

# 3-methylfentanyl Presence in Pennsylvania



DEA  
BULLETIN



This DEA Bulletin is based on preliminary reporting and may be subject to updating as additional information becomes available.

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## Event

In May 2016, the Drug Enforcement Administration (DEA) Philadelphia Field Division (PFD) Intelligence Program received information regarding the presence of 3-methylfentanyl (3-MF) and its precursors in seized drug exhibits and drug-related overdose death toxicology test results in Allegheny and Philadelphia counties in Pennsylvania. This information was researched and analyzed, with results published in a June 2016 DEA PFD Intelligence Bulletin, entitled "Presence of 3-methylfentanyl and/or precursor 3-methyl-ANPP in Recent Fatal Overdoses in Pennsylvania."

Subsequently, in September 2016, DEA reporting noted the seizure of capsules containing 3-MF in Montgomery County, Pennsylvania. As a result of the information obtained, additional research and outreach was conducted with the goal of identifying regional availability and a potential local/regional laboratory.

## Significance

According to open source reporting, 3-MF is an opioid analgesic with euphoric effects similar to fentanyl. It is a Schedule I controlled substance in the United States and one of the most potent opioids available on the illicit market. It has an estimated potency of 400 to 6,000 times greater than morphine (depending on which isomer is evaluated). 3-MF was frequently encountered on the illicit market in the mid-1980s to early 1990s, but has only been associated with deaths in Western and Northern Europe since then.

Two separate incidents of local production of 3-MF were noted in the 1980s. In 1985, DEA arrested a chemist for producing and selling 3-MF in Delaware. In 1988, 3-MF was a factor in 18 fatal overdose cases in Allegheny County. A research chemist from Aspinwall, Pennsylvania was identified as the source of the 3-MF and it was discovered that he manufactured the drug from chemicals stolen from his employer.

## Details

### Seized Drug Exhibits

Information received from the Pennsylvania State Police (PSP) Bureau of Forensic Services, the Philadelphia Police Department Office of Forensic Science, the Allegheny County Office of the Medical Examiner (ACOME) Trace and Drug Chemistry Section, and the National Medical Services (NMS) Laboratories regarding analysis of seized drug exhibits identified the following:

