

Fentanyl Facts

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Disclosures

There are no relevant financial relationships with ACCME-defined commercial interests for anyone who was in control of the content of this activity.



Objectives

- ▶ Understand the short-acting opioid, fentanyl
- ▶ Address misconceptions of fentanyl exposure
- ▶ Identify treatment considerations and overdose awareness due to fentanyl's pharmacology

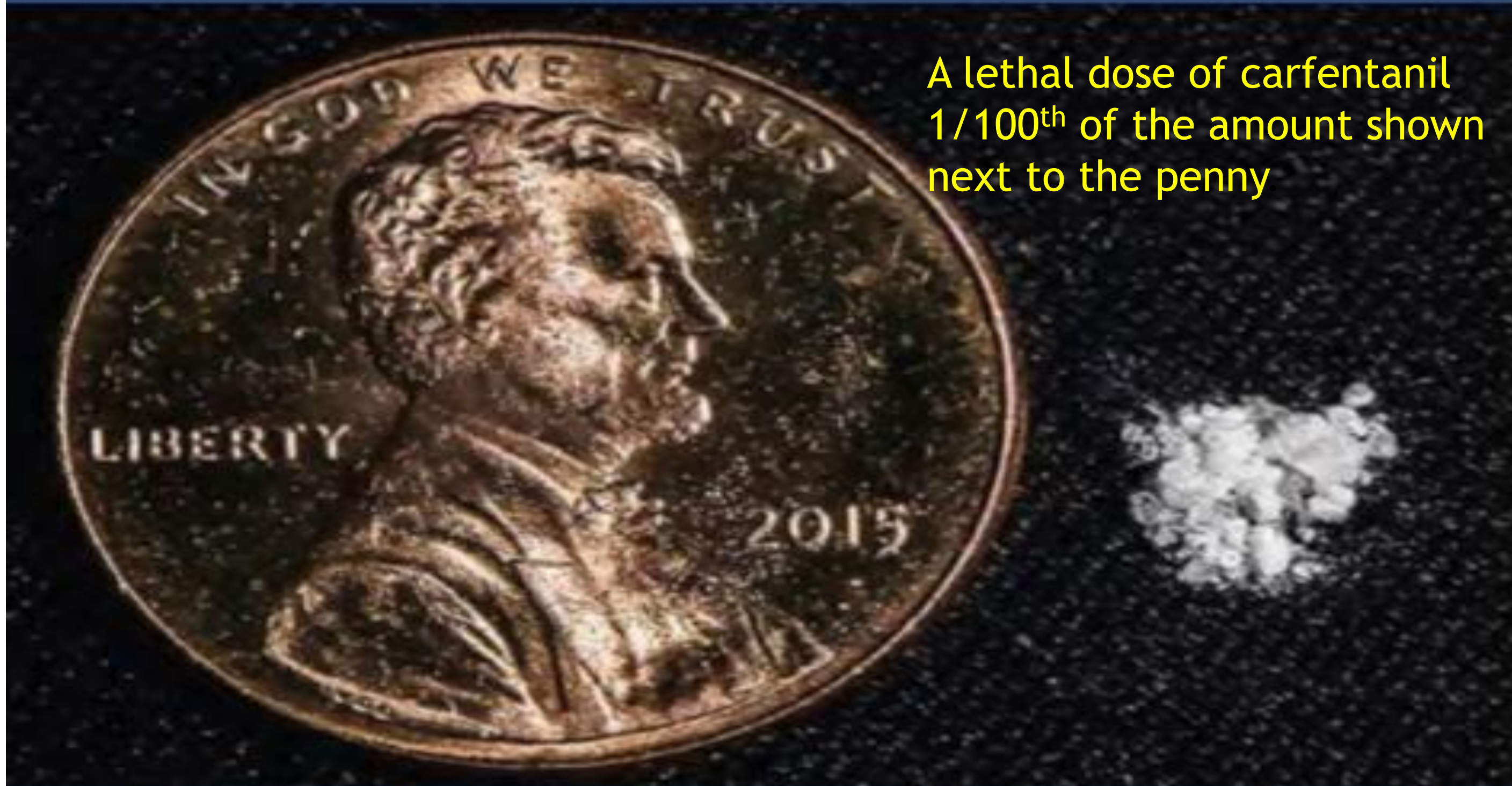


Fentanyl is a powerful opioid analgesic

- ▶ Schedule II controlled substance
- ▶ Indications for treating chronic pain
- ▶ Available as lozenges, buccal tablets, sprays, and patches
- ▶ Overdose deaths are typically due to illegally produced fentanyl
- ▶ Highly “lipophilic,” e.g., has much greater penetration in the central nervous system



