



## **Opioid-Related Emergency Department Visits and Suspected Drug Overdose-Related Deaths**

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### **Introduction**

The Shelby County Health Department compiles data about opioid-related emergency department (ED) visits and suspected drug overdose-related (OD) deaths and reports them in separate “Morbidity and Mortality Weekly Reports” (MMWR). Until September 2019, it provided quarterly and annual summaries of these weekly reports, but since then, no quarterly reports or annual reports for 2019 or 2020 have been issued. As a result, each pair of MMWR weekly reports since October 2019 was downloaded and weekly data compiled to calculate monthly numbers of opioid-related ED visits and suspected OD deaths.

One caveat is that data collection during 2020 was impacted by the COVID-19 pandemic. While people were still experiencing fatal and non-fatal overdoses

and were still seeking assistance at local emergency departments, data collection related to COVID-19 was given priority. One way this prioritization impacted the data summarized in this report is that, from March through August 2020, no weekly reports were published for ED visits (weeks 10-37). To obtain monthly comparison data, the total number of ED visits from Week 9 to Week 38 was calculated (n = 1,007) and evenly attributed to each month (i.e., about 168 per month). Thus, numbers from March through August 2020 and those for the first three quarters of 2020 are estimates although the annual total is correct.

## Emergency Department Visits

The monthly number of opioid-related ED visits steadily increased since 2018 (Figure 1). The number during April 2021 (n = 173) was 215% greater than the lowest number during April 2018 (n = 55). This means that more people were being transported to or were seeking assistance from local emergency departments for opioid-related issues (i.e., chief complaint lists “heroin, opioid, opiate, or fentanyl”).

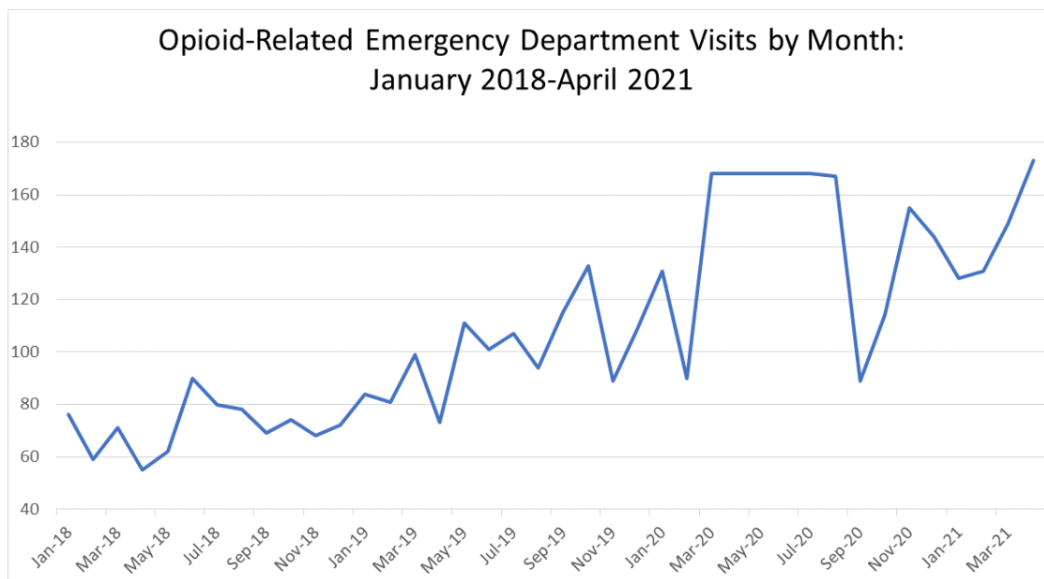


Figure 1: ED visits by month

The steady growth in the number of ED visits is clearly illustrated with the quarterly view (Figure 2). The first quarter of 2018 averaged fewer than 69 ED visits per month, but the same quarter in 2021 averaged 136 per month. As a reminder, monthly data for March-August 2020 were estimated.

