



FENTANYL

HEROIN

PRESCRIPTION PAIN PILLS

CUSTOMS AND BORDER PROTECTION DRUG SEIZURES

	FY 14	FY 15	FY 16	FY 17	FY 18	FY 19	FY20 TD JUL
Cocaine	45,323	38,346	52,838	62,415	51,592	89,207	33,684
Heroin	4,356	6,023	4,224	3,398	5,205	5,427	4,085
Marijuana	438,146	602,821	516,122	366,627	299,419	289,529	272,649
Methamphetamine ⁵	19,613	25,495	33,086	46,247	57,440	68,585	118,153
Fentanyl	n/a	70	596	1,875	1,895	2,545	2,852

FENTANYL , WHY NOW

- Manufacturing in China unregulated, now shifting to Mexico
- It is much cheaper than heroin per dose (\$2,000-\$5,000 per kg) vs \$25,000 per kg heroin
- Online dissemination of new and more efficient synthesis methods, anonymous e commerce changing the fundamental drug distribution paths (dark web, bit coin...)
- Supplier decisions and not user demand are driving the transition
- Its spread is fast, typically dominating a market within 1-2 years and remaining the dominant drug
- Synthetic opioids drive up deaths rather than number of users
- In some markets fentanyl is replacing (not just supplementing) heroin
- It is going to get worse before it gets better

Table 2.2**CBP Seizures of Fentanyl in FY 2018, by Mode of Transport**

Mode of Transport	Weight (kg)	Estimated Purity-Adjusted Weight (kg)	Number of Seizure Events	Average Weight of Seizure (bulk kg)
Land (mostly southwest border)	654.00	49.05	182	3.59
Border patrol	176.36	13.23	—	—
Express consignment	52.62	47.36	76	0.69
Mail	61.72	55.55	455	0.14
Air (other)	50.06	45.05	2	25.03
Total	994.76	210.24	715	—

SOURCE: CBP, 2019a.

NOTE: The purity of fentanyl arriving at mail and express consignment facilities is often 90 percent, while seizures at the southwest border are reportedly 5- to 10-percent pure; here we use the midpoint of 7.5-percent pure. CBP did not report the number of Border Patrol seizure events, so we cannot calculate the average weight.

There is considerable overlap in rising overdoses and drug seizure counts in the same parts of the United States.

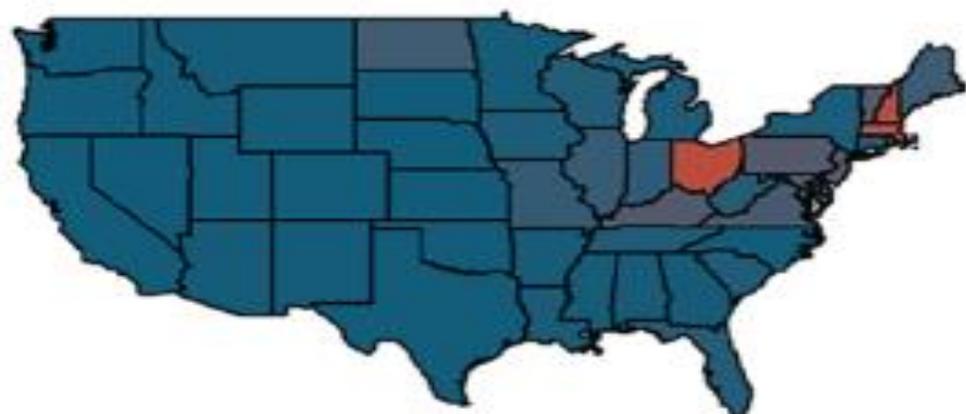
2014



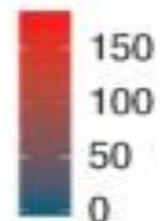
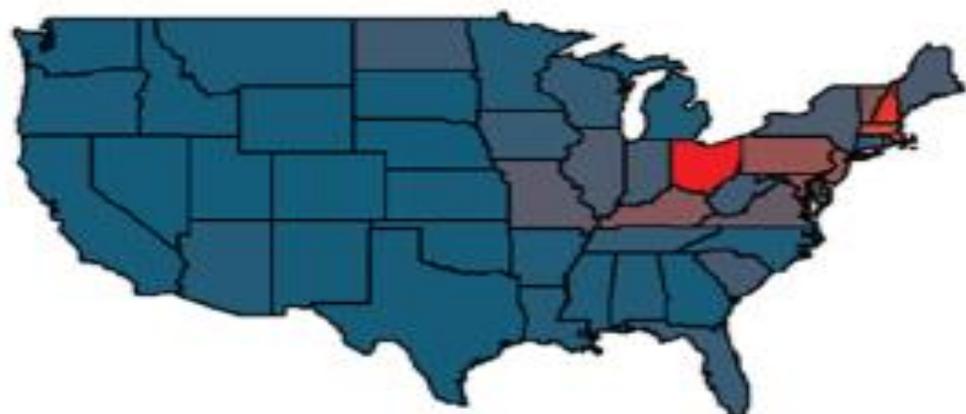
2015



2016



2017



Maps here show fentanyl and fentanyl-related seizure counts per 100,000 people over time, 2014–2017, using data from the Drug Enforcement Administration.

