

Fentanyl Primer

What Judges Should Know

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WHAT IS FENTANYL?



- Synthetic Opiate first developed late 1950s
- Initially only used for anesthesia, then pain
- Used daily in every operating room in U.S.
- Very good for pain control and sedation
- Available as pain patch in prescription form

Fentanyl is a synthetic opioid that is up to

50X

stronger than
heroin

100X

stronger than
morphine

- Dosed at 50-100mcg IV (1/10th of mg)
- Lethal Dose = 2mg (20X therapeutic dose)
- Very difficult to control dosing with solid forms (versus liquid form)

LETHAL DOSE 2 MILLIGRAMS



HOW DOES FENTANYL WORK?

- Stimulates mu-opioid receptors in the brain
- Initially, get a euphoria, then pain relief
- Causes respiratory depression at higher doses (1.5-2 mg and above)
- Half-life of 3-7 hours

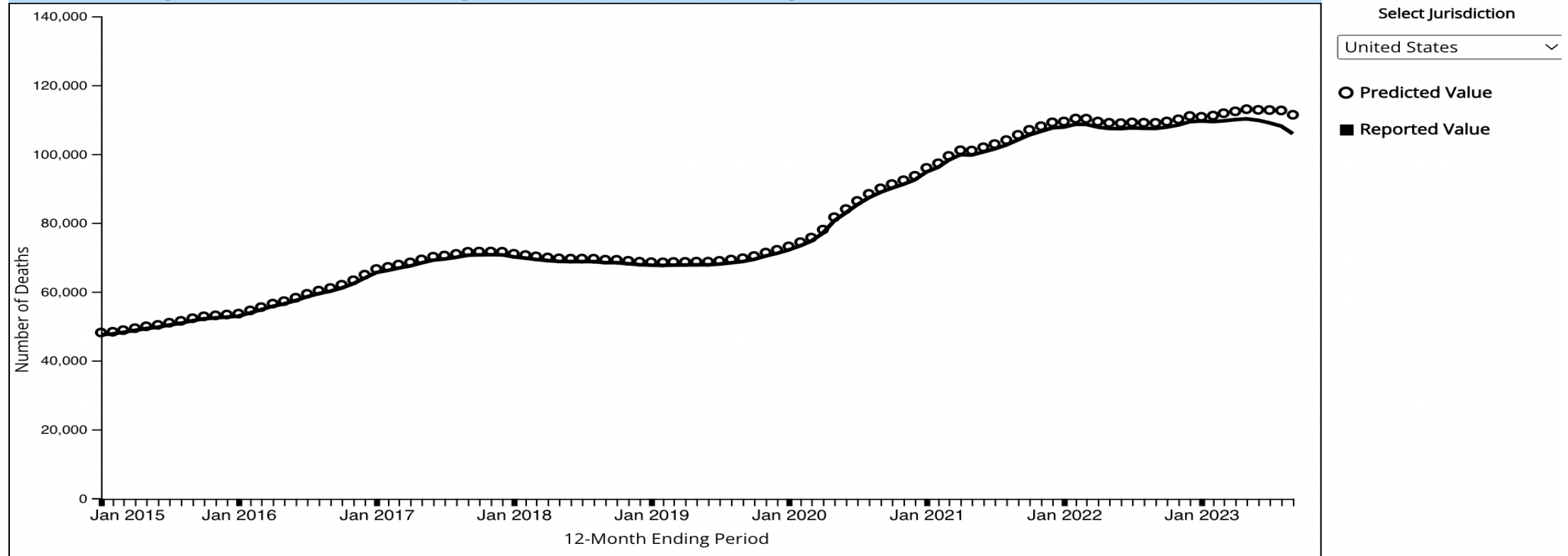
WHY FENTANYL IS A BIG DEAL NOW?

- Now leading cause of death in 18-45 year olds
- Killing over 100,000 Americans annually (dying at a rate > 1 every 5 minutes)
- Estimated that $\sim 2/3$ of opiate deaths due to Fentanyl
- Drug supply is virtually endless/no signs of slowing

12 Month-ending Provisional Number and Percent Change of Drug Overdose Deaths

Based on data available for analysis on: February 4, 2024

Figure 1a. 12 Month-ending Provisional Counts of Drug Overdose Deaths: United States



Source: US CDC

- Majority of Fentanyl OD deaths are accidental
- These are unintentional poisonings, not suicide attempts
- Most of these people didn't know they were ingesting Fentanyl
- Most are consuming something they consider relatively safe
- Cartels don't care – cost of doing business