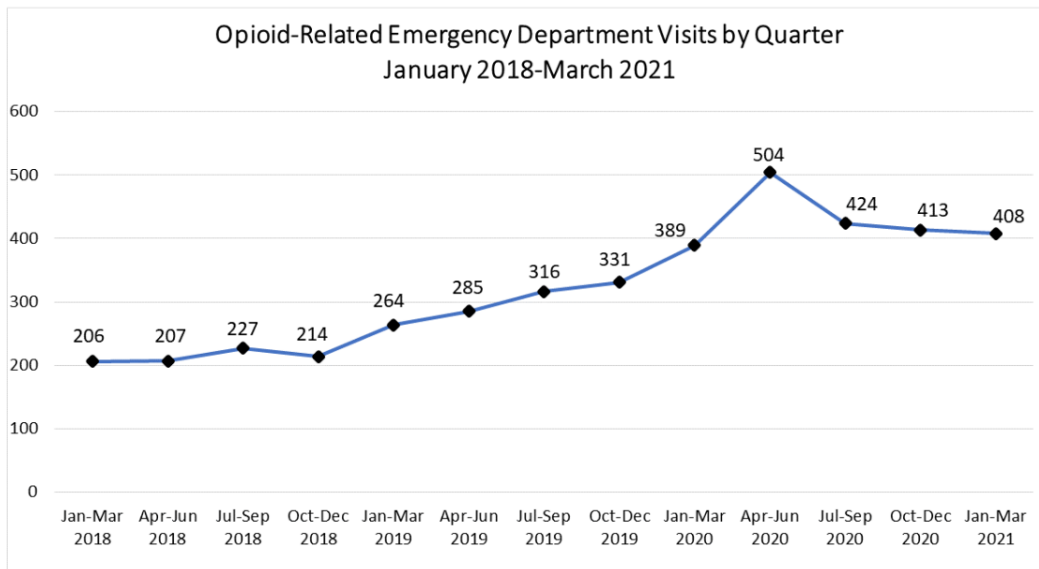
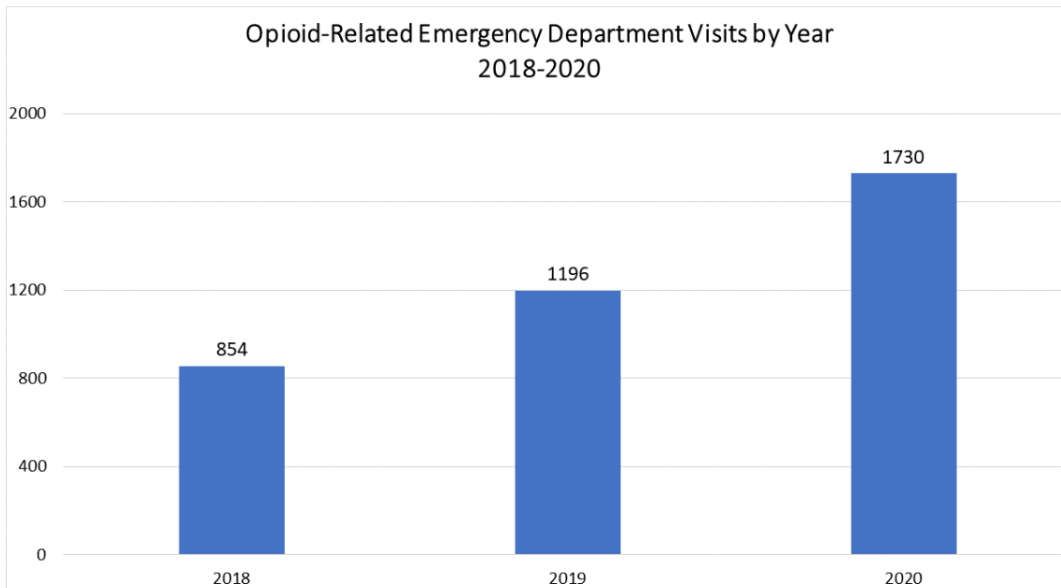


Figure 2: ED visits by quarter

Annual totals from 2018-2020 also clearly indicate rising numbers of ED visits (Figure 3). The number in 2020 ( $n = 1,730$ ) was more than double the number in 2018 ( $n = 854$ ) and nearly 45% more than the number in 2019 ( $n = 1,196$ ).

