The Rise of Fentanyl and How to Talk to Your Kids About It

David Deyhimy M.D., FASAM

- Diplomate & Fellow, American Board of Addiction Medicine
- Diplomate, American Board of Preventive Medicine
- Diplomate, American Board of Anesthesiology
- Medical Director of Pulse Addiction & MYMATCLINIC



Sergeant Brian Gunsolley

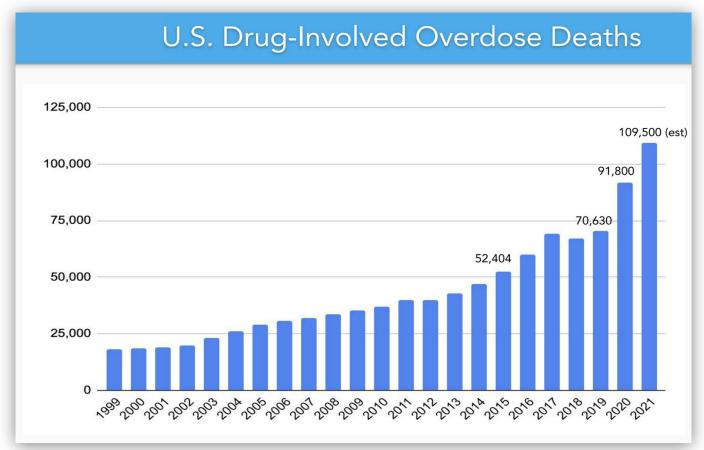
- Orange County Sheriff Dept.
 Community Engagement Unit
- 24 years of service
 - Corrections, Patrol, and Critical Incident Response Team, Field Training Officer, Drug Liaison Officer, DUI Task Force member, School Resource Officer and substance use prevention program creator.



Quick stats

- Fentanyl is #1 killer of teens in OC
- DEA reports 60% of seized pills contain lethal fentanyl. Up from 42% in 2021
- 50M seized illicit pills in 2022. Up from 20.4M in 2021
- Overdose is the leading cause of U.S. deaths ages 18-45 ⇒ Most weren't intending to use opioids. e.g. concerts, parties, experimenting

U.S. Drug-Involved Overdose Deaths

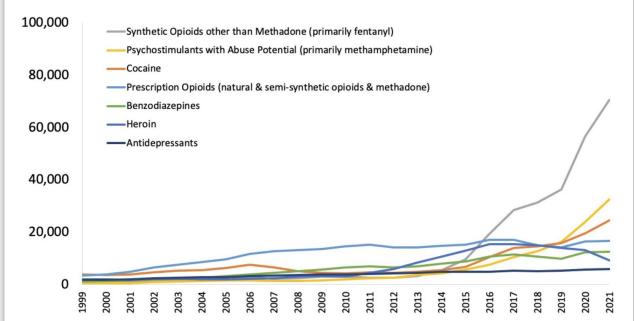


2022 estimates are at 130k+

Costs an
estimated
\$500B to U.S.
taxpayers
each year

U.S. Drug-Involved Overdose Deaths





*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.

2021 Gun deaths

Deaths: 21,009

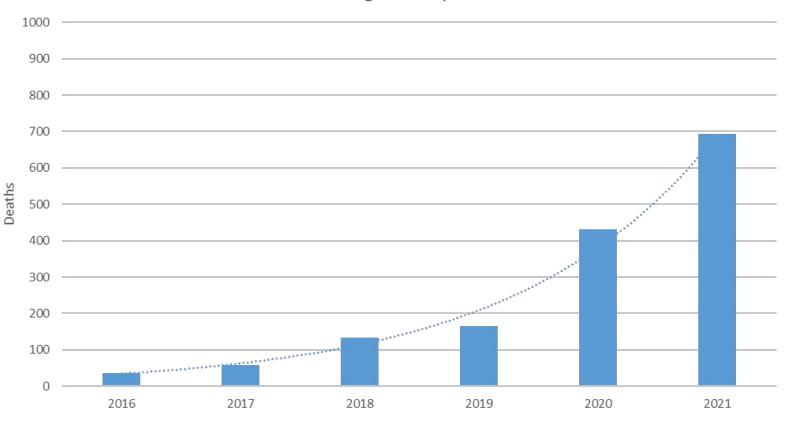
Suicide: 26,328

Teens killed: 4,645

Mass shooting: 690

https://www.gunviolencearchive.org/

All Fentanyl Related Deaths Orange County



What is Fentanyl?

