

Drug Overdose Surveillance Report Lake County, Ohio: April 2021

The following report outlines emergency department (ED) and urgent care (UC) drug overdose events by Lake County residents during the month of April. During this timeframe, a total of 37 recorded drug overdose ED/UC events met the inclusion criteria listed below. This represents a decrease from the previous month's 40 drug overdose ED/UC visits. No fatalities were reported among those reporting to ED/UCs for overdose during the month of April.

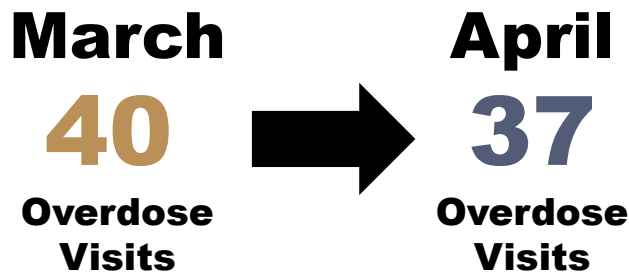
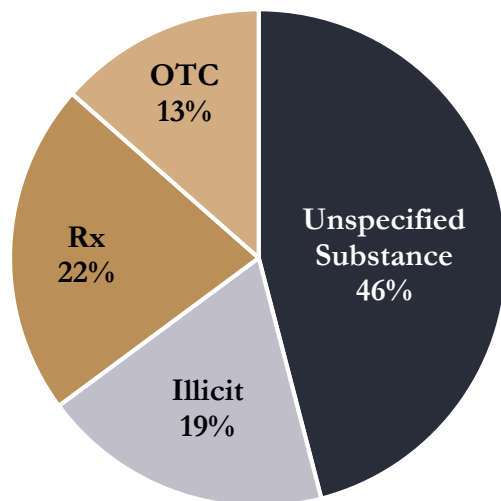
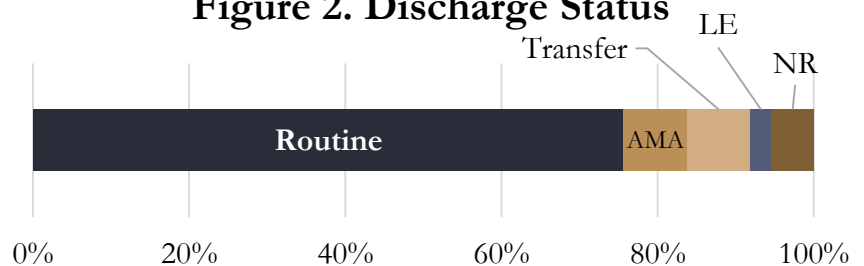


Figure 1. Overdoses by Type



In April, Lake County drug overdose ED/UC admissions occurred among individuals ranging from two (2) to 78 years of age. Eight events involved a prescription (Rx) medication, seven events involved an illicit substance, five involved an over-the-counter (OTC) medication, and 17 involved an unspecified substance (Figure 1). Moreover, 28 ED/UC visits resulted in routine discharge, while three left against medical advice (AMA), three were discharged to other healthcare facilities, one was discharged to law enforcement, and two lacked reported discharge information (Figure 2).