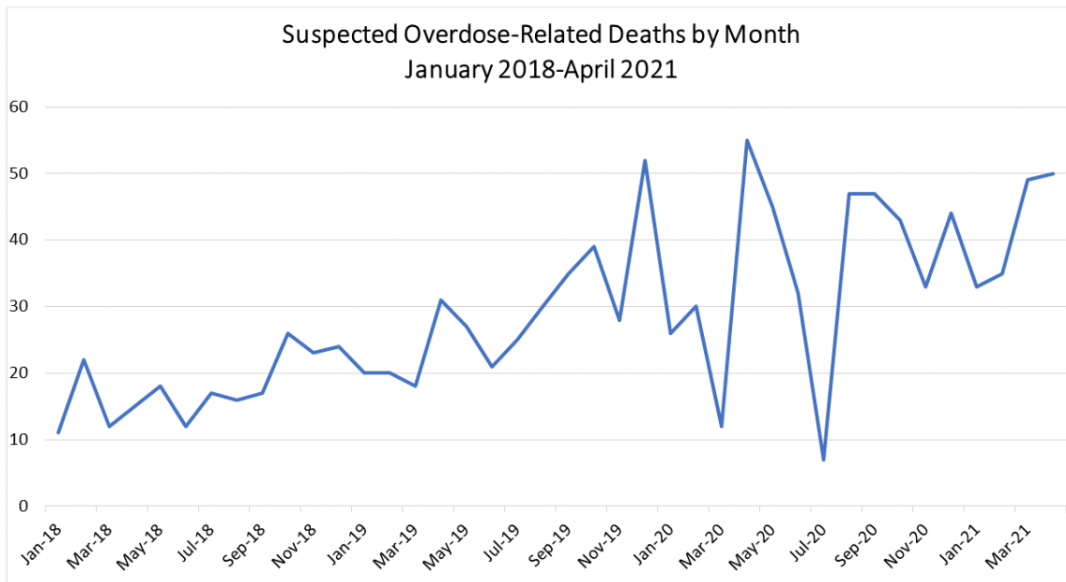


*Figure 3:* ED visits by year

### **Suspected Drug Overdose-Related Deaths**

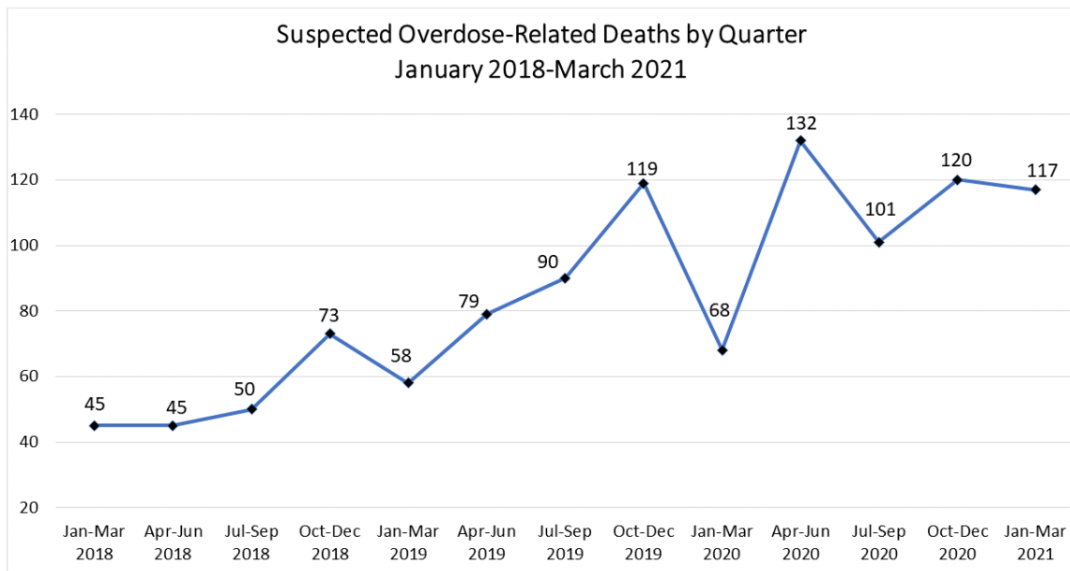
These data represent Shelby County deaths reported to the West Tennessee Regional Forensic Center (WTRFC) that appear to be overdose-related.

