

# Fentanyl-Related Teen Deaths Triple in Three Years

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✓ Fact Checked

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## STORY AT-A-GLANCE

- › 84% of all teen overdose deaths in 2021 were related to fentanyl
- › Fentanyl-related adolescent overdose deaths nearly tripled between 2019 and 2021, and a quarter of those deaths involved counterfeit drugs – pills like valium, Xanax or Percocet, often obtained from friends or bought through social media
- › Fentanyl is an incredibly potent synthetic opioid. It's 50 times stronger than heroin and 100 times stronger than morphine. Just 2 milligrams, equal to 10 to 15 grains of table salt, can be lethal
- › Having the right tools, such as fentanyl test strips and Narcan (naloxone) in your home or school medical kit can also save lives. Never buy fentanyl tests from friends or online. Always get them from your local health department or a trusted community organization, such as addiction recovery programs, as counterfeit tests are in circulation. Also make sure they're legal to obtain in your state
- › Drug makers are now working on anti-opioid vaccines, one for heroin, one for oxycodone and one for fentanyl. The fentanyl vaccine is said to work by preventing the drug from entering the brain, thus eliminating the "high" users experience, as well as the risk of respiratory depression. The other vaccines work on the same premise

Even as opioid deaths have become a leading cause of death among Americans younger than 50,<sup>1</sup> another horrifying trend is emerging: Teen deaths caused by fentanyl-laced counterfeit drugs.<sup>2,3</sup>

According to the Centers for Disease Control and Prevention,<sup>4</sup> 84% of all teen overdose deaths in 2021 were related to fentanyl, an incredibly potent synthetic opioid. It's 50 times stronger than heroin and 100 times stronger than morphine. Just 2 milligrams, equal to 10 to 15 grains of table salt, can be lethal.<sup>5</sup> As reported by USA Today:<sup>6</sup>

*"Fentanyl accounted for more than 67,000 preventable deaths in 2021, which represents a 21% increase since 2020, according to the National Safety Council.<sup>7</sup> More than 5,600 of those deaths occurred in people ages 15 to 24."*

Other data show fentanyl-related adolescent overdose deaths nearly tripled between 2019 and 2021, and a quarter of those deaths involved counterfeit drugs – pills like valium, Xanax or Percocet, often obtained from friends or bought through social media.<sup>8</sup>

While far deadlier than other opioids, fentanyl is much easier and cheaper to manufacture, which is why it's being used in counterfeits. It's potency, however, makes it risky. If unevenly distributed, you can easily end up with lethal doses in some pills.

In 2022, 75,000 of the nearly 110,000 overdose deaths were fentanyl-related,<sup>9</sup> and again, thousands of those were teens. In Hays County, Texas, nearly 40% of fentanyl-related overdoses in 2022 were among people under 18<sup>10</sup> – a statistic attributed in part to the rise in mental health problems among teens during the COVID pandemic.

President Biden's [open border policy](#) has also been identified as a contributing factor, as fentanyl and other illicit drugs are flowing in unimpeded. Insufficient access to mental health care and substance abuse treatment are others.<sup>11</sup>

## **We Need to Revive Drug Education**

Schools across the country are now struggling with how to best address this new trend. Many do not stock the overdose reversal drug Narcan, which could be helpful, but even more importantly, schools rarely educate kids and teens about the dangers of drugs anymore.

Most educational programs are currently run by families who lost a child or loved one to fentanyl. Examples include Project 1 Life, founded by Avery Kalafatas, an 18-year-old from the Bay Area whose cousin died from a fentanyl overdose after taking what he thought was a Percocet tablet.

"This isn't like the drug crisis we were dealing with 20 years ago, it's a completely different ballgame," Kalafatas told NPR.<sup>12</sup> It's a different ballgame because students rarely intentionally go looking for fentanyl. They're seeking out other drugs, and end up taking counterfeits laced with it.

