

Drug Overdose Surveillance Report

Lake County, Ohio: April 2020

The following report outlines emergency department (ED) and urgent care (UC) drug overdose events by Lake County residents during the month of April. During the aforementioned timeframe, a total of 38 recorded drug overdose ED/UC events met the inclusion criteria listed below and occurred among Lake County residents, accounting for 0.9% of all April ED/UC visits, and increasing from the previous month's 35 drug overdose ED/UC visits. One fatality was reported among those reporting to ED/UCs during the month of April.

In April, Lake County drug overdoses occurred among individuals ranging from 13 to 79 years of age. One event involved an accidental poisoning, one event involved an illicit substance, and 36 involved an unspecified substance (Figure 1). Moreover, 28 ED/UC visits resulted in routine discharge, while three were discharged to treatment, one left against medical advice, one was discharged to another hospital, one resulted in death, and four lacked reported discharge information.

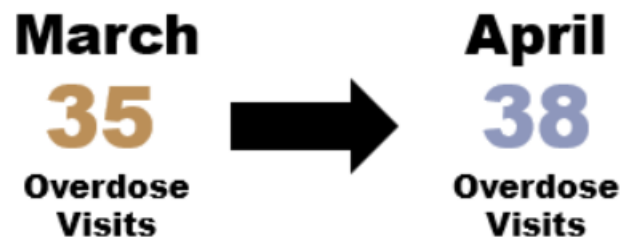
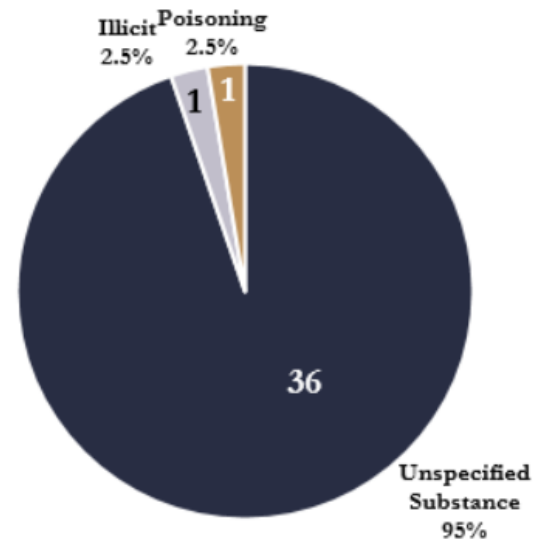
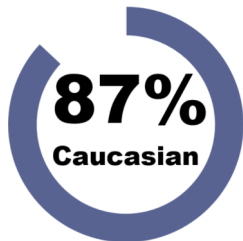


Figure 1. Overdose by Type



Ages:
13 to 79
Average:
35 Years



Inclusion Criteria:

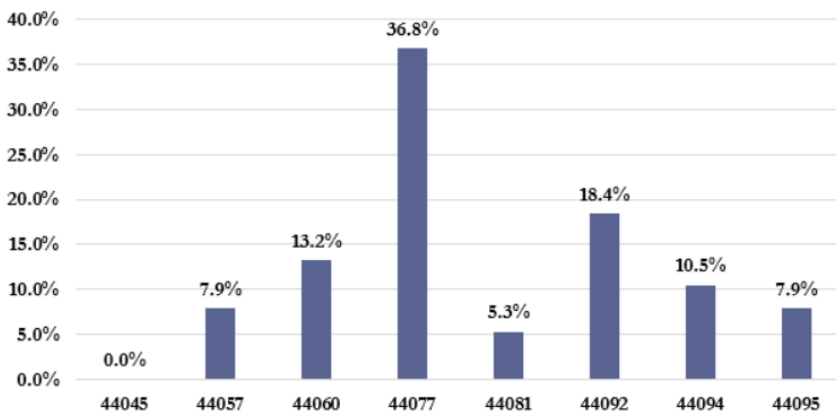
The data presented in this report was retrieved from Ohio's EpiCenter Health Monitoring System, as identified by the "Ohio Opioid-Related: Suspected Drug Overdose" classifier. Data prior to August 2019 was identified using the "Traumatic Injury: Drugs" classifier. This report contains information about Lake County residents, regardless of ED/UC location, and drug-related cases include all ED/UC admits specifying overdose or poisoning. Admits without supporting information, or otherwise indicative of a suicide attempt, intentional overdose, or accidental insulin overdose were excluded from this analysis, as were cases presenting for detox or withdrawal symptoms. In most cases, the drug responsible for the overdose is not indicated. As such, the included figures are not limited to opioid-related events.



