

AUGUST 4, 2025

WE NEED A HEALTH APPROACH TO FENTANYL.

Whether we like it or not, fentanyl is part of our drug supply. Learn more about how drug decriminalization and investing in health, overdose prevention centers, and safer supply can keep people safer.

1. WHAT IS FENTANYL AND WHAT ARE THE EFFECTS OF FENTANYL ON THE BODY?

WE NEED A HEALTH APPROACH TO FENTANYL

So much of the information on fentanyl promotes fear and criminalization instead of helping people. To address our collective safety and well-being—and save lives—information on fentanyl must be factual so people can make safer choices. Our responses to people who use drugs must be rooted in health. Here is what you need to know:

MEDICAL FENTANYL AND “STREET” FENTANYL

Fentanyl is a man-made or synthetic opioid drug that is used to relieve pain. It is commonly used for pain management under the supervision of a doctor. However, when people talk about fentanyl in relation to the overdose crisis, they are often referring to illicitly manufactured fentanyl people get on the street. This is fentanyl that was made in an underground laboratory. It has been mixed into the heroin and counterfeit pill supply in some parts of the country. It has even replaced heroin altogether in some drug markets.

FENTANYL IS A STRONG, FAST-ACTING DRUG

Fentanyl is 50–100 times more potent than morphine. It is also much stronger than other opioids like heroin, oxycodone, and hydromorphone. Fentanyl differs from other opioids because its effects are felt more quickly. These effects also wear off much faster than other commonly used opioids. Medical providers administer fentanyl to patients during certain surgical procedures. Some patients are prescribed fentanyl to manage chronic pain.

fentanyl is
50-100x
more potent than morphine

Because it is highly potent, only a small amount is needed to cause an effect. When someone consumes a large dose of fentanyl, they may be at risk of an opioid overdose. This is because their brain stops signaling to their lungs to breathe. It can be especially dangerous when mixed with other drugs or alcohol. A fentanyl overdose can be reversed by immediately administering naloxone and/or oxygen to the individual.

FENTANYL ANALOGUES HAVE DIFFERENT POTENCIES AND EFFECTS

Fentanyl analogues are opioids that are chemically similar to fentanyl, but they can have different potencies and effects.¹ Carfentanyl is an example

of a fentanyl analogue that is more potent than fentanyl. Acetylfentanyl is an example of an analogue that is less potent than fentanyl. Some fentanyl analogues have no psychoactive effects at all. There are thousands of different fentanyl analogues. We need more research to understand their effects and potential for medical use.

THERE ARE THOUSANDS OF DIFFERENT FENTANYL ANALOGUES.

FENTANYL IS DOMINANT IN THE CURRENT DRUG SUPPLY

Since 2013, fentanyl has been made in underground laboratories² and has been mixed into the illicit drug supply in North America. In some regions³ such as the east coast, fentanyl has been mixed into the underground heroin supply for so long that it has replaced heroin altogether. In the past several years, fentanyl has emerged in the drug markets west of the Mississippi.⁴ Growing numbers of people are accidentally consuming fentanyl in the form of counterfeit prescription opioid pills.⁵ In rare cases, fentanyl has been detected in stimulant drugs. This is likely due to cross-contamination rather than deliberate mixing. There are no surveys⁶ that have estimated how many people in the US have used fentanyl. One reason is because so many people who have used fentanyl consumed it accidentally.

FENTANYL AND PREGNANCY

When fentanyl is consumed during pregnancy, it has been associated with neonatal abstinence syndrome (NAS) in newborns. Fortunately, NAS in newborns can be safely treated.

2. ARE THERE ANY MEDICAL USES OF FENTANYL?

Yes. In medical settings, fentanyl is used during some surgical procedures. It is also prescribed as a treatment for chronic pain patients who have a high tolerance for opioids. In medical settings, fentanyl comes in several forms. These forms include liquid, tablets, lozenges, and skin patches.

Medical-grade fentanyl is made by pharmaceutical companies. Experts agree that our overdose crisis is not driven by diverted medical-grade fentanyl, but by illicitly manufactured fentanyl⁷

Fentanyl can be used safely under medical supervision, in small doses, and when appropriate precautions are taken.

3. HOW LONG DOES FENTANYL STAY IN THE SYSTEM?

Fentanyl effects can be felt for several hours. Effects may be longer when fentanyl skin patches are used, since they slowly release the drug over time.

Someone who recently used fentanyl may test positive on a urine drug test for several days after consuming the drug.