'Enough to kill the entire population': Ohio authorities seize 45 pounds of fentanyl



Ohio authorities have seized a multimillion-dollar haul of fentanyl so large they're calling it a "weapon of mass destruction." (Photo: Range Task Force)

DEA Alerts: Over one million deadly fentanyl pills seized by DEA Phoenix and Arizona law enforcement this year

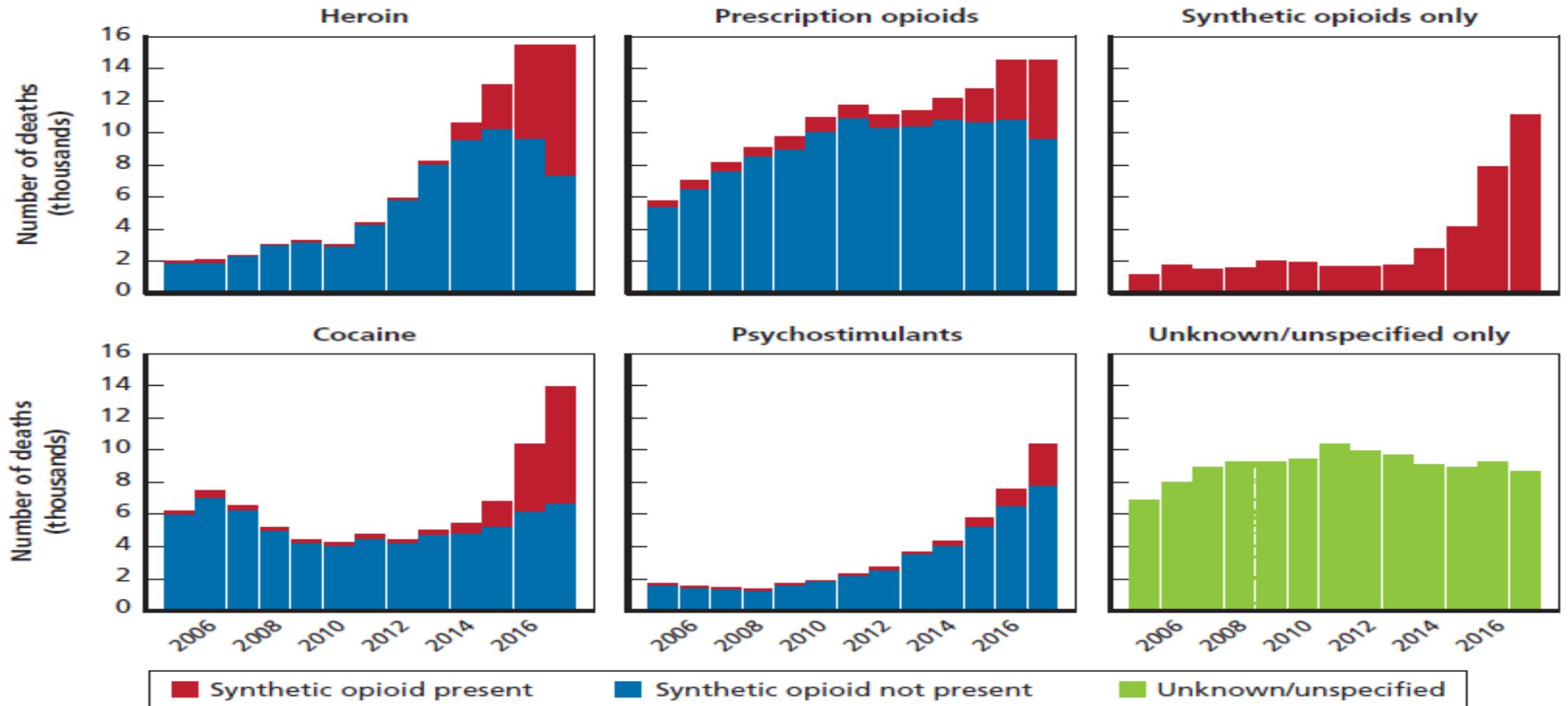


Photo of 90,000 fentanyl pills seized by DEA in Arizona.

