

# Fentanyl



**New Mexico Statewide Epidemiological Outcomes Workgroup  
White Paper Series**



Produced by Coop Consulting on behalf of the  
New Mexico Statewide Epidemiology Outcomes Workgroup

**Mission** New Mexico's Statewide Epidemiological and Outcomes Workgroup (SEOW) reviews and disseminates data about substance abuse and misuse and their consequences. It also identifies best practice information about evidence-based prevention strategies, policies and practices that can lead to successful outcomes for New Mexicans. The purpose of this two-fold work is to inform communities so that they can better target behaviors and risk factors that can be positively impacted by the implementation of well-chosen, evidence-based prevention approaches that are appropriate for the population. The important work of the SEOW is directed by the Office of Substance Abuse Prevention (Behavioral Health Services Division, Human Services Department) and supported by federal funding from the Center for Substance Abuse Prevention, Substance Abuse and Mental Health Services Administration.

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## WHAT IS FENTANYL?

Fentanyl is a powerful synthetic opioid drug designed to work in a similar way to opiates, such as heroin or morphine, but is 50 to 100 times more potent. Compared to opiates, which are derived from the opium plant, synthetic opioids such as fentanyl are produced in a lab.

Fentanyl is a schedule II prescription drug, and it is typically used to treat patients with severe pain or patients with chronic pain that have developed a tolerance to other prescription opioids. In its prescription form, fentanyl is known by such names as Actiq® or Duragesic®, and comes in a variety of forms such as lozenges and transdermal patches.



Fentanyl is abused for its euphoric and sedative effects, and can serve as a direct substitute for heroin among opioid abusers. However, fentanyl is a very dangerous substitute for heroin because it is much more potent and results in more frequent overdoses. A lethal dose for someone with a low tolerance for opioids is approximately 2 milligrams of pure fentanyl – about the same amount as a few grains of salt.

Fentanyl is available in two varieties: licit, which is illegally diverted from the pharmaceutical market, and illicit, which is illegally manufactured. Fentanyl patches, the most common prescription form, are abused by removing the gel contents from the patches and then ingesting these contents. Patches have also been frozen, cut into pieces and placed under the tongue.<sup>1</sup> Both licit and illicit types of fentanyl are abused; however, illicit fentanyl is primarily responsible for the current fentanyl epidemic in the United States.

## WHAT IS ILLICIT FENTANYL?

Illicit fentanyl is primarily manufactured in China and Mexico and smuggled into the United States. Illicit fentanyl is usually made in powder form and mixed into white heroin to increase its potency or pressed into counterfeit prescription pills. Fentanyl is rarely mixed with black tar heroin, as it is easily recognized as an additive, although in rare cases this has occurred.

Much of the fentanyl that is illegally produced comes in the form of fentanyl analogs, or chemically similar compounds, such as alpha-Methylfentanyl (“China White”) and Carfentanil, to subvert U.S. and Chinese drug regulations. The former is preferred for illicit use because of a longer duration of effects, while the latter has a potency 10,000 times that of morphine (compared to 50-100 times the potency for regular fentanyl).<sup>2</sup> There are currently dozens of known analogs of fentanyl, but many more continue to be developed to subvert drug regulations.<sup>3</sup> Heroin laced with Carfentanil was found in Ohio in 2016 and linked to a spike in overdoses there.<sup>4</sup>

<sup>1</sup> *Fentanyl Fact Sheet*. Drug Enforcement Administration, 2016.

<sup>2</sup> *Fentanyl Drug Profile*. European Monitoring Center for Drugs and Drug Addiction, 2016.

<sup>3</sup> Communication with New Mexico Department of Health

<sup>4</sup> "Heroin Deaths Tied to Powerful Drug Carfentanil: What Is It?" Time, 12 Sept. 2016.