Figure 2. Discharge Status

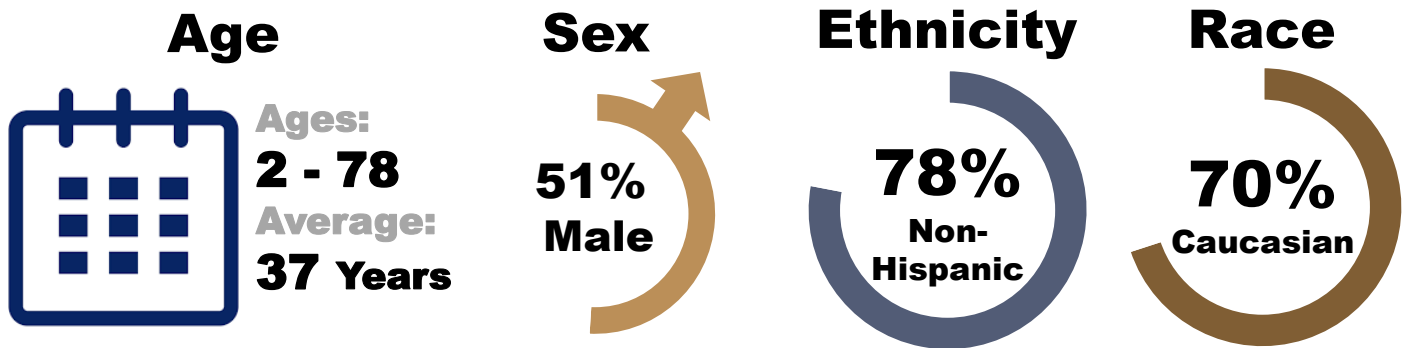


Inclusion Criteria:

The data presented in this report was retrieved from Ohio ESSENCE (Electronic Surveillance System for the Early Notification of Community-based Epidemics), which replaced EpiCenter as Ohio's Syndromic Surveillance System in January 2021. Data is extracted using the Chief Complaint and Differential Diagnosis Category "CDC All Drug v1." Data prior to 2021 was retrieved from EpiCenter using the "Ohio Opioid-Related Suspected Drug Overdose" classifier, and prior to August 2019, 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, withdrawal symptoms, or evaluation for admission to a treatment program absent an overdose. In many cases, the drug responsible for the overdose is not indicated. As such, the included figures are not limited to opioid-related events.