LETHAL DOSES COMPARISON



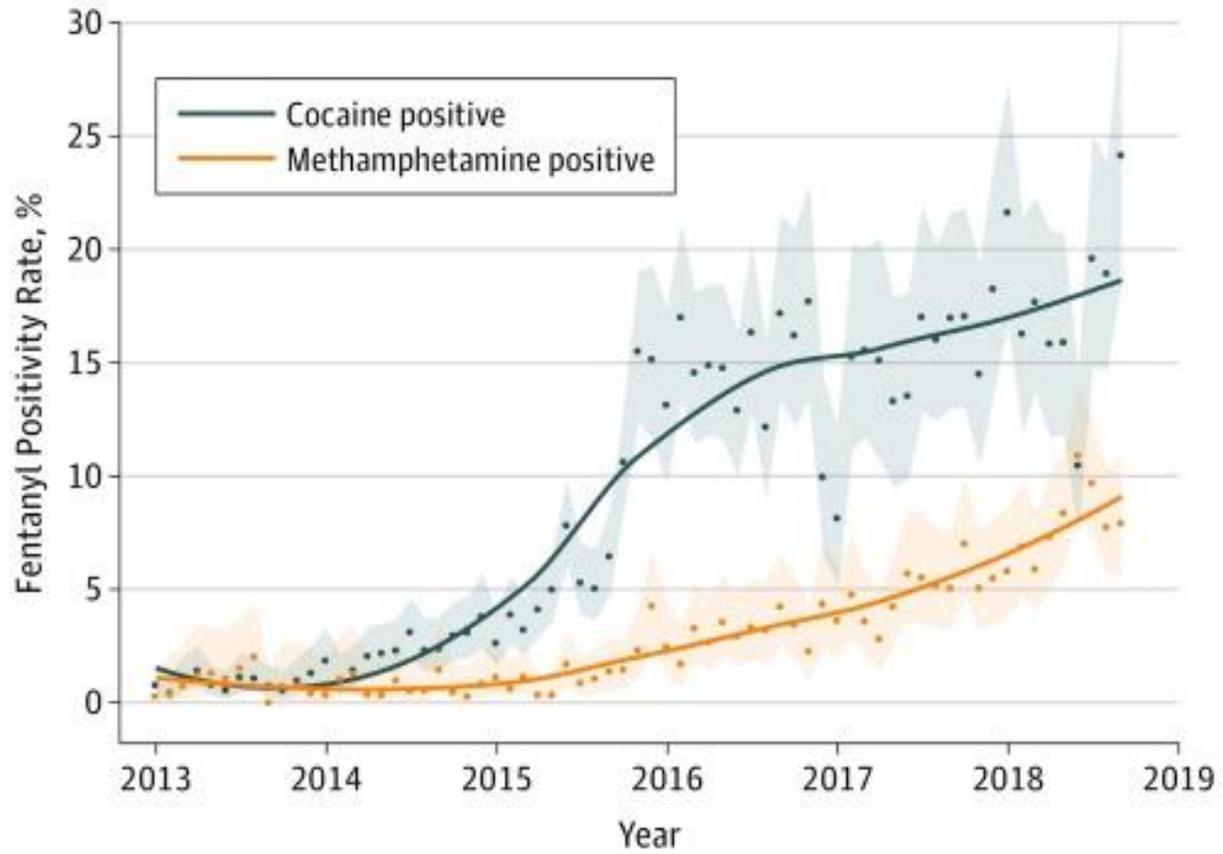
Figure 2.2
U.S. Drug Overdose Death Count, by Year and Drug Category



SOURCE: Data for this figure are from deidentified public-use MCODE certificate files produced by the National Center for Health Statistics, 2005–2017, shared with RAND researchers under a data use agreement.
 NOTE: The “synthetic opioids only” panel excludes deaths that also mention cocaine, heroin, prescription opioids, or psychostimulants.

[JAMA NETW OPEN](#). 2019 APR 5;2(4):E192851. DOI: 10.1001/JAMANETWORKOPEN.2019.2851.

RATE OF FENTANYL POSITIVITY AMONG URINE DRUG TEST RESULTS POSITIVE FOR COCAINE OR METHAMPHETAMINE.

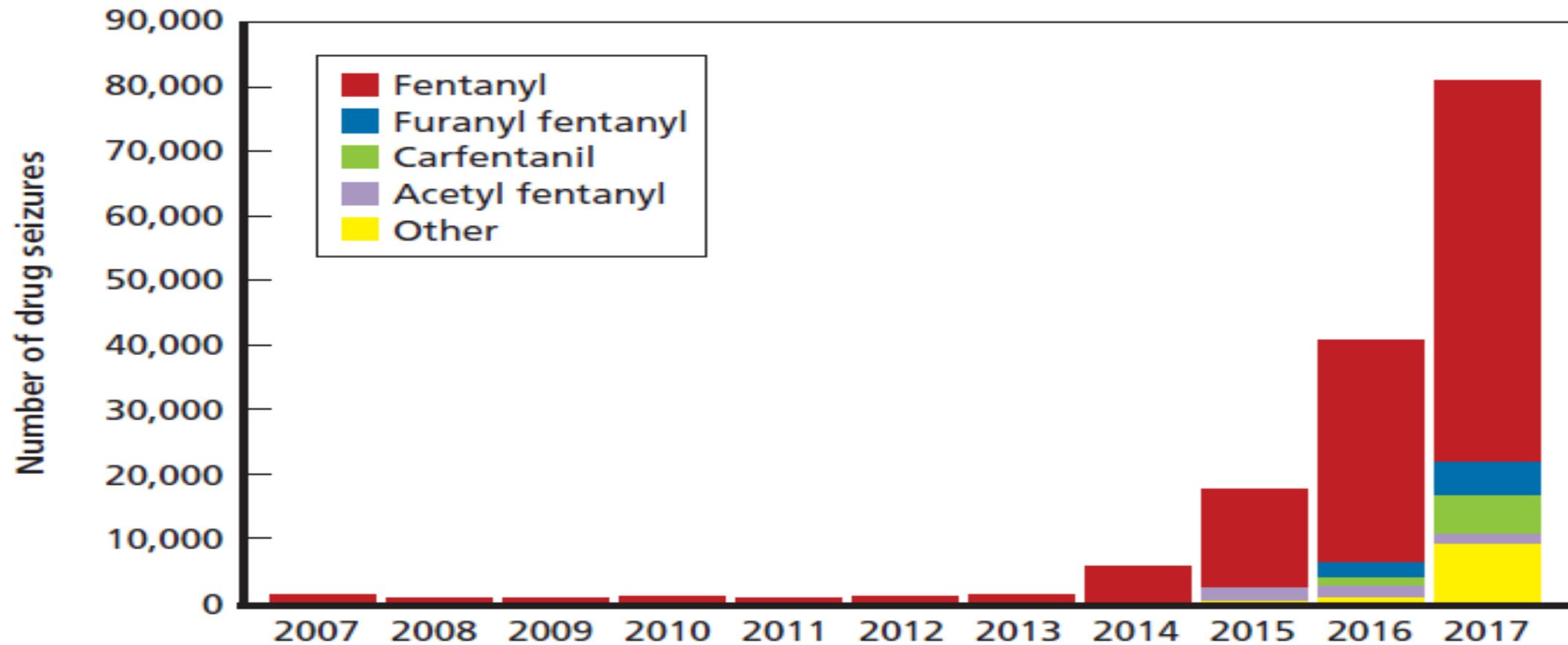


CARFENTANIL

- **Analog of fentanyl**
- **10,000 times more potent than morphine**
- **“weapon of mass destruction”**
- **Moscow theater hostage rescue disaster**
- **Was not a controlled substance in China till March 2017**
- **June 2016 Canadian authorities seized 1 kg (enough to kill 50 million people)**

