



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 December 31, 2017¹

Report Date: January 22, 2018

The DC Office of the Chief Medical Examiner (OCME) investigated a total of **674²** deaths due to use of opioids from Jan. 1, 2014 through Dec. 31, 2017: **83** deaths in CY 2014, **114** in CY 2015, **231** deaths to in CY 2016, and **246** deaths in CY 2017 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 OCME. Tables and graphs below present decedent information by trends, demographics and jurisdiction of residence.

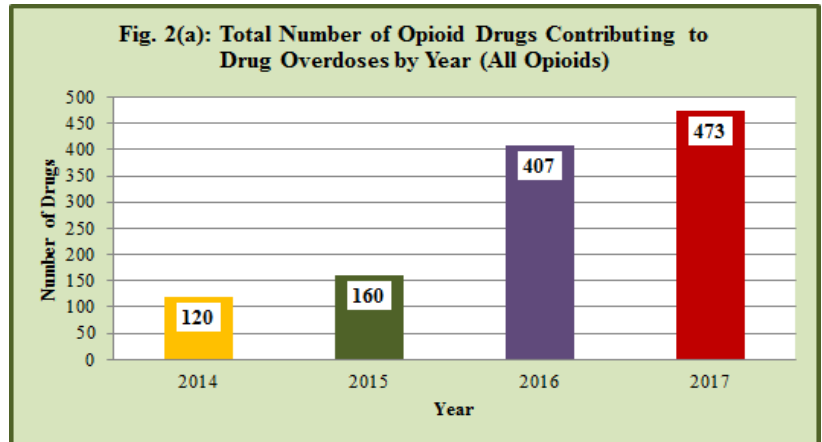
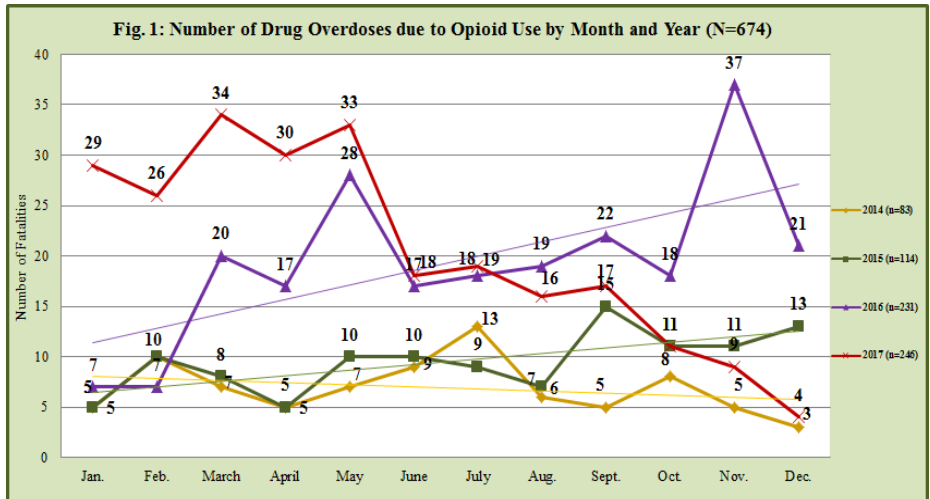
Trends in Deaths due to Opioid Use

The number of deaths due to opioid use in November 2016 was higher than any other month over the past three years (Fig. 1). Overall, there was a **178%** increase in fatal overdoses due to opioid use from 2014 (n=83) to 2016 (n=231).

Currently, there are more opioid overdoses in 2017 than there were in 2016.