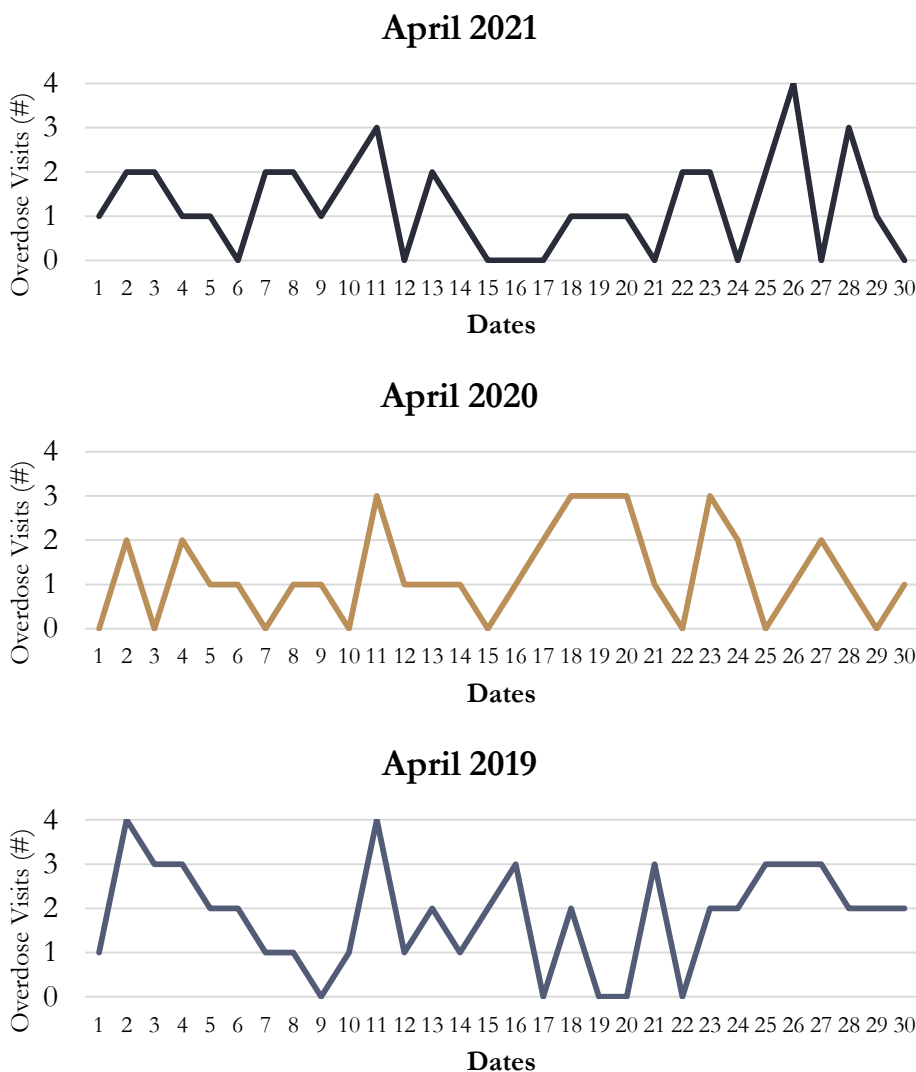


Characteristics of Individuals who Overdosed



How does this compare with past years?

Figure 3. April Drug Overdose Daily Frequencies, 2019-2021



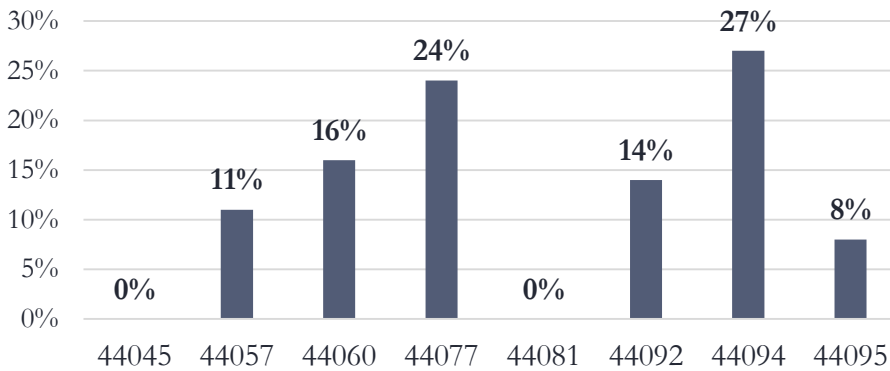
In order to provide for comparisons of daily ED/UC overdose event frequency, March events by day are illustrated for 2019, 2020, and 2021 (Figure 3). The daily maximum of three for March of 2021 is 40% lower than the daily maximum of five reported in 2020, and 25% lower than the daily maximum of four in 2019. Mean daily ED/UC overdose event frequency for April of 2021 (1.2) is equivalent to the rate for 2020 (1.2), and lower than the rate in 2019 (1.8).

A total of nine days with no ED/UC overdose events were observed during April of 2021, as compared to eight days in April of 2020, and five in April of 2019. April 2021 overdose events peaked on April 26, as compared to multiple 2020 peaks, which occurred on April 11, 18-20, and 23, and two 2019 peaks, which occurred on April 2 and 11.

Geographical Distribution

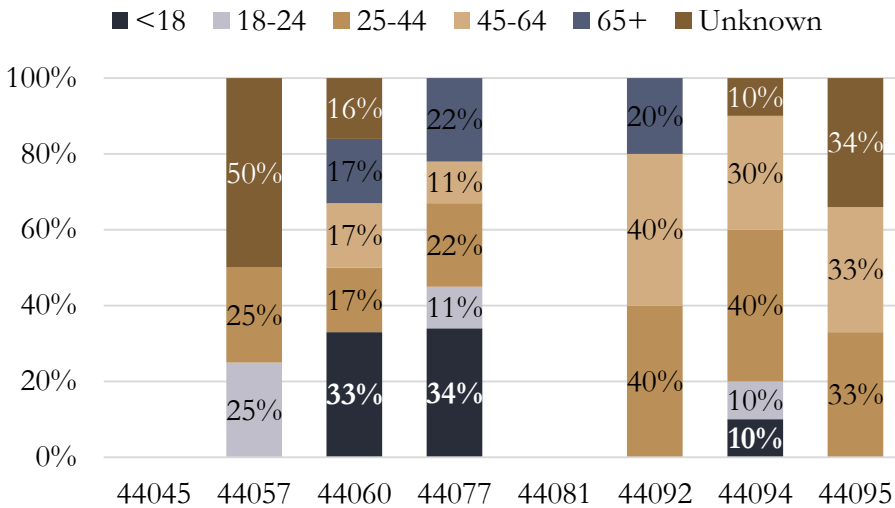
In what areas were overdoses most prevalent?