Figure 2.9

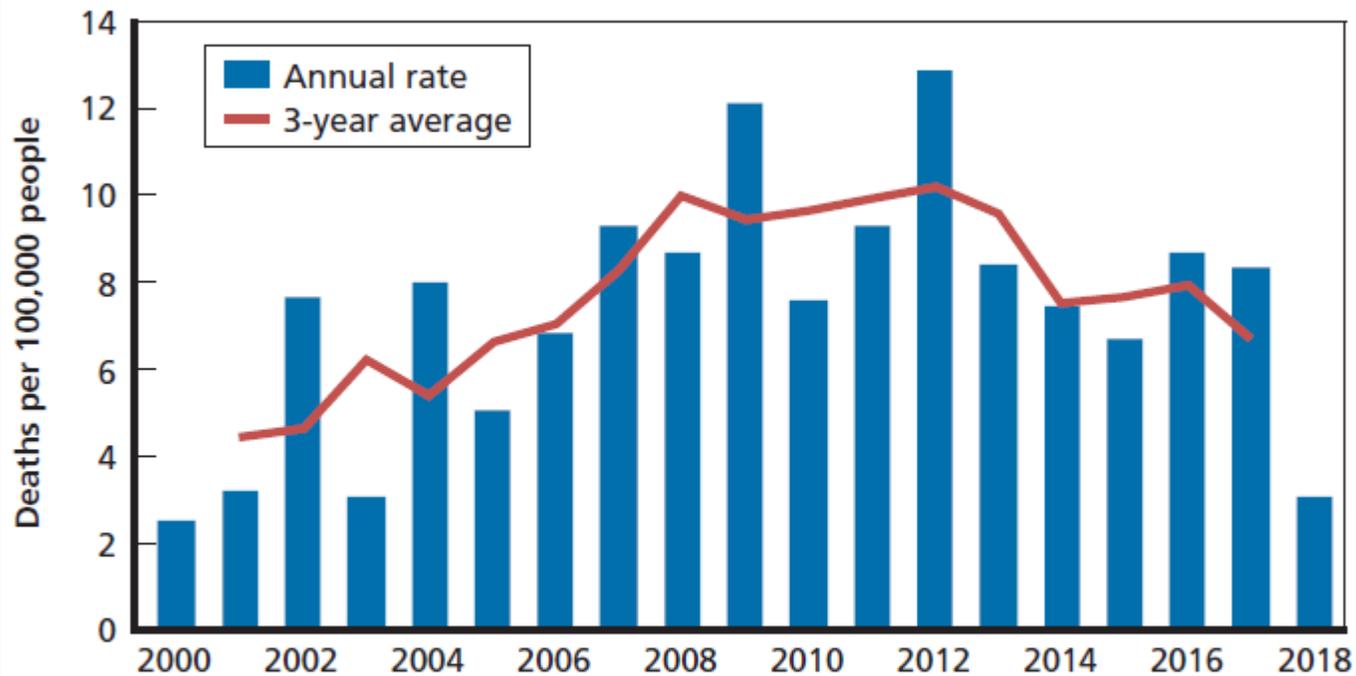
Drug Seizures of Fentanyl and Fentanyl-Related Substances in the United States, 2007–2017



SOURCE: Data are from DEA NFLIS reports, 2007–2017.

THE ESTOTIAN EXPERIENCE

Figure 4.3
Drug-Related Death Rate in Estonia per 100,000 People, 2000–2018



SOURCE: Data on deaths are from the Estonian Cause of Death Registry, 2019. Data on population are from Statistics Estonia, 2019.

NOTE: 2002 was the first full year with the presence of fentanyl noted; 2016 was the first full year with the presence of analogs other than 3MF noted.

WILL THIS CHANGE OUR APPROACH TO OPIOID USE DISORDER TREATMENT

- Does this make harm reduction more of a priority
- Everyone gets a naloxone rescue kit, including stimulant use disorder patients
- MAT (medication assisted treatment) remains important
- Relapse following recovery becomes more dangerous
- Getting out of jail becomes more dangerous
- Education of patients is even more important

COMPONENTS OF REDUCING OVERDOSE RISK

DISCUSS THE PATIENTS PERSPECTIVE/MOTIVATION

EDUCATION

TREATMENT with a focus on harm reduction

RESCUE KITS

Overdose Lifeline, Inc.



Indiana nonprofit on the front-lines
of the Opioid Health Crisis since 2014

ADVOCACY >>

HARM REDUCTION >>

TRAINING + EDUCATION >>

YOUTH PREVENTION + EDUCATION >>

SUPPORT >>

Information > OverdoseLifeline.org

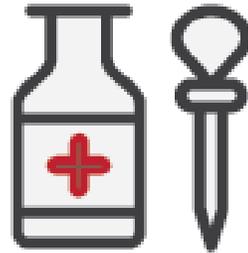


Our work ...



