



GOVERNMENT OF THE DISTRICT OF COLUMBIA
OFFICE OF THE CHIEF MEDICAL EXAMINER

401 E Street, SW – 6th Floor
Washington, DC 20024



Opioid-related Fatal Overdoses: January 1, 2014 to April 31, 2019¹

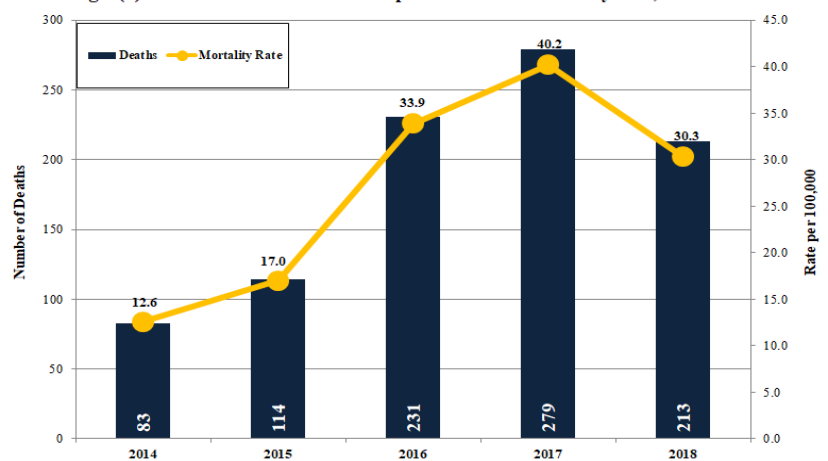
Report Date: June 24, 2019

The DC Office of the Chief Medical Examiner (OCME) investigated a total of **975²** deaths due to the use of opioids from January 1, 2014 through April 31, 2019. This report examines the presence of opioids (*heroin, fentanyl, fentanyl analogs, morphine, prescription opioids and the general category of opiates*) in deaths observed at the OCME.

Trends in Deaths due to Opioid Use

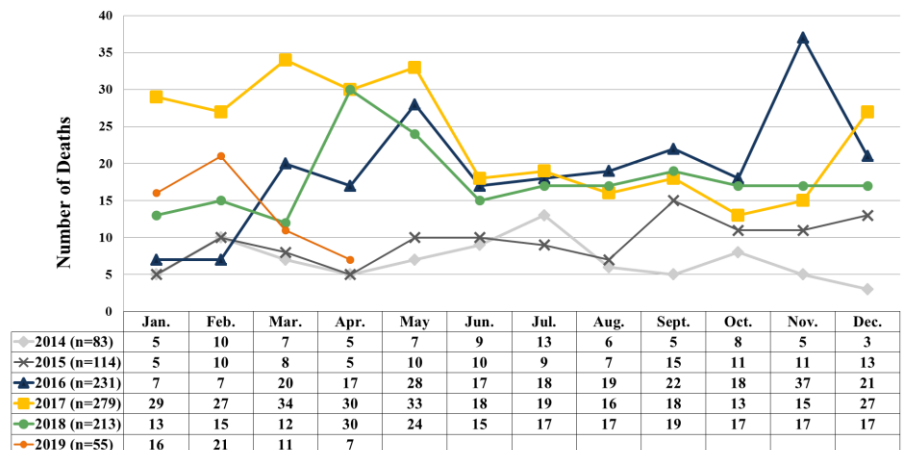
There was a steady increase in the number of fatal opioid overdoses between 2014 and 2017 (Fig.1a). However, the number of opioid overdoses in 2018 decreased by 17% compared to 2017.

Fig. 1(a): Number and Rate of Fatal Opioid Overdoses Cases by Year, 2014-2018



The number of fatal opioid overdoses per month has decreased since 2017 (Fig. 1b). In 2017, there was an average of 23 opioid-related fatal overdoses per month. However the number of opioid-related overdoses per month decreased to average 17 per month in 2018. The total number of opioid overdoses in 2018 is slightly less than 2016 levels. **The 1st quarter of 2019 suggests a similar trend in opioid overdoses as seen in 2018 (Jan-Mar.¹).**

Fig. 1(b): Number of Drug Overdoses due to Opioid Use by Month and Year (N=975)



¹ Data for 2019 is inconclusive and subject to change due to cases where cause and manner of death is “Pending Further Investigation”

