

# Opioid Harm Reduction

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# The number who die each year from...

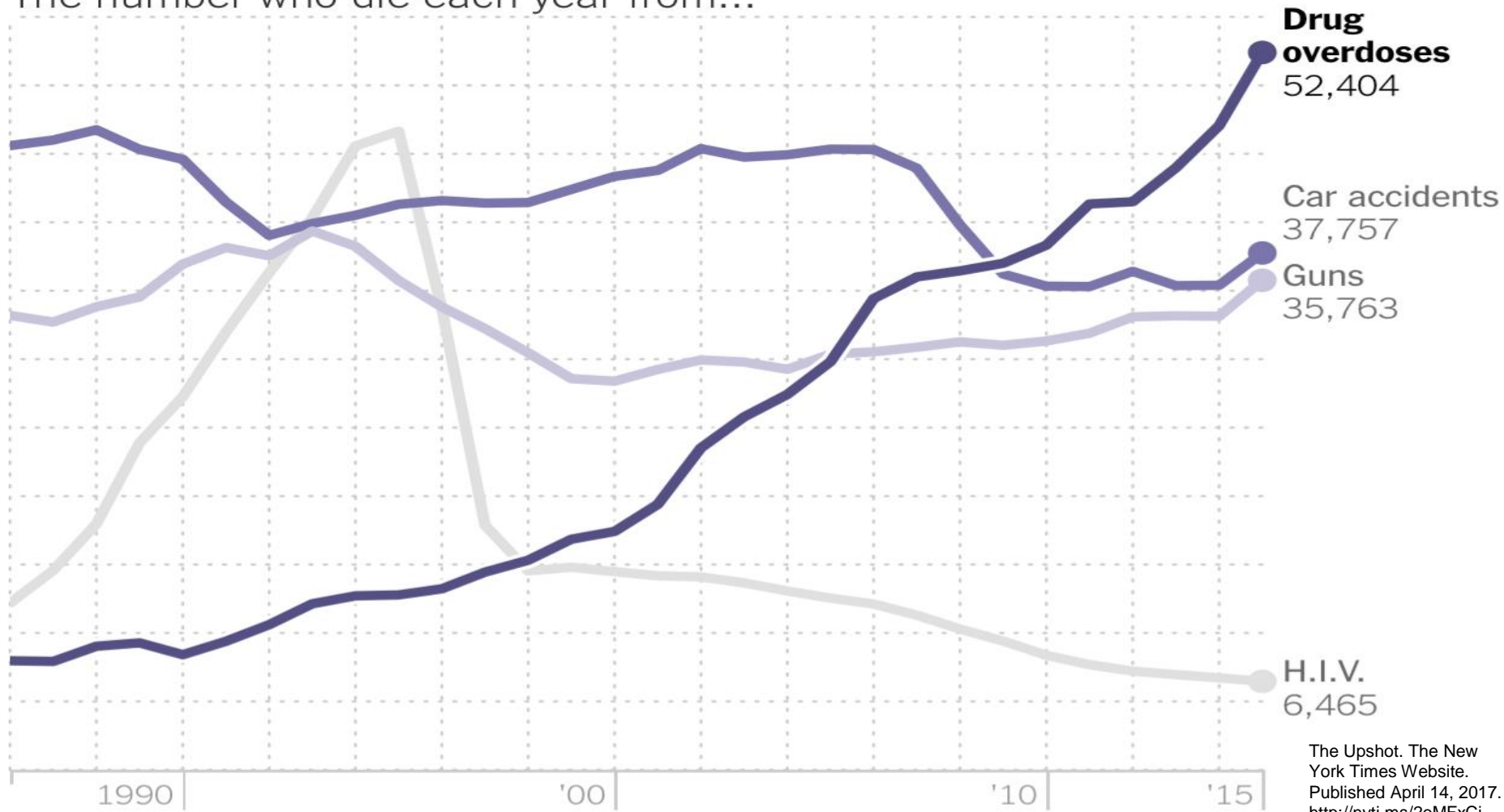
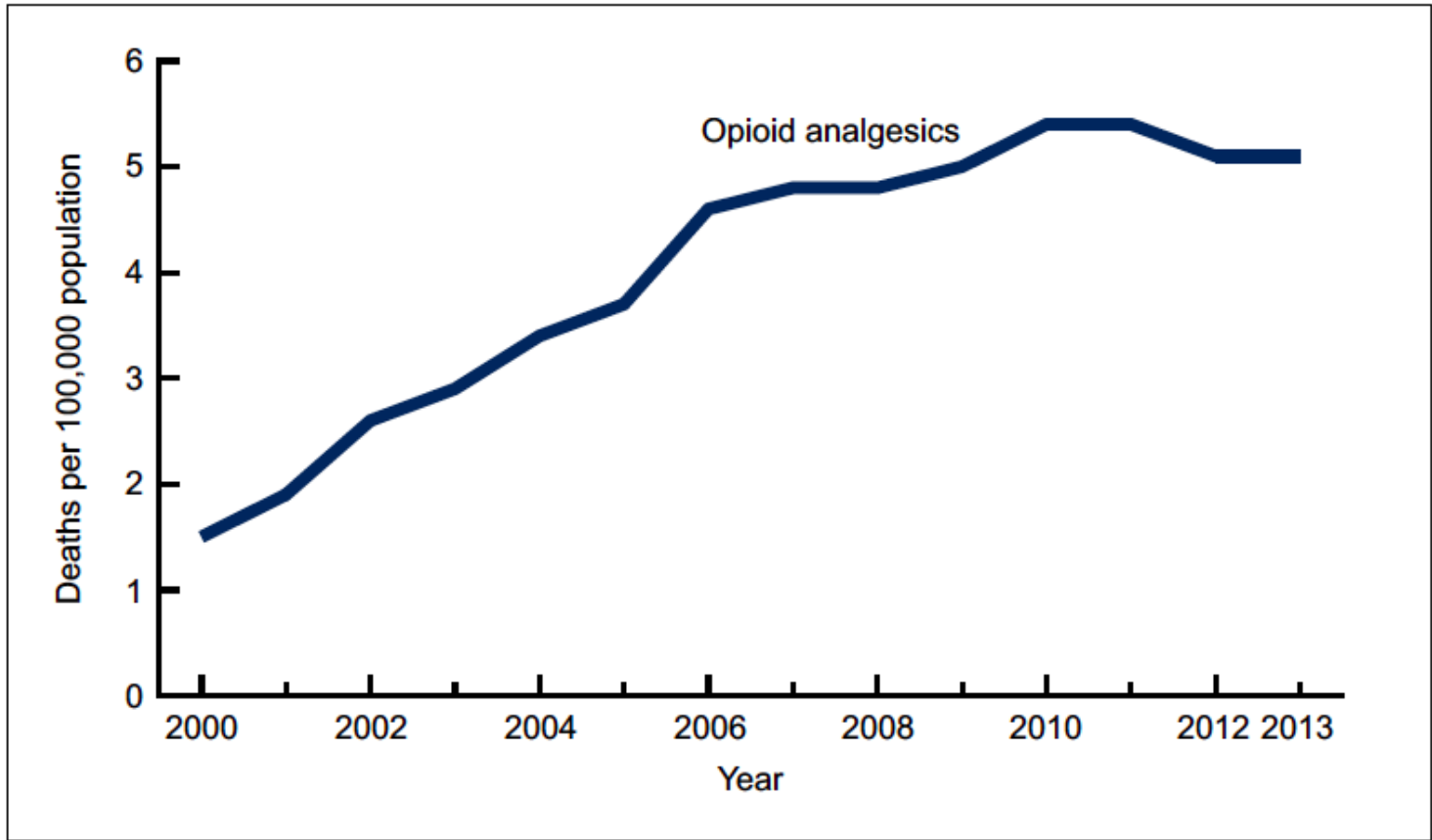
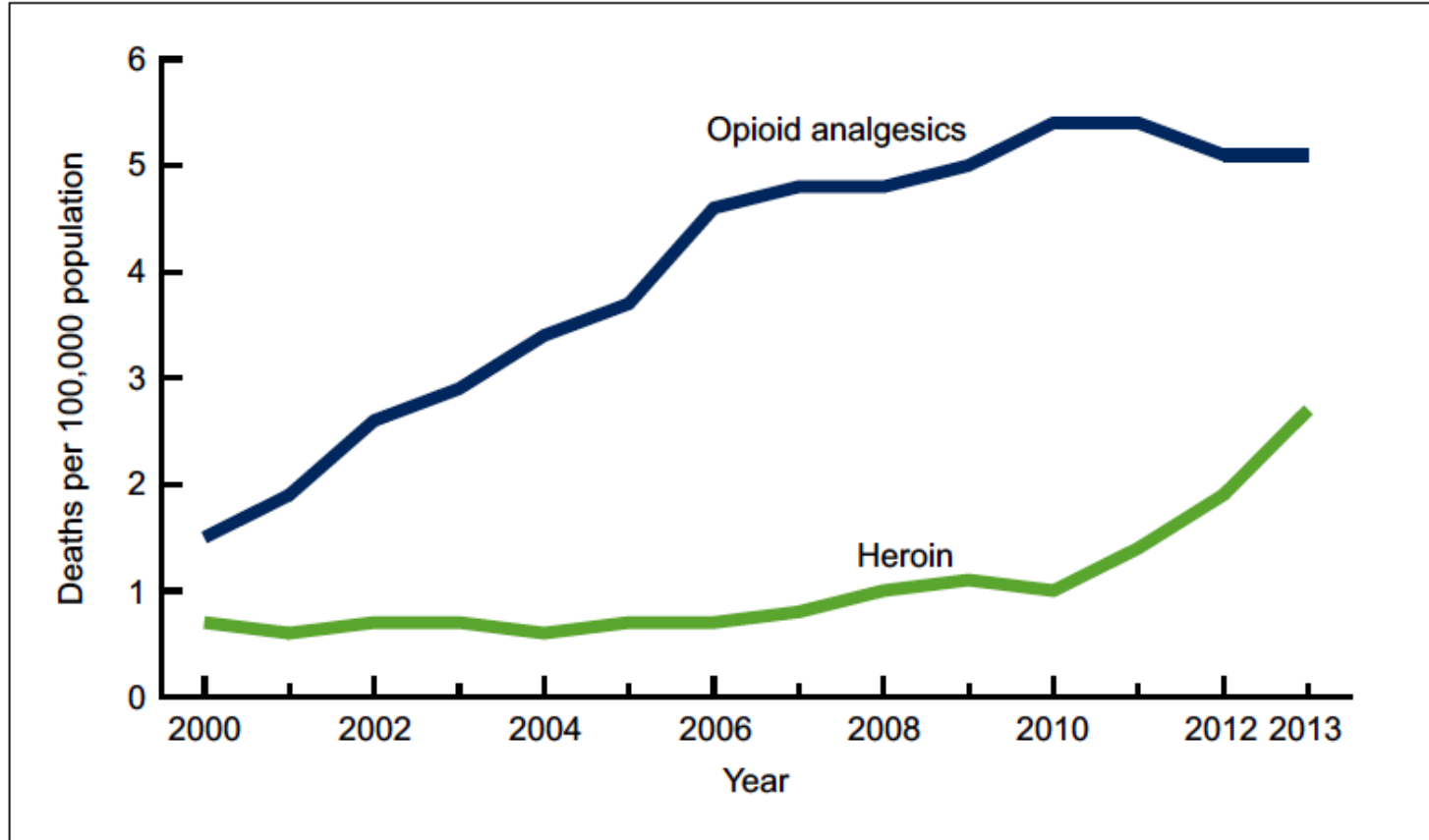