Monthly OD deaths have been steadily increasing, from 11 in January 2018 to 50 in January 2021, a 355% increase (Figure 4).



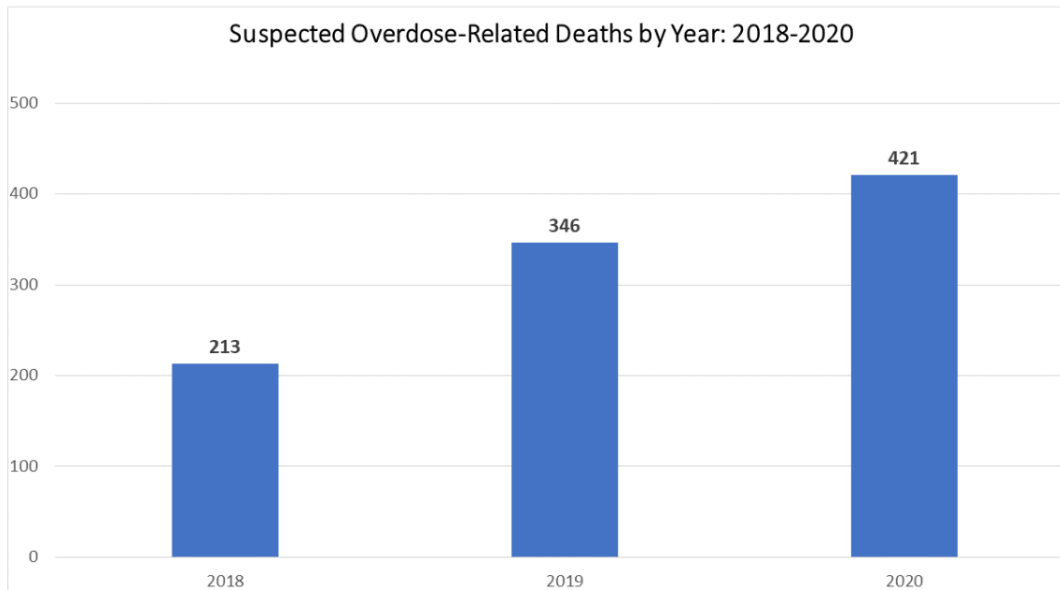
*Figure 4:* OD-related deaths by month

The monthly trend of increasing numbers is reflected in the quarterly totals (Figure 5). During the first quarter of 2021, Shelby County had 117 fatal ODs, 72% more than the same quarter in 2020, 102% more than the same quarter in 2019, and 160% more than the same quarter in 2018.



*Figure 5:* OD-related deaths by quarter

Finally, the total number of suspected OD-related deaths in 2020 was nearly 22% higher than in 2019 and nearly twice the number during 2018 (Figure 6). More people are dying from overdoses and, if the trend from the first quarter of 2021 is any indicator, 2021 will see another increase.



*Figure 6:* OD-related deaths by year

## Discussion

Clearly, the COVID-19 pandemic has not mitigated Shelby County's opioid epidemic. It is less clear, however, whether the pandemic exacerbated the problem. In 2019, numbers were up over 2018, so the trend already was increasing numbers of both ED visits and OD deaths. Forced social isolation accompanied by significantly fewer or no community-level outreach and prevention activities during most of 2020 likely contributed to higher numbers. Federal stimulus funds also may have unintentionally subsidized drug purchases that led to more use and more potential for OD. Fewer entries into treatment, especially among people of color, may also be connected to widespread mistrust of authority (e.g., law enforcement and government agencies, in general) stemming from the murder of George Floyd by Minneapolis police officer Derek Chauvin, and the resulting national civil unrest, social justice demonstrations, and protests.

If the first quarter of 2021 is any indication of the remainder of the year, these data will only become more dismal with record numbers of people visiting local emergency departments and dying from overdoses. With COVID-19 restrictions eased and more people becoming fully vaccinated, community outreach and prevention activities should resume as soon as possible to distribute Narcan kits and to offer treatment services to those in need. Hopefully, these efforts can lead to better outcomes in the latter part of the year.



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