Geographical Distribution

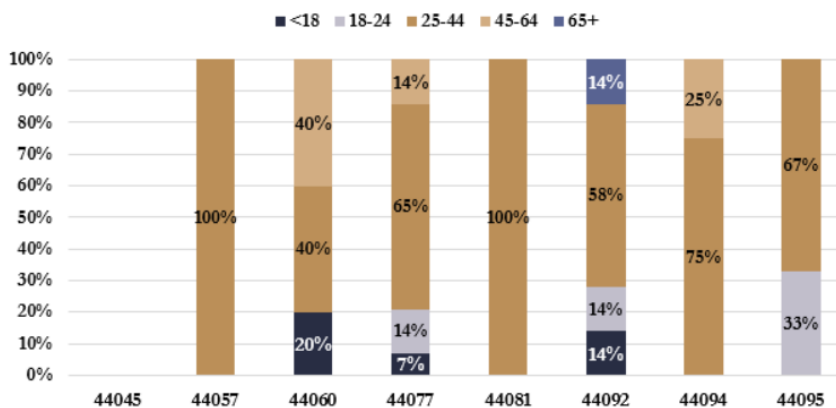
In what areas were overdoses most prevalent?

Figure 2. Overdose Occurrences by Zip Code of Residence



In April, the greatest frequency of ED/UC overdose events occurred amongst those residing in zip code 44077 (Figure 2). The proportion of ED/UC overdose events increased by 8.2% in 44077, 9.8% in 44092, and 7.6% in 44094, as compared to the month of March, while decreasing 4.1% in 44057, 6.8% in 44060, 9.0% in 44081, and 9.2% in 44095. For the sixth consecutive month, no ED/UC overdose events were observed among residents of 44045.

Figure 3. Overdose Ages by Zip Code of Residence



ED/UC overdose events varied by age across each of the reported zip codes (Figure 3). Overdose event frequency was highest among those 25 to 44 years of age (66%), followed by those 45 to 64 years of age (13%), 18 to 24 years of age (10%), and under 18 years of age (8%), and 65 years and over (3%).

At which Lake County facilities did overdose events present?

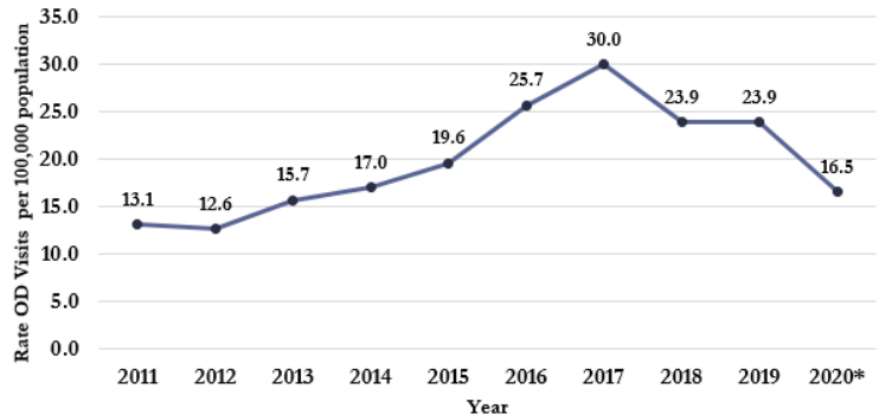
During the month of April, West Medical Center experienced the highest number of all ED/UC visits observed among Lake County residents (50.0%), followed by TriPoint (31.6%), facilities outside of Lake County (15.8%), and the Lake Health Madison Campus (2.6%; Table 1).

Table 1. Overdose Reporting Facility

Facility	N	(%)
Madison Campus	1	2.6
TriPoint Medical Center	12	31.6
West Medical Center	19	50.0
Outside of County	6	15.8
Total	38	100.0

