



## The Toxic NOSE (Novel Opioid and Stimulant Exposure)

Report #8 from Toxic's Rapid Response Program for Emerging Drugs of Abuse

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### Illicit Fentanyl Use: M30 Pills

#### Introduction

Recreational use of illicit fentanyl, a synthetic opioid, has increased dramatically over the past few years. Synthetic opioid overdoses, including illicit fentanyl, have increased 10.2 fold from 2014 to 2020. Total opioid related overdoses have increased 2.4 fold in the same time. In 2020 there were 68,630 total opioid related deaths reported to the National Institute of Health (NIH), 56,516 (82.3%) of these deaths involved synthetic opioids.<sup>1</sup> Data obtained from the Toxic Core Registry has replicated these trends.

#### The Toxic Novel Opioid and Stimulant Exposures (NOSE) Reports

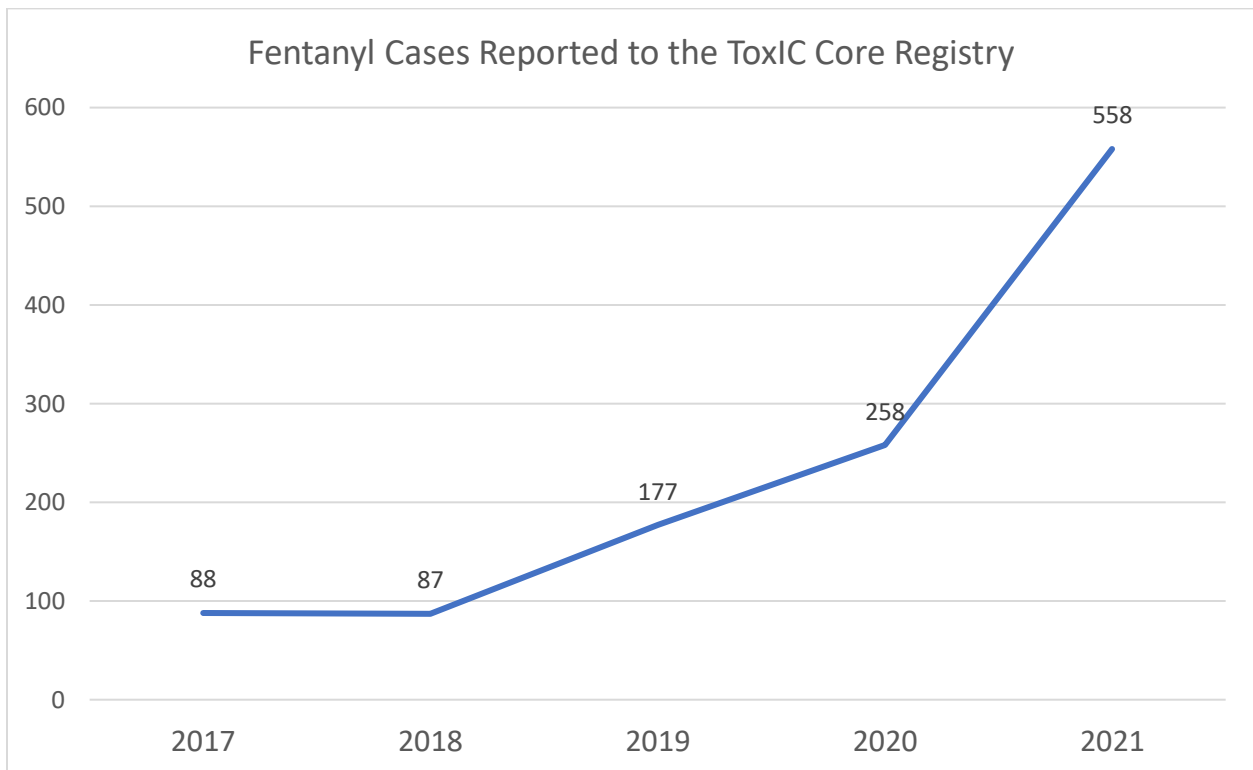
As a project of the Opioid Response Network (ORN), the American College of Medical Toxicology (ACMT) Toxicology Investigators Consortium (Toxic) is using the enhanced sentinel detector field to identify and report on novel and emerging opioid and stimulant exposures reported in Toxic every quarter over a 2-year period.

