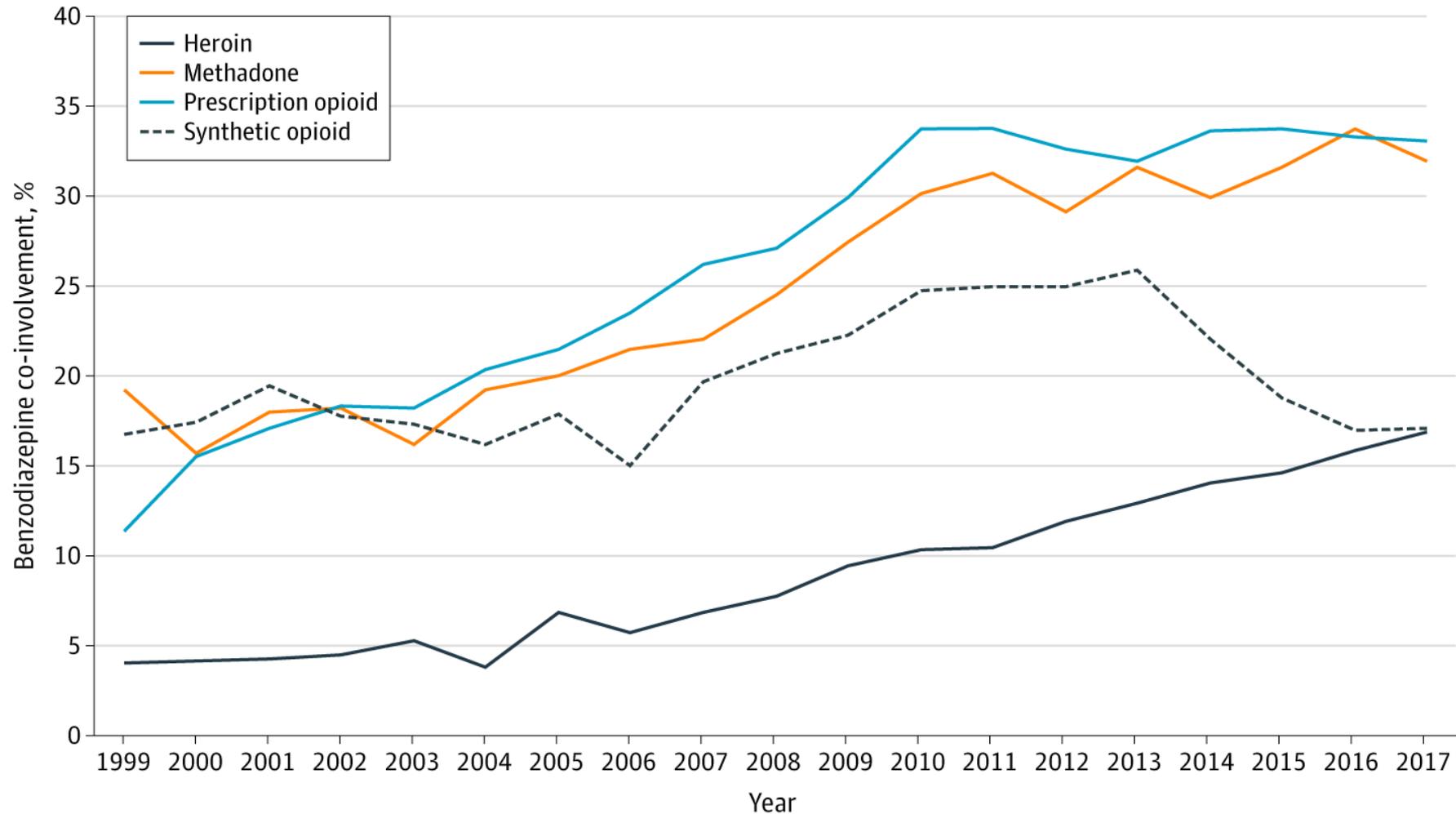
15,349

Deaths attributed to
overdosing on heroin
in 2018¹

Alcohol Co-involvement Among Overdose Deaths by Opioid Subtype



Benzodiazepine Co-involvement Among Overdose Deaths by Opioid Subtype

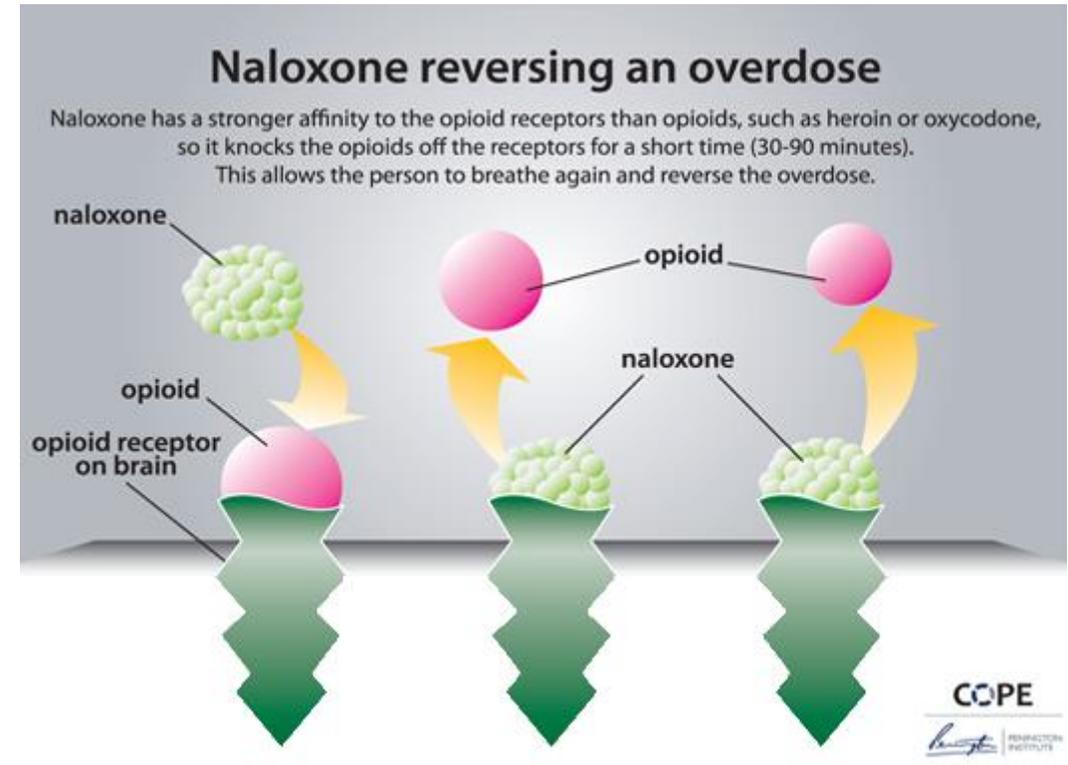


SAMHSA 5 Strategies to Prevent Overdose Deaths

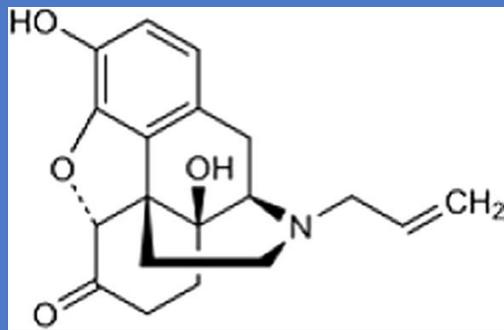
Strategy 1	Encourage providers, persons at high risk, family members, and others to learn how to prevent and manage opioid overdose
Strategy 2	Ensure access to treatment for individuals who are misusing or addicted to opioid or who have other substance use disorders
Strategy 3	Ensure ready access to naloxone
Strategy 4	Encourage the public to call 911
Strategy 5	Encourage prescribers to use the state PDMP

What is Naloxone?

- Mu opioid receptor antagonist that reverses clinical and toxic effects of an overdose by blocking opioid's action on the brain and restores breathing
- Effective for opioids only
 - Ineffective for benzodiazepine overdose
 - Ineffective for alcohol intoxication
- No potential for abuse
- Available in 4 formulations
 - Injectable (IM/SC)
 - Nasal (Atomizer)
 - **Autoinjector (IM)**
 - **Nasal (Nasal spray)**



Naloxone Adverse Reactions



- Can precipitate abrupt opioids withdrawal symptoms in physically dependent patients
- Loss of pain control in opioid dependent patients
- Case Reports
 - Perioperative patients treated with high doses of naloxone
 - Pulmonary edema
 - Hypertension
 - Cardiac Arrhythmias/arrest
- Naloxone use in cases of life-threatening opioid induced respiratory depression is well established and accepted.

Naloxone: Who should receive it?