Our Youth Awareness Prevention Program is now used in **more than 28 U.S. states** by over **500 delivery partners**

Narcan (naloxone) is now available over the counter **as a result of our work**



Engaged **over 500 First Responder Departments**. Trained over **15,000 First Responders** and over **10,000 layperson** on Narcan.

Increased state-wide awareness and knowledge via **evidence-informed adult training**



First in the U.S. to deliver an **evidence-based personality-targeted approach** to adolescent substance use prevention



Saved **thousands of Indiana residents' lives**



The family of opioids

Natural

Morphine - Codeine - Opium



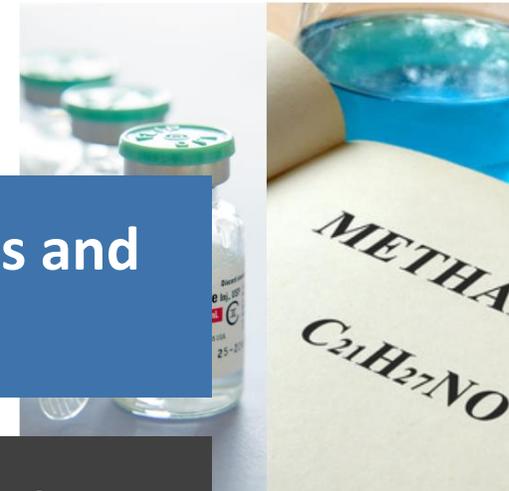
Semi-Synthetic

Vicodin - Percocet - Oxycodone - Heroin



Fully Synthetic

Fentanyl - Methadone



Manufactured by Pharmaceutical Companies and
Illicit Drug Manufacturers

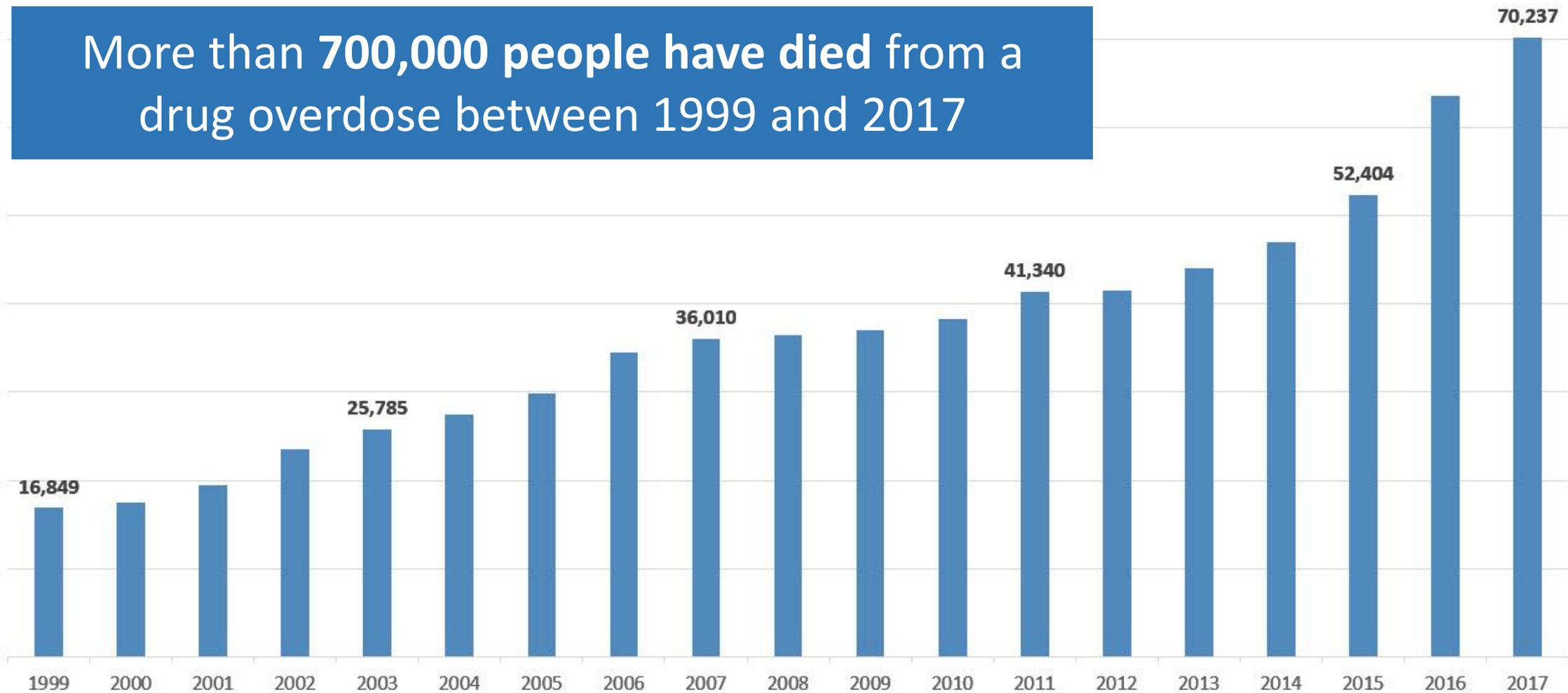
Regardless of the Form – Opioids Are Addictive

Opioids

Natural	Semi-Synthetic	Fully Synthetic
Codeine	Buprenorphone (Suboxone, Subtex) – Used in MAT	Carfentanil (Large Mammals)
Morphine	Heroin	Meperidine – Demerol
Opium	Hydrocodone	Fentanyl – Actiq, Duragesic, Fentora
	Hydrocodone/Acetaminophen – Lorcet, Lortab, Norco, Vicodin	Methadone – Used in MAT
	Opana	
	Oxycodone – OxyContin	
	Oxycodone/Acetaminophen – Percocet, Endocet, Roxicet	
	Tramadol	



More than 700,000 people have died from a drug overdose between 1999 and 2017



Drug Overdose Deaths are Preventable



Stimulant overdose death rate trends

NEW trend: "Fentanyl is being used to lace a wide variety of drugs, including marijuana," — Nora Volkow, MD, director of the National Institute on Drug Abuse.