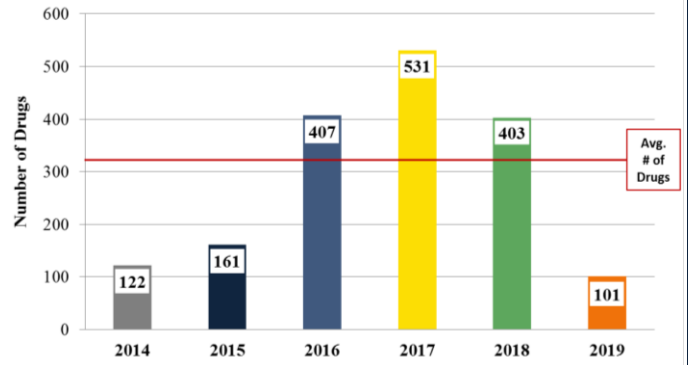
² The data presented in this report includes 11 cases with a Manner of Death other than Accidental Intoxication- three cases in 2014, one case in 2015, and one case in 2016 in which the Manner of Death was Undetermined, but the Cause of Death was due to opioid drug use. Additionally there were two cases with Manner of Death of Suicide in 2014, one case in 2015 and three cases in 2016.



Incidence of Opioids by Year

As depicted in Figure 2(a), there has been a steady increase in the total number of opioids found in fatal overdoses between 2014 and 2017. The majority of opioid overdoses were due to multiple drug toxicity, ranging from 1 to 7 opioids per death. There were a total of **122** opioids³ found in the 83 deaths in 2014, **161** opioids in the 114 deaths in 2015, **407** opioids in the 231 deaths in 2016 and **531** opioids in the 279 deaths in 2017. There were **403** opioids identified in the 213 decedents in 2018.

Fig. 2(a): Total Number of Opioid Drugs Contributing to Drug Overdoses by Year (All Opioids)



*Average excludes 2019 data

Fig. 2(b): Number of Opioid Drugs Contributing to Drug Overdoses by Year

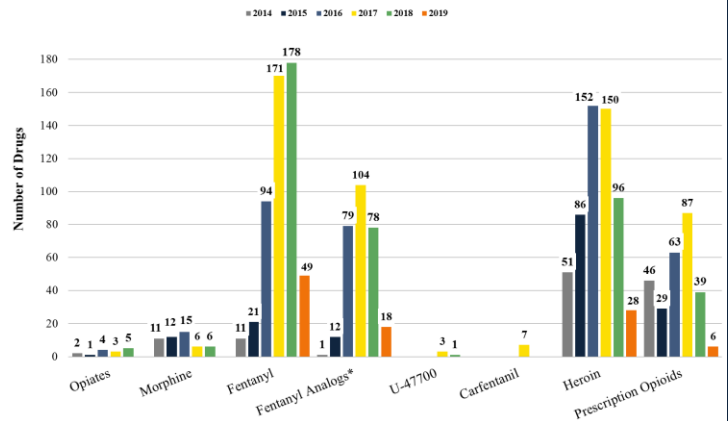


Figure 2(b) displays the illicit and prescription opioids identified through toxicology testing of the 975 decedents from 2014 to 2019. Overall, the most prevalent drugs identified were heroin followed by fentanyl, although the trend is reversed in 2017 and 2018. Table 1 highlights the various fentanyl analogs found per year.

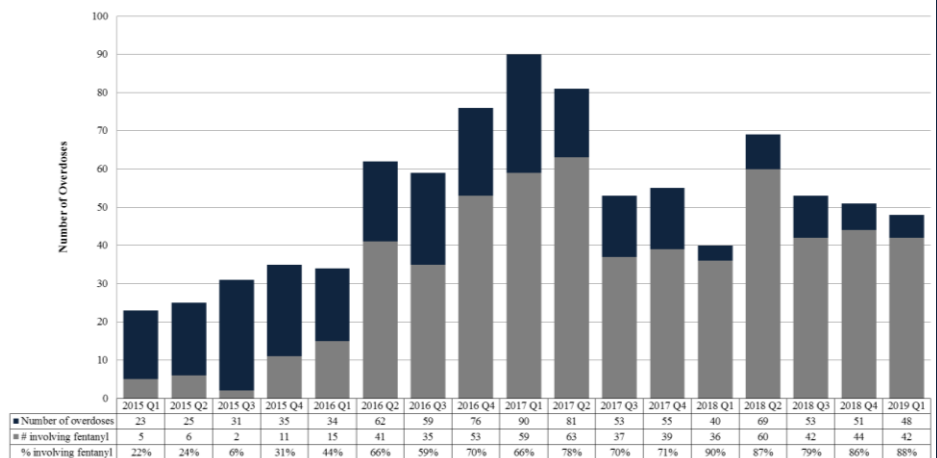
Increase in Fentanyl/Fentanyl Analogs in Opioid Overdoses