Figure 4. Overdose Occurrences by Zip Code of Residence



In April, the greatest frequency of ED/UC overdose events occurred amongst those residing in zip code 44094 (Figure 4). ED/UC overdose events increased in 44057 (6%), 44060 (4%), 44092 (7%), and 44094 (7%), and decreased in 44077 (11%), 44081 (3%), and 44095 (10%). For the 19th consecutive month, no overdose visits were observed among residents of 44045.

Figure 5. Overdose Ages by Zip Code of Residence



ED/UC overdose events varied by age across each of the reported zip codes (Figure 5). Overdose event frequency was highest among those 25 to 44 years of age (27%), followed by those 45 to 64 years of age (24%), less than 18 years (16%), 18 to 24 years of age (11%), and 65 years or older (8%). Fourteen (14) percent of April 2021 overdose events among Lake County residents did not have any associated age information.

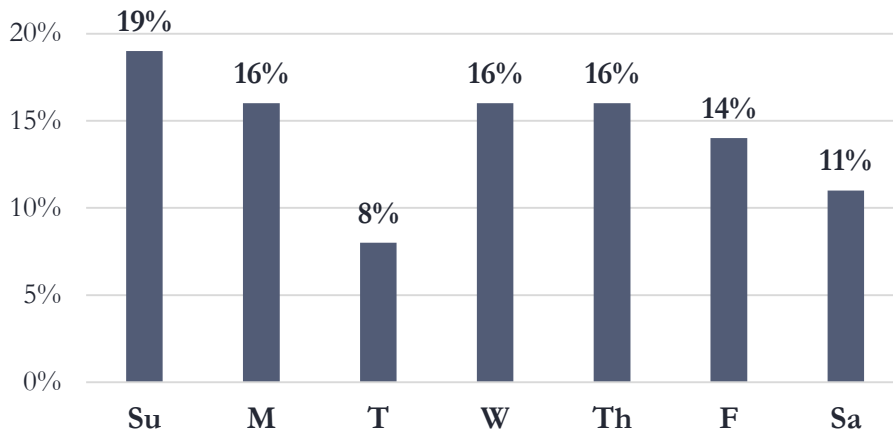
At which Lake County facilities did overdose events present?

Table 1. Overdose Reporting Facility

Facility	N	(%)
Madison Campus	1	3
TriPoint Medical Center	9	24
West Medical Center	14	38
Outside of County	13	35
Total	37	100

During the month of March, the highest proportion of Lake County residents who presented to ERs/UCs for suspected drug overdoses presented to West Medical Center (38%), followed by facilities outside of Lake County (35%), TriPoint (24%), and Madison Campus (3%).