## WHERE IS ILLICIT FENTANYL AND WHAT ARE THE TRENDS IN ITS USE?

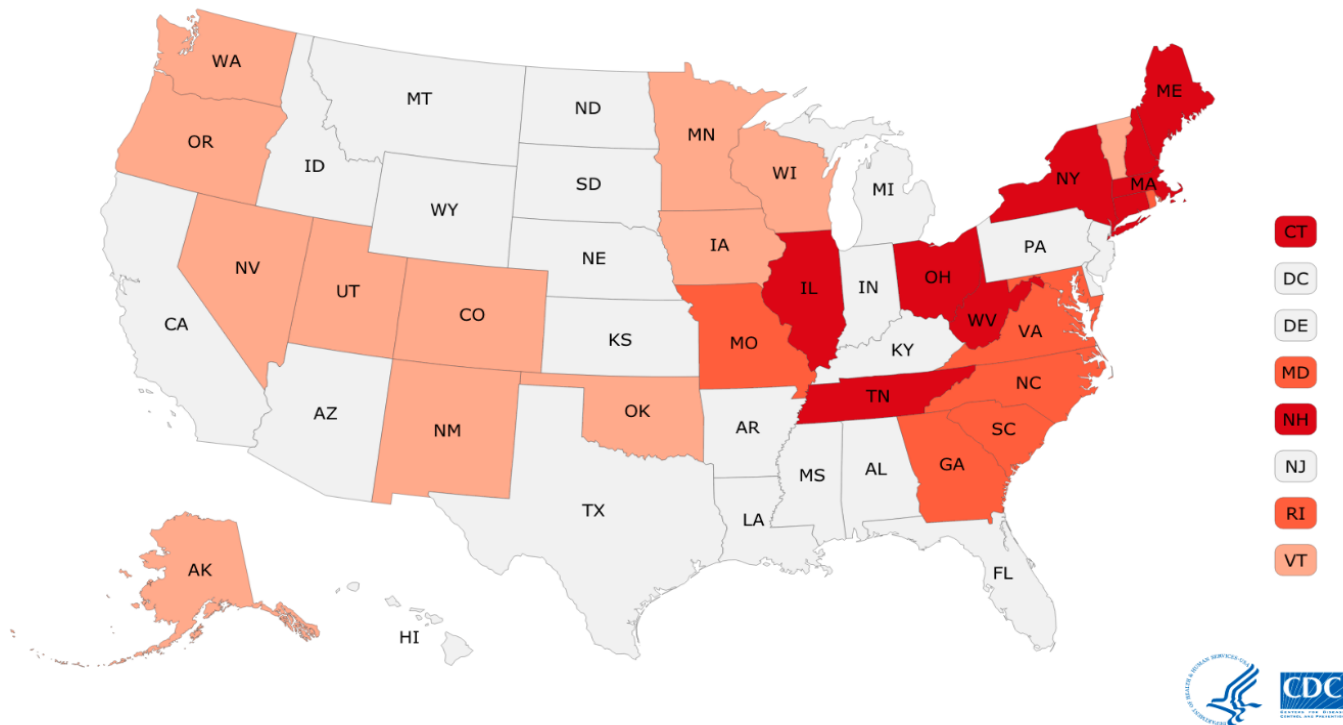
Fentanyl is primarily smuggled across the Mexican border or delivered via mail from China. According to the DEA, illicit fentanyl is not believed to be produced in large quantities the United States, but is instead obtained by U.S. drug traffickers in finished powder or pill form.

Illicit fentanyl use surged in the United States starting in 2013, primarily affecting users in the Northeast and down through West Virginia and Ohio. The CDC reports that there was a 79% increase in fentanyl-related overdose deaths nationwide from 2013 to 2014. From 2014 to 2015, Maine and New Hampshire saw over a 90% increase in fentanyl-related overdose deaths, while Ohio and Massachusetts saw over a 100% increase (see figure below). The DEA notes a heavy concentration of fentanyl seizures in the Northeast, primarily due to the fact that white powder heroin has historically been the opiate of choice in that region and fentanyl can be easily added to existing batches of white powder heroin without the user being aware.

The DEA notes that in 2015, “there was a marked surge in the availability of illicit fentanyl pressed into counterfeit prescription opioids, such as oxycodone. In many cases, the shape, colorings, and markings were consistent with authentic prescription medications and the presence of fentanyl was only detected after laboratory analysis. Investigative reporting indicates that domestic traffickers acquire fentanyl powder and process the fentanyl into pill. The rise of fentanyl in counterfeit pill form exacerbates the fentanyl epidemic. Prescription pill abuse has fewer stigmas and can attract new, inexperienced drug users, creating more fentanyl-dependent individuals.” As seen in the figure on the next page, it has been a major contributor to a dramatic uptick in all opioid/opiate deaths since 2013.