Many also aren't aware of just how deadly fentanyl can be, and how prevalent counterfeit drugs are. Another group focused on fentanyl education for teens is Song for Charlie, founded by Ed and Mary Ternan, who lost their son, Charlie, to an accidental fentanyl overdose.

"We need to revive drug education in America," Ed told NPR, adding that the old "just say no" adage doesn't work on today's teens. They need fact-based messages, which is what Song for Charlie puts out on social media.

*"Rather than focus on 'Don't do drugs, they might harm you,' Song for Charlie's messaging is: 'You're getting ripped off. These dealers advertising on social media do not care. They don't know you, they're not your friend, and they are lying to you about what they're selling you,'" NPR writes.<sup>13</sup>*

*"That's what happened to Ternan's youngest son, Charlie ... In May 2020, Charlie was on his college campus in northern California. He was weeks away from graduation, and was prepping for a job interview. He was also in pain. Ternan says his son had recently undergone back surgery.*

*Charlie purchased what he thought was a Percocet off of Snapchat. It contained fentanyl. 'He actually took it a couple hours before he was supposed to have a job interview on the phone,' Ternan says. 'And so he died very quickly in his room at his frat house waiting for the phone to ring at about four o'clock on a Thursday afternoon.'*

*After his son's death, Ternan says most of the information about fentanyl he could find was buried on government websites and in a smattering of news articles.*

*'You can put that information in those places for the next 10 years, and Charlie and his friends would never have seen it because that's not where they are.' Where they are is on social media.*

*Ternan says their messages also appeal to teenagers' strong social bonds. He's learned that telling teens to warn their friends about fentanyl is more powerful than stoking fear of their own harm."*

## **Increasing Awareness Can Save Lives**

Increasing awareness about the risks of fentanyl and counterfeit drugs could save a lot of lives. According to CDC research,<sup>14</sup> bystanders were present at two-thirds of teen overdose deaths. Had they recognized the warning signs and known how to respond in case of a suspected overdose, they may have been able to save many of those kids.

**“ Never buy fentanyl tests from friends or online. Always get them from your local health department or a trusted community organization, such as addiction recovery programs, as counterfeit tests are in circulation. Also make sure they're legal to obtain in your state.”**

Having the right tools, such as fentanyl test strips and Narcan (naloxone) in your home or school medical kit is also part of it. Fentanyl test strips can be used to detect the presence of fentanyl in a wide variety of drugs, including pills, powders and injectables – anything that can be dissolved in water. To test for fentanyl:<sup>15</sup>

- Place a small amount of the drug in a clean, dry container

- Add a small amount of water and mix
- Place the wavy end of the test strip into the mixture for about 15 seconds
- Remove the strip and place it on a flat surface for two to five minutes
- Read the results: A single pink line means fentanyl has been detected (positive result). Two lines mean no fentanyl has been detected (negative result)

Caution is warranted, however, because counterfeit fentanyl test strips are also in circulation. Never buy them from friends or online. Your best bet is to get them from your local health department, or a trusted community organization, such as addiction recovery programs.

## Are Fentanyl Tests Legal in Your State?

Also, check your state laws. Fentanyl test strips are still considered illegal "drug paraphernalia" in most states, although several states have exceptions for fentanyl tests, and some have decriminalized them and taken them off the drug paraphernalia list.

As of January 2022, states where fentanyl test strips were still illegal included the following.<sup>16</sup> Many states are now reconsidering this ban, so be sure to double check the current status in your state.

Alabama	Arkansas	Florida
Georgia	Hawaii	Idaho
Illinois	Indiana	Iowa
Kentucky	Louisiana	Michigan
Mississippi	Missouri	Montana
New Hampshire	North Carolina	North Dakota

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Oklahoma	Oregon	Pennsylvania
South Dakota	Tennessee	Texas <sup>17,18</sup>
Vermont		

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Utah and Washington have distribution programs that allow certain entities to legally distribute fentanyl test strips, despite being otherwise banned as drug paraphernalia. Similarly, North Dakota and Vermont permit the use of fentanyl test strips by harm reduction programs only.

