



Parma Police Department, Ohio Drug-Related Overdose Incidents January 1, 2017 – December 31, 2020

Analysis of suspected drug-related overdose incidents in Parma, Ohio

Background

Parma Police Department (PPD) serves a mostly urban population of 78,103 near Cleveland in northeastern Ohio.¹ Like many Ohio communities, Parma continues to be impacted by drug-related overdose deaths, which spiked in 2016 claiming the lives of 37 Parma residents. Parma public safety personnel serve as first responders to hundreds of overdose incidents each year and invest time and effort partnering with other agencies to explore solutions to the opioid epidemic.

In 2020, with funding support from the Bureau of Justice Assistance (#2018-AR-BX-K033), the Begun Center for Violence Prevention Research and Education at Case Western Reserve University partnered with PPD to provide further data analysis and report the findings of overdose incidents from 2017 to 2020 in Parma. This data brief highlights selected outcomes of overdose incident data provided by the PPD and drug-related death data provided by the Cuyahoga County Medical Examiner's Office (CCMEO). The full report is available at <https://www.ccbh.net/overdose-data-dashboard/>.



Key Datapoints

- CCMEO reported an average of 26 Parma residents died each year from a drug overdose
- Opioids caused 86% ($n=89$) of all drug-related deaths of Parma residents
- PPD responded to 626 overdose incidents or an average of 156 per year
- 43.1% ($n=270$) of PPD overdose incident responses were to males 25-39 years of age



The Drugs Causing Overdose

Scene Reports

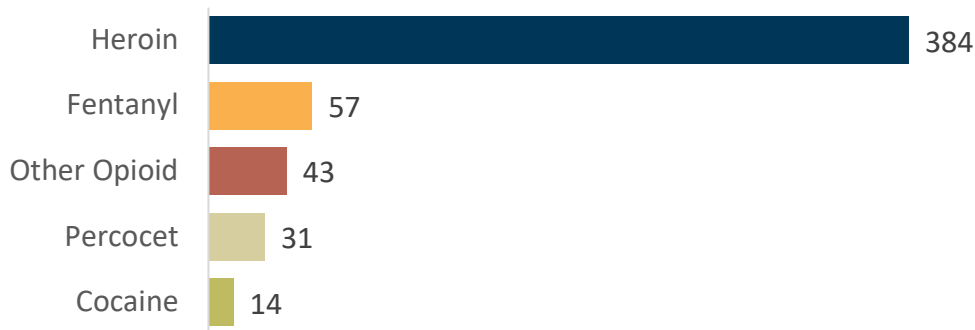
From 2017 to 2020, PPD responded to 626 suspected drug-related overdose incidents.² According to police reports, opioids and their synthetic analogues accounted for most of the drugs suspected of causing these overdoses. Heroin and/or fentanyl were reported as the suspected drug in 62.7% of cases ($n = 441$). Cocaine, crack cocaine, crystal methamphetamine, and methamphetamine were reported as the suspected drug in only 3.4% ($n = 24$) of incidents (see Figure 1).³ Legal prescription medications, diverted legal prescription medications, potentially counterfeit prescription medications and/or other pill origins were reported in 28.2% ($n = 198$) of these incidents.

¹ From U.S. Census Bureau (2021). *Population Estimates, July 1, 2019*. Retrieved from [census.gov/quickfacts/parmacity](https://www.census.gov/quickfacts/parmacity)

² The PPD and Parma Fire/EMS jointly respond to all suspected drug-related overdose calls for service within their jurisdiction.

³ More than one suspected drug may be reported per incident; the total count for suspected drugs is 703 compared to the 626 total overdose incidents.

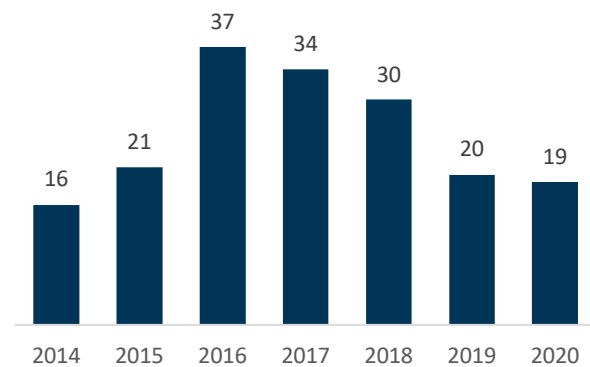
Figure 1. Top Five Known Suspected Drug Types Reported at Overdose Incident Scenes (N = 529).



