

Fentanyl Brief

Topical Brief Series: Vol. 3, Issue 1

Overview of Trends

Drug overdose deaths with mention of fentanyl in Colorado have more than doubled each year since 2018, resulting in 540 fentanyl-related overdose deaths in 2020.¹

Preliminary data from the Centers for Disease Control (CDC) predicts 1,913 fentanyl overdose deaths in Colorado for 2021², continuing the upward trend. Law enforcement agencies in the state also reported increased activity involving fentanyl, demonstrated by large increases in fentanyl seizures between 2020 and 2021.^{3,4} The supply and use of fentanyl are rising rapidly in Colorado.

What is Fentanyl?

Fentanyl is a synthetic opioid with a potency 80-100 times greater than morphine and 50 times greater than heroin.⁵ A potentially lethal dose is defined as two milligrams of fentanyl.⁶ Fentanyl is a white powder that can be easily added to and sold as heroin due to their similar effects and characteristics. It has also been found in other substances, such as cocaine and methamphetamine. The powder can be pressed into counterfeit pills to mimic prescription drugs like oxycodone.⁷

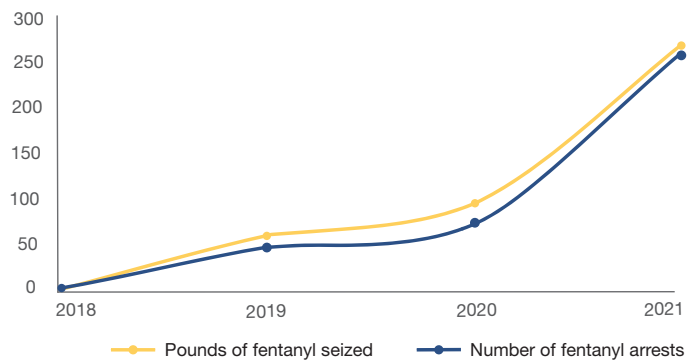
Licit & Illicit Supply Chains

Licit forms of fentanyl have been approved by the Federal Drug Administration for use in pain management in cancer cases and as anesthesia. Licit fentanyl is manufactured in a controlled laboratory setting in the United States. Illicit forms of fentanyl are also lab-made, often originating in China, India, and Mexico. Illicit fentanyl enters the United States through the postal service or the Canadian and Mexican borders. Once in the United States, the supply makes its way to suppliers through the interstate highway system.⁸

Law Enforcement Activity on Fentanyl

In 2021, the Rocky Mountain High Intensity Drug Trafficking Area (RMHIDTA) Task Force in Colorado reported 132 fentanyl-related arrests, accounting for 19.3% of total drug-related arrests. Nearly 350,000 dosages (single pills or capsules) of fentanyl were seized in 2021 – a more than five-fold increase in seizures compared to 2020. Fentanyl seizures by pound also increased significantly from 2020 to 2021. The RMHIDTA Task Force in Colorado seized nearly 135 pounds in 2021 compared to 48 pounds in 2020, resulting in a 184% increase.⁹

Law enforcement agencies in Colorado seized **285 pounds of fentanyl** in 2021



Source: Rocky Mountain High Intensity Drug Trafficking Area and Colorado State Patrol

Colorado State Patrol and U.S. Border Patrol data demonstrate similar findings related to fentanyl. Despite having fewer drug cases compared to the previous year,¹⁰ Colorado State Patrol seized 151 pounds of fentanyl powder and 13,842 counterfeit fentanyl pills in 2021 – a 403% increase from 2020.¹¹ The U.S. Border Patrol had 251 drug seizures in FY 2021 between the Northern and Southwest border, resulting in over 1,000 pounds of fentanyl seized (mostly at the Southwest border).¹²



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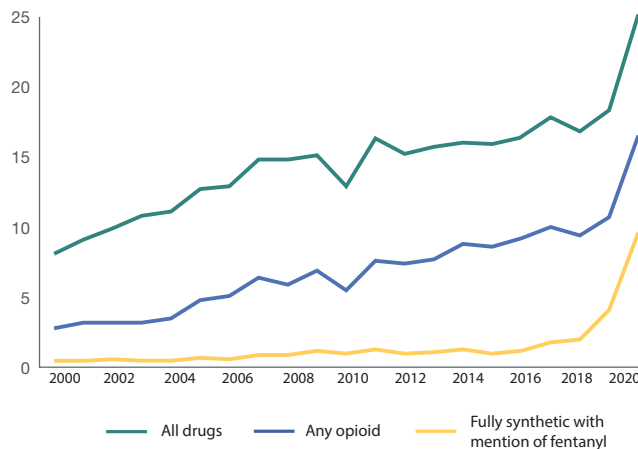
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Trends in Fentanyl Overdose Deaths