Opioids Involved in 73% of
Cocaine-Overdoses

Opioids Involved in 50% of
Psychostimulant-Overdoses

In many cases, both street-level drug dealers and the people who use cocaine are unaware that the cocaine is laced with fentanyl.

2018 CDC data indicated stimulant overdose deaths continuing to increase.



Benzodiazepines (Benzos)

More than 30% of overdoses involving opioids **also involve benzodiazepines (benzos)**. Commonly prescribed for anxiety or to help with insomnia. Includes: Valium, Xanax and Klonopin. Both slow down the body's systems (cardiovascular and respiratory)

Pattern of Prescribing and Misuse Similar to Opioids

Prescriptions have tripled in recent years. Xanax is the #1 prescribed psychiatric medication with 50M prescriptions written every year.

Commonly co-prescribed with opioids.

Often misused (esp. among youth/young adults).

Tolerance and dependence can develop quickly.

Source: National Institute of Drug Abuse, Benzodiazepines and Opioids, updated March 2018, <https://www.drugabuse.gov/drugs-abuse/opioids/benzodiazepines-opioids>



Who is at risk to overdose?

Get opioids from multiple sources	Elderly people prescribed opioids
Use opioids for non-medical reasons (misuse)	Children who accidentally take opioids
Use opioids prescribed to others	Anyone on high doses of opioids, even if taking medications as prescribed
Take more than, or more often than they are prescribed	People using pain-reliever patches incorrectly
Former opioid user recently released from prison or treatment >> lowered tolerance	People taking multiple respiratory depressants (alcohol, benzodiazepines)
Who snort or inject the opioid	People with chronic lung disease or sleep apnea taking opioids



What increases heroin overdose risk

- Taking a larger than usual dose
- Switching between smoking and injecting
- Using with other substances (ex. alcohol or sleeping pills)
- Increase in purity, laced with Fentanyl
- Using while no one else is present
- Using after not having used for a while



Image Source: Wikipedia Bayer released into the public domain. This applies worldw



The dangers of fentanyl exposure

Recommend taking precautions when arriving on a scene or processing any drugs taken into custody

Early 2017 Reports Taken Out of Context and Misrepresented

*Sources: Marie McCullough, Experts: Fentanyl's risk to first responders overblown. PoliceOne.com News, Philly.com, July 4, 2017
Jeremy Samuel Faust, The Viral Story About the Cop Who Overdosed by Touching Fentanyl Is Nonsense, Medical Examiner, June 28, 2017*



The dangers of fentanyl exposure

Ohio law enforcement officer who became exposed to fentanyl brushing the powder from his shirt and subsequently overdosed.

It was also reported that it took multiple doses of naloxone to revive the officer.



*Sources: Marie McCullough, Experts: Fentanyl's risk to first responders overblown. PoliceOne.com News, Philly.com, July 4, 2017
Jeremy Samuel Faust, The Viral Story About the Cop Who Overdosed by Touching Fentanyl Is Nonsense, Medical Examiner, June 28, 2017*



The dangers of fentanyl exposure

David Juurlink, M.D., a toxicologist at the University of Toronto, **“it is hard to imagine someone would need multiple doses of naloxone after transient skin contact with powdered fentanyl,”** and that it was more likely that naloxone had simply been deployed against the **wrong problem.”**



Sources: Marie McCullough, Experts: Fentanyl's risk to first responders overblown. PoliceOne.com News, Philly.com, July 4, 2017
Jeremy Samuel Faust, The Viral Story About the Cop Who Overdosed by Touching Fentanyl Is Nonsense, Medical Examiner, June 28, 2017



The dangers of fentanyl exposure

Medical and toxicology professionals agree that it is implausible that one could overdose from brushing powder off a shirt.

- Skin cannot absorb even the strongest formulations of opioids efficiently or fast enough to exert such an effect.
- Fentanyl isn't absorbed through the skin into the blood quickly or efficiently enough to make overdose occur.