Naloxone
should be
considered for
all patients who
have the
chance of
opioid exposure

Patients at higher risk for overdose

Concurrent use of opioids + any of the following medical conditions

COPD, Emphysema, Asthma, Respiratory infection	Known or suspected alcohol use
Active smoker	<u>Currently undergoing an opioid rotation</u>
Sleep Apnea	History of substance abuse, opioid addiction, or nonmedical use of opioid
Renal dysfunction	History of opioid overdose
Hepatic disease, Cardiac disease	Receiving methadone or buprenorphine for opioid use disorder
Comorbid mental illness	Specific request from patient or caregiver
Taking >50mg of morphine equivalents opioids per day	Children live in the house where opioids are stored
Pt currently taking Benzodiazepines	Lives in a remote area with difficulties accessing medical services
Pt currently taking Antidepressants	Pts with risk of returning to high dose of opioid when no longer tolerant (prison release, leaving detox facility)
Pt taking extended-release or long acting medication	Obtaining prescriptions from multiple pharmacies/prescribers

FDA recommends health care professionals discuss naloxone with all patients when prescribing opioid pain relievers or medicines to treat opioid use disorder

07-23-2020
FDA Drug Safety Communication

Consider prescribing naloxone to those at increased risk of opioid overdose

Consider prescribing naloxone for patients:

- Using benzodiazepines
- Using other CNS depressants
- History of OUD
- Under current treatment for OUD
- History of opioid overdose
- Living with other household members including children at risk for accidental ingestion or opioid overdose

For other patients at increased risk of opioid overdose, health care professionals should consider prescribing naloxone, *even if the patient is not receiving a prescription for an opioid pain reliever or medicine to treat OUD.*

This may include people with a current or past diagnosis of OUD or who have experienced a previous opioid overdose.

Naloxone Education: 5 Essential Steps for Use

1. Check for signs of opioid overdose

- Inability to awaken
- Shallow breathing, choking/gurgling/snoring from someone who can't be aroused
- Fingernails or lips turning blue
- Pinpoint pupils
- Low blood pressure
- Use Sternal rub, call name, rub knuckles on upper lip

2. Call for Help (Dial 911)

- "Someone is unresponsive and not breathing"
- Give specific address and/or description of location
- Let EMS know Narcan is going to be given

3. Administer naloxone

- Goal: restore adequate spontaneous breathing
 - Possible ROA: intranasal, IM, Subq, IV.
 - If the patient does not respond within 2-3 minutes after administering a dose of naloxone; give a second dose of naloxone

4. Support the person's breathing

- Rescue breathing

5. Monitor the person's response

- Response usually occurs in 2-3 minutes (spontaneous breathing)
- Monitor for at least 4 hours after last dose of naloxone
- Long acting opioids need longer monitoring
- Put patient in recovery position

Naloxone Products

Naloxone: Intranasal Spray

What is needed:

- Two 2mg naloxone/2ml prefilled needleless syringes
- 2 atomizers

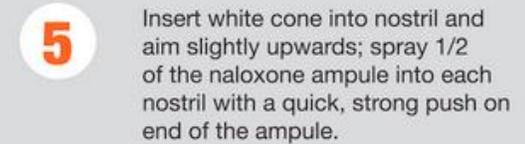
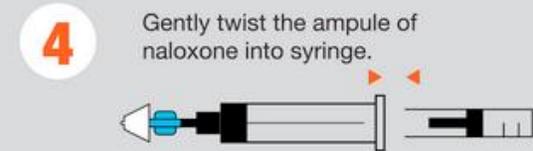
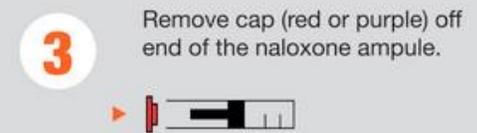
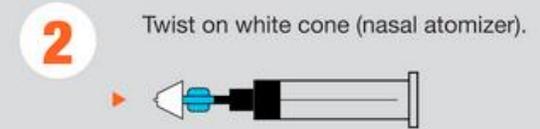
• Directions:

- Spray half of naloxone in each nostril
- Use 2nd dose of naloxone if no response in 5 minutes



<https://www.ems1.com/pharmacology/articles/naloxone-drug-whys-5Paf9xIHspVM5MLG/>

NASAL SPRAY NALOXONE



Pain Ther 8, 89–98 (2019). <https://doi.org/10.1007/s40122-019-0118-0>

Image: <https://harmreduction.org/issues/overdose-prevention/overview/overdose-basics/responding-to-opioid-overdose/>

DiPaula B, Gaspter J, Gold J, et al. Naloxone access: A Practical Guideline for Pharmacists. https://cpnp.org/_sdocs/guideline/naloxone/naloxone-access.pdf

Image: Calas T, Wilkin M, Oliphant C. Naloxone: An Opportunity for Another Chance. *J for Nurse Practitioners* 2016;12(3): 154-160.



Demonstration

Allyson Eichner, PharmD-Kelly-Ross Pharmacy Group: Demonstration of Naloxone Products:
<https://www.youtube.com/watch?v=xCqloorR9L5k>

Naloxone: Intramuscular Kits

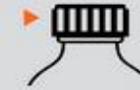
- IM kits
 - 2 naloxone 0.4mg/ml vials
 - 2 intramuscular syringes
- Directions:
 - Pop off the top from the vial
 - Turn vial upside down.
 - Pull plunger to draw **1mL** of naloxone into syringe
 - If possible, clean area with alcohol swab first
 - Inject into thigh, upper-outer quadrant of buttock, or shoulder. Inject straight in to make sure to hit the muscle
 - If no response in 3-5 minutes repeat injection procedure



INJECTABLE NALOXONE

1

Remove naloxone vial cap.