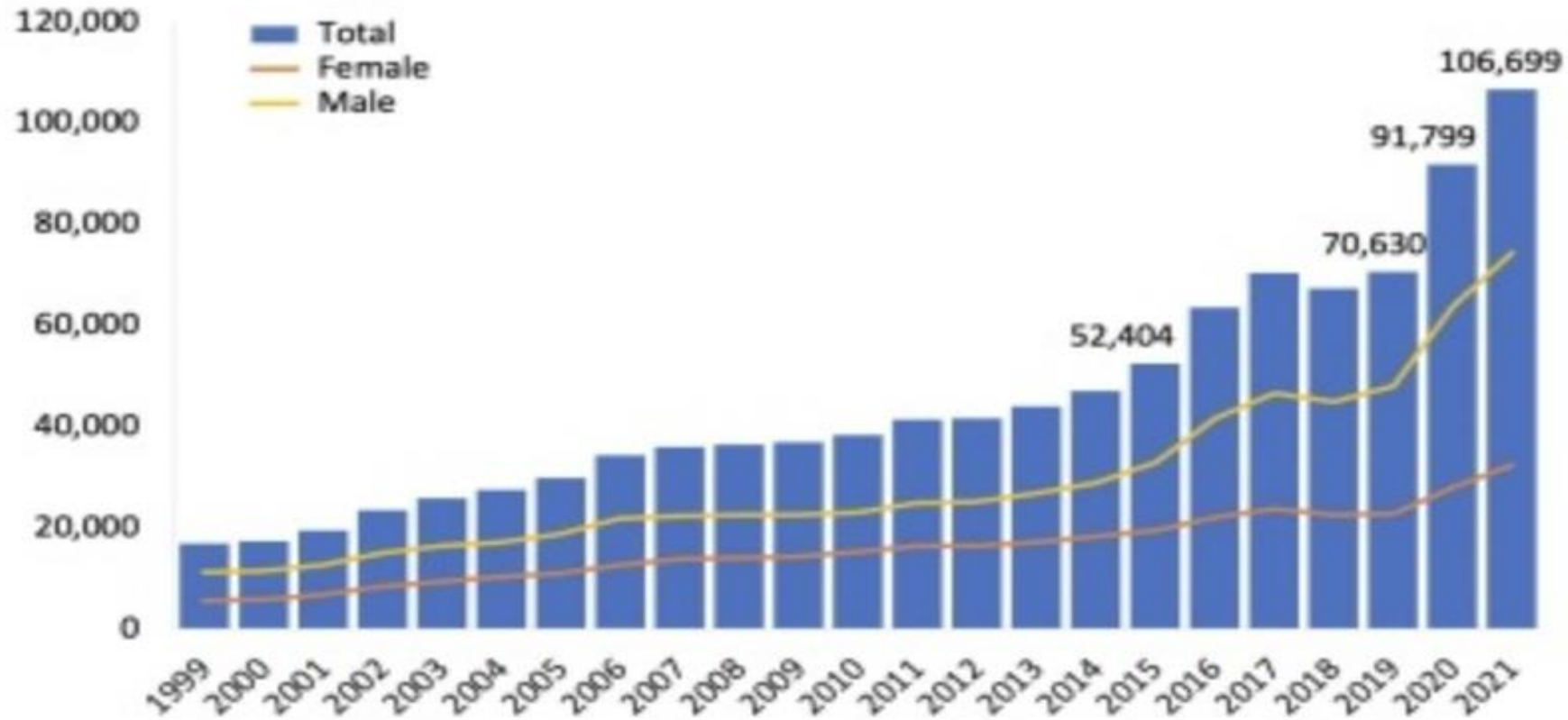
HOW DID WE GET HERE?

