

Drug Overdose Surveillance Report Lake County, Ohio: August 2019

The following report outlines emergency department (ED) and urgent care (UC) drug overdose events by Lake County residents during the month of August. During the aforementioned timeframe, a total of 66 recorded drug overdose ED/UC events met the inclusion criteria listed below and occurred among Lake County residents, accounting for 0.8% of all August ED/UC visits, and increasing from the previous month's 53 drug overdose ED/UC visits. No fatalities were reported among the cases presenting to EDs/UCs during the month of August.

In August, Lake County drug overdoses occurred among individuals ranging from 19 to 76 years of age. In total, six events involved an illicit substance, three involved a prescription medication, and 57 involved an unspecified substance (Figure 1). Moreover, 32 ED/UC visits resulted in routine discharge, 12 left against medical advice, five were discharged to treatment, one was admitted for inpatient care, one was not seen, and 15 lacked reported discharge information.

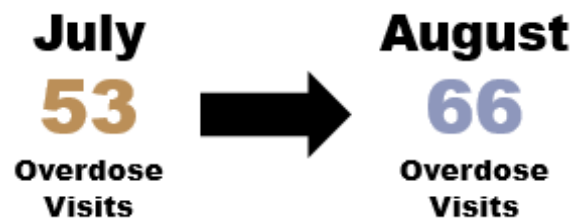
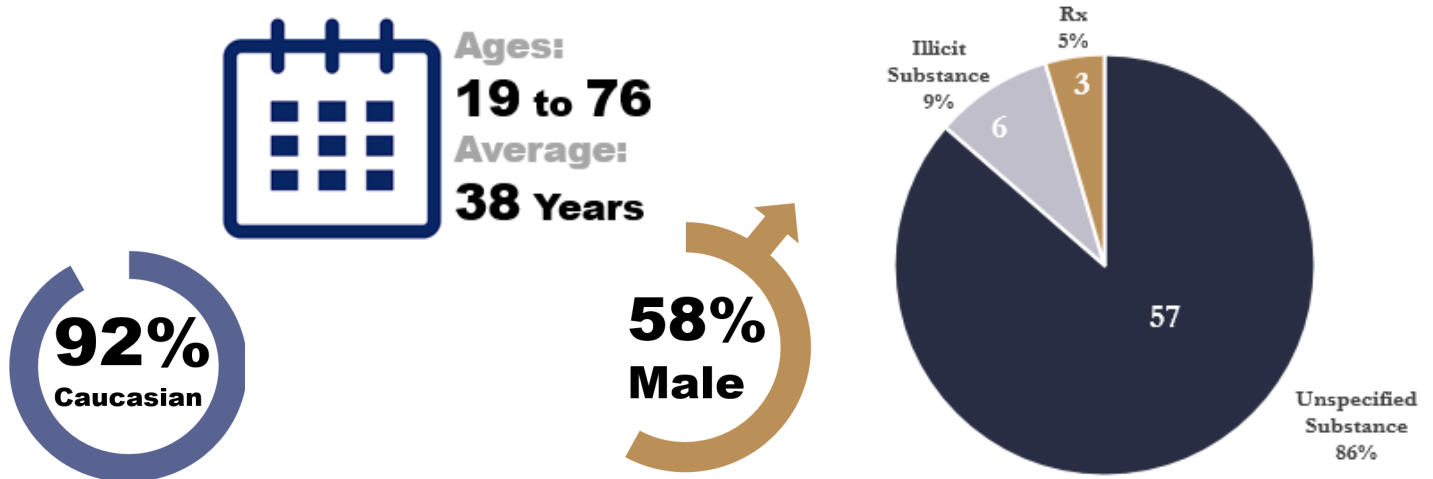


Figure 1. Overdoses by Type



Inclusion Criteria:

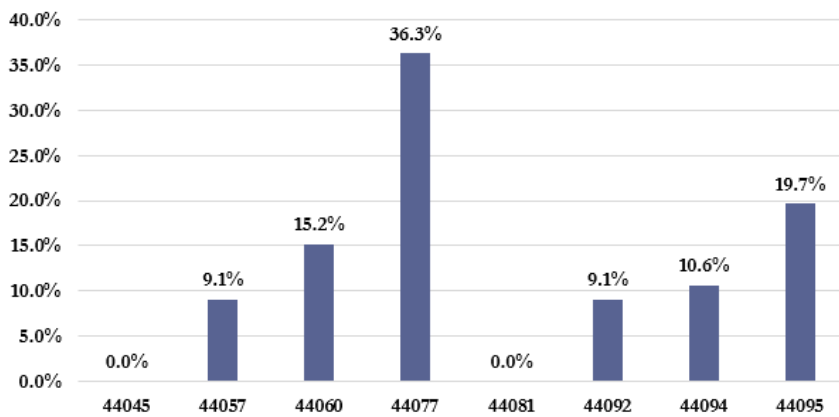
The data presented in this report was retrieved from Ohio's EpiCenter Health Monitoring System, as identified by the "Ohio Opioid-Related: Suspected Drug Overdose" classifier. Data prior to August 2019 was identified using the "Traumatic Injury: Drugs" classifier. This report contains information about 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