2

Remove cap from the needle.

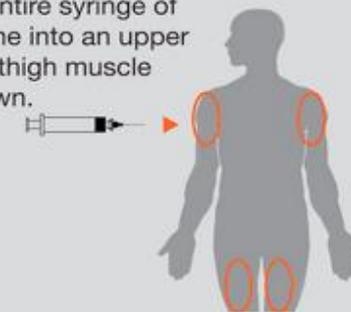
Turn vial upside down and insert needle through rubber stopper. Pull back on plunger and fill syringe to 1 ml.



Fill to 1ml ▶

3

Inject entire syringe of naloxone into an upper arm or thigh muscle as shown.



4

If no response in 2 to 3 minutes, administer second dose.



Demonstration

Allyson Eichner, PharmD-Kelly-Ross Pharmacy Group: Demonstration of Naloxone Products:
<https://www.youtube.com/watch?v=xCqloorR9L5k>

Naloxone: Intranasal Spray

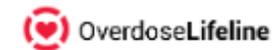
- Intranasal Spray: Narcan Nasal Spray
 - Twin pack nasal spray devices
 - Directions: Spray entire contents of device into 1 nostril upon signs of opioid overdose. May repeat x1. Call 911



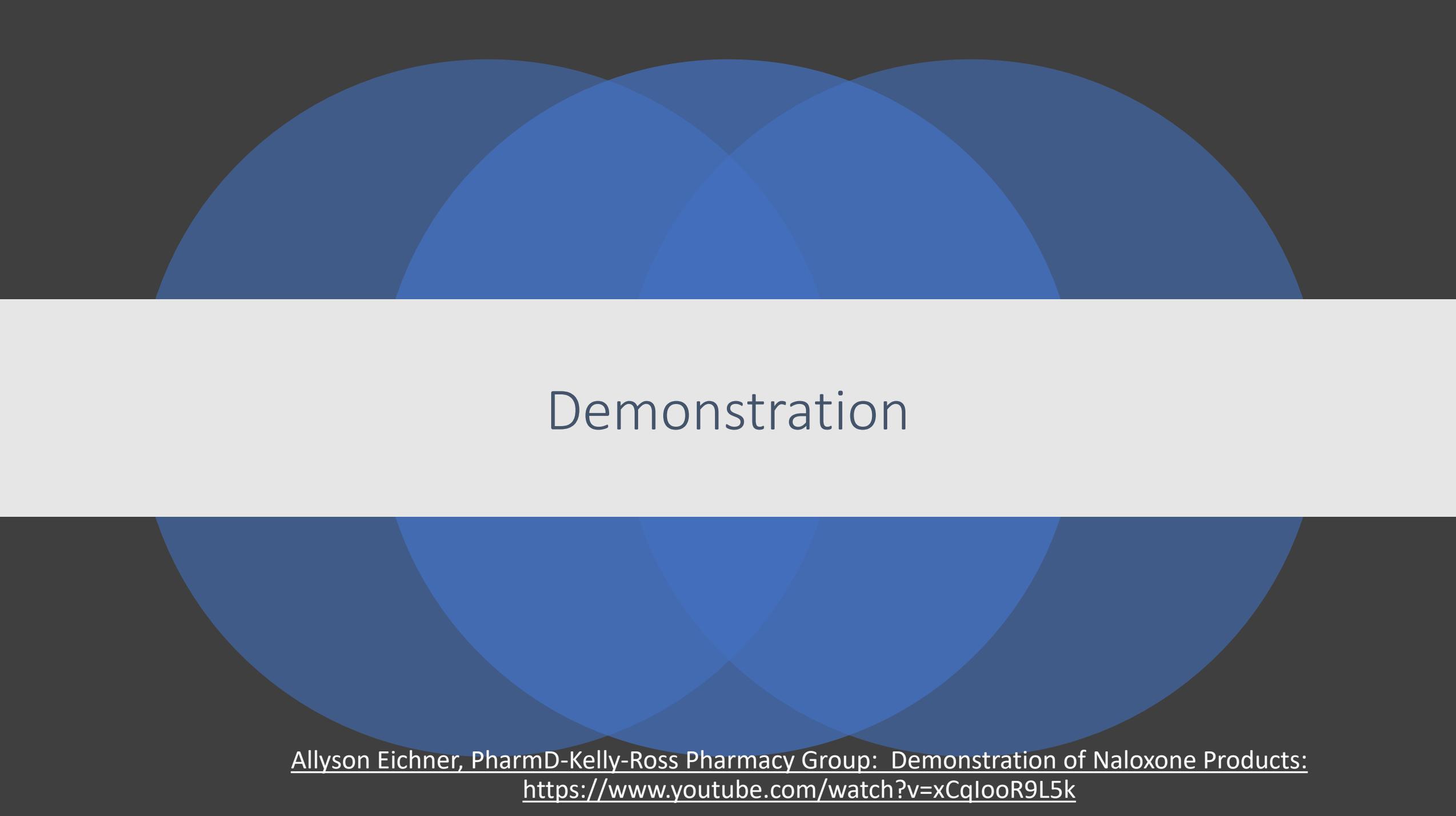
Lay Responder NARCAN Administration

- STEP 1**  **911** Call 911. Ensure that 911 has been called and EMS is on the way.
- STEP 2**  Open the medication package and lay the person on their back.
- STEP 3**  Hold the NARCAN with your thumb on the bottom of the plunger and your first and middle fingers on either side of the nozzle.