- Represents shift from plant-based drugs to synthetics
- Started about 2015 with shift away from Heroin
- DEA believes Mexican cartels are targeting youth
- Fentanyl is cheap and easy to produce (estimate profit margins of 200-800X cost of precursor chemicals)

- Fentanyl is made from unregulated precursors and other chemicals used in common household products
- Most precursors come from China (some from India) and the Cartel is learning to make its own
- Chemists share recipes on the dark web
- Can be made in a makeshift lab in any modest home

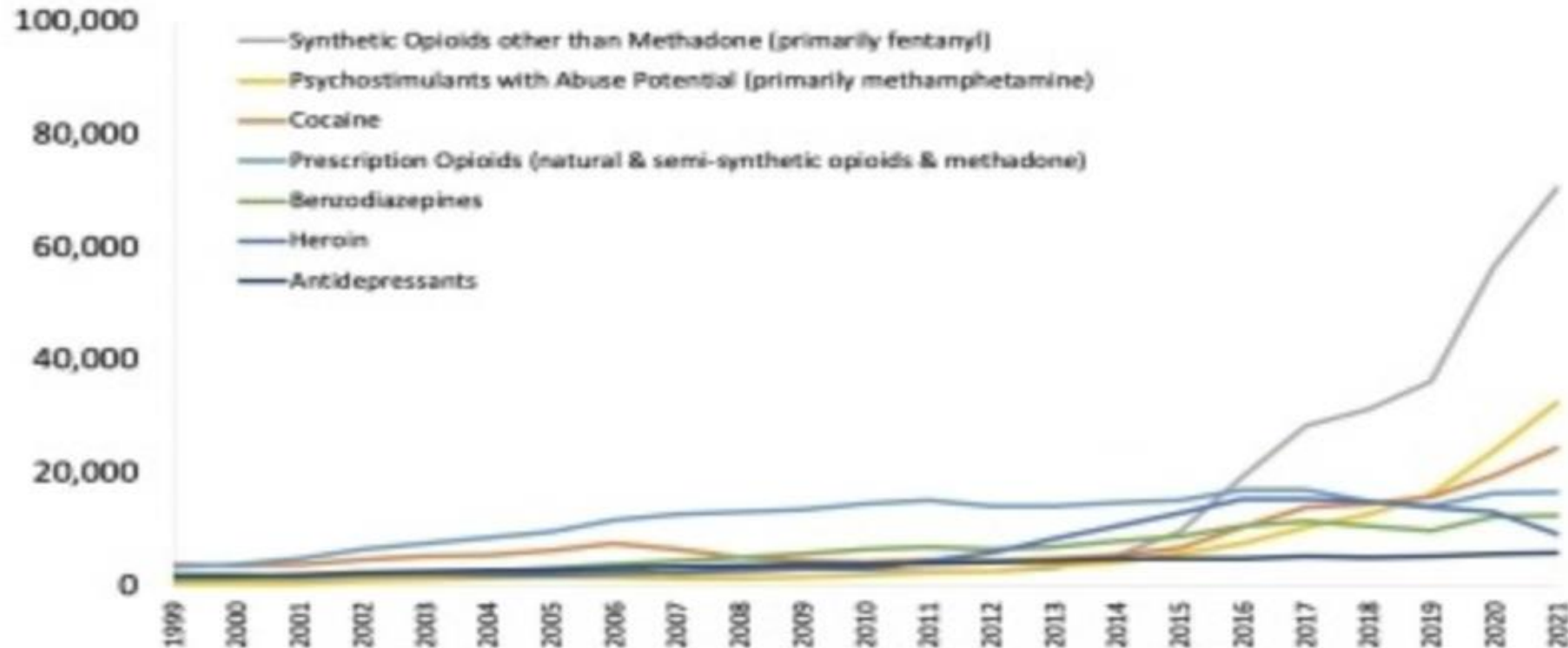
- ~2014 Chinese fentanyl appeared in U.S. Markets
- Shortly after, the Sinaloa Cartel began cooking their own
- This was much easier than making/distributing plant-based drugs
- Could be produced in small spaces in days, year-round
- By 2022, methamphetamine seizures fell by 40% and heroin seizures plummeted (down from 80% of opiates to 7%)

Figure 1. National Drug-Involved Overdose Deaths*, Number Among All Ages, by Gender, 1999-2021



*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.

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



*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.