4. WHAT HAPPENS IF YOU MIX FENTANYL WITH OTHER DRUGS?

Mixing fentanyl with other drugs can increase the risk of an overdose, especially if the other drugs are opioids or depressants. Depressant drugs include alcohol, benzodiazepines (like Valium® and Xanax®), sedatives, and tranquilizers. When fentanyl is taken with these types of drugs, it can lead to drowsiness, sedation, unconsciousness, overdose, and death.

MOST OVERDOSES INVOLVING FENTANYL AND OTHER OPIOIDS LIKE HEROIN CAN BE REVERSED IF THE PERSON IS IMMEDIATELY GIVEN OXYGEN AND/OR NALOXONE.

Naloxone (also called Narcan®) is a drug that works to reverse an opioid overdose, including fentanyl overdose. However, overdoses that involve fentanyl and depressant drugs could require additional medical attention. This is because naloxone cannot reverse the effects of depressants.

Some people take fentanyl along with stimulant drugs like methamphetamine or cocaine. Stimulants cannot reverse opioid overdoses. In fact, they may put someone at risk of an overdose because someone might accidentally take too much fentanyl.

5. CAN YOU OVERDOSE ON FENTANYL?

YES, YOU CAN OVERDOSE ON FENTANYL.

Remember: not all overdoses are fatal, but even non-fatal overdoses can have lasting health effects.

Fentanyl has been involved in the majority of overdose deaths⁹ in the United States since 2017.

People often overdose on fentanyl by taking too much or taking more than they anticipated. It is a highly potent opioid so only a small amount can cause an overdose. People with no opioid tolerance are most at risk for a fentanyl overdose if they accidentally consume the drug. However, people with established opioid tolerance are also at risk. This is because they may be accustomed to consuming lower-potency opioids such as heroin or oxycodone or not know what or how much they are taking.

DRUGS IN THE UNDERGROUND MARKET ARE NOT LABELED AND TESTED.

This means people may accidentally consume high doses of fentanyl without their knowledge. The risk of a fentanyl overdose is higher if the fentanyl is consumed with other opioids or depressant drugs, like alcohol, benzodiazepines, or tranquilizers.

BUT, FENTANYL OVERDOSES CAN OFTEN BE REVERSED.

Most overdoses involving fentanyl and other opioids like heroin can be reversed if the person is immediately given oxygen and/or naloxone. Naloxone is a drug that works to reverse an opioid overdose, including fentanyl overdose. However, overdoses that involve fentanyl and depressant drugs could require additional medical attention. This is because naloxone cannot reverse the effects of depressants.

6. CAN YOU BECOME ADDICTED TO FENTANYL AFTER USING IT FOR THE FIRST TIME?

No, you cannot become addicted to fentanyl or any drug after using it only one time.

PHYSIOLOGICAL DEPENDENCE IS DIFFERENT FROM SUBSTANCE USE DISORDER.

People can develop a physiological dependence upon fentanyl if they use it repeatedly for several days or weeks in a row. Physiological dependence means that someone has developed an increased tolerance for a drug. They need to use more to get a desired effect. It also means they may experience physical withdrawal symptoms if they suddenly stop using a drug.

ADDICTION AND SUBSTANCE USE DISORDER

A person only meets the criteria for a substance use disorder if they continue to use a drug repeatedly despite experiencing numerous harms and negative consequences.

NOT EVERYONE WHO HAS PHYSIOLOGICAL DEPENDENCE ON A DRUG HAS A SUBSTANCE USE DISORDER.

Chronic pain patients will naturally develop physiological dependence from taking their medication. But it often allows them to function and live fulfilling lives.

METHADONE AND BUPRENORPHINE, WHICH MAY ALSO CAUSE PHYSICAL DEPENDENCE, ARE HIGHLY EFFECTIVE TREATMENTS FOR OPIOID USE DISORDER.

People who take methadone or buprenorphine for opioid use disorder can achieve recovery and meet their goals.

7. WHAT ARE TREATMENT OPTIONS FOR PEOPLE WITH OPIOID USE DISORDER?

People with opioid use disorder and those who use fentanyl have several treatment options⁹ if they want help. Substance use disorder treatment involves professionally delivered psychosocial treatment and/or medications to reduce problematic drug use and improve health and quality of life. These services are provided in a variety of settings. This includes specialized treatment facilities like outpatient, inpatient, or residential centers. It can also include medical settings, such as hospitals and clinics. We at DPA believe that people should be able to choose the options that work best for them.