California, Connecticut, Maine, New Jersey and Ohio also have specialized distribution programs for fentanyl tests, while still legally classifying them as banned drug paraphernalia. So, in all of these states, you have to make sure you're getting them from a legal source. States and territories where fentanyl test strips have been legalized include:

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Alaska	Colorado	Maryland
Nebraska	New York	South Carolina
Virginia	Washington D.C.	Wyoming

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## What You Need to Know About Narcan

The U.S. Food and Drug Administration approved naloxone (brand name Narcan) in nasal spray form for over the counter (OTC) sale without a prescription in late March 2023.<sup>19</sup> Naloxone is also available in injectable form, but requires a prescription.<sup>20</sup>

The drug reverses the fatal effects of an opioid (including oxycodone, heroin and fentanyl) overdose. It works by displacing opioid molecules from the opioid receptors in the brain, so it won't work if the person has overdosed on a non-opiate drug. It won't

make matters worse, however, so when in doubt, use it. People recommended to carry naloxone on their person include:<sup>21</sup>

- People who use opioids and benzodiazepines together.
- People who use illicit opioids like heroin.
- People taking high-dose opioid medications prescribed by a doctor. Ideally, ask your doctor to co-prescribe naloxone. You may also want to talk to your doctor about low-dose naltrexone (LDN).

As described in "[The Remarkable Benefits of Low-Dose Naltrexone \(LDN\)](#)," by using microdoses (0.001 milligrams or 1 microgram) of naltrexone, long-term opioid users who have developed a tolerance to the drug and are on high doses, can, over time, lower their dose and avoid withdrawal symptoms, as the LDN makes the opioid more effective. This, in turn, will lower your risk of experiencing an opioid overdose in the first place.

For opioid dependence, the typical starting dose is 1 microgram twice a day, which will allow them to lower their opioid dose by about 60%. When the opioid is taken for pain, the LDN must be taken four to six hours apart from the opioid in order to not displace the opioid's effects.

Also, since you cannot administer naloxone to yourself, be sure to let people around you know that you have it, where you keep it and, ideally, how to use it, so they can help you in case you experience an overdose.

If you cannot afford OTC or prescription naloxone, you may be able to get it free of charge from a community-based naloxone program or your local syringe services program. [Nextdistro.org](#)<sup>22</sup> and [Nasen.org](#)<sup>23</sup> can help you locate naloxone resources in your state.

## **How to Use Naloxone**

Before you use naloxone,<sup>24</sup> first, determine whether the person has overdosed on opioids. Symptoms of an opioid overdose include:

- Slowed breathing, gurgling or no breathing
- Pupils narrowed to a pinpoint
- Blue or purple lips and/or fingernails
- Clammy skin
- Cannot be roused by shaking and shouting

The OTC Narcan box contains two nasal sprays with plungers, each containing 4 mg of naloxone. Do not prime the plunger as this will release the contents. Wait until you're ready to administer the dose.

1. Get the Narcan ready, then tilt the person's head backward and insert the spray tip into one nostril until both of your fingers are touching the nose. Push the plunger down to administer the dose.
2. Call emergency services (911 in the U.S.) after you've given the first dose, as every second counts.
3. Next, roll the person onto their side. Place one of their hands under their head and bend the leg that is on top at the knee to prevent them from rolling over. Narcan can trigger acute withdrawal symptoms, including vomiting, so make sure the airways are kept clear to avoid choking.
4. If the person has not regained consciousness after two to three minutes, repeat the process and administer the second dose into the other nostril.
5. Stay with them until emergency services arrive, or for at least four hours to make sure their breathing returns to normal.