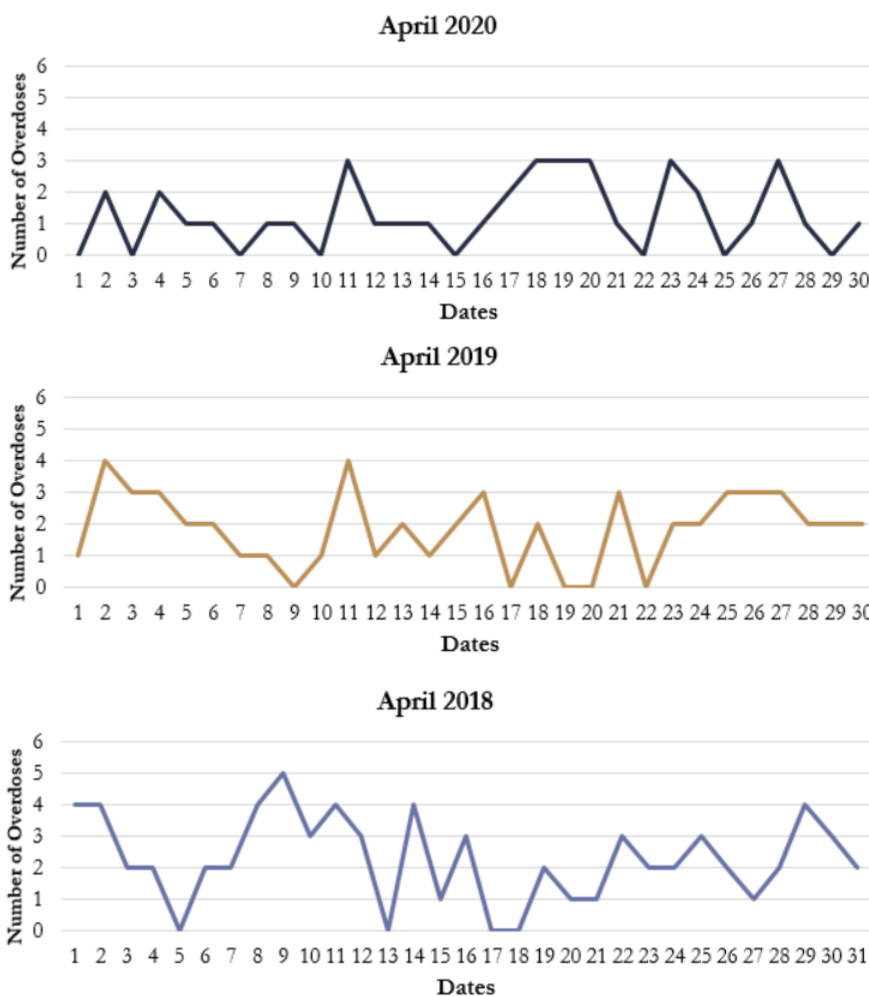
The April 2020 Lake County ED/UC overdose event rate per 100,000 population was the fourth lowest observed in the past 10 years, is 31% lower than that of April 2019, and was 45% below the peak 2017 rate of 30.0 (Figure 4).

Figure 4. Rate of April OD Visits by Year



*Rates based on most current available annual population estimates, as obtained from census.gov. 2020 rates are based on 2019 population estimates.

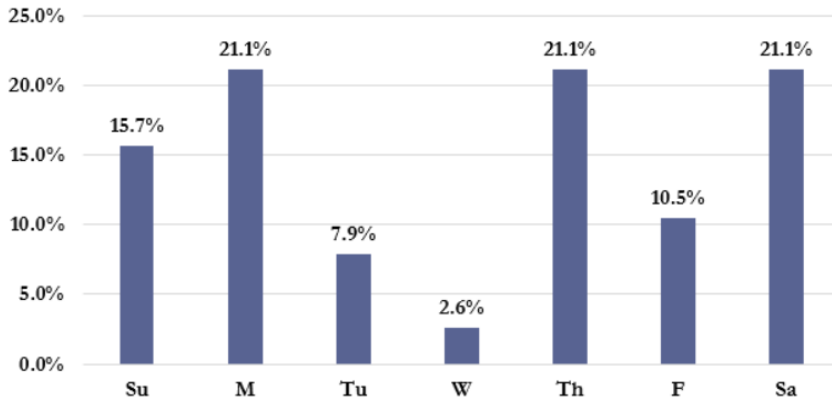
Figure 5. April Drug Overdose Daily Frequencies, 2018 to 2020



In order to provide for comparisons of daily ED/UC overdose event frequency, April ED/UC overdose events by day are illustrated for 2018, 2019, and 2020 (Figure 5). The daily maximum of three ED/UC overdose events in April of 2020 is 25% lower than the daily maximum of four reported in 2019, and 40% lower than the daily maximum of five reported in 2018. Moreover, mean daily ED/UC overdose event frequency for April of 2020 (1.1) is lower than both April of 2018 (2.3) and 2019 (1.8), respectively.

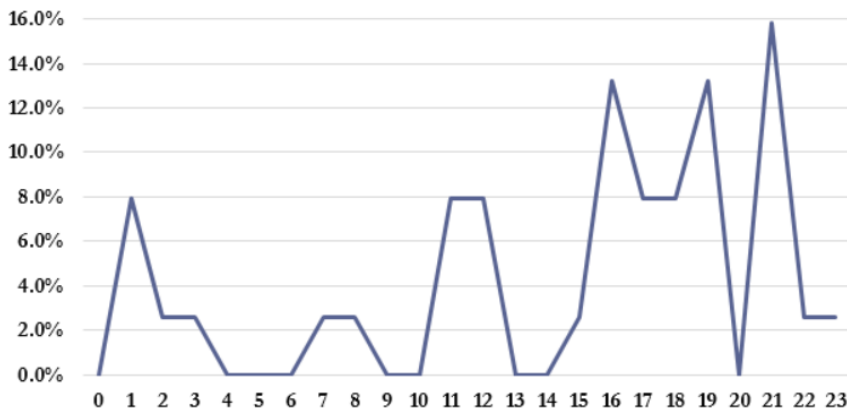
A total of eight days with no ED/UC overdose events were observed during April of 2020, as compared to five days in April of 2019, and four in April of 2018. April 2020 overdose events peaked on April 11, 18-20, 23, and 27, as compared to 2019 peaks, which occurred on April 2 and 11, and the 2018 peak, which occurred on April 9.