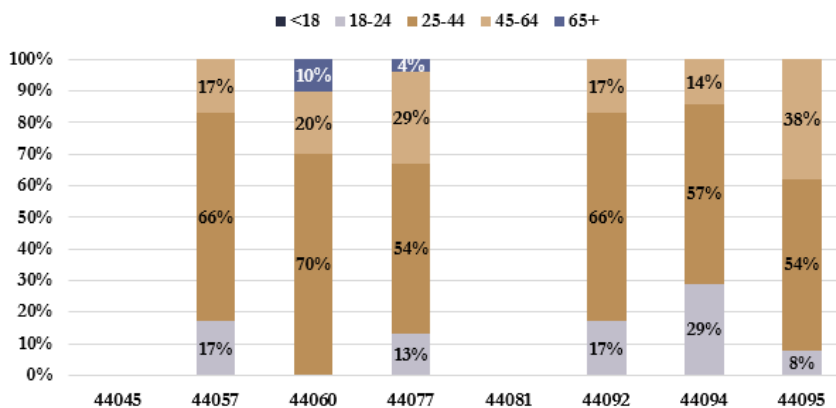
In what areas were overdoses most prevalent?

Figure 2. Overdose Occurrences by Zip Code of Residence



The greatest frequency of ED/UC overdose events occurred amongst those residing in zip code 44077, and no events were observed among those in zip codes 44045 and 44081 (Figure 2). The proportion of ED/UC overdose events increased by 9.1% for 44057, 11.8% for 44077, and 1.2% for 44094 as compared to the month of July, while decreasing 11.2% for 44060, 1.9% for 44081, and 2.9% for 44095. Consistent with July, no overdoses were observed among residents of zip code 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 (59%), followed by those 45 to 64 years of age (26%), 18 to 24 years of age (12%), and over 65 years of age (3%). No overdoses were reported among those under 18 years of age.

At which Lake County facilities did overdose events present?

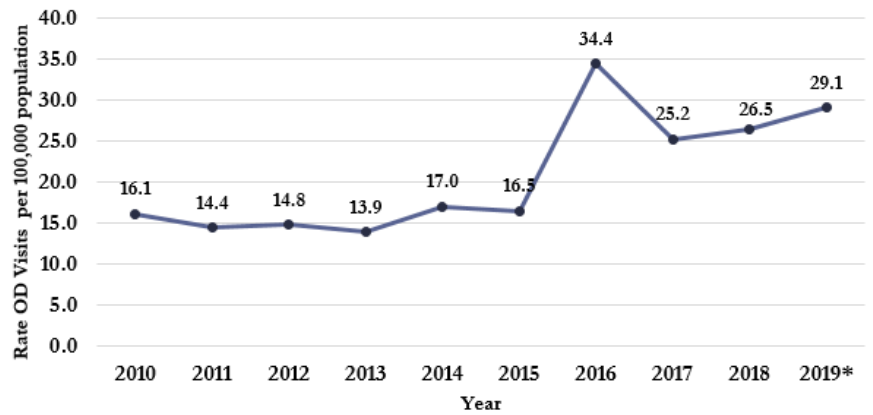
Table 1. Overdose Reporting Facility

Facility	N	(%)
Madison Campus	3	5
TriPoint Medical Center	14	21
West Medical Center	32	48
Outside of County	17	26
Total	66	100

During the month of August, West Medical Center experienced the highest proportion of ED/UC visits (48%), followed by facilities outside of Lake County (26%), TriPoint (21%), and Madison Campus (5%; Table 1).