The increased presence of fentanyl is driving the rise in Colorado drug overdose deaths. The age-adjusted rate of fully synthetic opioid overdoses with mention of fentanyl increased sharply by 447% from 1.7 per 100,000 in 2018 to 9.3 per 100,000 in 2020. Between 2018 and 2020, these deaths occurred most often among three groups – males, non-Hispanic Whites, and individuals aged 25-34, followed closely by individuals aged 35-44.¹⁴ While many counties in Colorado report suppressed data due to small samples, from 2018 to 2020, the age-adjusted rate of fully synthetic opioid overdose deaths with mention of fentanyl was highest in Las Animas County (26.1 per 100,000) - more than double that of the next highest county (Otero at 10.2 per 100,000).¹⁵

Nationally, deaths involving fentanyl mirror Colorado trends. From 2013 to 2019, the age-adjusted rate of fully synthetic opioid deaths increased from 1.0 to 11.4 per 100,000.¹⁶ From 2019 to 2020, the rate increased by 56% from 11.4 to 17.8 per 100,000.¹⁷ Among all drug overdose deaths, these deaths occurred primarily among three groups – males, individuals aged 35-44 years old, and non-Hispanic American Indian or Alaska Native (AIAN).¹⁸ Like Colorado, the increase in fentanyl-related deaths nationally can likely be attributed to the illicit manufacturing and distribution of fentanyl in combination with other drugs.¹⁹

Overdose deaths with mention of fentanyl increased **447%** from 2018 to 2020 in Colorado



Source: Colorado Department of Public Health & Environment

4 out of every **10**
pills with fentanyl contain a
potentially lethal
dose.¹³



Harms

Fatal overdoses are the most severe harm associated with fentanyl. Since fentanyl is often mixed with other drugs, individuals may be unaware that the drug contains fentanyl, which results in an increased risk of overdose.²⁰ In addition to death, hypoxia-related (lack of oxygen) brain injuries, lung injuries, and decreased cognitive function are non-fatal harms related to fentanyl use.²¹

While snorting, smoking, or ingesting fentanyl is common, individuals who inject fentanyl may be at an increased risk of other harms. According to the CDC, 25% of illicitly manufactured fentanyl overdose deaths between May 2020 to April 2021 were due to injection drug use. Furthermore, other harms associated with injection drug use include skin infections, abscesses, hepatitis, and HIV.²²



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Harm Reduction and Overdose Prevention

There are numerous evidence-based harm reduction strategies to prevent fatal overdoses and other adverse outcomes related to drug use generally and fentanyl specifically. Public health and harm reduction approaches to drug use have been adopted by organizations across the state and nation. The Colorado legislature has passed [a variety of public health harm reduction legislation](#) aimed at reducing overdose deaths.²³

Testing Strips

Testing drugs for the presence of fentanyl can prevent overdose deaths among individuals who use drugs. Providing people who use drugs with tools to check their substances empowers them to make decisions that reduce risk. Fentanyl testing strips (FTS) are available at a low cost (approximately \$1 each),²⁴ with many harm reduction agencies, syringe exchange programs, and treatment providers supplying them to clients at no cost.

According to a 2018 Johns Hopkins Bloomberg School of Public Health study, researchers found that FTS are 96% to 100% effective at detecting the presence of fentanyl and unlikely to produce false negative results.²⁵ In a 2017 study, participants reported testing strips were useful, easy to use, and led to many individuals altering their drug use behaviors, such as discarding the drug supply, using with someone else, keeping Naloxone nearby, and distributing FTS to friends who were at high risk of fentanyl exposure.²⁶ Individuals utilizing fentanyl test strips should be aware that, due to its high potency at a low concentration, fentanyl may still be present in a pill or powder even if the portion tested does not contain fentanyl. Illicit substances are often unevenly mixed, so it is important to utilize other harm reduction strategies such as using a smaller amount, never using alone, and keeping naloxone available.²⁷

Naloxone

Naloxone, more commonly known by the name-brand Narcan, is an overdose reversal drug that can be administered nasally or injected into a muscle. Naloxone administration can be done by lay people and does not require a medical professional to do so. In Colorado, a standing order allows for individuals who are at risk of and/or interacting with individuals who are at risk of an opioid overdose to obtain naloxone without a prescription. Naloxone can be obtained at most pharmacies and eligible entities can access it through the [Naloxone Bulk Fund](#).²⁸ According to the Substance Abuse and Mental Health Services Administration, grantees of the State Opioid Response nationally have distributed 1,051,550 naloxone kits and used naloxone to reverse approximately 90,204 overdoses between May 2020 and March 2021.²⁹



For more information on harm reduction issues for fentanyl, please see <https://cdphe.colorado.gov/overdose-prevention>



Colorado State Epidemiological Outcomes Workgroup

For more information on the SEOW, please visit our website - www.coloradoseow.org

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