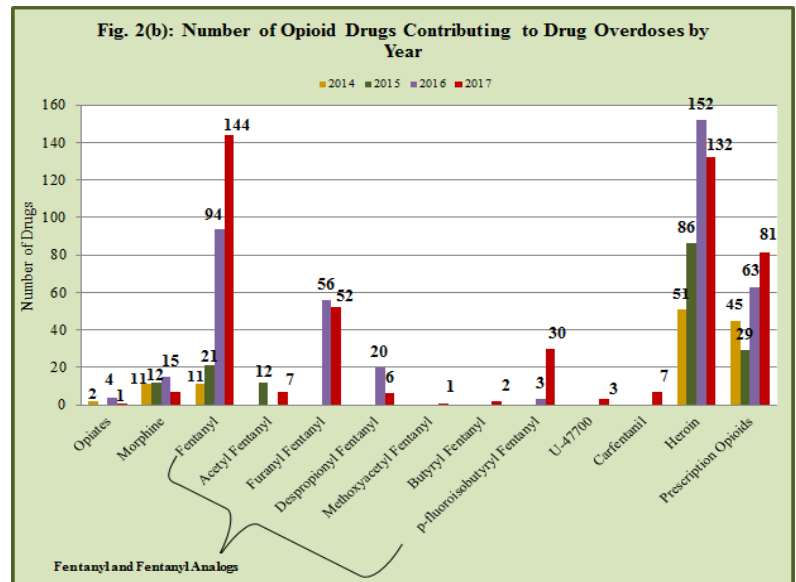
Incidence of Opioids by Year

Each drug is counted independently in fatalities involving more than one of these drugs and ranged from 1 to 7 opioids identified per death. There were a total of **120** opioids³ found in the 83 deaths in 2014, **160** opioids found in the 114 deaths in 2015 and **407** opioids found in the 231 deaths in 2016. In 2017, there have been **473** opioids found in the 246 deaths year-to-date. As depicted in Figure 2(a), the total number of opioids that caused a death has steadily increased from 2014 to 2017.



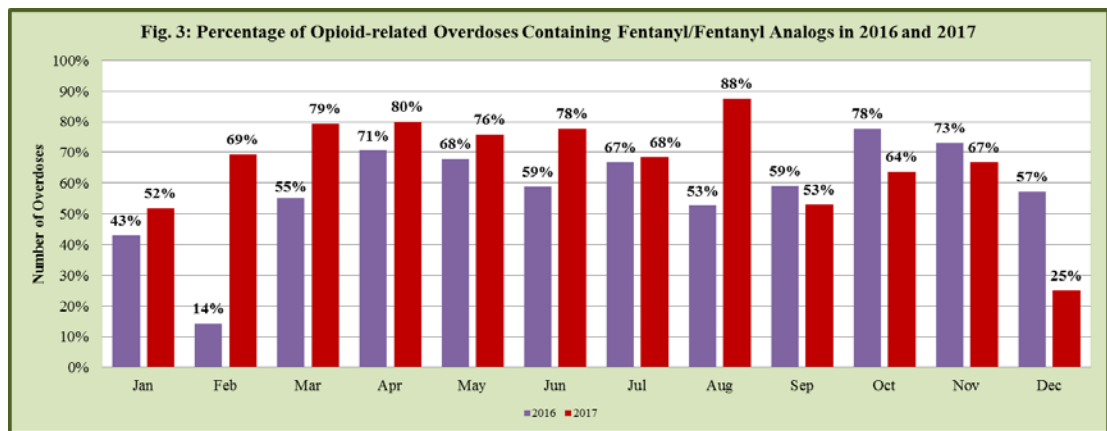
¹ Data for 2017 is inconclusive and subject to change due to cases where cause and manner of death is “Pending Further Investigation”
² The data presented in this report includes 11 cases with a Manner of Death other than Accidental Intoxication- three cases in 2014, one case in 2015, and one case in 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.
³ 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 674 decedents from 2014 to 2017. The most prevalent drugs identified are heroin followed by fentanyl.



Increase in the Presence of Fentanyl/Fentanyl Analogs

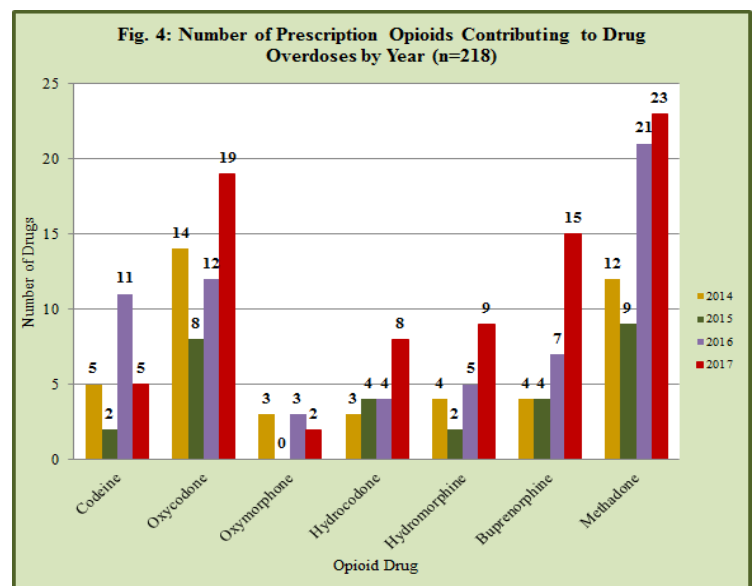
In 2016, 62% of cases involved fentanyl or a fentanyl analog (fentanyl, furanyl-fentanyl, despropionyl-fentanyl, or p-fluoroisobutyryl-fentanyl). Figure 3 highlights the number of cases containing fentanyl or fentanyl analogs. There was a noticeable increase in the presence of fentanyl and fentanyl analogs beginning in March 2016 (n=11).



