

Fentanyl Analog Testing (LC/MS/MS)

What is a Fentanyl Analog?

Over the past several years, there has been an increasing trend of death caused from synthetic opioids. Synthetic opioid-involved death rates increased by over 15% from 2018 to 2019 and accounted for nearly 73% of all opioid-involved deaths in 2019. In 2020 through April of 2021, more than 100,000 deaths from overdose occurred which was the highest in U.S. history. Of the 100,000, more than 60% of the deaths involved synthetic opioids¹. Fentanyl has been the highest cause of death of the synthetic opioids.

- According to a DEA research study, roughly 4 out of every 10 drugs that contain fentanyl have a lethal amount laced into them. A Fentanyl dosing of only 2mg is considered a potentially lethal dose².

In recent years, illicit manufacturing of fentanyl has occurred, making chemically similar substances available. These compounds are known as analogs and can range in potency. Some of these illicit versions are less potent than fentanyl while others are significantly more powerful. In either case, the lack of knowledge around these analogs available - specifically dosing values - provides significant risk to patients who take it for illicit reasons or supplement to enhance the effects of their prescription medications.

- Naloxone continues to be an effective drug in reversing overdose with opioids, including the Fentanyl analogs, however larger doses of naloxone are required to reverse the effects of analogs than commonly used³.

Fentanyl Analogs available at Assurance *

Fluoro Fentanyl (O-Isomer)	Methoxyacetyl Fentanyl
Cyclopropyl Fentanyl	4-ANPP
*This is not an exclusive list of all fentanyl analogs	

Assurance Laboratories has researched commonly seen Fentanyl Analogs in our local communities and continues to pursue the most impactful compounds to make available. According to the Milwaukee County Medical Examiner's office, 79% of overdose cases in Milwaukee involved fentanyl, and further 78% of heroin that was tested included fentanyl⁴. The table above lists Fentanyl Analogs available today through our quantitative testing, in addition to our standard Fentanyl testing.

1. Hazelden Betty Ford Spring webinar, Fentanyl and the Evolving Opioid Epidemic. March 2022.
2. DEA Facts About Fentanyl: <https://www.dea.gov/resources/facts-about-fentanyl>
3. Fentanyl, fentanyl analogs and novel synthetic opioids: A comprehensive review. Patil Armenian et. Al. October 2017
4. 360:Fentanyl Testing Strips to Become Legal in Wisconsin. <https://www.tmj4.com/news/local-news/360/360-fentanyl-testing-strips-set-to-become-legal-in-wisconsin>. February 2022.