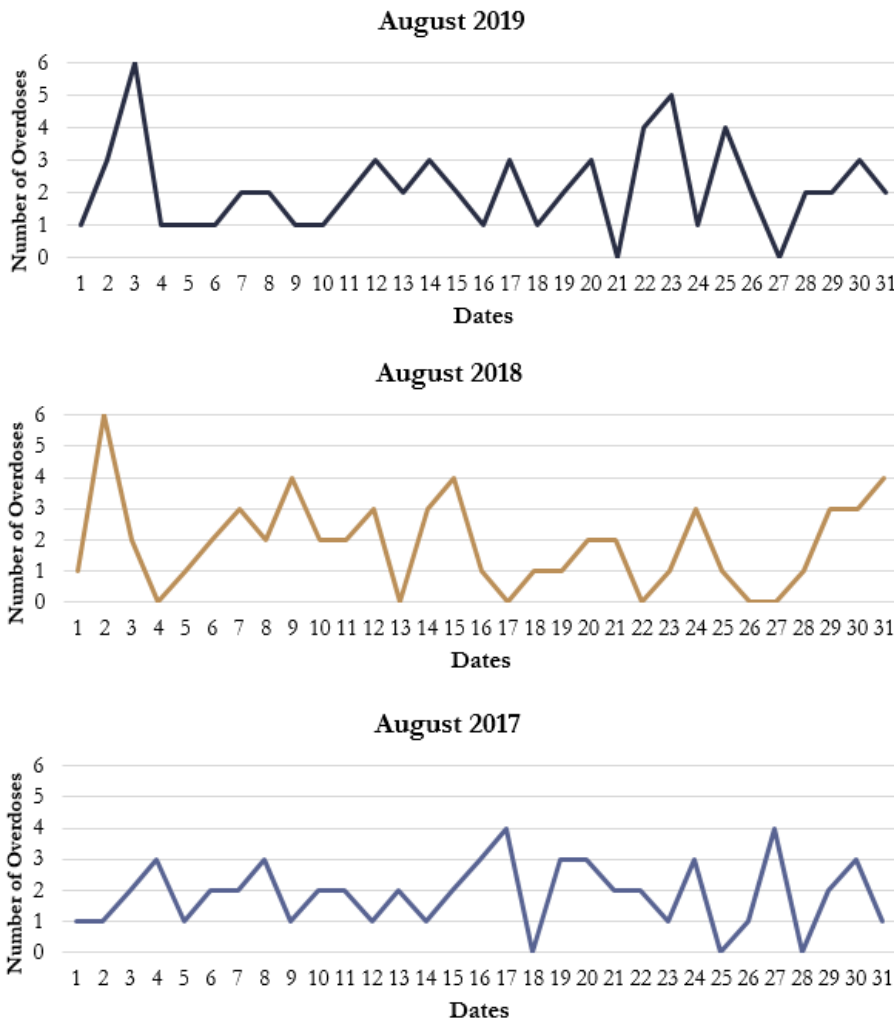
The August 2019 Lake County ED/UC overdose event rate increased 10% from August of 2018, and is 15% lower than the peak of 34.4 overdose visits per 100,000 population in August of 2016 (Figure 4).

Figure 4. Rate of August OD Visits by Year



*Rates based on most current available annual population estimates, as obtained from American Fact Finder; 2019 rates are based on 2018 population estimates.

Figure 5. August Drug Overdose Daily Frequencies, 2017 to 2019

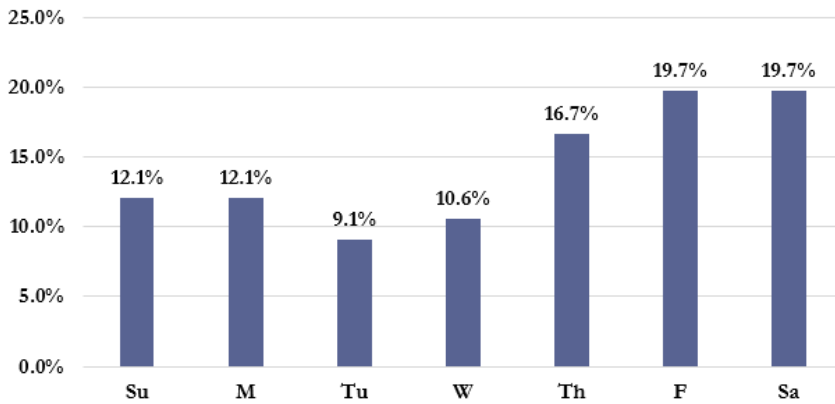


In order to provide for comparisons of daily ED/UC overdose event frequency, August ED/UC overdose events by day are illustrated for 2017, 2018, and 2019 (Figure 5). The daily maximum of six ED/UC overdose events in August 2019 is equivalent to the daily maximum observed in 2018, and higher than the maximums (4) observed in 2017. Mean daily ED/UC overdose frequency (2.1) is higher than 1.9 observed in both August of 2018 and 2017. A total of two days with no ED/UC overdose events were observed during August of 2019, as compared to six days in 2018, and three days in 2017.