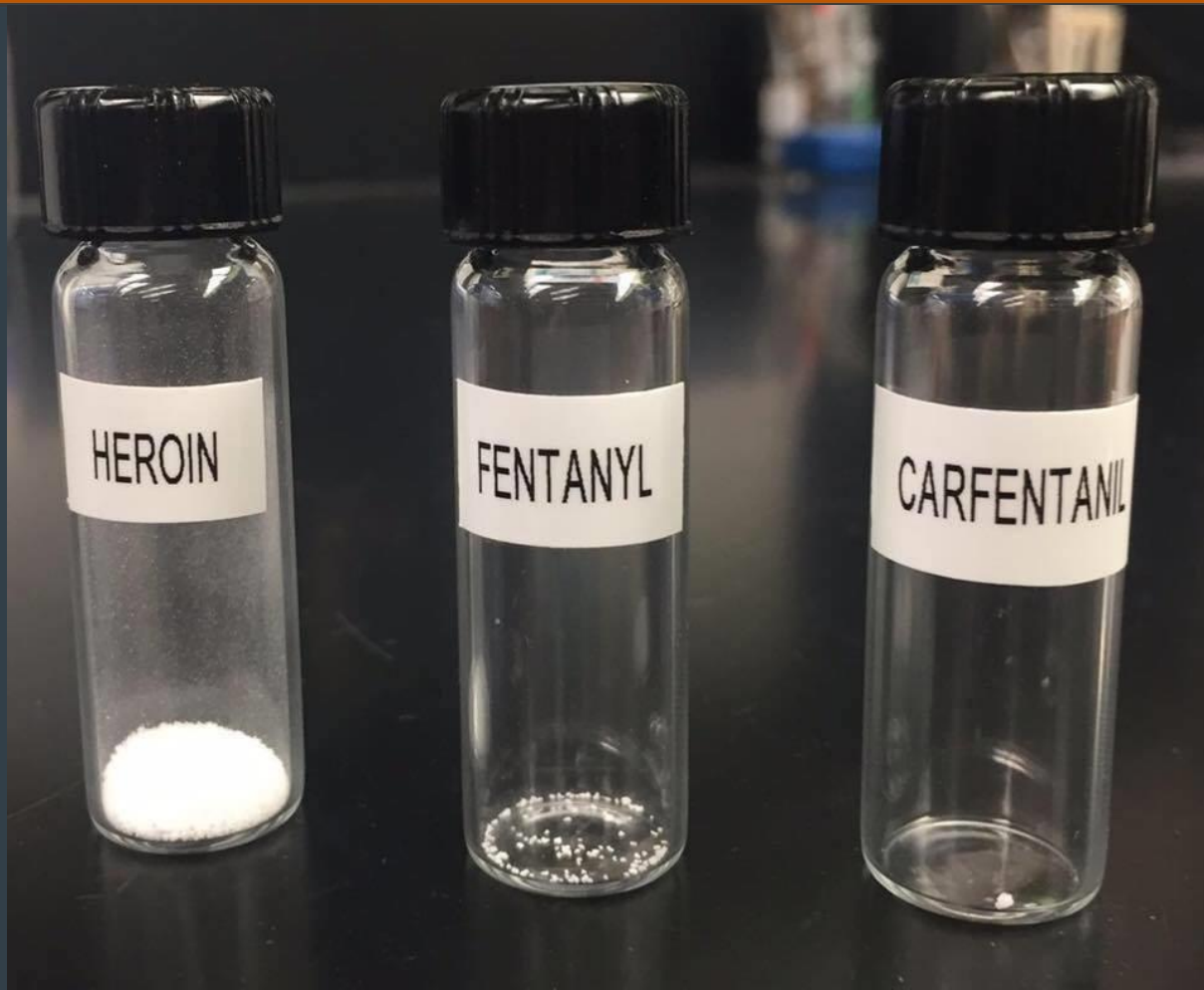
Figure 1. Age-adjusted rates for drug-poisoning deaths, by type of drug: United States, 2000–2013