Figure 6. Overdose Occurrences by Day of Week



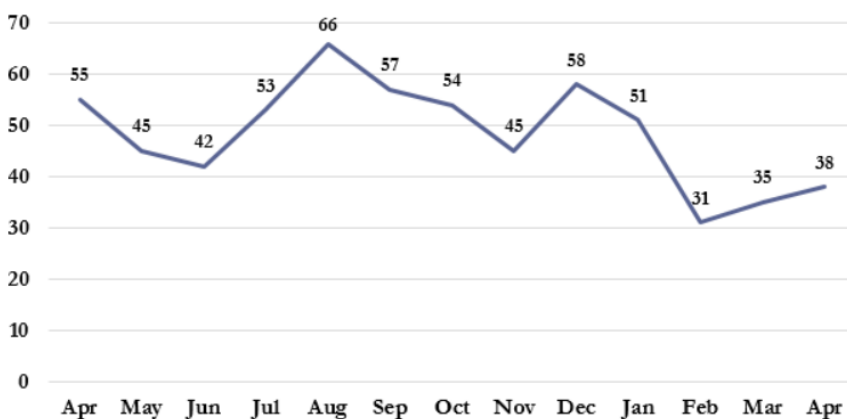
When organized by day of week, the frequency of ED/UC overdose events was highest on Monday (21.1%), Thursday (21.1%), and Saturday (21.1%) during the month of April (Figure 6). Sunday experienced the second highest event frequency (15.7%), followed by Friday (10.5%), Tuesday (7.9%), and Wednesday (2.6%).

Figure 7. Overdose Occurrences by Hour of Day



April ED/UC overdose events were more prominent during late afternoon and evening hours, and lowest during morning and early afternoon hours (Figure 7). ED/UC overdose events peaked around 9:00 pm, with additional increases around 4:00 and 7:00 pm, respectively. No ED/UC overdose events were reported between the hours of 4:00 and 6:00 am, 9:00 and 10:00 am, 1:00 and 2:00 pm, 8:00 pm, or midnight during the month of April.

Figure 8. Overdose Counts - Past 12 Months



When organized by month, ED/UC overdose events decreased 24% from April to June, increased 57% from June to August, decreased 32% from August to November, increased 29% from November to December, decreased 47% from December to February, and increased 23% from February to April (Figure 8). A total of 155 ED/UC visits for drug-related overdose events have been observed thus far in 2020, as compared to 200 during the same time frame in 2019.

Lake County General Health District Resources



Project DAWN Naloxone Clinics

Due to the ongoing situation with COVID-19 and response efforts, all in-person Project DAWN Clinics have been canceled until further notice.

Training and registration to receive a naloxone kit is available on our website for residents of Lake County, as well as other counties in Ohio without an active Project DAWN Program.

For more information, please visit:

<https://www.lcghd.org/naloxone-distribution/>.

Pharmaceutical Disposal Instructions

Before disposing of pharmaceuticals at one of the drop-off locations, be sure to remove or black-out identifiable information on the pharmacy label. Disposable items suitable for drop-off include:

- Unused or expired medications
- Prescriptions, non-prescription pills, syrups, and creams
- Pain and mood altering medications
- Pain relievers, over-the-counter cold and flu medication, vitamins, and pet medications

Pharmaceutical Drug Collection and Disposal Locations

Monday-Friday: 7:00 am - 8:00 pm

Saturday: 9:00 am - 5:00 pm

Sunday: 1:00 pm- 5:00 pm

Note: NO Sunday hours at Lakeland

Eastlake Police Department

35150 Lakeshore Boulevard
Eastlake, OH 44095

Madison Township Police Department

2065 Hubbard Road
Madison, OH 44057

Mentor Police Department

8500 Civic Center Boulevard
Mentor, OH 44060

Mentor-on-the-Lake Police Department

5860 Andrews Road
Mentor-on-the-Lake, OH 44060

Lake County Sheriff's Office

104 East Erie Street
Painesville, OH 44077

Willoughby Police Department

36700 Euclid Avenue
Willoughby, OH 44094

Willoughby Hills Police Department

35405 Chardon Road
Willoughby Hills, OH 44094

Lakeland Comm. College Police Department

7700 Clocktower Drive, Building A, Lower Level
Kirtland, OH 44094

REV: 5/22/2020



**Lake County
General Health District**

Public Health
Prevent. Promote. Protect.