Figure 3 highlights the increasing percentage of cases containing fentanyl or fentanyl analogs. The percentage of cases containing fentanyl or a fentanyl analog has gradually increased since 2015. In 2016, **62%** of cases involved fentanyl or a fentanyl analog. The noticeable

	2014	2015	2016	2017	2018	2019
Acetyl Fentanyl	1	12	0	10	21	5
Furanyl Fentanyl	0	0	56	53	1	0
Despropionyl Fentanyl	0	0	20	7	10	8
Methoxyacetyl Fentanyl	0	0	0	1	0	0
Butyryl Fentanyl	0	0	0	2	3	0
P-fluoroisobutyryl Fentanyl	0	0	3	31	38	5
Isobutyryl Fentanyl	0	0	0	0	1	0
P-fluorofentanyl	0	0	0	0	1	0
Valeryl Fentanyl	0	0	0	0	1	0
Norfentanyl	0	0	0	0	2	0
Total	1	12	79	104	78	18

increase in the presence of fentanyl and fentanyl analogs began in March 2016, with over half of the cases containing fentanyl. In 2017, **71%** of the cases contained fentanyl or a fentanyl analog. **However in 2018, approximately 85% of the opioid overdoses contain fentanyl.**

Fig. 3 Number of Opioid Overdoses Containing Fentanyl/Fentanyl Analogs by Quarter, 2015-2018



³ Morphine and fentanyl can both be prescribed. However, for the sake of this report, they are included under the illicit opioids.



Prescription Opioids

There were **270** prescription opioids found in the 975 opioid related drug overdoses between January 2014 and April 2019 (Fig. 4). Despite the downward trend between 2014 (n=46) and 2015 (n=29), the number of prescription opioids identified in fatal opioid overdoses had increased steadily between 2016 and 2017 (n=63, 2016) (n=87, 2017). However, the number of prescription opioids identified in fatal opioid deaths has decreased to 39 in 2018. Figure 4 illustrates that methadone and oxycodone are the most prevalent prescription opioids identified.

Demographics

Age

Approximately **79%** of all overdoses due to opioid drug use happen among adults between the ages of 40-69 years old (Fig. 5). Deaths due to opioid use were most prevalent among people ages 50 to 59 (n=38%).

Race/Ethnicity

Overall, **800** or **82%** of all deaths due to opioid use were among Blacks (Fig. 6). This trend remains consistent across years.

Gender

Fatal overdoses due to opioid drug use were more common among **males** (Fig. 7).

Fig. 4: Number of Prescription Opioids Contributing to Drug Overdoses by Year (n=270)