Of these treatments, medication assisted therapies have proven to be the most effective forms of treatment for opioid use disorder. There are 3 medications approved by the Food and Drug Administration (FDA) to treat opioid use disorder. These are methadone, buprenorphine (e.g., Suboxone), and naltrexone (e.g., Vivitrol).

Methadone is seen as the "gold standard" treatment for opioid use disorder. Research has shown¹⁰ for decades that it helps people to cut down on street opioids. It also helps patients to gain stability in their lives so they can reach their goals. To obtain methadone in the U.S., patients must visit special clinics. Due to strict regulations, most patients are required to be observed while taking their doses there, on a daily or near-daily basis.

Buprenorphine is a medication with similar benefits to methadone. Patients do not need to visit specially regulated clinics to obtain

buprenorphine. However, until the recent passage of the MAT Act in Congress, medical professionals had to undergo additional training and get a special DEA waiver, commonly called the X-waiver, in order to prescribe buprenorphine.

Research shows that patients who take methadone or buprenorphine are less likely to experience cravings and withdrawal¹¹ and are less likely to overdose than people who do not take these medications for their opioid use disorder.¹²

The research on naltrexone is more mixed,¹³ but it can be helpful for some people who voluntarily choose this option.

**WE AT DPA
BELIEVE THAT
PEOPLE SHOULD
BE ABLE TO
CHOOSE THE
OPTIONS
THAT WORK BEST
FOR THEM.**

8. WHAT ARE HARM REDUCTION STRATEGIES FOR PEOPLE WHO USE FENTANYL?

There are several important harm reduction strategies¹⁴ for people who use fentanyl.

USE STERILE AND NEW EQUIPMENT.

Fentanyl can be injected, smoked, or snorted. When possible, people who use fentanyl should use sterile and new equipment every time. Supplies may include syringes, cookers, pipes, and straws. People should also avoid sharing equipment with others. Reusing or sharing equipment can place users at risk of skin and soft tissue infections, and spread diseases like HIV and Hepatitis C.

NEVER USE ALONE.

People should avoid using fentanyl alone. They should make sure that someone has naloxone (the opioid reversal medication) on hand in case of an overdose.

CHECK DRUGS IF POSSIBLE.

People also should use fentanyl test strips or other available drug checking technologies to test their drugs for other adulterants. Fentanyl test strips are often available at harm reduction programs, and can tell someone whether or not fentanyl is present. However, they cannot tell someone how much fentanyl is present.

GO SLOW.

People should “go slow,” dilute their drugs, or take a little bit at a time to reduce the risk of an overdose by accidentally taking too much. It is also advised that people do not take fentanyl in combination with other opioids or depressant drugs, including alcohol. This can increase the risk of an overdose.

9. WHAT ARE DRUG POLICIES TO HELP PEOPLE WHO USE FENTANYL TO BE SAFER?

Drug policies should be rooted in health, not criminalization.

There are many policies we can pass at the local, state, and federal level to help people who use fentanyl to stay safe.

- **Invest in addiction services.** A full range of addiction services—including counseling, medications, long-term treatment, and recovery housing—should be available to individuals. Personalized support reduces overdose risk and improves recovery chances.
- **Expand access to addiction medications.** Medications like methadone and buprenorphine promote recovery and save lives by reducing opioid/fentanyl cravings and withdrawal symptoms, while cutting overdose risk in half. They should be widely available, including in jails and prisons.
- **Address demand (root causes of fentanyl use).** Fentanyl offers pain relief—many people use it to cope with physical or emotional pain. Ensuring

people have access to housing, community, mental health services, and jobs can help address why people are using.

- **Increase access to interventions like naloxone and sterile supplies that reduce overdose deaths and infectious diseases.** Naloxone saves lives by immediately reversing an active opioid/fentanyl overdose. Sterile supplies like syringes and smoking kits reduce the transmission of infectious diseases. These supplies should be widely available to people who use drugs, and their use and possession should not be criminalized.
- **Authorize overdose prevention centers (OPC) on the state and local level.** These centers provide connections to care and can respond to an active overdose at its earliest sign, preventing overdose deaths, saving lives, and promoting recovery in the process.
- **Ensure people have access to their basic needs, like housing.** Offer retroactive record clearing and the removal of civil penalties for drug convictions so people have more access to jobs, housing, and benefits.
- **Prioritize a health approach to drugs, end criminal penalties.** Shift drug policy from criminal penalties to public health, focusing on treatment, housing, jobs, healthcare, overdose prevention, and crisis response teams to provide effective support and resources.
- **Improve drug checking and data collection.** This will help us better understand the current drug supply, create warnings, and offer better solutions.
- **Expand research and services for polysubstance use.** Many people with substance use disorders use multiple drugs. Research and addiction services must account for polysubstance use to improve services and outcomes.