Figure 76. Two Milligrams of Fentanyl - A Potential Lethal Dose



A lethal dose of carfentanil
1/100th of the amount shown
next to the penny

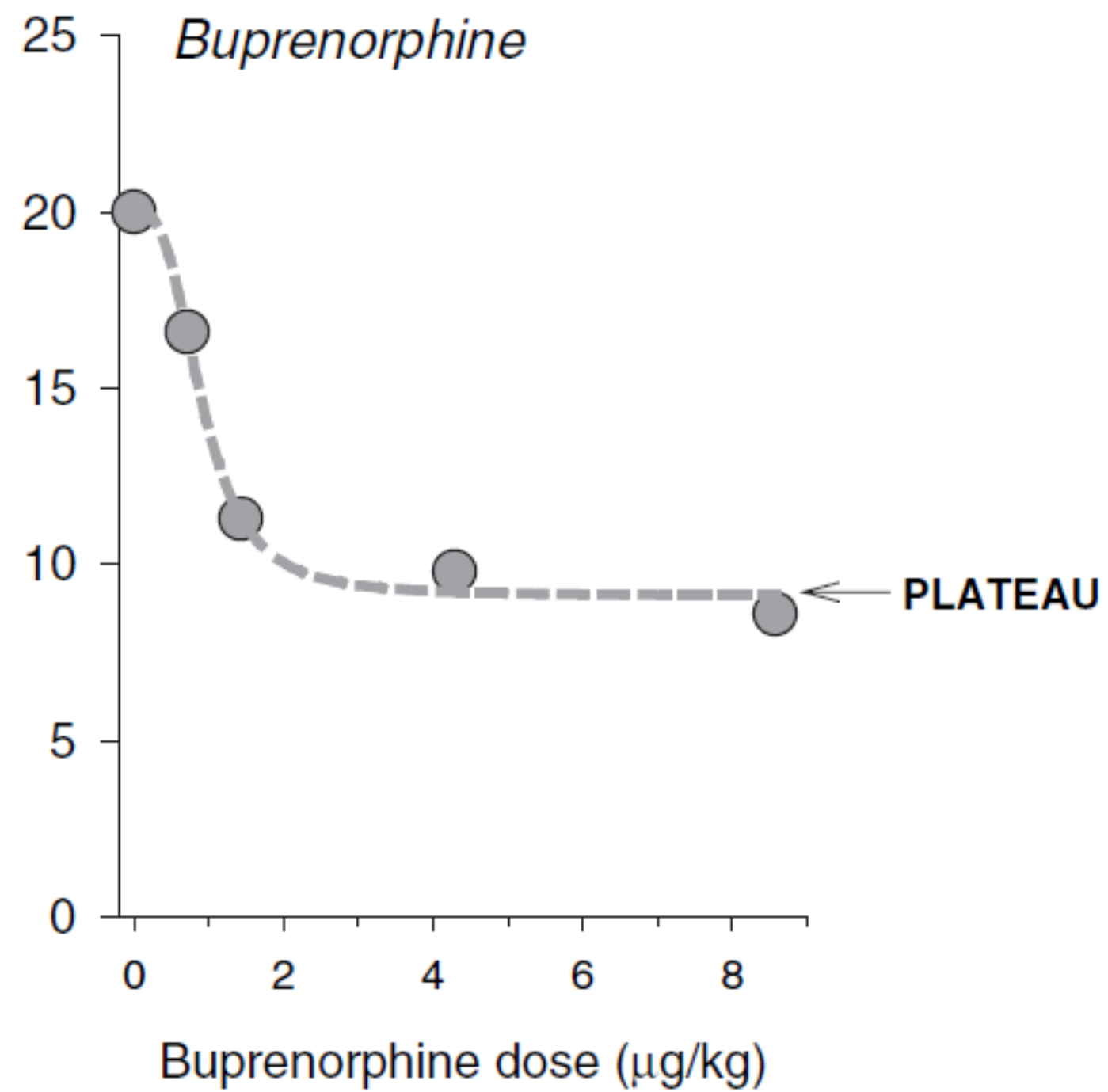
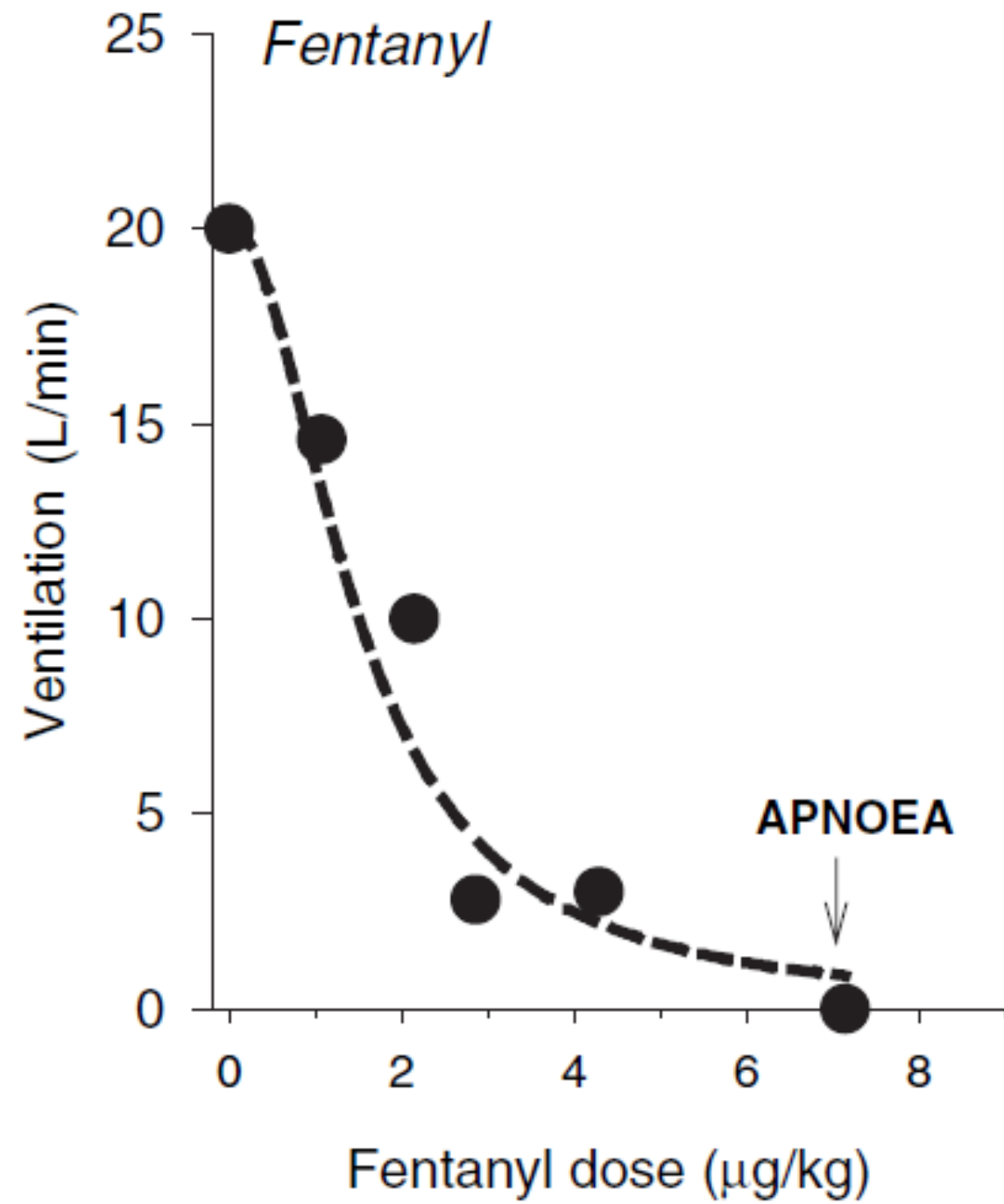
Source: Network Environmental Systems (NES)