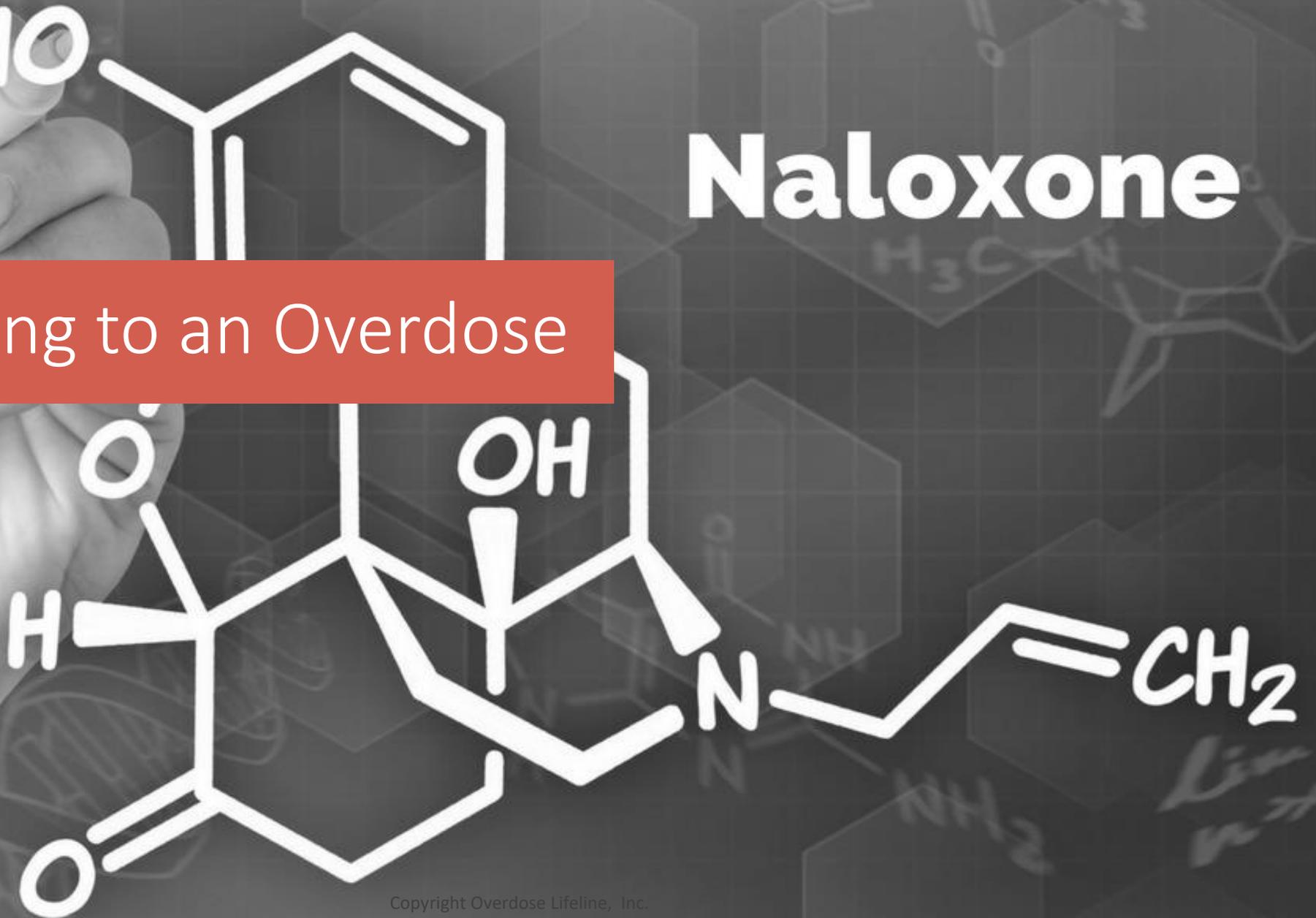
Use good judgement, proper protective equipment, gloves, safety glasses, and an agency approved respiratory protection all the way to hazmat suits with breathing gear.

*Sources: Marie McCullough, Experts: Fentanyl's risk to first responders overblown. PoliceOne.com News, Philly.com, July 4, 2017
Jeremy Samuel Faust, The Viral Story About the Cop Who Overdosed by Touching Fentanyl Is Nonsense, Medical Examiner, June 28, 2017*



Naloxone

Responding to an Overdose



Naloxone (also known as Narcan[®])

Is an opiate antidote (antagonist) which reverses an opioid overdose.

When a person is overdosing from an opioid, their central nervous system and respiratory system is depressed and breathing slows or stops.

Naloxone blocks the effects of opioids and reverses the effects of an overdose, allowing the overdose victim to breathe normally.

It cannot be used to get a person high. It is non-addictive. It will not harm someone if opioids are absent.



Naloxone laws in every state will differ.

IC 16-42-27 - Aaron's Law (April 2015)

- Allows for layperson access to naloxone
- Third Party prescription or standing order
- Allows for state registered distribution entities to distribute naloxone to the public without a prescription
- **Protected under the Good Samaritan Law**

Amended in July 2016 to state-wide standing order.

IC 16-31-12 (Expanded 2013)

- Expands first responder use of naloxone to EMT's, Police Officers and Firefighters



Naloxone delivery devices



INTRAVENOUS – Healthcare / Hospital Settings



INTRAMUSCULAR

- Needle draw and injection
- Autoinjector (Evzio)



INTRANASAL

- Amphastar with MAD
- Narcan[®] Nasal Spray by Adapt

Myths about naloxone

1. Naloxone encourages people to use opioids more.
False. Studies have shown that areas where naloxone is commonly used and available have seen decreases in opioid misuse.
2. Naloxone makes the recovered violent.
Not quite. Less than 3%. Naloxone at high dose can cause a quick reversal of an overdose, leading the body to go to “fight-or-flight” mode. This is because the user’s addiction relies on the opioid for survival, without it withdraw kicks in and a person may become combative.
3. Naloxone prevents people from seeking treatment.
False. Areas with naloxone distribution have seen higher rates of treatment seeking among those saved by the drug.



The truth about naloxone

In a 2005 San Francisco, CA study, injection drug users received naloxone kits and CPR training

6-month follow-up (interview), no evidence of increased drug use

Found decreased heroin use among participants

Participants entering drug treatment increased from 35% to 60% - Even though the program did not promote reduction in drug use or drug treatment

In a similar 2010 program in Los Angeles, CA

53% of program participants reported decreased drug use at 3 months follow-up (interview)

Sources: Seal et al, Attitudes about prescribing take-home naloxone to injection drug users for the management of heroin overdose: a survey of street-recruited injectors in the San Francisco Bay Area, J Urban Health. 2003 Jun;80(2). Wagner et al, Evaluation of an overdose prevention and response training programme for injection drug users in the Skid Row area of Los Angeles, Int J Drug Policy. 2010 May; 21(3):186-93.