- STEP 4**  Tilt the person's head back. Provide support under the neck.
- STEP 5**  Gently insert the tip of the nozzle into one nostril until your fingers are against the bottom of the person's nose. Press the plunger firmly to give the entire dose into one nostril.
- STEP 6**  Place the person in the recovery position.
- STEP 7** **Give a Repeat Dose** If no response after 2-3 minutes, give a repeat dose in the other nostril.

OverdoseLifeline.org



https://s3.amazonaws.com/thinkific/file_uploads/59907/attachments/282/87e/504/Overdose_Lifeline_NARCAN_Administration.pdf



Demonstration

Allyson Eichner, PharmD-Kelly-Ross Pharmacy Group: Demonstration of Naloxone Products:
<https://www.youtube.com/watch?v=xCqloorR9L5k>

Naloxone: Intramuscular Auto-injector

- IM Auto-injector: Naloxone 2mg/0.4ml
 - Twin pack
 - Generic now available
- Directions; Use on auto-injector upon signs of opioid overdose. Call 911. May repeat x 1

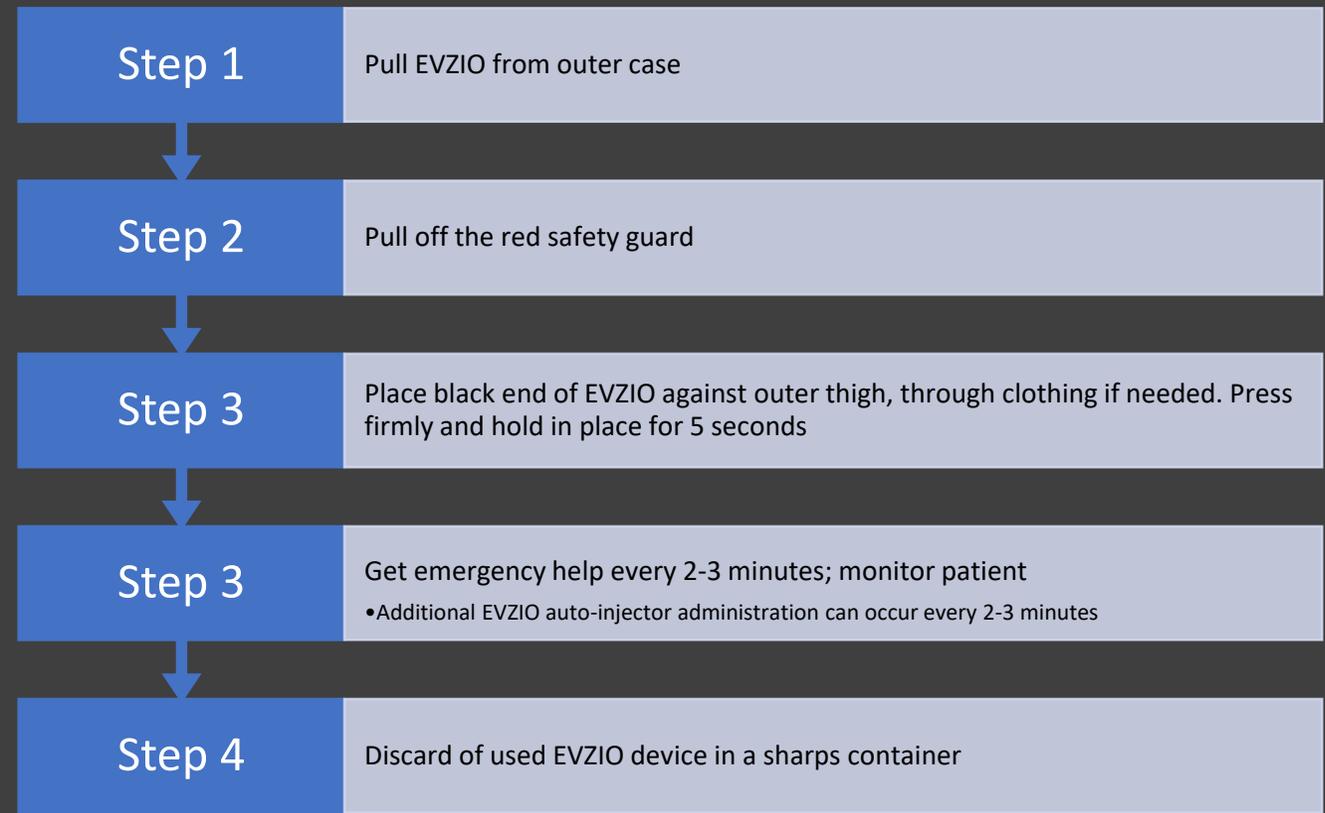
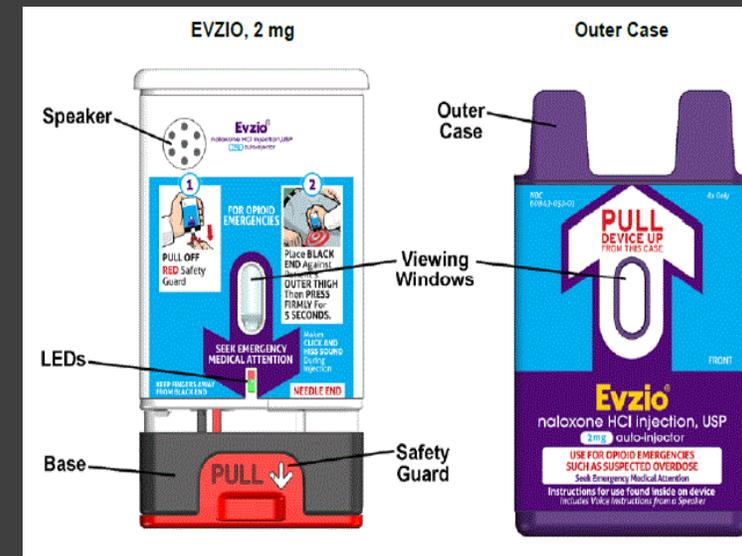


