

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

401 E Street, SW – 6<sup>th</sup> Floor Washington, DC 20024

# Opioid-related Fatal Overdoses: January 1, 2014 to September 30, 2018<sup>1</sup>

Report Date: November 27, 2018

The DC Office of the Chief Medical Examiner (OCME) investigated a total of **860**<sup>2</sup> deaths due to the use of opioids from January 1, 2014 through September 30, 2018: **83** deaths in CY 2014, **114** in CY 2015, **231** deaths in CY 2016, **279** deaths in CY 2017 and **153** in CY 2018 respectively. 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. In 2017, there were 373 intoxication deaths, of which (75%) or 279 were opioid-related overdoses. In 2018, there are 241 intoxications deaths, of which (63%) or 153 are opioid-related overdoses.

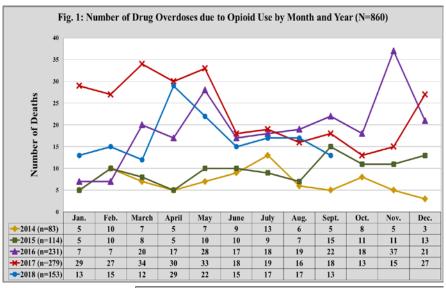
### **Trends in Deaths due to Opioid Use**

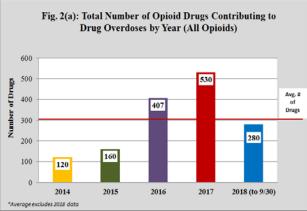
Despite the downward trend observed during the 1<sup>st</sup> quarter of 2018, there were 29 fatal overdoses in April (Fig. 1). On average, there are 17 opioid-related overdoses per month in 2018. If current trends persist, there will be 204 opioid overdoses in 2018. Moreover, the opioid-related fatalities in 2018 will be slightly less than 2016 levels.

#### **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 120 opioids<sup>3</sup> found in the 83 deaths in 2014, 160 opioids in the 114 deaths in 2015, 407 opioids in the 231 deaths in 2016 and 530 opioids in the 279 deaths in 2017. To date, there have been 280 opioids identified in the 153 decedents in 2018. If current trends persist, the total number of opioids contributing to a drug overdose will surpass the average number of opioids identified per year.





<sup>&</sup>lt;sup>1</sup> Data for 2018 is inconclusive and subject to change due to cases where cause and manner of death is "Pending Further Investigation"

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<sup>&</sup>lt;sup>2</sup> 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.

<sup>&</sup>lt;sup>3</sup> Morphine and fentanyl can both be prescribed. However, for the sake of this report, they are included under the illicit opioids.

Figure 2(b) displays the illicit and prescription opioids identified through toxicology testing of the 860 decedents from 2014 to 2018. 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.

Table 1: Number of Fentanyl Analogs by Year					
	2014	2015	2016	2017	2018
Acetyl Fentanyl	0	12	0	10	13
Furanyl Fentanyl	0	0	56	53	0
Despropionyl Fentanyl	0	0	20	7	5
Methoxyacetyl Fentanyl	0	0	0	1	0
Butyryl Fentanyl	0	0	0	2	1
P-fluoroisobutyryl Fentanyl	0	0	3	31	32
Isobutyryl Fentanyl	0	0	0	0	1
P-fluorofentanyl	0	0	0	0	1
Total	0	12	79	104	53

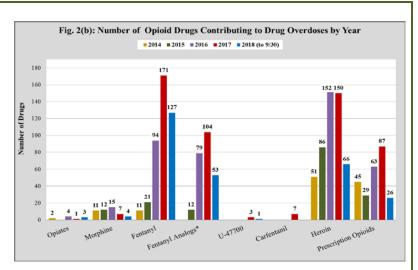
<u>Increase in Fentanyl/Fentanyl Analogs in Opioid</u> <u>Overdoses</u>

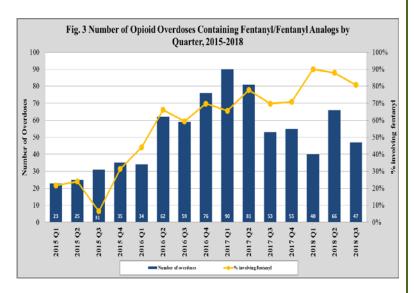
Figure 3 highlights the increasing percentage of cases containing fentanyl or fentanyl analogs. With the exception of the beginning of 2017, the percentage of cases containing fentanyl or a fentanyl analog has remained relatively steady throughout 2017. In 2016, 62% of cases involved fentanyl or a fentanyl analog. The noticeable 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.

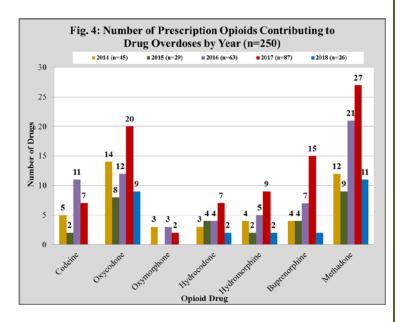
# Currently, approximately 81% of the opioid overdoses contain fentanyl.