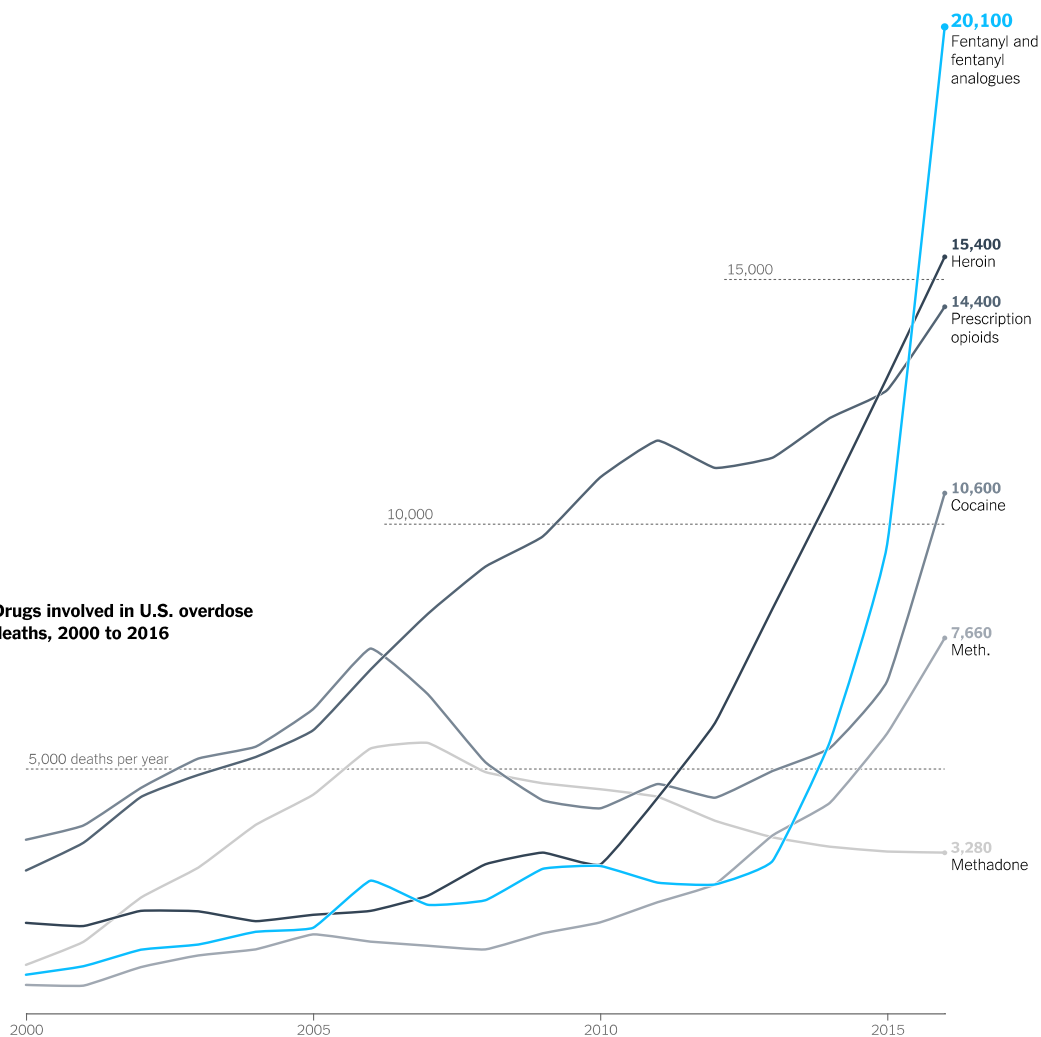
Hedegaard et al. Drug-poisoning deaths involving opioid analgesics: United States, 1999–2011. NCHS Data Brief #190.

Figure 1. Age-adjusted rates for drug-poisoning deaths, by type of drug: United States, 2000–2013