Image: <https://www.comprecarerx.com/product/narcan-nasal-spray/>

https://dailymed.nlm.nih.gov/dailymed/fda/fdaDrugXsl.cfm?setid=5f8e8d17-a72f-406d-a736-48e61620f9d8&type=display#s_ppi

DiPaula B, Gaspter J, Gold J, et al. Naloxone access: A Practical Guideline for Pharmacists. https://cpnp.org/_sdocs/guideline/naloxone/naloxone-access.pdf



Demonstration

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Naloxone Options

Category	Intranasal Spray via atomizer	Injectable	Intranasal	Auto-injector
Brand Name	N/A	N/A	Narcan Nasal Spray	Evzio Auto-Injector
FDA approval	Yes (IV,IM,SC use only) Intranasal use: off label	Yes	Yes	Yes
Assembly required	Yes	Yes	No	No
Strength	2mg/2mL	0.4mg/mL Also available in: 4mg/10mL multiple dose vials	4mg/0.1mL	2mg/0.4mL
Cost per kit	\$	\$	\$\$	\$\$\$ (generic)
Total quantity in kit/package	One 2mL syringe (recommended to include 2 syringes)	One 1 mL vial (recommended to include 2 vials)	2 devices	2 devices
Directions	Spray 1 mL (1/2 syringe) into each nostril. Repeat after 2-3 minutes if response is not achieved or is minimal	Inject 1 mL in shoulder (deltoid) or thigh. Repeat dose in 2-3 minutes if response is not achieved or is minimal.	Administer full single spray into one nostril. Repeat dose with device #2 in 2-3 minutes if response is not achieved, alternating nostrils	Inject into outer thigh as per English voice-prompt system. Place black side firmly on outer thigh; depress and hold firmly for 5 seconds. Repeat with device #2 after 2-3 minutes if response is not achieved or is minimal.
Generic available?	Yes	Yes	Yes	Yes