The highest percentage of cases involving fentanyl or a fentanyl analog occurred in October 2016 (78%) and August 2017 (88%). The fewest cases involving fentanyl or a fentanyl analog occurred in February 2016 (14%). In 2017 to date, 70% of the cases contained fentanyl or a fentanyl analog. **In addition, drugs (U-47700, carfentanil and butyryl fentanyl) previously found in other regions of the country were identified amongst several of our decedents.**

Prescription Opioids

There were 218 prescription opioids found in the 674 drug overdoses between January 2014 and December 2017 (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 over the past two years (n=63, 2016) (n=81, 2017). Figure 4, illustrates that methadone and oxycodone are the most prevalent prescription opioids identified.

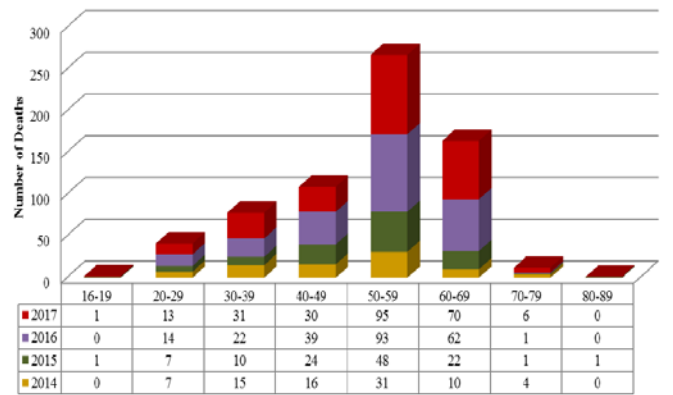


Demographics¹

Age

Approximately **80%** 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=40%).

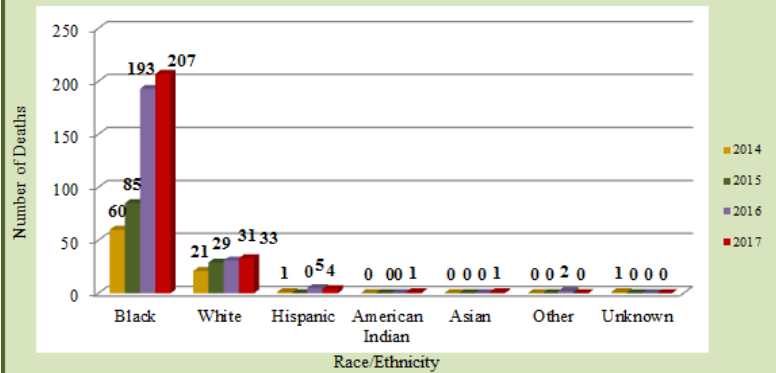
Fig. 5: Drug Overdoses due to Opioid Use by Age



Race/Ethnicity

Overall, **545** or **81%** of all deaths due to opioid use were among Blacks (Fig. 6). This trend remains consistent across years. Deaths among Blacks increased 127% from 2015 to 2016.