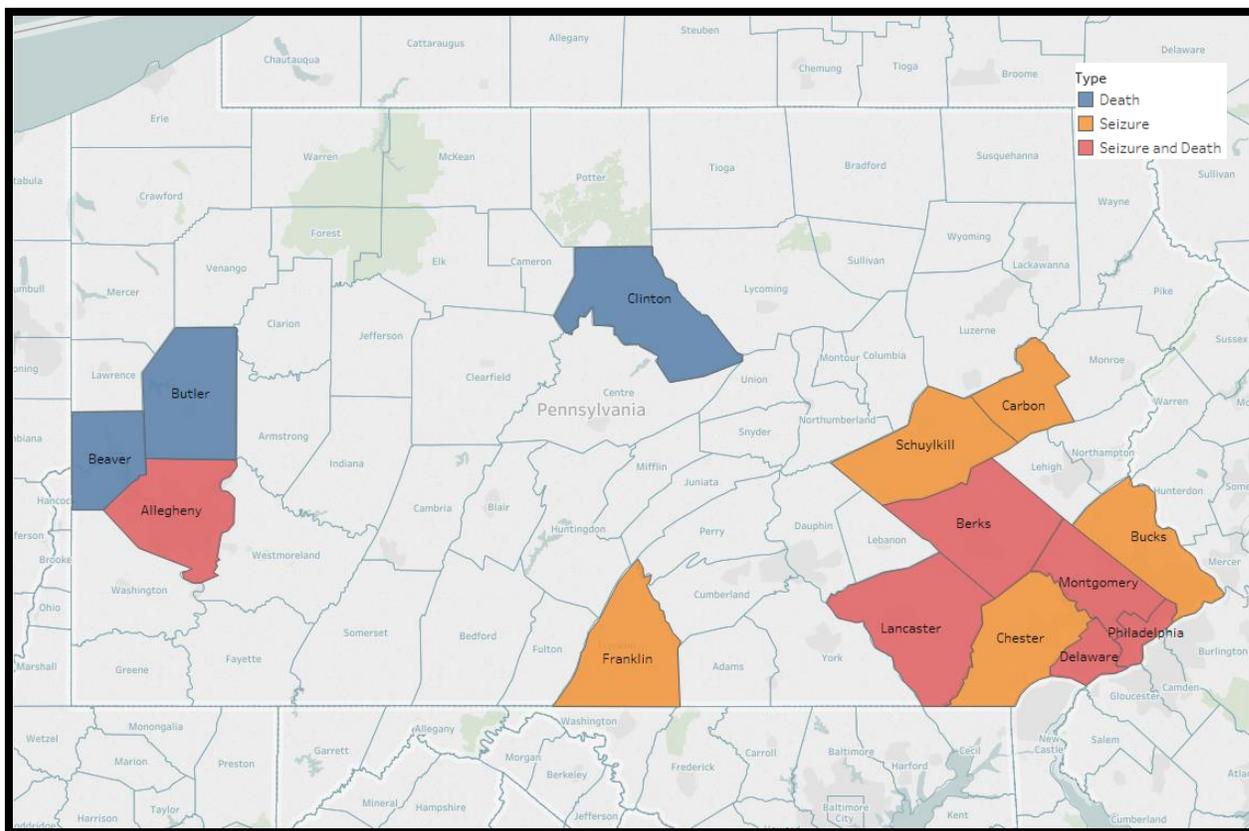
- Drug exhibits containing 3-MF were seized in 11 Pennsylvania counties in 2016—Allegheny, Berks, Bucks, Carbon, Chester, Delaware, Franklin, Lancaster, Montgomery, Schuylkill, and Philadelphia.
- The seizure dates range from March 2016 through October 2016, with a spike in July, possibly due to investigative activity (controlled purchases). The circumstances regarding seizure (controlled purchases, interdiction, overdose scene, etc.) are not known. It is possible that additional drug seizures containing 3-MF have yet to be tested/identified due to laboratory backlogs.
- The composition of the seized exhibits included mixtures of heroin/3-MF; cocaine/3-MF; acetyl fentanyl/fentanyl/3-MF; fentanyl/3-MF; heroin/fentanyl/3-MF; heroin/ketamine/3-MF; and 3-MF alone.
- Of note, a query by the National Forensic Laboratory Information System (NFLIS) for 3-MF exhibits from 1997 (oldest data available) through 2014 produced no results. The first seizure in recent history was in Georgia in October 2015. Pennsylvania seizures contained in PSP Bureau of Forensic Services reports were first noted in March 2016.

### Fatal Overdoses

Information received from NMS Laboratories, ACOME, and the Philadelphia Medical Examiner's Office (PMEO) identified drug-related overdose deaths where 3-MF was present in nine Pennsylvania counties between March and November 2016—Allegheny, Beaver, Berks, Butler, Clinton, Delaware, Lancaster, Montgomery, and Philadelphia. It is possible that additional deaths related to 3-MF have occurred in that state but were not identified by toxicology testing due to the limited scope of requested testing.

As of December 5, 2016, there have been 22 deaths linked to 3-MF in Pennsylvania in 2016. Of interest, six counties reported both 3-MF seizures and deaths.

Figure 1. 3-MF Seizures and Related Deaths in Pennsylvania, 2016.



Sources: Pennsylvania State Police, Bureau of Forensic Services, the Philadelphia Police Department Office of Forensic Science, Allegheny County Office of the Medical Examiner, Philadelphia Medical Examiner's Office, and NMS Laboratories

## Intelligence and Information Gaps

The PFD is currently investigating several fatal overdoses linked to 3-MF and is coordinating with several state/local law enforcement agencies in Southeastern Pennsylvania. Questions persist regarding the source(s) of 3-MF, such as whether 3-MF results from domestic or international production. The PFD is also pursuing information related to purchasing chemicals required to manufacture 3-MF, as well as seizures and deaths not previously reported.

*This product was prepared by the DEA Philadelphia Field Division. Comments and questions may be addressed to the Chief, Analysis and Production Section at [dea.onsi@usdoj.gov](mailto:dea.onsi@usdoj.gov).*