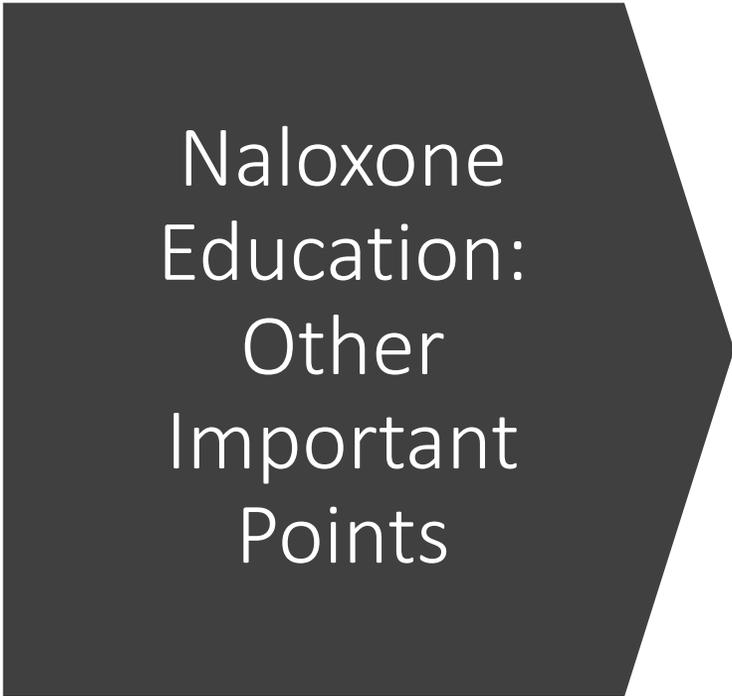
Naloxone Education

Approaching the subject of Naloxone
with a patient



Naloxone Education

Education Point	Comments
Introduction to naloxone	How the medication works, benefits of naloxone
Why recommendation for naloxone is appropriate	Expand on identified risk factors to provide the rationale for recommending this product
Signs of life-threatening overdose	Excessive sedation or no response, no or very slow breathing (1 breath every 5 seconds) bluish purplish or ashen grey appearance.
Efficacy of naloxone	Naloxone effects lasts approximately 30-90 minutes. Naloxone effective on opioids. Be prepared to give second dose of naloxone if breathing stops again. Discuss long acting opioids and synthetic fentanyl products
Importance of calling 911	Stress this is vital even if patient responds immediately to naloxone
Directions for use	Discuss commercially available devices and counsel on proper use for chosen device
Side effects associated with naloxone	Can cause withdrawal symptoms in those that are opioid dependent
How to determine if second dose of naloxone is needed	No breathing 2-3 minutes after first dose of naloxone.
Rescue maneuvers	Discuss proper rescue breathing, chest compressions, and recovery position



Naloxone
Education:
Other
Important
Points

- Always keep this device stored in an easily accessible area
- Store in room temperature
 - If you are comfortable, it is comfortable
- Train all your family and/or caregivers on the proper use of this device
- Check the expiration date and make sure to get a new one upon expiration
- This is safe to use on children and pets as well
- Pregnant women can be given naloxone in limited doses under MD supervision
- Naloxone has no effect in people who are not taking opioids

Naloxone Access Laws

Naloxone Access in Community Pharmacies

Based on data collected by NASPA (updated January 2019)