OBTAINING PRECURSOR CHEMICALS - Nat'l Geographic



NCJFCJ
est. 1937

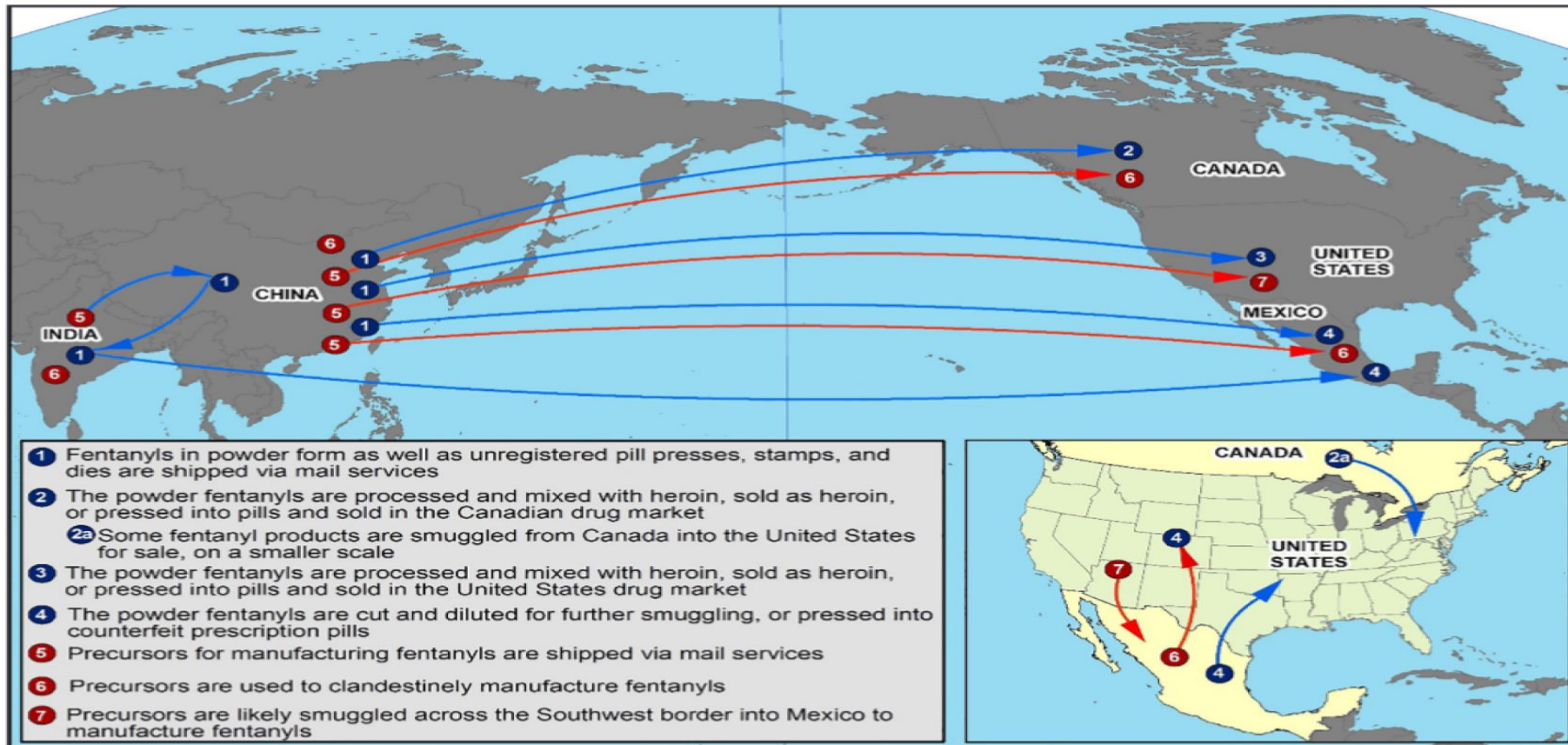
NATIONAL COUNCIL OF
JUVENILE AND FAMILY COURT JUDGES

CHAIN OF CUSTODY

Precursor mfg China → Cargo Ship → Fishing
Trawler → Tourist Boat → Dock workers → Store
House → Lab → Holding House → Mule/others to
cross border → US Based distributors → End Users

WHERE IS IT COMING FROM?