Pharmaceutical Fentanyl

- Clinically useful drug used daily worldwide
- 100x more potent than morphine and 50x heroin
- Potent and short-acting

Illicit Fentanyl

- Made in unregulated "labs" in Mexico and China
- Many potencies, duration of action, undetectable when mixed into other drugs
- 2022 :: 60% of confiscated pills laced w/fentanyl; illicit drugs now laced with fentanyl, including marijuana and cocaine

Illicit Fentanyl "Production" - farmers in rudimentary settings



Lethal doses



Hours to overdose



Minutes to overdose

Addiction Neuroscience

Dopamine

Responsible for pleasure and motivation

- Insures we repeat certain "pro-survival" behaviors
- Drugs can "hijack" this system
- Drug use results in much higher than normal — 20x normal with some drugs

The Brain

Compensates rapidly

- "Too much!"
- Down-regulates, leading to tolerance
- Removing drugs dramatically reduces
 Dopamine levels withdrawal

The Body

Survival

 Users do whatever it takes to stay alive... increased usage, potencies, frequency

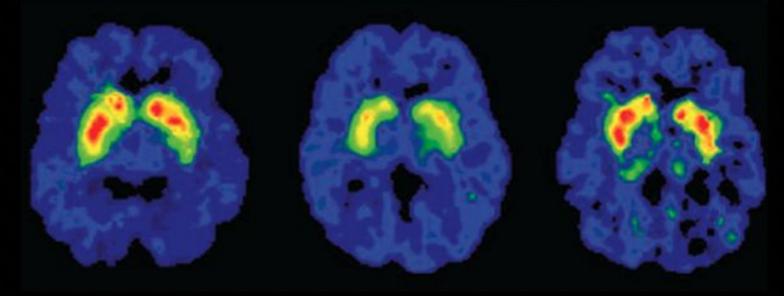
vicious cycle

Addiction is a disease.

It's time to drop the stigma.

- Similar to other chronic diseases, such as heart disease or diabetes
- All disrupt the normal, healthy functioning of an organ, have serious harmful effects, and in many cases are preventable and treatable
- Untreated, they can last a lifetime and may lead to death
- Considered a brain disorder, involving functional changes to brain circuits for reward, stress, and self-control.
 Changes may last a long time after a person has stopped taking drugs

BRAIN RECOVERY WITH PROLONGED ABSTINENCE



HEALTHY CONTROL

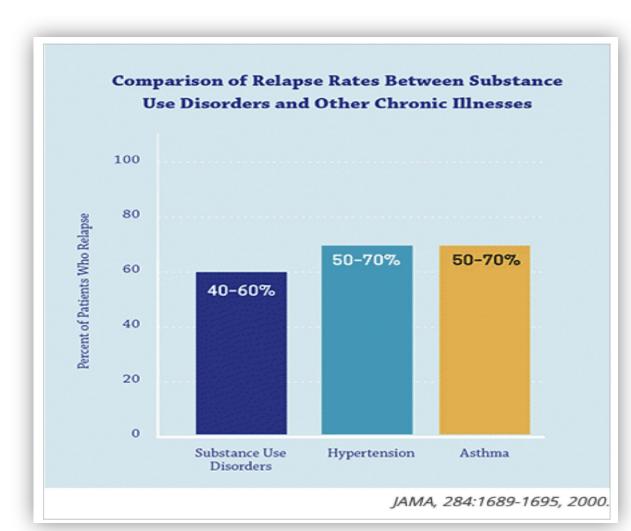
PATIENT WITH METHAMPHETAMINE USE DISORDER

1 MONTH OF 14 MONTHS OF ABSTINENCE ABSTINENCE

Relapse rates

Relapse is common across these illnesses. **Substance Use Disorders** should be treated like any other chronic illness.