Naloxone starts a conversation

Naloxone can help start the conversation about opioid use and addiction

A 2016 Staten Island, NY study found that 99% of study participants (opioid users) would be more open with their healthcare provider about drug use history and relapse, if offered a naloxone rescue kit.

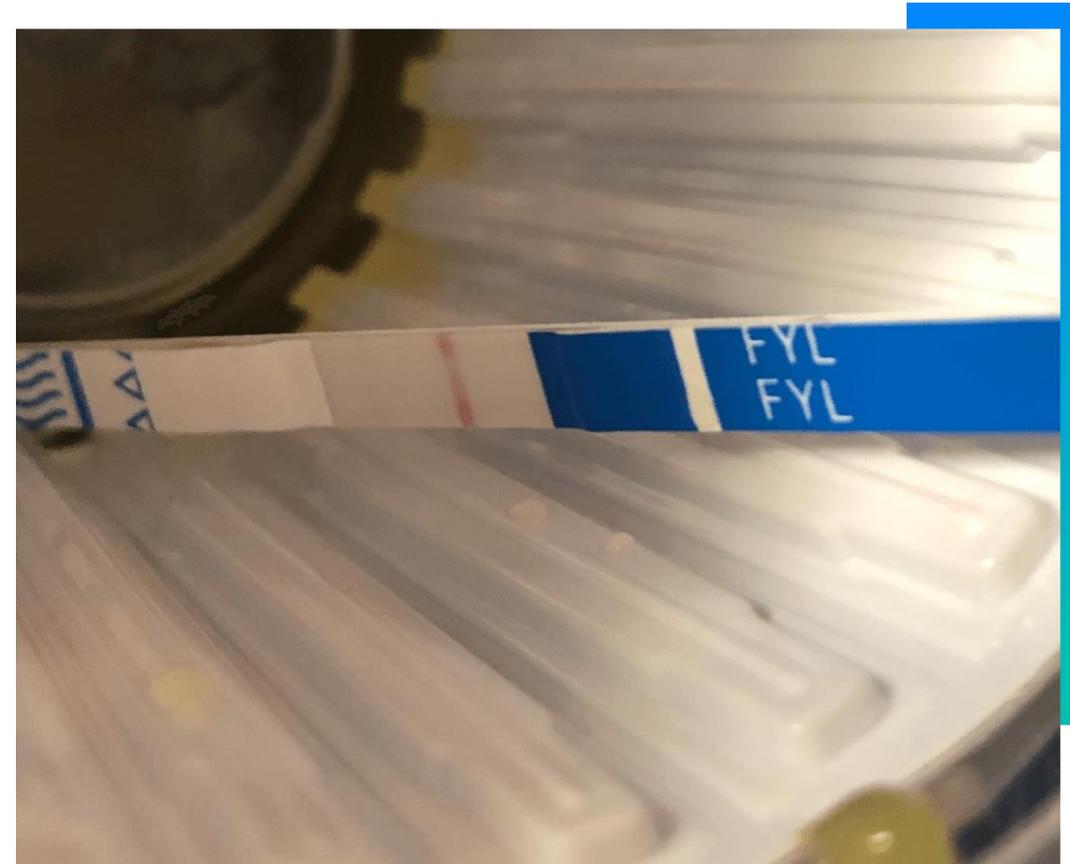
Not only can naloxone save a life, but it can start needed communication.

Source: Kirane H et al *Awareness and Attitudes Toward Intranasal Naloxone Rescue for Opioid Overdose Prevention*, Journal Substance Abuse Treatment, 2016 Oct



Fentanyl Test Strips

- Testing for Fentanyl
- Fentanyl test strips can identify the presence of fentanyl in unregulated drugs. They can be used to test injectable drugs, powders, and pills.
- Being aware if fentanyl is present allows people to implement appropriate harm reduction strategies to reduce the risk of an overdose.



Fentanyl Test Strips

- Test strips are a useful engagement tool to foster discussion with people who use drugs .
- Test strips are easy to use with minimal instruction
- Test strips allow PWUD to be more informed about the drugs they are buying and using, leading to behavior change and the adoption of increased harm reduction measures, including sharing information among peers.
- PWUD demonstrate a high likelihood of implementing one or more harm reduction strategies when learning that their drugs are positive for fentanyl.

Considerations:

- Important that providers have adequate knowledge of the test strip technology, how to read results and what results mean in order to accurately communicate with PWUD.
- Test strips are not an effective tool for systematically documenting the presence of fentanyl in the drug supply.
- Test strips are extremely sensitive, and pick up on minimal amounts of fentanyl, often so little that PWUD do not feel the effects of it, casting doubt on the utility of the technology.
- Test strips often show a faint line for negatives, which can cause mistakes in reading them, resulting in false positives.
- Test strips do not tell any information about the percentages of fentanyl in drugs nor do they detect any other drugs.

* <https://harmreduction.org/issues/fentanyl/fentanyl-test-strip-pilot/>



Overdose Lifeline resources

- <https://www.overdoselifeline.org/2020-indiana-naloxone-request/>
- Currently have 23 community-based locations distributing under this opportunity.
- Fentanyl test strips available upon request (limited supply)
contact@overdoselifeline.org





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