A lethal dose



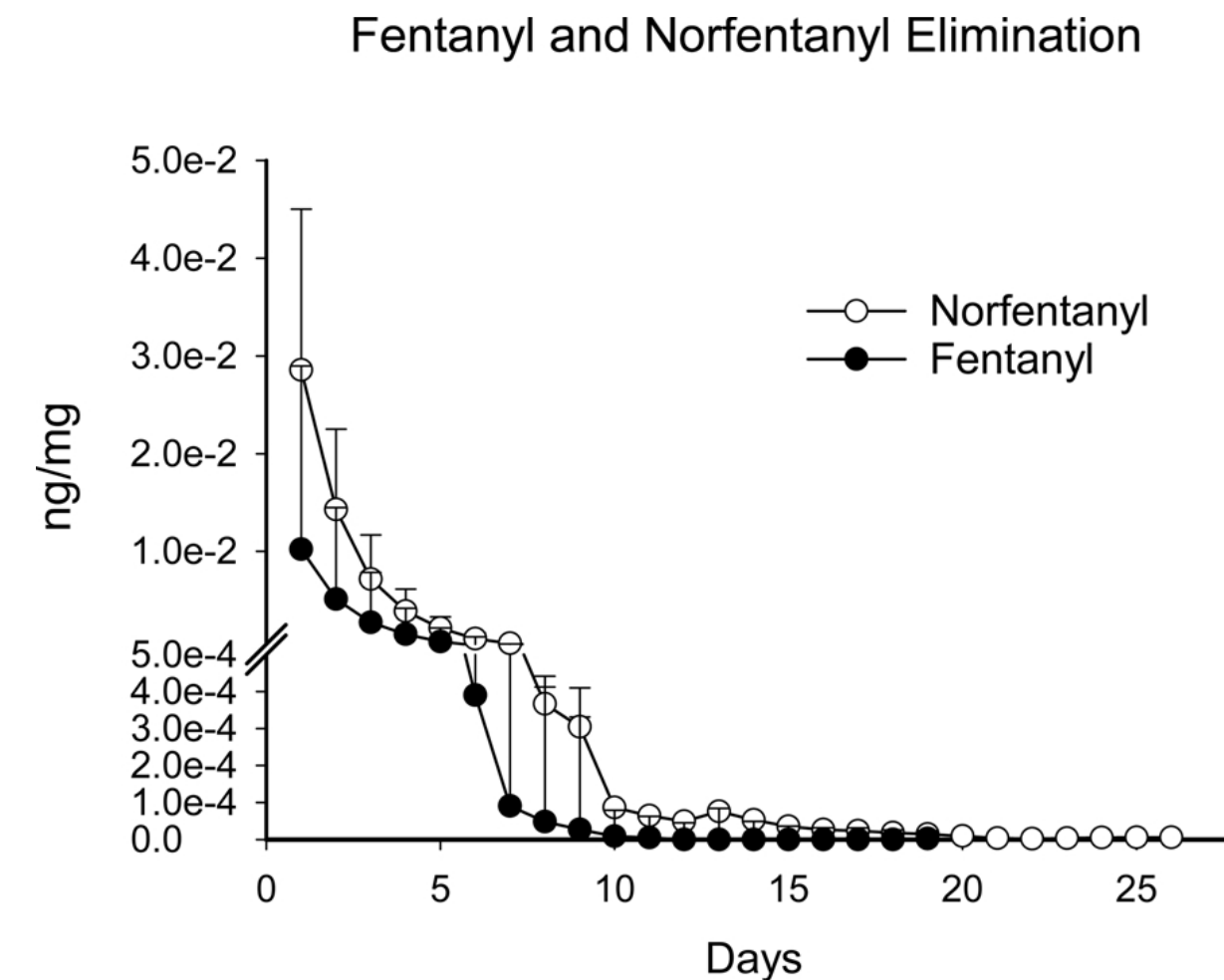
Fentanyl vs. Buprenorphine



Dahan et al., 2006

Fentanyl Clearance and Treatment

- ▶ Fentanyl clearance in persons with OUD is considerably longer than typical 2-4 day clearance of other short-acting opioids.
- ▶ Implications for starting buprenorphine



Huhn et al., 2020

Stimulant and opioids overdose death rate trends

Opioids Involved in 73% of Cocaine-Overdoses

Opioids Involved in 50% of Psychostimulant-Overdoses

In many cases, people are unaware that cocaine or methamphetamine are laced with fentanyl.

2020 CDC data indicate stimulant overdose deaths continuing to increase.
From 2018-2019, overdose deaths due to synthetic opioids increased over 90% in California

Misinformation on fentanyl exposure

Early 2017 reports taken out of context and misrepresented

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

*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*

Project ECHO, Overdose Awareness. Prescriber OUD Clinic. 2020.



The truth about 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



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The truth about fentanyl exposure (2)

