

Deadly Carfentanil Resurfaces

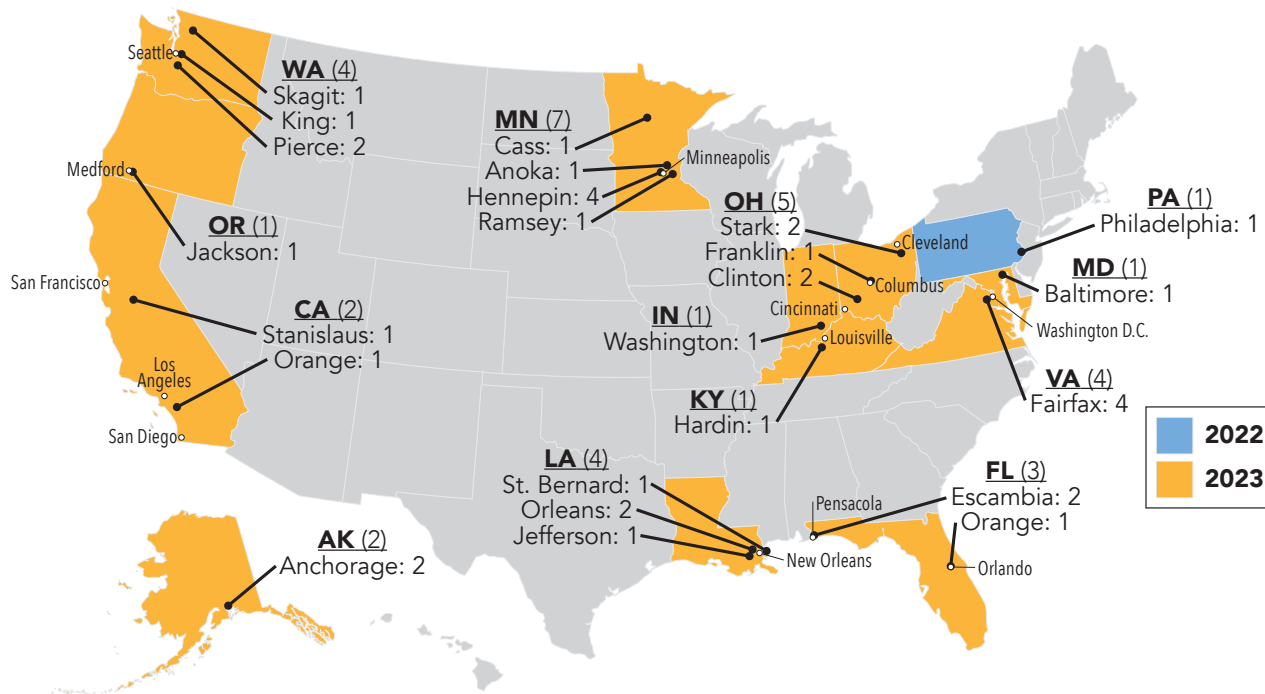
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Carfentanil, a lethal fentanyl analogue, is increasingly being detected in states from coast to coast and may have significant implications for overdose outbreaks.

- **Carfentanil is a fentanyl analogue that is 100 times more potent than fentanyl and 10,000 times more potent than morphine¹**
- Carfentanil was associated with a significant spike in synthetic opioid overdose deaths in 2016-2017²
- We previously reported a dramatic decline in carfentanil detections in urine drug test (UDT) results that generally coincided with the onset of the COVID-19 pandemic in 2020³
- As carfentanil-involved overdose deaths and forensic laboratory detections have begun to reemerge, law enforcement and public health officials in some states have issued alerts about the presence of carfentanil in the illicit drug supply and its associated harms^{4,5}
- This analysis of our UDT results compared carfentanil detection frequencies and locations in 2022 and 2023
 - **In 2022, carfentanil was detected ONCE nationally via UDT** occurring only in Philadelphia County, PA (Figure 1, ■)
 - **In 2023, carfentanil detections in UDT increased by 3,400%; detected 35 times across 12 states (AK, CA, FL, IN, KY, LA, MD, MN, OH, OR, VA, WA)** (Figure 1, ■)
- Although these increases are alarming, the prevalence of carfentanil in 2023 is considerably lower than in peak years (e.g., 2017)²; we are closely monitoring carfentanil trends and will provide updates as warranted

Figure 1: County-Level Carfentanil Detections in Fentanyl-Positive Urine Specimens in 2022 and 2023



Frequency of carfentanil detection in fentanyl-positive urine drug test (UDT) specimens by state and patient county of residence in 2022 (light blue) and 2023 through October 23rd (yellow). A Z-Test of proportions revealed that the number of carfentanil-positive UDT results was significantly higher in 2023 compared to 2022 ($p < 0.05$). Urine drug tests were ordered by healthcare providers on the basis of medical necessity and had valid results for carfentanil.

Reference:

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