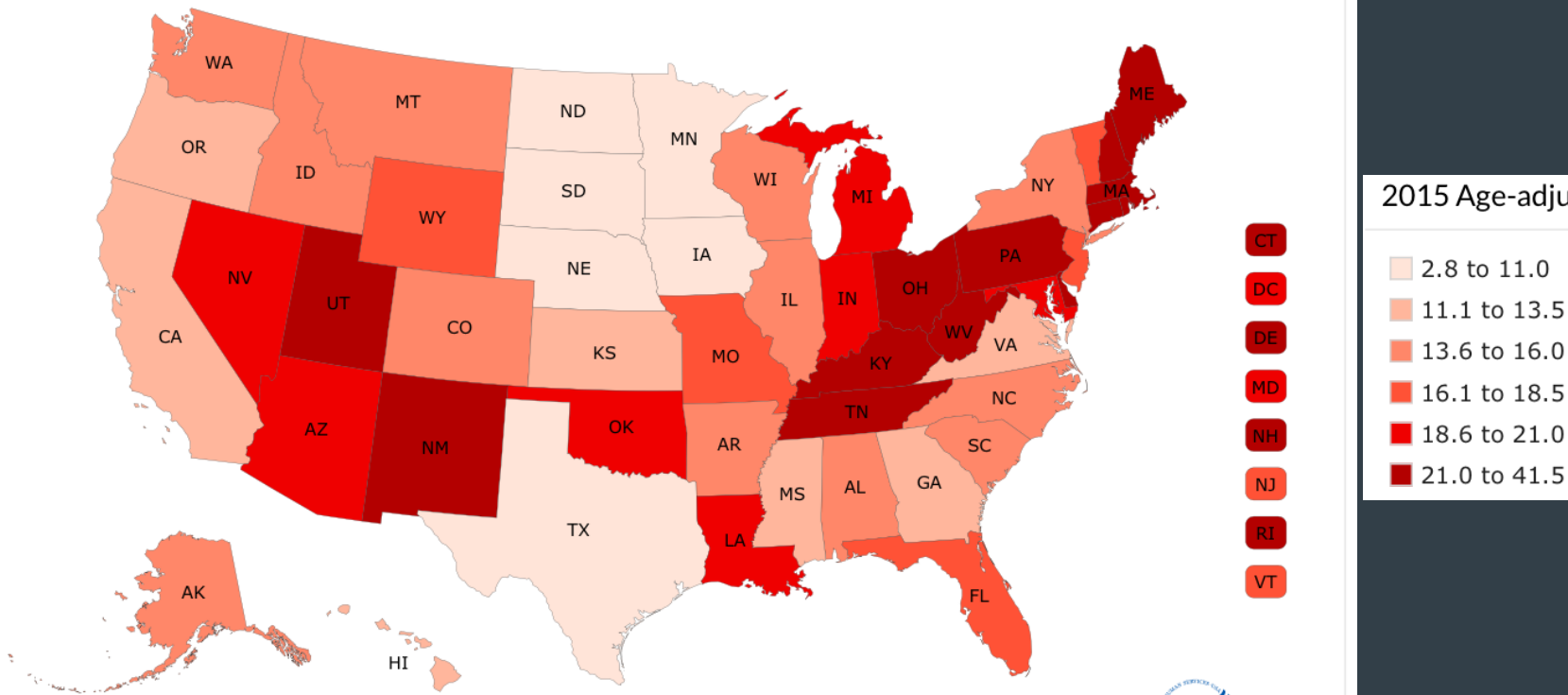




**Drugs involved in U.S. overdose deaths, 2000 to 2016**



## Number and age-adjusted rates of drug overdose deaths by state, US 2015



# Maternal Mortality

Death of mother during pregnancy, childbirth, or in year post-delivery

**Texas = highest rate in U.S.**

**Drug overdose = #1 leading cause!**



***Who is at risk for an  
opioid overdose?***

2

## You or a loved one may be at risk for an accidental drug overdose.

2

Drug overdose is the leading cause of injury/death in the United States. Most overdoses involve opioids, which include certain prescription pain relievers and heroin.

2

<b>Common Opioids</b>	Morphine (MS Contin®), Oxycodone (OxyContin®/Percocet®), Hydromorphone (Dilaudid®), Oxymorphone (Opana®), Fentanyl (Duragesic®), Hydrocodone (Vicodin®/Norco®), Codeine, Methadone, Heroin
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2

Thousands of people die each year from accidental overdoses related to prescription drugs they were taking as directed. The pharmacist has determined you or a loved one may be at risk for an accidental opioid overdose for one or more of the following reasons:

2

✓ 2	Risk Factors for Opioid Overdose
2	History of opioid poisoning or overdose
2	History of illicit or nonmedical opioid use
2	Use of methadone or buprenorphine for opioid use disorder
2	High-dose prescription opioid use (>50 milligram morphine equivalents daily)
2	Long-term prescription opioid use (>90 days continuously for non-cancer pain)
2	Long-acting or extended-release prescription opioid use
2	Use of opioids from multiple prescribers or multiple pharmacies
2	Use of interacting drugs or medications (alcohol, sedatives, antidepressants)
2	Underlying disease of key organs (lung, kidney, liver, heart, HIV/AIDS)
2	Recent release from drug treatment/detoxification or correctional facility

2

## You should have naloxone at home to keep you and your loved ones safe.

2

Naloxone is the antidote to an opioid overdose. If you take too much of an opioid medication, your brain will stop telling your lungs to breathe. If this occurs, taking naloxone can save your life by allowing you to breathe again. Naloxone is not a controlled substance and it cannot be abused.

2

If you give naloxone to someone who is not experiencing an opioid overdose, nothing will happen. The only serious side-effect of naloxone is that it can cause withdrawal symptoms if the overdose victim has developed physical dependence to opioids. While acute opioid withdrawal is not generally life-threatening, it is still essential to call emergency medical services. If you try to save someone's life with naloxone, you are protected by law from any liability regardless of the outcome.