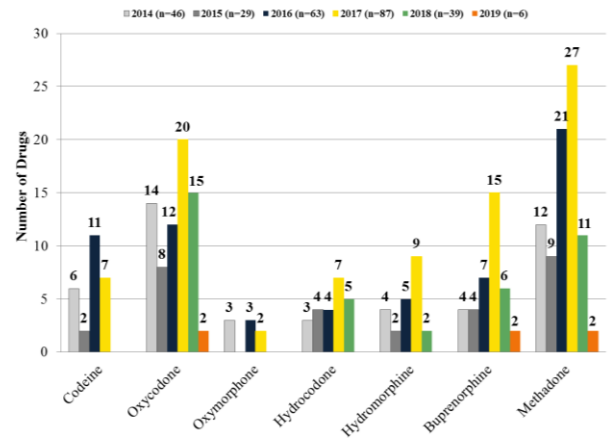


Fig. 5: Drug Overdoses due to Opioid Use by Age

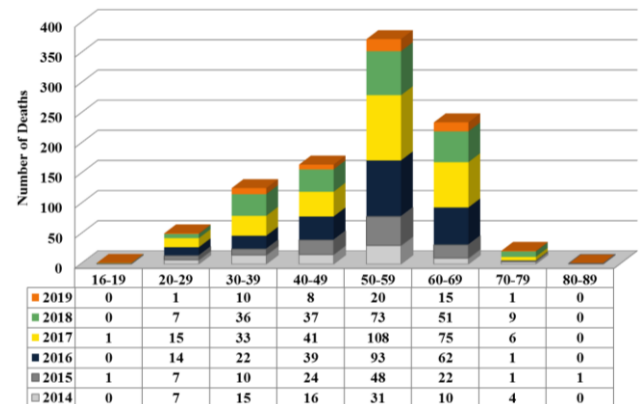


Fig. 6: Number of Drug Overdoses due to Opioid Use by Race/Ethnicity and Year

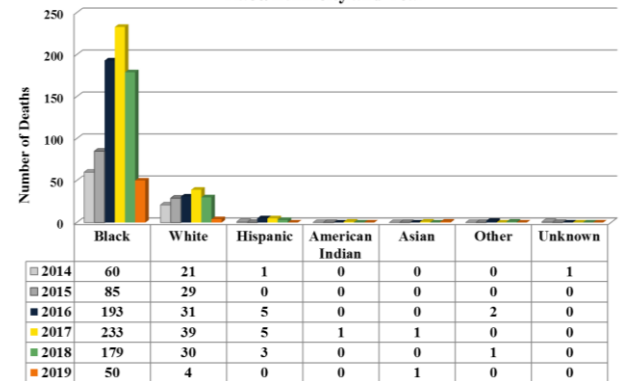
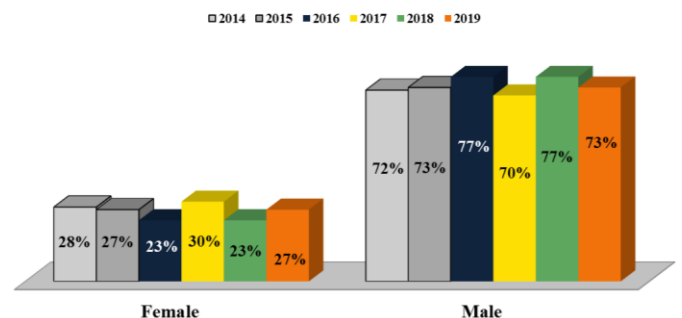


Fig. 7: Percentage of Drug Overdoses due to Opioid Use by Gender and Year



Jurisdiction of Residence¹

The majority of the decedents were residents of DC (Fig.8). From 2014 to 2019 YTD, opioid-related fatal overdoses were most prevalent in **Wards 7 & 8** (n=360) (Fig.9). However, there are variations across years.

Fig. 8: Number of Drug Overdoses due to Opioid Use by Jurisdiction of Residence and Year

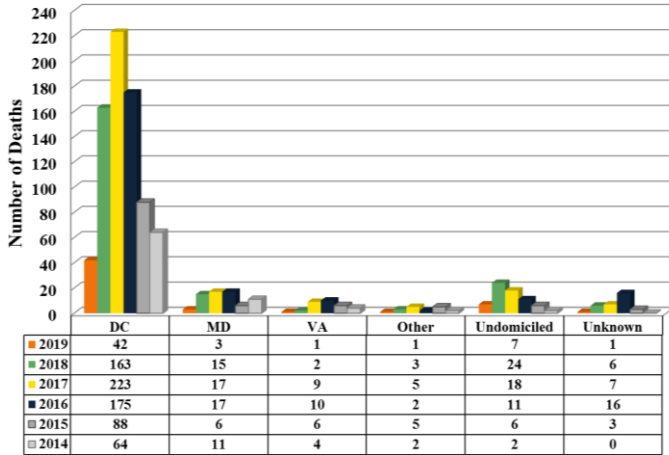
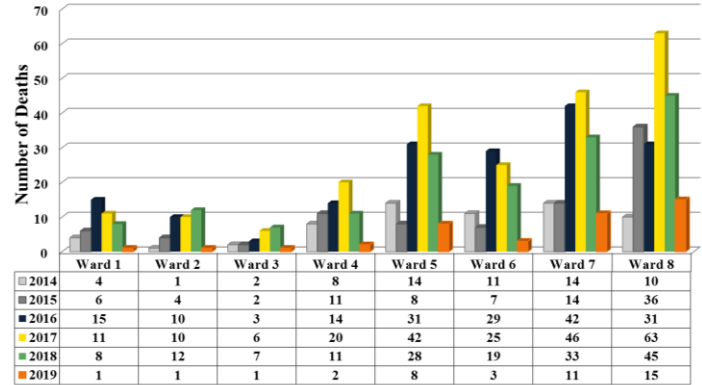


Fig. 9: Number of Drug Overdoses due to Opioid Use by Ward of Residence and Year



Map of 2019 Opioid Overdoses