The goal of this project is to disseminate this novel information to the medical toxicology community as well as the ORN as part of a Rapid Response program.

"For more information on the Toxic Registry and data collection, please visit: [www.toxicregistry.org](http://www.toxicregistry.org)

## Toxic Fentanyl Data

Between 2017-2021 there were 1,168 fentanyl cases reported to the ToxIC Core Registry in patients 12 years of age or older. This includes patients presenting with any intentional fentanyl use, such as overdose from abuse/misuse or self-harm, as well as cases of fentanyl withdrawal. Additionally, some cases reported in this registry were seen not for acute intoxication or withdrawal, but for opioid use disorder and initiation of medications such as buprenorphine or methadone. The average age of patients was 36 years, and 61% were male. A total of 59 patients (5.1%) were pregnant. The number of fentanyl cases increased dramatically between 2017-2021 (see graph). Excluding withdrawal or addiction medicine cases, 53% received naloxone in the hospital and 28 patients died (2.4%).



In the ToxIC Core Registry, there were 145 novel cases of fentanyl exposures from 2017-2021 that were labeled as suspected M30 cases (pills containing fentanyl) from one site in Arizona. Fentanyl containing pills are often called M30s or “blues” due to the blue pill color and

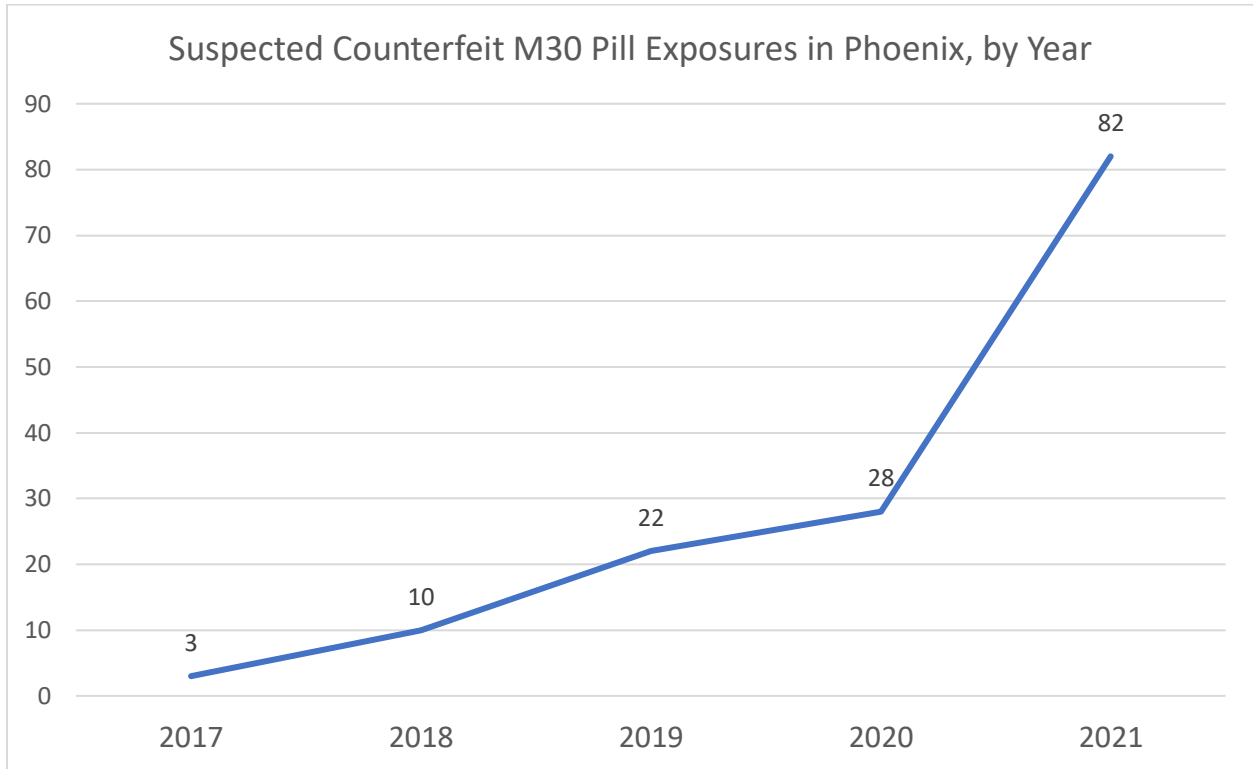
markings of “M” on one side of the pill and “30” on the other side (see photo and CDC link below). M30 exposures were suspected if a patient had urine immunoassay or Gas Chromatography/Mass Spectroscopy positive for fentanyl. The majority (64.8%) of the patients tested positive for fentanyl plus other opioids, stimulants and/or benzodiazepines. Fifty-one of the 145 patients (35%) had fentanyl with no other opioids, stimulants or benzodiazepines detected in the urine. Suspected M30 use increased significantly from 2017 to 2021. In 2017 there were three M30 pill exposures, which increased to 82 M30 pill exposures in 2021. Approximately 31% of patients reported oral ingestion of the M30 pills, 43% of patients reported inhalation of pills by smoking, 7% inhalation by insufflation, and 17% did not have data reporting the exposure route. Seventeen patients were placed on a naloxone drip due to re-sedation after initial naloxone administration.