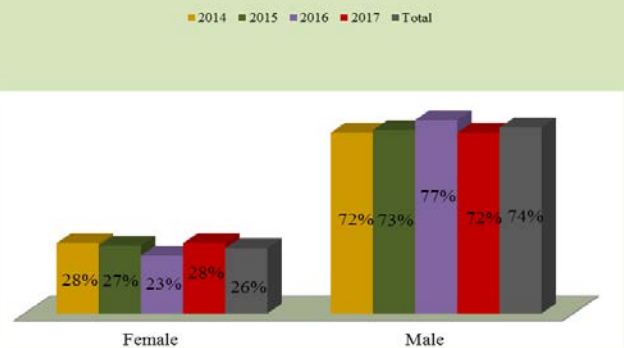
Fig. 6: Number of Drug Overdoses due to Opioid Use by Race/Ethnicity and Year



Gender

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

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 2017, opioid-related fatal overdoses were most prevalent in **Wards 7 & 8** (n=224) (Fig.9). However, there are variations across years.

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

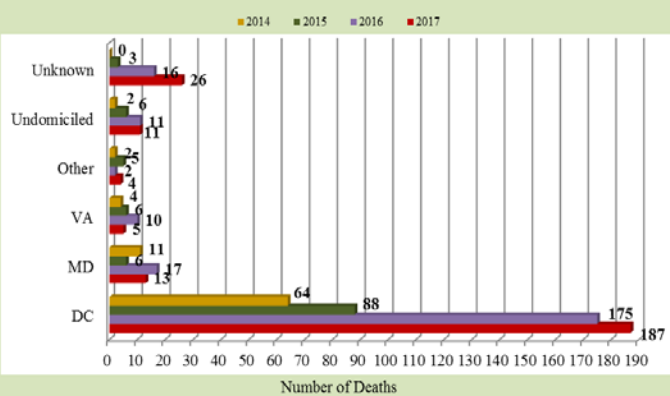
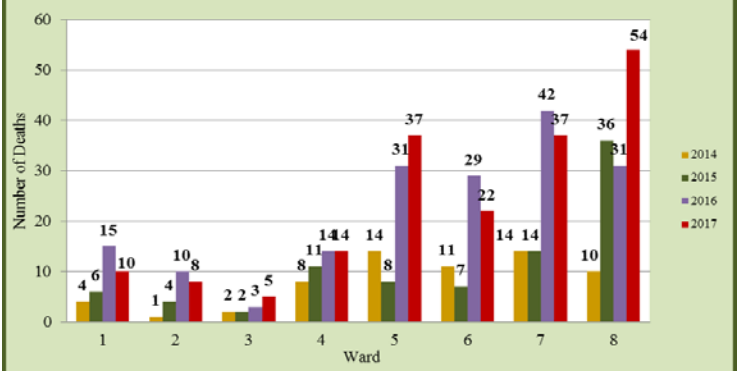
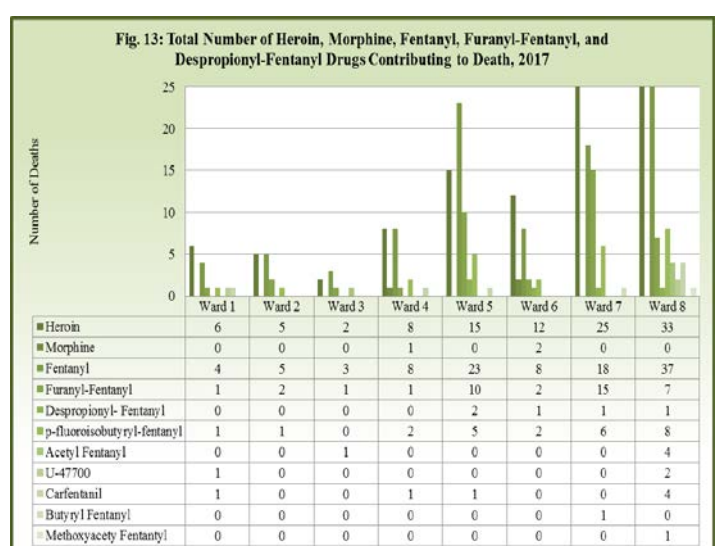
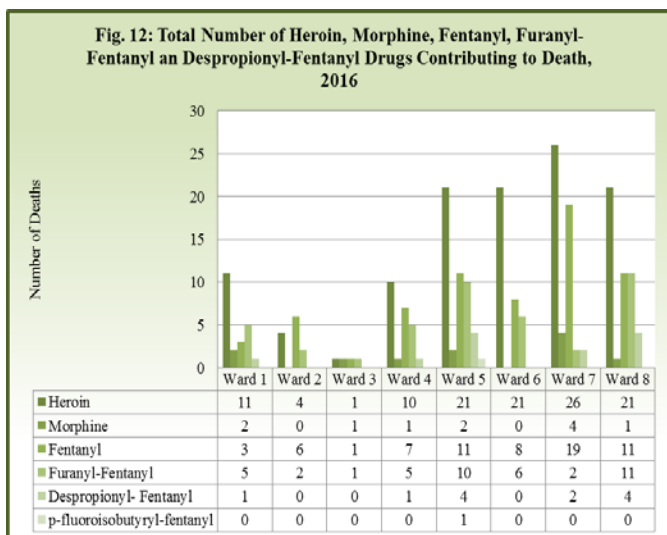
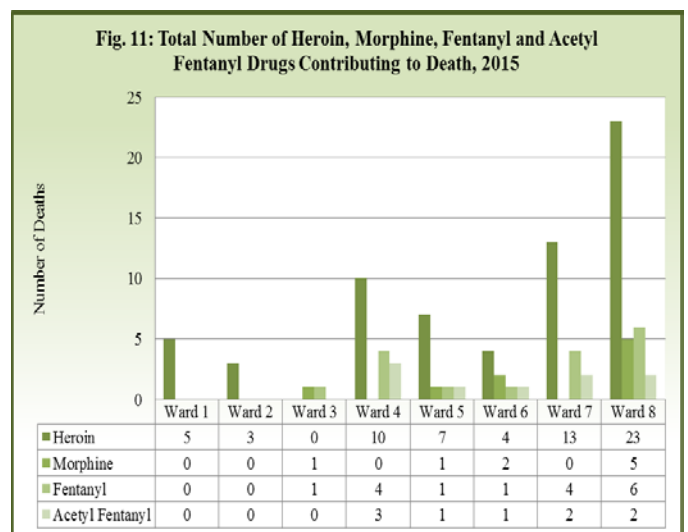
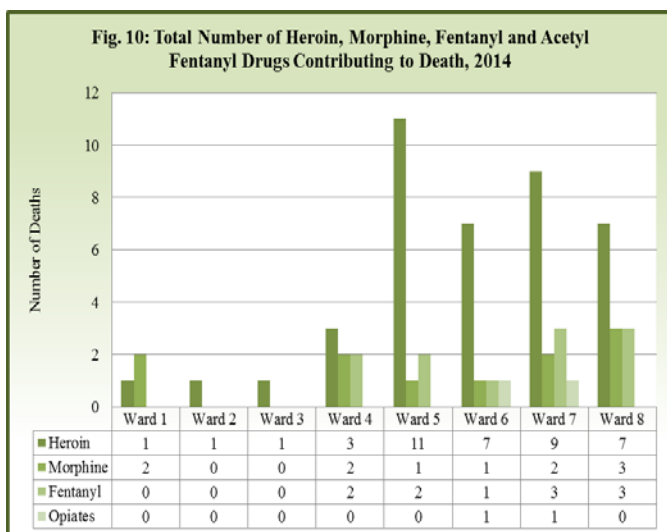