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*



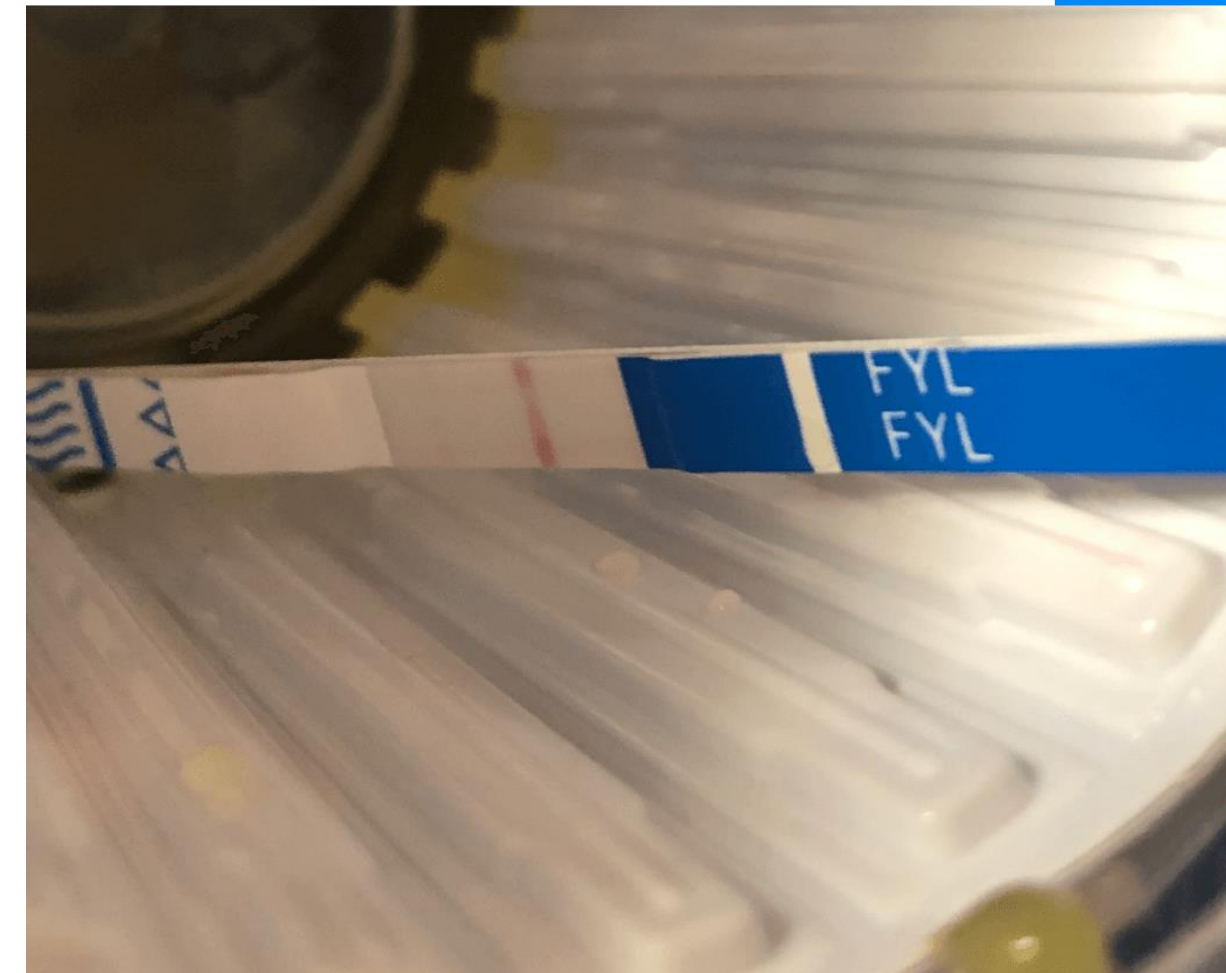
Recommended PPE for First Responders

- ▶ Universal precautions
- ▶ Nitrile gloves
- ▶ In case of skin exposure, wash with water only
 - ▶ Alcohol-based hand sanitizer could cause absorption
- ▶ N95 mask if desired
 - ▶ Not airborne



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.
- ▶ CDC/SAMHSA funds allowable for purchase with DHCS approval (April, 2021)





Fentanyl Overdose May Require More Naloxone

- ▶ High affinity for mu opioid receptor
- ▶ Displaces opioids from receptor
- ▶ Rapidly reverses effects of opioid overdose (minutes)
- ▶ Effects last 20-90 mins
- ▶ Studies show multiple doses may be required when fentanyl is involved
- ▶ [PrescribeToPrevent.org](https://www.prescribetoavoid.org)



Patient Education Poster from Round Valley Indian Health Center



Fentanyl Facts

- Fentanyl is **50 to 100 times more potent** than heroin and morphine. Fentanyl is the most common drug involved in overdose deaths.
- Fentanyl is being **mixed with other drugs**, such as heroin, methamphetamine, cocaine, cannabis and MDMA. A person who uses drugs can be unaware that a powder, a pill or any substance contains it.



This small amount of fentanyl can kill!

NARCAN SAVES LIVES!



Naloxone (Narcan) is a medicine that can be given to a person to reverse a fentanyl or any opioid overdose.



What are Fentanyl Test Strips?
Fentanyl test strips are easy to use tests to see if your drugs have fentanyl in them.



Multiple naloxone (Narcan) doses - up to or 4-6 doses - might be necessary because of fentanyl's potency.

If you'd like Narcan or Fentanyl Test Strips, come by Yuki Trails or contact:
Kathy Britton @983-6648 ext. 201 or Valerie Moore @983-6648 ext. 203



Summary

- ▶ Fentanyl is powerful, short-acting opioid used for pain relief
- ▶ Illicit use and accidental use have increased overdose death
- ▶ Fears about accidental exposure overdose are not supported by mechanisms of action
- ▶ Pharmacology of fentanyl likely requires additional naloxone administration