Relapse serves as a sign for resumed, modified, or new treatment.



Medication Assisted Treatment (MAT)

- Relapse rates for Substance Use Disorder is 40-60%
- Opioid Use Disorder is 90-95%
- Medication Assisted Treatment is a very effective way to treat patients with efficacy rates of 60-80%

Protecting our kids

What we're seeing in Orange County

#1 killer of kids

2015 - 2021 saw 1600% increase in fentanyl deaths (all ages)

FENTANYL kills more kids than

- car accidents
- drownings
- suicide
- gun violence

Modern-day Dealers

DELIVERY is easy

Snapchat

Pill confiscation has increased

WHY lace everything with Fentanyl?

 Not necessarily to kill, but to hook

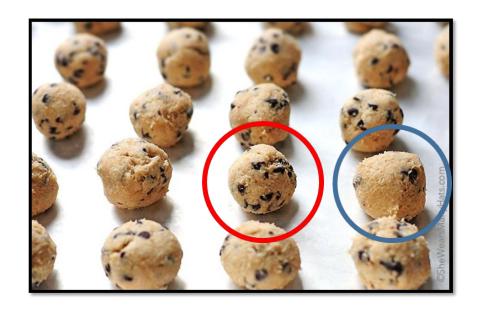
Chocolate Chip Cookie

- Dealers mixing in rudimentary settings
- Not all pills are equal
- 1 pill can kill!



Why counterfeit pills are so deadly





Never too young; start conversations early!

- Discuss casual drug use and its implications
 - Pills that look like candies
 - Rainbow parties
 - Friends at a party... "try this"
 - Short and long-term effects



- Brain development; frontal lobe isn't fully-formed until 25 years old
 - Neural connections are forming as rapidly as during infancy
 - By nature, teens are impetuous and thrill-seeking
- Check kids' phones and social accounts you're the parent!
- Build trust with your kids and their friends

Trends

Xylazine "Tranq"

- Veterinary tranquilizer
- Suppresses respiratory system
- Makes Fentanyl high last longer
- Narcan has no effect

Protonitazene

- Opioid
- 3Xs stronger than Fentanyl
- Requires 2 to 3 Narcan doses to reverse

Xanax and Valium

- Benzodiazepine
- Anti-anxiety drug
- Suppresses respiratory system
- Narcan has no effect

Trends



Purposefully overdosing and having their friends or themselves "bring them back"

- Similar to the movie
 Flatliners
- Rarely works for so many reasons

L.A.W. of Human Need

Everyday, children need to feel...

Loved

Accepted

Wanted

- Communication occurs in the recipient
- How do you communicate to the children in your care that they're loved and accepted?

Be the "safe call"

- Know the signs of overdose and how to use Naloxone
 - unconsciousness or unresponsiveness (doesn't wake up when shaken or called)
 - shallow breathing
 - limpness
 - blue lips, gums, or fingertips
 - slow or irregular heartbeat or pulse
 - Training video https://youtu.be/nurz9qPGKws
- Regular dialog with other parents
- Carry Narcan and/or Kloxxado home, cars, office, purses

Naloxone aka Narcan and Kloxxado





- 80% of overdoses happen in a home
- 40% of overdoses have a bystander present
- Carrying reversal agents can save lives!

Narcan: 4 mg Requires multiple doses Kloxxado: 8 mg

Kloxxado Rx available through Dr. Deyhimy's office or any doctor.

Thank you!

David I Deyhimy, MD, FASAM

info@mymatclinic.com

(949) 829-2779



Brian Gunsolley

bdgunsolley@ocsheriff.gov

(714) 647-4014

Orange County Sheriff's Department