(U) FIGURE 1. FENTANYL FLOW TO THE UNITED STATES 2019



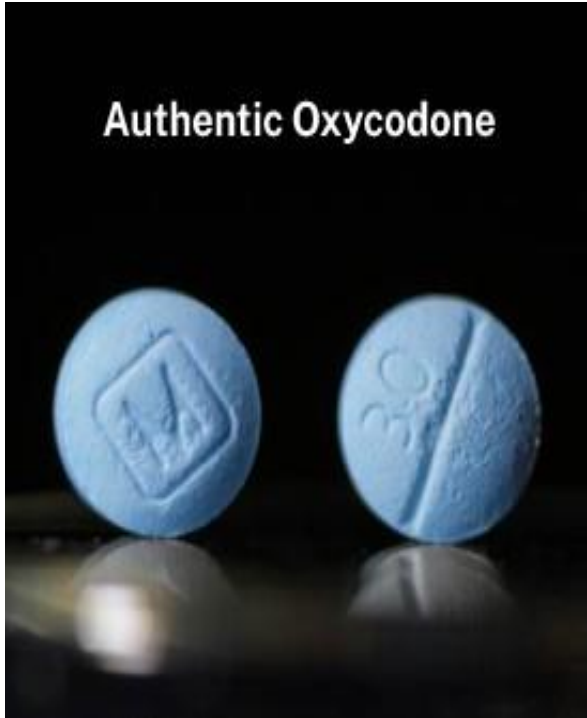
Source: DEA

CHEMISTRY LAB – Nat'l Geographic



FORMS OF FENTANYL

Authentic Oxycodone



Fake Oxycodone



- 6-7 out of 10 Fake pills contain a lethal dose!!





SMUGGLING INTO AMERICA

- Almost exclusively the Mexican Sinaloa or Jalisco Cartels
- Typically in form of kilo block, finished pills, candy
- Carefully packaged to avoid X-ray or dogs
- Vehicles (Semis, cars, trucks)
- In bodies, on planes, via drone drops
- Estimated that only 5-10% is seized

HITTING THE STREETS

- There's no doubt kids are being targeted
- Use of social media to market and sell
- Use of encrypted apps to sell
- Found in cocaine, ketamine, THC, meth, pain pills, benzos, sleep aids, Adderall, heroin, ecstasy, vapes

STREET NAMES

Apache, China Girl, China Town,
Dance Fever, Friend, Goodfellas,
Great Bear, He-Man, Jackpot, King
Ivory, Murder 8, Tango and Cash

COMMON EMOJI CODES

FAKE PRESCRIPTION DRUGS

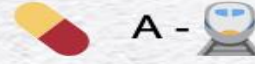
PERCOCET & OXYCODONE



XANAX



ADDERALL



DEALER SIGNALS

DEALER ADVERTISING



HIGH POTENCY



UNIVERSAL FOR DRUGS



LARGE BATCH



OTHER DRUGS

METH



HEROIN



COCAINE



MDMA & MOLLIES



MUSHROOMS



COUGH SYRUP



MARIJUANA



ENCRYPTED APPS



Status



Telegram



Signal



Whatsapp



WeChat



Line



KakaoTalk



Messenger

Leverages P2P Protocols



E2E encryption by default



App & Server Completely Open source



No phone number or email required



Perfect forward secrecy



SIMILAR DRUGS

- Xylazine
- Sufentanil
- Carfentanil

XYLAZINE



- Veterinary drug
- For sedation, anesthesia, analgesia
- Street name “Tranq”
- Being mixed with fentanyl
- Found in all 50 states now
- Now found in $>10\%$ of Fentanyl

CARFENTANIL/SUFENTANIL

- Carfentanil 100X more potent than Fentanyl
- Sufentanil 10X more potent than Fentanyl
- Now being synthesized by the Cartel
- Same symptoms as Fentanyl but much lower doses

OVERDOSE DEATHS

We lose a classroom full of teens every week.