2

Naloxone is available in several different versions. Some versions of naloxone are injected into the victim's muscle, while others can be squirted into their nose. Your pharmacist can help you determine which version of naloxone is right for you based on cost and ease-of-use. Check out

**OperationNaloxone.org** to learn more about staying safe with opioids.

2

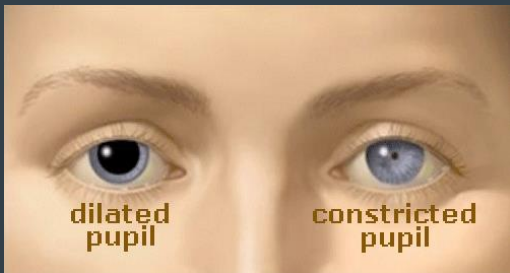
✓	<b>Risk Factors for Opioid Overdose</b>
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***What does an opioid  
overdose look like?***



# Intoxication (Being High)

- Small pupils
- “nodding out”
- Scratching skin
- Mildly responsive



# Overdose (Might Die)

## *Opioid Overdose Signs & Symptoms*

**Don't use alone**

Breathing will  
be slow or  
absent



Lips and nails  
are blue



Person is not  
moving



Person may  
be choking



You can hear  
gurgling sounds  
or snoring



Can't be  
woken up



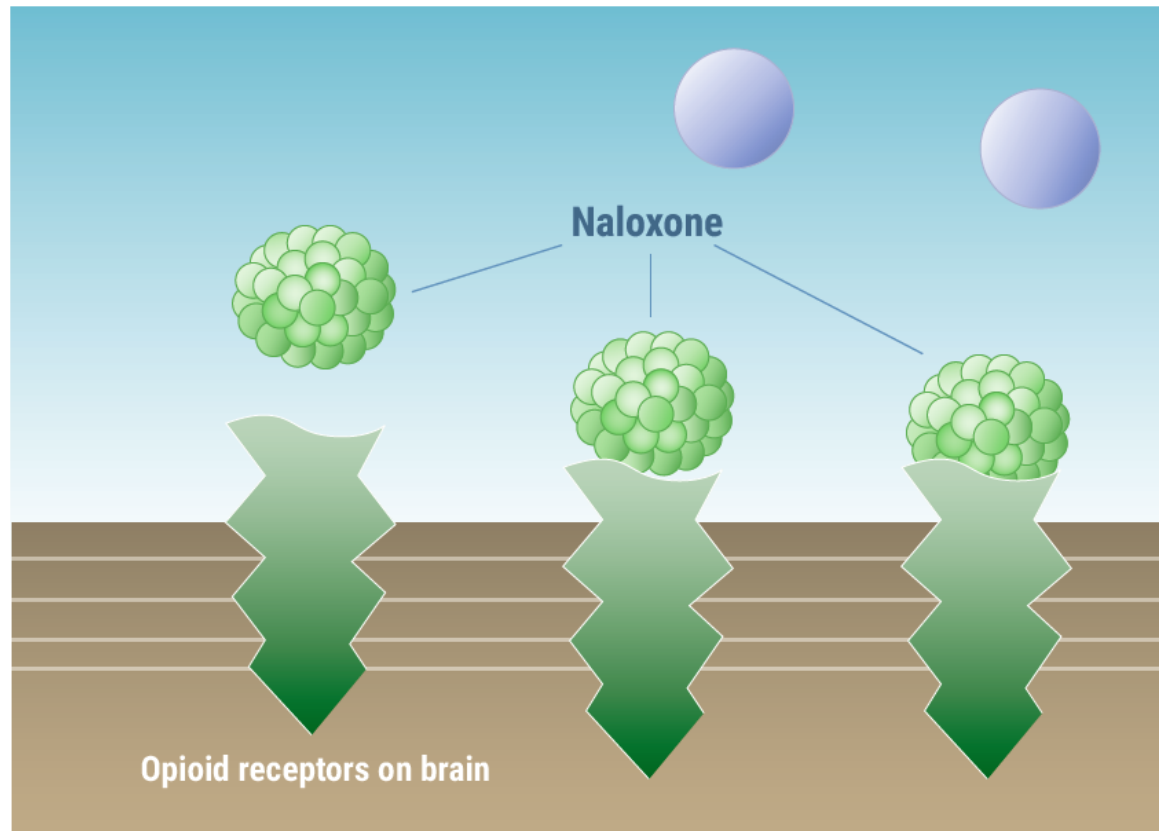
Skin feels cold  
and clammy



Pupils  
are tiny



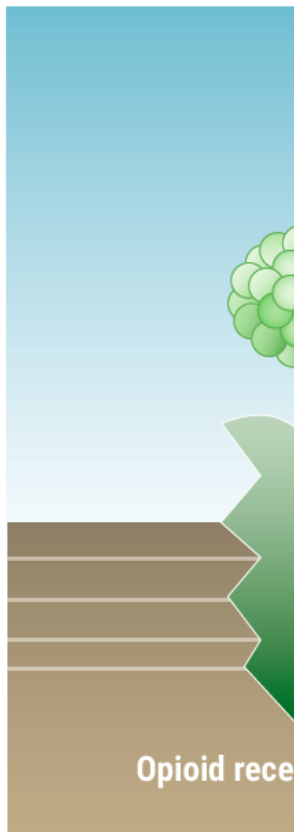


**FIGURE 4. NALOXONE MECHANISM OF ACTION<sup>7</sup>**

**Naloxone has a higher affinity to the opioid receptors than opioids like heroin or oxycodone, so it knocks other opioids off the receptors for 30-90 minutes. This reverses the overdose and allows the person to breathe.**