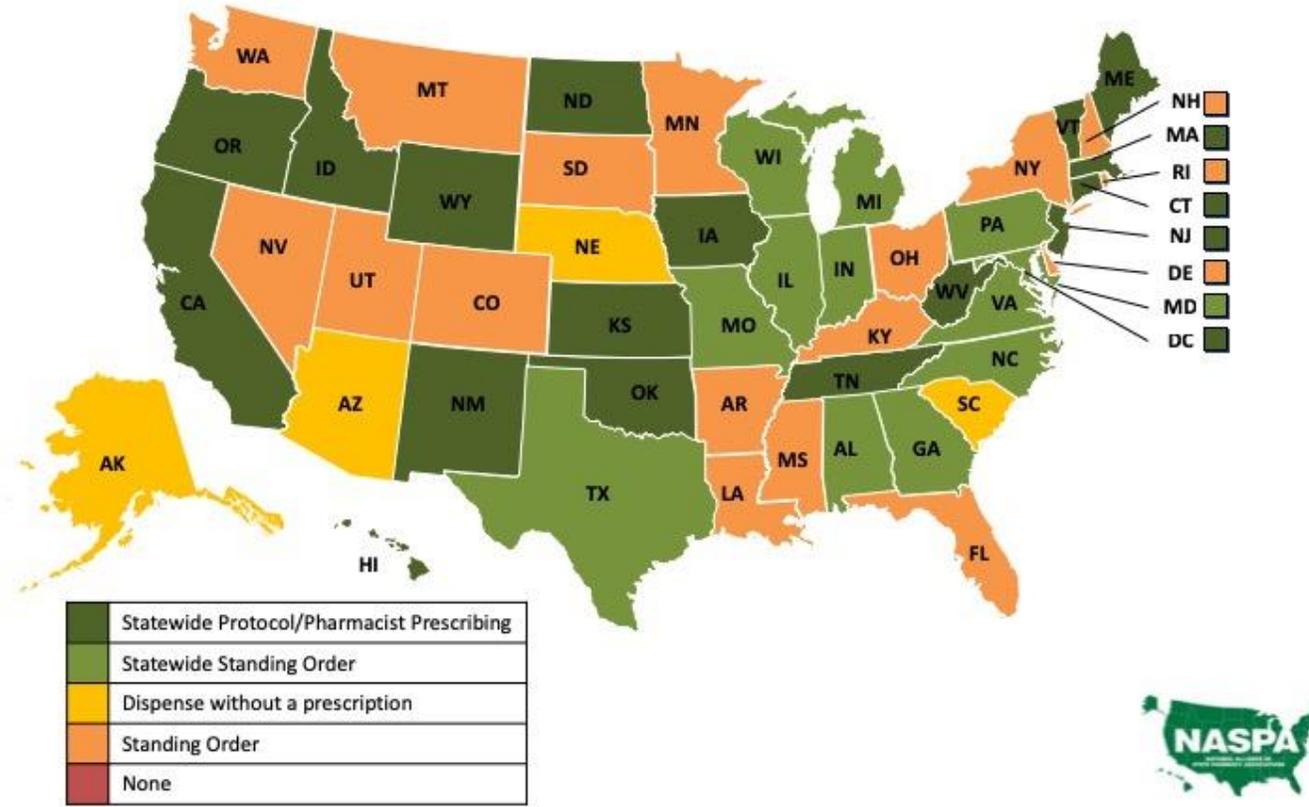


Image: <https://naspa.us/resource/naloxone-access-community-pharmacies/>

About R, Pacula RL, Powell D. Association Between State Laws Facilitating Pharmacy Distribution of Naloxone and Risk of Fatal Overdose. *JAMA Intern Med.* 2019;179(6):805-811. doi:10.1001/jamainternmed.2019.0272

Naloxone Access Laws

- **Third Party**: naloxone can be dispensed to a person for use on other individuals
- **Standing Order**: naloxone can be dispensed to any patient who meets criteria
- **Possession**: an individual can carry naloxone without a prescription
- **Prescriber immunity**: civil and/or criminal immunity to medical personnel who prescribe naloxone
- **Dispenser immunity**: civil and/or criminal immunity to medical personnel who dispense naloxone
- **Layperson dispensing**: permits laypeople to dispense naloxone

Florida and Naloxone

911 Good Samaritan Act:

- Protects a person who seeks medical assistance in good faith for an individual experiencing a drug related overdose from charge, prosecution, or other penalties for possession of controlled substance
- The overdose victim is receiving the same immunity

Emergency Treatment and Recovery Act: Florida Statute 381.887

- Permits all first responders to possess, store, and administer naloxone
- Patients and caregivers are permitted to store and possess emergency opioid antagonists
- Patients and caregivers are authorized to administer an opioid antagonist to a person who is believed to be in an overdose situation
 - *Authorization applies in an emergency situation when a physician is not immediately available*
- Authorizes health care practitioners to prescribe and pharmacists to dispense an emergency opioid antagonist to patients and caregivers
- Provides immunity from liability under the Good Samaritan Act
- Professional sanctions or disciplinary licensing actions for related to prescribing or dispensing an opioid antagonist

Naloxone Bill HB 1241:

- Pharmacists are able to dispense naloxone without a prescription
 - Handled similar to epi-pens, flu shots
 - Non-patient specific standing order for
 - Auto injection delivery system
 - intranasal application delivery system
 - Must be appropriately labeled with instructions for use

<https://www.flsenate.gov/Committees/BillSummaries/2016/html/1383>

<https://www.flsenate.gov/Session/Bill/2012/0278>

<https://www.flsenate.gov/Laws/Statutes/2011/768.13>

<https://www.flsenate.gov/Session/Bill/2015/0758>

Vital Signs: Pharmacy-Based Naloxone Dispensing — United States, 2012–2018

Weekly / August 9, 2019 / 68(31);679–686

On August 6, 2019, this report was posted online as an MMWR Early Release.

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Naloxone prescriptions increased substantially from 2012-2018

- 2012: 0.4 per 100,000
- 2018: 170.2 per 100,000

Naloxone dispensing rates increased in all areas

- Highest: Metropolitan areas, Females, patients 60-64.
- Lowest: Rural areas

“High dose” opioid prescription (>50MME)

- 1 Naloxone Rx for every 69 “high dose” opioid prescription

NALOXONE

SAVES

LIVES



Learn more at stopoverdose.org

“Nobody dies from Narcan.
They die
from NOT getting Narcan”

Mike Miller

Vice Speaker

Wisconsin Medical Society