**M30 fentanyl pills**

(Photo provided by Christopher Dion)

CDC Drug Fact Sheet: <https://www.dea.gov/sites/default/files/2021-05/Counterfeit%20Pills%20fact%20SHEET-5-13-21-FINAL.pdf>



## Discussion

Fentanyl use has surpassed that of heroin and other common opioids such as oxycodone, or hydromorphone. Increased prevalence of fentanyl and specifically M30s is evidenced by multiple large scale drug seizures reported by DEA over the past year. One million fentanyl pills were seized in Los Angeles in July 2022.<sup>2</sup> Approximately 9.5 million fentanyl pills were seized in Arizona during 2021 alone, with a single raid netting 1.7 million pills.<sup>3</sup> Fentanyl seizures have not been limited to the west coast. Twenty kilograms of fentanyl was seized in New York City in January, 2022<sup>4</sup> and 75,000 fentanyl pills were seized in June.<sup>5</sup>

The treatment for acute opioid overdose, naloxone, is the same regardless of the opioid. Fentanyl pills, however, are not subject to the same quality controls as prescription opioids, so it is nearly impossible to determine the actual quantity of fentanyl in each tablet. Patients are at

risk of consuming larger doses of fentanyl than expected and/or additional sedating agents as adulterants with increased risk of respiratory depression. Fentanyl is not commonly picked up on traditional drug screens and requires a dedicated fentanyl immunoassay or advanced toxicology testing for detection.

## Conclusion

In the past 8 years, fentanyl has transitioned from a contaminant in other illicit opioid products to the most common opioid drug involved in opioid overdoses. Fentanyl pills masquerade as legal and less potent opioids such as oxycodone. Medical toxicologists should be aware of the increasing prevalence of fentanyl pills. In some areas fentanyl pills have become the primary opioid used as a drug of abuse.

## References

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3. Record Fentanyl Seizure by DEA Phoenix, Scottsdale Police & the Arizona Attorney General's Office as DEA Announces Nationwide Public Safety Surge." *Drug Enforcement Agency*. Published December 17, 2021. <https://www.dea.gov/press-releases/2021/12/17/record-fentanyl-seizure-dea-phoenix-scottsdale-police-arizona-attorney>
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5. "Major Multi-Drug Seizure of Over 250 Pounds of Heroin, Fentanyl, Cocaine, Crystal Meth and Counterfeit Pills in the Bronx." *Drug Enforcement Agency*. Published June 29, 2022.

<https://www.dea.gov/press-releases/2022/06/29/major-multi-drug-seizure-over-250-pounds-heroin-fentanyl-cocaine-crystal>

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### **About the *Opioid Response Network (ORN)*:**

*ORN* provides free, localized training and education for states, communities, organizations and individuals in the prevention, treatment and recovery of opioid use disorders and stimulant use. Learn more and submit a request at [www.OpioidResponseNetwork.org](http://www.OpioidResponseNetwork.org).

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