## **A Vaccine Against Fentanyl Overdoses?**



Not willing to let a crisis go to waste, the vaccine industry is now hard at work to create an injectable solution. November 14, 2022, the University of Houston announced positive results from an animal study<sup>25</sup> in which they tested a vaccine against fentanyl.<sup>26</sup> The vaccine is said to work by preventing fentanyl from entering the brain, thus eliminating the "high" users experience, as well as the risk of respiratory depression.

The study's lead author, Colin Haile, described the potential vaccine as a "significant impact on a very serious problem" since the user doesn't experience the euphoria associated with fentanyl and "can 'get back on the wagon' to sobriety."<sup>27</sup>

The vaccine includes a deactivated diphtheria toxin and an adjuvant derived from E. coli called dmLT. The researchers reported this adjuvant had been combined with other vaccines in other human clinical trials, but in each of those trials, the dmLT was administered orally and therefore exposed to the digestive tract.

In this case, the vaccine is administered by injection, which means dmLT enters the muscles and bloodstream directly. The shot was given to 28 male and female mice, after which the researchers measured antibodies.

Serum testing showed antibody levels rose significantly after the third dose, between weeks four and six. They tested whether fentanyl had reached the brain by gauging pain reactions since opioids are used to dull pain sensation.

The three-shot series triggered the animal to create anti-fentanyl antibodies that bound with fentanyl, preventing it from entering the brain and allowing it to be eliminated through the kidneys. Other vaccines, based on the same premise, are being made to target heroin and oxycodone.<sup>28</sup>

No acute side effects were reported in this rodent trial, but long-term side effects remain unknown. The research team is preparing to launch Phase 1 human trials sometime in 2024 — one for a heroin vaccine and another for fentanyl. Eventually, they hope to develop a multivalent vaccine that targets both.<sup>29</sup>

If you ask me, this sounds like another Big Pharma scheme where the companies that create the opioids will end up profiting from anti-opioid vaccines, just like the Sackler family did.

They created OxyContin and fraudulently marketed it as nonaddictive, thereby sparking the opioid crisis. Then, rather than pulling back and making OxyContin harder to obtain, they created and sold an overdose antidote, a naloxone spray called Nyxoid, instead.<sup>30</sup>

## Where to Find Help for Addiction

If you or a loved one is struggling with drug addiction, the Substance Abuse Mental Health Service Administration<sup>31</sup> can be contacted 24 hours a day at 1-800-622-HELP. Your workplace Employee Assistance Program may also be able to help.

Also consider having Narcan on hand, and fentanyl test strips (where legal). While neither of these do anything to fix the problem of addiction, the test strip can prevent the accidental overdosing on a fentanyl-laced drug, and Narcan can save your or someone else's life in case of an overdose, giving you/them another chance to make a different choice.

## Sources and References

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- <sup>3, 10, 11, 18</sup> [The New Yorker March 28, 2023](#)
- <sup>4</sup> [CDC Fentanyl May 3, 2023](#)
- <sup>5</sup> [HHS.texas.gov Fentanyl](#)
- <sup>6, 15</sup> [USA Today August 21, 2023](#)
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- <sup>9</sup> [KCRA June 8, 2023](#)
- <sup>14</sup> [CDC MMWR December 16, 2022; 71\(50\): 1576-1582](#)
- <sup>16</sup> [Addiction Resource January 13, 2022](#)
- <sup>17</sup> [Spectrum Local News July 7, 2023](#)
- <sup>19</sup> [FDA March 29, 2023](#)
- <sup>20</sup> [SAMHSA.gov Naloxone FAQ](#)
- <sup>21, 24</sup> [CDC Lifesaving](#)

- <sup>22</sup> [Nextdistro.org](#)
- <sup>23</sup> [Nasen.org](#)
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- <sup>26, 27</sup> [University of Houston, November 14, 2022](#)
- <sup>28, 29</sup> [Medicalxpress August 29, 2023](#)
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- <sup>31</sup> [Substance Abuse Mental Health Service Administration](#)