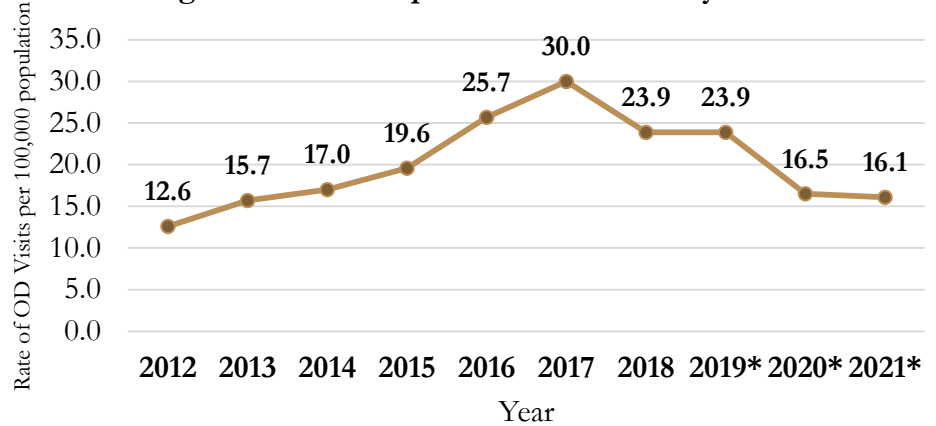
Figure 6. Overdose Occurrences by Day of Week



When organized by day of week, the frequency of ED/UC overdose events was highest on Sundays (19%; Figure 6). Mondays, Wednesdays, and Thursdays experienced the next highest frequency of overdose events (16% each), followed by Fridays (14%), and Saturdays (11%). Rates of ED/UC visits for overdose events were lowest on Tuesdays in April (8%).

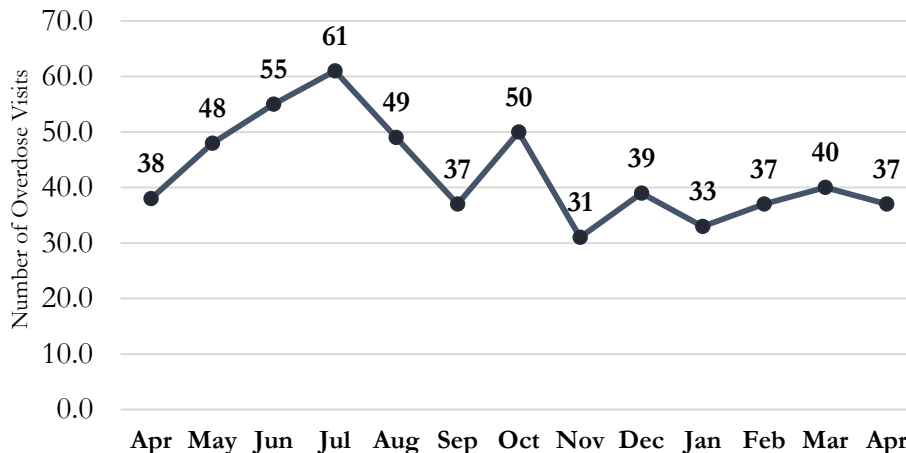
The April 2021 Lake County ED/UC overdose event rate per 100,000 population is the third lowest rate observed for April in the past 10 years (Figure 7). It is 2% lower than the rate for April 2020, 46% lower than the highest rate of 30.0 observed in April 2017, and 28% higher than the lowest rate of 12.6 observed in April 2012.

Figure 7. Rate of April Overdose Visits by Year



*Rates based on most current available annual population estimates, as obtained from data.census.gov; 2019-2021 rates are based on 2019 population estimates.

Figure 8. Overdose Counts – Past 12 Months



When organized by month, ED/UC overdose events increased 61% from April to July 2020, decreased 39% from July to September, increased 35% from September to October, decreased 38% from October to November, increased 26% from November to December, decreased 15% from December to January, increased 21% from January to March, and decreased 8% from March to April (Figure 8). A total of 147 ED/UC visits for drug-related overdose events have been observed thus far in 2021, as compared to 155 in the same period for 2020.

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 a.m. to 8:00 p.m.

Saturday: 9:00 a.m. to 5:00 p.m.

Sunday: 1:00 p.m. to 5:00 p.m.

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: 5/28/2021



**Lake County
General Health District**

Public Health

Prevent. Promote. Protect.