Drug Policy Alliance (DPA) recommends a comprehensive, health-based response to the overdose crisis to keep people safe and healthy. There is growing public acceptance of the fact that drug use is a health issue, not a criminal one.

Unfortunately, some elected officials and members of law enforcement continue to call for draconian criminal policies to drive up support for policies that hurt people instead of helping them.

END NOTES

1. Pardo, Bryce, Jirka Taylor, Jonathan P. Caulkins, Beau Kilmer, Peter Reuter, and Bradley D. Stein. 2019. "The Future of Fentanyl and Other Synthetic Opioids" Product Page. https://www.rand.org/pubs/research_reports/RR3117.html.
2. Ciccarone, Daniel. 2017. "Fentanyl in the US Heroin Supply: A Rapidly Changing Risk Environment" *International Journal of Drug Policy*, July. <https://doi.org/10.1016/j.drugpo.2017.06.010>.
3. Kilmer, Beau, Bryce Pardo, Toyya A. Pujol, and Jonathan P. Caulkins. 2022. "Rapid Changes in Illegally Manufactured Fentanyl Products and Prices in the United States" *Addiction*, 1–5. <https://doi.org/10.1111/add.15942>.
4. Health Alert Network (HAN). Provided by the Centers for Disease Control and Prevention (CDC). 2020. "Increase in Fatal Drug Overdoses Across the United States Driven by Synthetic Opioids Before and During the COVID-19 Pandemic" December 17, 2020. https://emergency.cdc.gov/han/2020/han00438.asp?ACSTrackingID=USCDC_5II-DM4496I&ACSTrackingLabel=HAN%20438%20-%20General%20Public&deliveryName=USCDC_5II-DM4496I.
5. Kilmer, Beau, Bryce Pardo, Toyya A. Pujol, and Jonathan P. Caulkins. 2022. "Rapid Changes in Illegally Manufactured Fentanyl Products and Prices in the United States" *Addiction*, 1–5. <https://doi.org/10.1111/add.15942>.
6. Kilmer, Beau, Bryce Pardo, Jonathan P. Caulkins, and Peter Reuter. 2022. "How Much Illegally Manufactured Fentanyl Could the U.S. Be Consuming?" *The American Journal of Drug and Alcohol Abuse* 48 (4): 397–402. <https://doi.org/10.1080/00952990.2022.2092491>.
7. Drug Enforcement Agency. 2021. "2020 National Drug Threat Assessment" <https://www.dea.gov/documents/2021/03/02/2020-national-drug-threat-assessment>.
8. <https://www.cdc.gov/nchs/nvss/vsrr/drug-overdose-data.htm>
9. National Academies of Sciences, Engineering, and Medicine. 2019. *Medications for Opioid Use Disorder Save Lives*. Washington, DC: The National Academies Press. <https://doi.org/10.17226/25310>.
10. Mattick RP, Breen C, Kimber J, Davoli M. Methadone maintenance therapy versus no opioid replacement therapy for opioid dependence. *Cochrane Database Syst Rev*. 2009 Jul 8;2009(3):CD002209. <https://doi.org/10.1002/14651858.CD002209.pub2>. PMID: 19588333; PMCID: PMC7097731.
11. <https://ps.psychiatryonline.org/doi/full/10.1176/appi.ps.201300256>
12. Larochelle, Marc R, Dana Bernson, Thomas Land, Thomas J. Stopka, Na Wang, Ziming Xuan, Sarah M. Bagley, Jane M. Liebschutz, and Alexander Y. Walley. 2018. "Medication for Opioid Use Disorder After Nonfatal Opioid Overdose and Association With Mortality: A Cohort Study." *Annals of Internal Medicine*, June. <https://doi.org/10.7326/M17-3107>.
13. Wolfe, Daniel, and Roxanne Saucier. 2021. "Biotechnologies and the Future of Opioid Addiction Treatments" *International Journal of Drug Policy* 88 (February): 103041. <https://doi.org/10.1016/j.drugpo.2020.103041>.
14. Duhart Clarke, Sarah E, Alex H. Krai, and Jon E. Zibbell. 2022. "Consuming Illicit Opioids during a Drug Overdose Epidemic: Illicit Fentanyl, Drug Discernment, and the Radical Transformation of the Illicit Opioid Market" *International Journal of Drug Policy* 99 (January): 103467. <https://doi.org/10.1016/j.drugpo.2021.103467>.