Fig. 9: Number of Drug Overdoses due to Opioid Use by Ward of Residence and Year



The graphs below depict the total number of heroin, morphine, fentanyl, and fentanyl analogs that contributed to overdose deaths by Ward of Residence. Each drug is counted independently in fatalities involving more than one of these drugs. The total number of opioids found in fatal overdoses increased between 2014 and 2016. Overall, in the District, there were a total of **64** counts of heroin, morphine, and fentanyl that contributed to fatal overdoses in 2014. In 2015, the number of opioids that contributed to a fatal overdose in the District increased to a total of **100** opioids (heroin, morphine, fentanyl, and acetyl fentanyl). There were zero cases of fentanyl analogs in 2014.⁴ Nine of the twelve cases of acetyl fentanyl found in 2015 were among decedents that were residents of the District. In 2016, there were a total of **247** illicit opioids (heroin, morphine, fentanyl, furanyl-fentanyl despropionyl-fentanyl, p-fluoroisobutyryl-fentanyl) identified. Although, there are zero cases of acetyl fentanyl in 2016, new, equally potent, fentanyl analogs have emerged. In 2017 to date, there have been a total of **301** illicit opioids contributing to drug overdoses. In addition, U-47700 and carfentanil were identified, as well as acetyl fentanyl has reemerged.



⁴ OCME began screening for fentanyl analogs in 2015.