Toxicology Reports

The CCMEO reported fentanyl and fentanyl analogs (including carfentanil) were the cause of death (COD) drugs in 97.6% ($n = 41$) of accidental drug overdose fatalities in which PPD responded. In the 15 accidental overdose death cases in which psychostimulants (cocaine and methamphetamine) were reported as COD drugs, opioids were reported in all but one case.⁴ CCMEO records show that between 2017 and 2020 a total of 103 Parma residents died from an accidental drug overdose and of these deaths, 86.4% ($n = 89$) were caused by opioids.⁵ Of these 103 deaths, carfentanil had the most impact in 2017 and 2019, contributing to 26.4% ($n = 9$) of drug-related overdose deaths in 2017 and 40% ($n = 8$) in 2019.

Figure 2. Drug-Related Overdose Deaths for Parma Residents from 2014-2020*



* Not all 2020 drug-related overdose death cases were ruled at the time of this report.
Source: Cuyahoga County Medical Examiner's Office



Overdose Incident Profile

PPD reported 69.3% ($n = 434$) of the overdose victims were male. Persons 25-39 years old accounted for 57.4% of all overdoses ($n = 359$). The five-year age group experiencing the most overdose deaths in Parma consisted of persons 25-29 years old, accounting for 20.9% of incidents ($n = 131$). PPD responded to 70 persons who experienced an overdose two or more times, accounting for 28.3% of all incident responses ($n = 177$).

Overdose Incident Profile

- Average Age: **35.4**
- Male/Female Ratio: **2.3 : 1**
- **70 of 519** persons were involved in an overdose incident more than once (28%)

⁴ Of the six accidental methamphetamine related deaths, five were opioid-related. Of the nine accidental cocaine related deaths, all nine were opioid-related. Not all 2020 cases were ruled by the Cuyahoga County Medical Examiner at the time of this report.

⁵ Although PPD responded to all reported suspected drug overdose incidents in the City of Parma, many Parma residents who died from drug overdose deaths either died outside of the city, were not reported to public safety (and thus PD/EMS did not respond to the incident), or were not determined or suspected drug overdoses at the time of death.



Cities of Residence & Overdose Incident Locations

PPD reported 59 cities of residence for individuals who experienced an overdose in Parma. The majority were residents of Parma ($n = 434$). The city of Cleveland was the residence of the next highest number of those who experienced an overdose in Parma, accounting for 11% of incidents ($n = 69$). Parma Heights residents ranked third, representing 2.5% of incidents ($n = 16$) of those experiencing an overdose in Parma (see Table 1).

77.3% ($n = 484$) of PPD responses were to residential locations. Fatal overdose incidents occurred in residential locations in 92% of the cases ($n = 46$), whereas non-fatal incidents occurred in and around residences 76% of the time ($n = 438$). Most individuals (88.5%) who experienced an overdose were transported to University Hospitals Parma Medical Center.

Table 1. Top Cities of Residence

City	Number of Overdoses
Parma	434
Cleveland	69
Parma Heights	16
North Royalton	8
Brooklyn	7
Lakewood	6
Brook Park	6
Strongsville	3
Seven Hills	3
Broadview Heights	3
Brecksville	3



Naloxone

Naloxone was administered in 77.3% of all incidents (484 of 626), 48.9% of fatal overdose incidents (23 of 50), and 80% of non-fatal overdose incidents (461 of 576). First responders (Fire/EMS and Police) were involved in 93.8% of the incidents in which naloxone was administered (454 of 484). Family, friends, or caregivers administered naloxone in 8.9% of incidents (43 of 484). For most of the incidents (468 of 626), PPD reported the number of naloxone doses administered ($n=1,491$) for an average of 3.2 doses per incident. For the 23 fatal overdose incidents where naloxone was administered, the average number of doses was 3.4.

- Naloxone was administered in **77.3% of cases**
- Average Doses by Year:
2017 = 3.3 (181 incidents)
2018 = 3.2 (98 incidents)
2019 = 3.1 (125 incidents)
2020 = 3.0 (80 incidents)
- Family or friends administered naloxone in **8.9%** of cases

Ongoing Efforts

PPD and Parma Fire and EMS joined with social workers in 2018 to form a Quick Response Team to directly engage persons who had experienced a drug-related overdose and provide support and referrals to treatment. The Begun Center continues to work with the PPD and other partners in Cuyahoga County to analyze data related to the opioid epidemic, identify facilitators and barriers to sharing information across communities and sectors, explore solutions, and inform decision-makers.



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