FIGURE 4. NALOXO



Naloxone has a higher affinity to the opioid receptors than opioids like heroin or oxycodone, so it knocks other opioids off the receptors for 30-90 minutes. This reverses the overdose and allows the person to breathe.

# Naloxone Access Laws

All 50 U.S. states + DC

Core Components

- Standing Orders
- Third Party Prescribing
- Liability Protection

## Standing Orders

Pharmacists can dispense naloxone without a prescription under physician's authority

## Third Party Prescribing

The person receiving naloxone does not have to be the person at risk for overdose

## Liability Protection

Persons who prescribe/dispense/administer naloxone are protected from liability

## Naloxone Formulations

Suggested order sentences for currently available naloxone formulations are listed below. Dispensing two doses is generally recommended in case the first dose is insufficient. Prescriptions should be issued to the recipient, even if the recipient is not the individual at risk for opioid overdose.

### Intranasal

#### Prefilled Syringe

1. Naloxone Prefilled Syringe (2mg/2mL), #2 boxes, PRN refills
  - Instill 1 mL into each nostril as needed for suspected opioid overdose, repeat in 2 minutes if necessary
2. Mucosal Atomization Device with Luer-lock, #2 devices, PRN refills
  - Attach to prefilled naloxone syringe as needed for suspected opioid overdose



#### Nasal Spray

1. Narcan Nasal Spray (4mg/0.1mL), #1 two-pack, PRN refills
  - Instill 4mg into nostril as needed for suspected opioid overdose, repeat in 2 minutes if necessary



### Intramuscular

#### Vial & Syringe

1. Naloxone Vial (0.4mg/mL), #2 vials, PRN refills
  - Inject 2 mL into buttock as needed for suspected opioid overdose, repeat in 2 minutes if necessary
2. IM Needle & Syringe (3mL, 25g, 1"), #2 syringes, PRN refills
  - Use to administer naloxone as needed for suspected opioid overdose



#### Prefilled Syringe

1. Naloxone Prefilled Syringe (2mg/2mL), #1 box, PRN refills
  - Inject 2 mL into buttock as needed for suspected opioid overdose, repeat in 2 minutes if necessary
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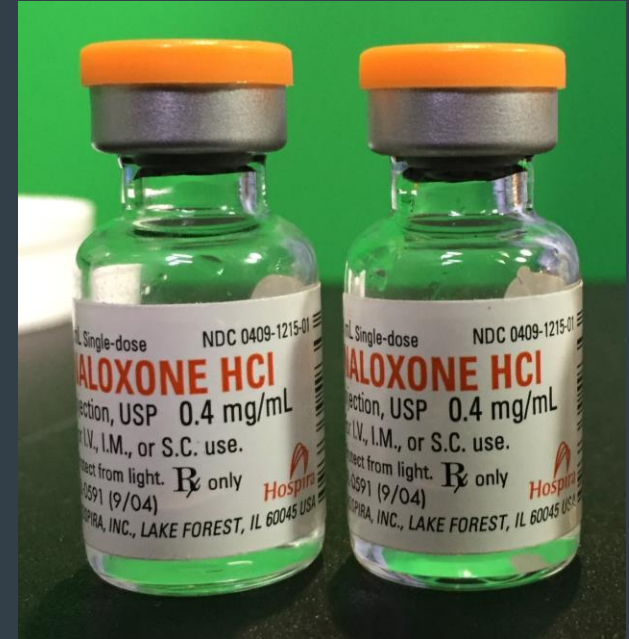
### Auto-Injector

1. Evzio Auto-injector (2mg/0.4mL), #1 two-pack, PRN refills
  - Inject into buttock as needed for suspected opioid overdose, repeat in 2 minutes if necessary
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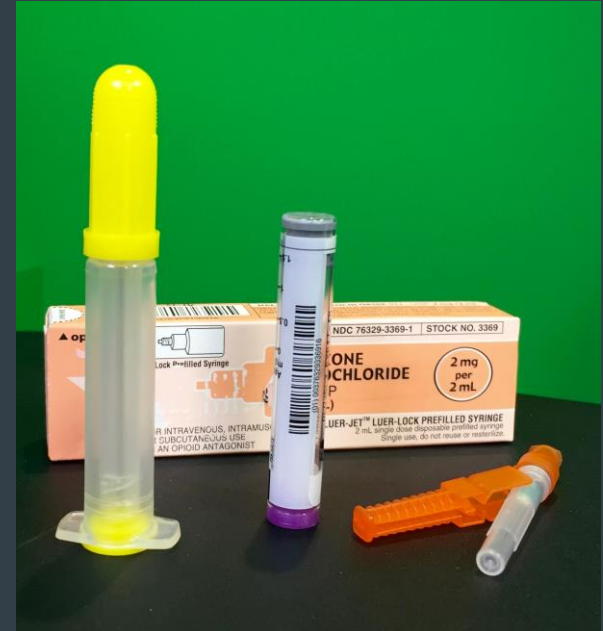
# Vial + Syringe