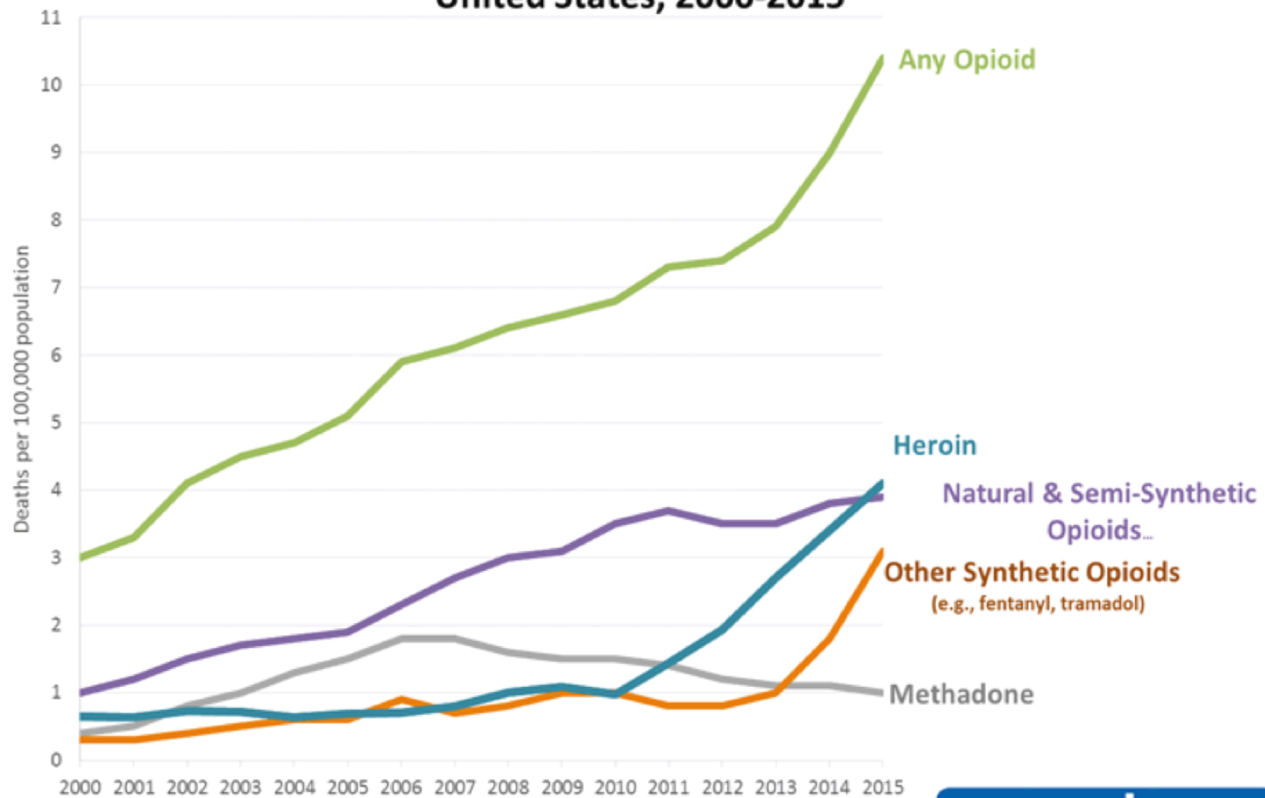
Source: 2016 National Drug Threat Assessment Summary. Drug Enforcement Administration, 2016.

Statistically significant changes in drug overdose death rates involving synthetic opioids (excluding methadone) by select states, United States, 2014 to 2015



States in dark red experienced a significant increase in overdose rates. Those in light red did not, and those in grey did not meet reporting standards. Source: Centers for Disease Control, 2016.

## Overdose Deaths Involving Opioids, by Type of Opioid, United States, 2000-2015



SOURCE: CDC/NCHS, National Vital Statistics System, Mortality. CDC WONDER, Atlanta, GA: US Department of Health and Human Services, CDC; 2016. <https://wonder.cdc.gov/>.

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## FENTANYL IN NEW MEXICO

Although illicit fentanyl is not believed to be in widespread use in New Mexico, much of it comes through the state from Mexico on its way to the East Coast market. In March 2015, DEA agents in Albuquerque seized three kilograms of fentanyl powder concealed in a false bottom compartment of a suitcase at a bus transportation center as a drug trafficker was travelling from San Diego to New York City.<sup>1</sup>

Illicit fentanyl is not very popular because heroin users in New Mexico traditionally prefer black tar heroin, which is not easily adulterated with illicit fentanyl without the user noticing. Fentanyl in New Mexico has traditionally been diverted from the licit market in the form of patches and lozenges, not mixed with heroin or sold as counterfeit pills as is seen in the current epidemic on the East Coast.<sup>2</sup>

Nevertheless, there were 10 deaths involving fentanyl analogs (which are known to be illicit) in New Mexico in 2016. Counterfeit pills were associated with a small number of overdose deaths as well. Overall, there were approximately 1.8 fentanyl-related overdose deaths per 100,000 population in New Mexico in 2016, a little more than half the nationwide rate of 3.1 per 100,000.<sup>2</sup>

<sup>1</sup> 2016 National Drug Threat Assessment Summary. Drug Enforcement Administration, 2016.

<sup>2</sup> Communication with New Mexico Department of Health