A single peak in ED/UC overdose events was observed on August 3, 2019, with a secondary peak on August 23, and tertiary peak on August 25. During August of 2018, a single peak was observed on August 2, and two peaks on August 17 and August 27 were observed in 2017.

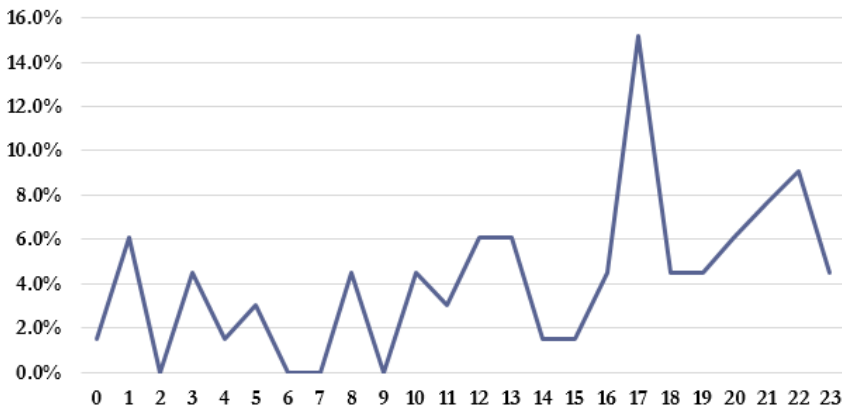
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Figure 6. Overdose Occurrences by Day of Week



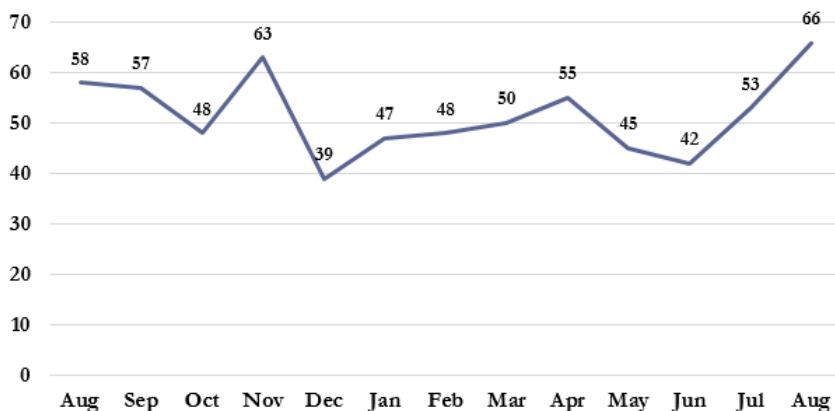
When organized by day of week, August ED/UC overdose events peaked on Friday and Saturday (20% each), and were lowest on Tuesday (9%); overdose events tended to be lowest early to mid-week, and built to a weekend peak (Figure 6).

Figure 7. Overdose Occurrences by Hour of Day



August ED/UC overdose events peaked at 5:00 pm, with a secondary peak at 11:00 pm (Figure 7). No ED/UC overdose events were reported during the hours of 2:00 am, 6:00 am, 7:00 am, or 9:00 am, respectively.

Figure 8. Overdose Counts - Past 12 Months



When organized by month, ED/UC overdose events decreased 17% between August and October 2018, increased 31% between October and November, decreased 38% between November and December, increased 41% between December and April, decreased 24% from April to June, and increased 57% from June to August (Figure 8). To date, 406 ED/UC drug overdose events have been observed in 2019. The total number of overdoses in August was the highest observed count in the past year.

Lake County General Health District Resources



Project DAWN Naloxone Clinics

Signature Health

38882 Mentor Avenue, Willoughby, OH 44094;
First Wednesday of each month at 4:00 pm.

Crossroads Health (formerly Beacon Health)

9220 Mentor Avenue, Mentor, OH 44060;
Second Tuesday of each month at 4:30 pm.

Lake County General Health District

5966 Heisley Road, Mentor, OH 44060;
Third Thursday of each month at 12:30 pm.

Windsor Laurelwood Center for Behavioral Medicine

35900 Euclid Avenue, Willoughby, OH 44094;
4th Wednesday of each month at 7:00 pm.

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



**Lake County
General Health District**

Public Health
Prevent. Promote. Protect.



REV: 9/9/2019