- Naloxone Vial (0.4mg/mL), #2, PRN refills
  - Inject 1mL into outer thigh as needed for suspected opioid overdose, repeat in 2 minutes if necessary
- IM Needle & Syringe (3mL, 25g, 1"), #2, PRN refills
  - Use to administer naloxone as needed for suspected opioid overdose



# Prefilled Syringe + Needle

- Naloxone Prefilled Syringe (2mg/2mL), #1, PRN refills
  - Inject 1mL into outer thigh as needed for suspected opioid overdose, repeat in 2 minutes if necessary
- IM Needle (25g, 1"), #2, PRN refills
  - Attach to prefilled naloxone syringe as needed for suspected opioid overdose



# Prefilled Syringe + MAD

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# NARCAN Nasal Spray

- NARCAN Nasal Spray (4mg/0.1mL), #1 box, PRN refills
  - Instill 4mg into nostril as needed for suspected opioid overdose, repeat in 2 minutes if necessary





# EVZIO Auto-Injector

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# OPERATION NALOXONE.org

PHARMACISTS



OPIOID HARM EDUCATION AND  
OVERDOSE PREVENTION  
2.5 CPE ACTIVITY

PRESCRIBERS



OPIOID HARM EDUCATION AND  
OVERDOSE PREVENTION  
2.5 CME ACTIVITY

SOCIAL WORKERS



OPIOID HARM EDUCATION AND  
OVERDOSE PREVENTION  
2.5 CEU ACTIVITY

# Key Points for Clinicians

Naloxone is harmless if administered to someone who is not experiencing an opioid overdose

Any patient who takes opioids chronically should be offered naloxone to keep at home

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## Naloxone for Patients

### You or a loved one may be at risk for an accidental drug overdose.

Drug overdose is the leading cause of injury death in the United States. Most overdoses involve opioids, which include certain prescription pain relievers and heroin.

<b>Common Opioids</b>	Morphine (MS Contin®), Oxycodone (OxyContin®/Percocet®), Hydromorphone (Dilaudid®), Oxymorphone (Opana®), Fentanyl (Duragesic®), Hydrocodone (Vicodin®/Norco®), Codeine, Methadone, Heroin
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Naloxone is available in several different versions. Some versions of naloxone are injected into the victim's muscle, while others can be squirted into their nose. Your pharmacist can help you determine which version of naloxone is right for you based on cost and ease-of-use. Check out **OperationNaloxone.org** to learn more about staying safe with opioids.

## Naloxone for Pharmacists

### **Naloxone can reverse the effects of an opioid overdose and save a life.**

Naloxone is an opioid antagonist that blocks the effects of opioids, including heroin. If someone takes too much of an opioid, they may experience fatal respiratory depression. Naloxone can reverse the effects of opioids and allow an overdose victim to breathe again. Naloxone is not a controlled substance and cannot be abused. If an overdose victim is physiologically dependent on opioids, administering naloxone may precipitate acute opioid withdrawal. This is generally not life-threatening, but contacting emergency medical services is still essential.

### **Every patient who fills an opioid prescription should be offered naloxone.**

Pharmacists should always maintain a stock of naloxone and be prepared to dispense it. The Texas Naloxone Law (SB 1462) allows for third-party prescribing, meaning any person who may be in a position to help someone experiencing an opioid overdose may receive it. There is no medically valid reason to refuse to dispense naloxone to a person who requests it.

### **No formulation of naloxone has been proven more effective than another.**

Price and ease-of-use vary greatly, and these will likely be the determining factors when you work with a patient to select an appropriate formulation. Some formulations require separate equipment to be dispensed for proper administration. The person responding to an overdose will NOT be the victim, so assumptions about the responder being injection-savvy or speaking English may be incorrect. It is possible that high-dose formulations may exhibit a longer duration-of-action than lower doses.

### **Reports of ultra-potent, naloxone-resistant opioids are unsubstantiated.**

The U.S. is seeing an influx of illicitly-manufactured fentanyl (IMF), some of which exhibit enhanced binding affinity to mu-opioid receptors. There have been isolated reports of IMF overdoses in which several doses of naloxone were administered to resuscitate the victim, but it is not clear that all doses were required. It is hypothesized that high-dose formulations of naloxone may exhibit superior efficacy against IMF, but this has not yet been demonstrated in practice.

### **You are authorized to administer naloxone to an overdose victim.**

As a pharmacist, you have been identified as a front-line harm reduction provider in the state of Texas. This responsibility extends beyond the dispensing of naloxone to administering it in the case of an acute opioid overdose. Go to **OperationNaloxone.org** to find naloxone administration videos.

## Naloxone Formulations

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