Most common overdose is from synthetic opioids

Deaths usually occur alone at home prior to Naloxone being given

97k deaths a year from overdoses

68% or 7 out of 10 pills have a lethal dose of fentanyl

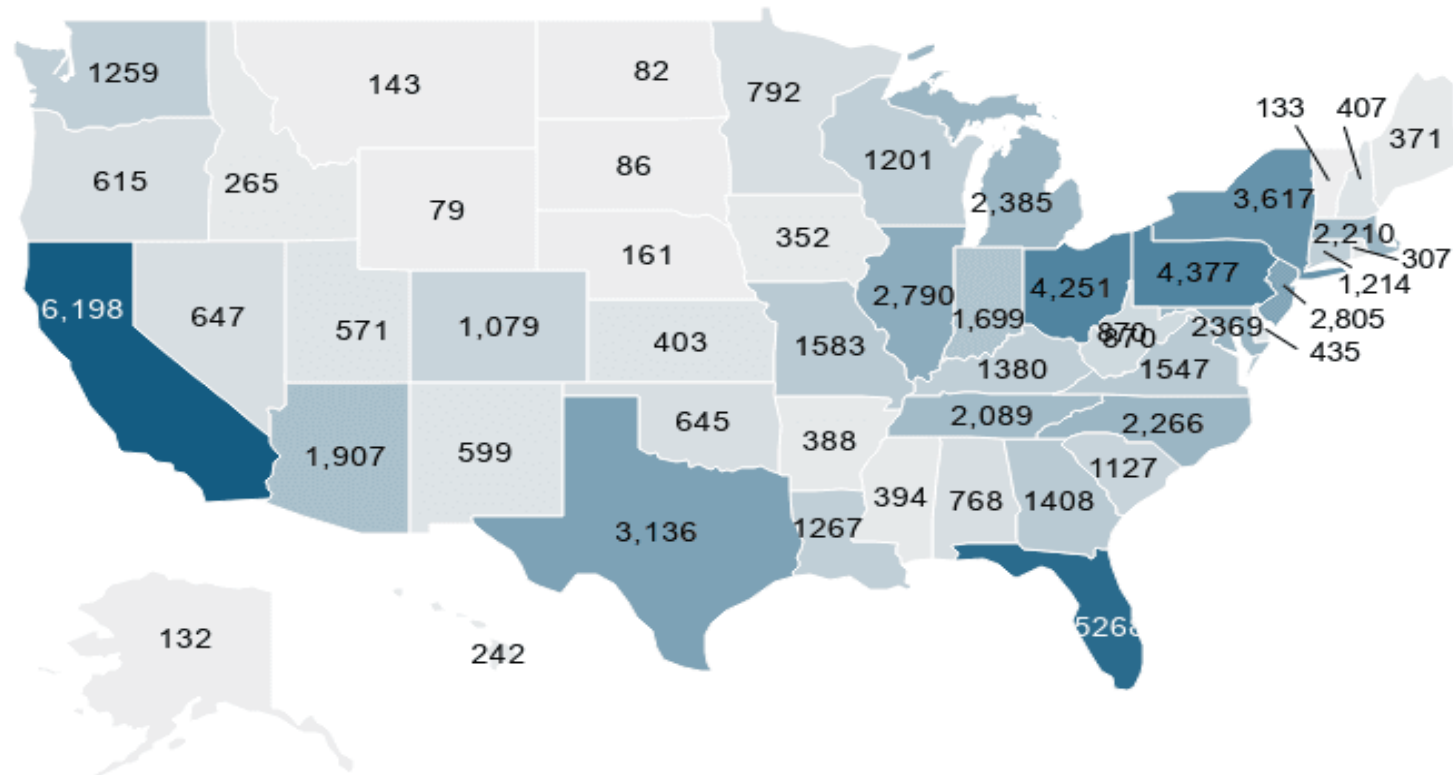
1200% increase in deaths of 14 and under

12-17 fastest growing group

DEA seized 74.5 million pills in 2023

**OVER 96,700 PEOPLE DIE FROM DRUG OVERDOSES IN A YEAR.
OPIOIDS ARE A FACTOR IN 7 OUT OF EVERY 10 OVERDOSE DEATHS.
DRUG OVERDOSES HAVE KILLED ALMOST A MILLION PEOPLE SINCE 1999.**

Total Annual Overdose Deaths by State



NALOXONE, NARCAN 4MG, OPVEE, KLOXXADO 8MG GOOD SAMARITAN LAWS IN ALL BUT TX, KANSAS, WYOMING



- Mechanism: Opioid receptor antagonist
- Quickly reverses effects of opioids
- No effect on people without opioids in their system
- Available as an injectable or a nasal spray
- Works for about 30-90 minutes
- Dose depends on how much opioid is in a person's system
(have heard of dosing up to 15 times)
- Available OTC for about \$45 for 2 doses
- Very long shelf life

NARCAN CONSIDERATIONS

- When to use it?
- Should all households have it (like a fire extinguisher)?
- Should kids have it?

WHAT CAN WE DO NOW?

- We have to acknowledge what's happening/Awareness
- We need to know how this is happening
- We need to get facts and give fact-based answers
- We need to be nosy with our kids
- We need to educate, educate, educate

EFFORTS TO COMBAT THE PROBLEM

- Curtail acquisition of raw material
- Improve border protection/security
- Narcan
- Education/Awareness
- Efforts to get drugs off the streets

FINAL POINTS

- This is NOT just moral panic (real and getting worse)
- Now the leading cause of death in the 18-45yo group
- Vast majority of OD deaths are accidental
- Most who ingest Fentanyl did not knowingly intend to
- 6+/10 counterfeit pills contain Fentanyl
- All recreational drugs are being laced
- We need significant efforts at all levels to respond

QUESTIONS?