#### **Prescription Opioids**

There were **250** prescription opioids found in the 860 drug overdoses between January 2014 and September 2018 (Fig. 4). Despite the downward trend between 2014 (n=45) and 2015 (n=29), the number of prescription opioids identified in fatal opioid overdoses has increased steadily over the past two years (n=63, 2016) (n=87, 2017). Figure 4, illustrates that methadone and oxycodone are the most prevalent prescription opioids identified.









# **Demographics**<sup>1</sup>

#### <u>Age</u>

Approximately 81% 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

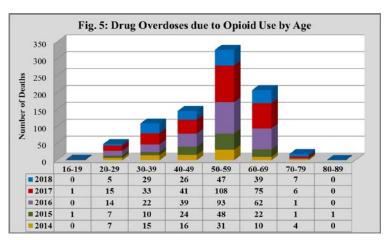
Overall, **702** or **82%** of all deaths due to opioid use were among Blacks (Fig. 6). This trend remains consistent across years.

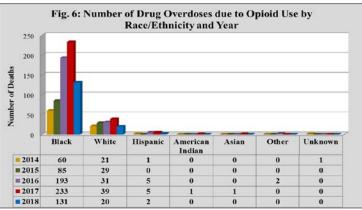
#### <u>Gender</u>

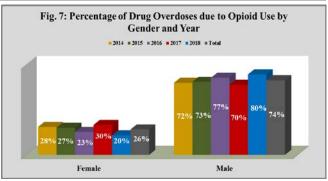
Fatal overdoses due to opioid drug use were more common among **males** (Fig. 7).

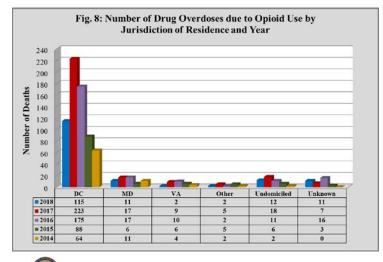
## Jurisdiction of Residence<sup>1</sup>

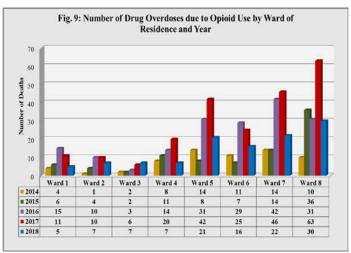
The majority of the decedents were residents of DC (Fig.8). From 2014 to 2018, opioid-related fatal overdoses were most prevalent in **Wards 7 & 8** (n=308) (Fig.9). However, there are variations across years. The map below displays the fatal opioid overdoses in 2018 (DC residents only).







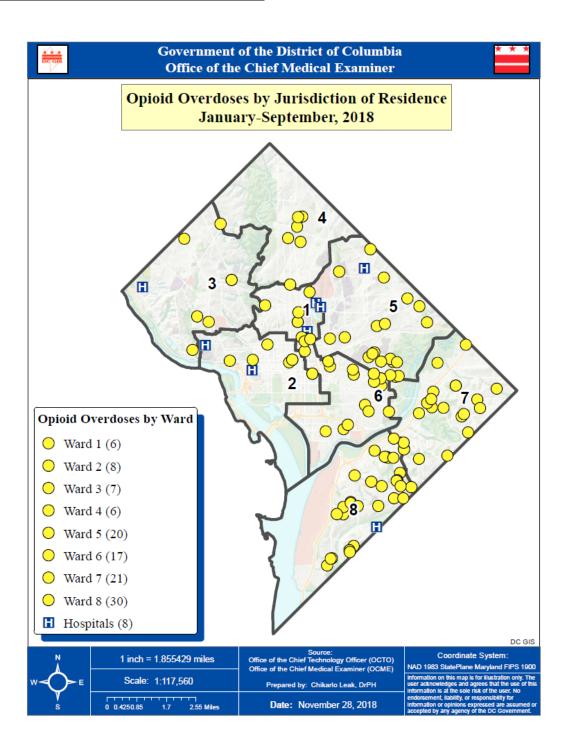




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# **Opioid Overdoses by Jurisdiction of Residence**



## Prevalence of Cocaine and Phencyclidine in Drug Overdoses

Overall, the prevalence of cocaine and PCP related drug overdoses have increased since 2013. For example, the number of cocaine related drug overdoses has increased from 39 in 2013 to 106 in 2018 YTD (Fig. 10). In addition, the number of PCP related drug overdoses has increased from 15 in 2013 to 43 in 2018 YTD. The increasing percentage of cocaine and PCP related drug overdoses that also contain fentanyl may help to explain the observed increases.

