

Drug Overdose Surveillance Report Lake County, Ohio: October 2019

The following report outlines emergency department (ED) and urgent care (UC) drug overdose events by Lake County residents during the month of October. During the aforementioned timeframe, a total of 54 recorded drug overdose ED/UC events met the inclusion criteria listed below and occurred among Lake County residents, accounting for 0.7% of all October ED/UC visits, and decreasing from the previous month's 57 drug overdose ED/UC visits. No fatalities were reported among the cases presenting to EDs/UCs during the month of October.

In October, Lake County drug overdoses occurred among individuals ranging from 13 to 67 years of age. In total, three events involved an illicit substance, one involved an over the counter medication, and 54 involved an unspecified substance (Figure 1). Moreover, 31 ED/UC visits resulted in routine discharge, seven were discharged to treatment, five left against medical advice, two were transferred to other hospitals, one was discharged to a skilled nursing facility, one was discharged to law enforcement, and seven lacked reported discharge information.

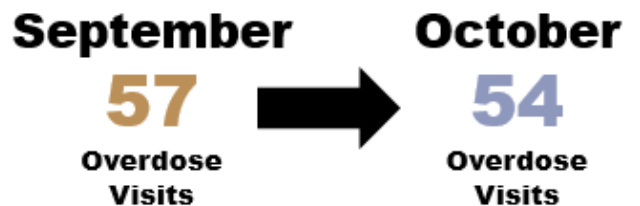
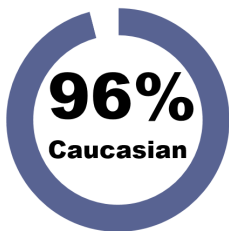
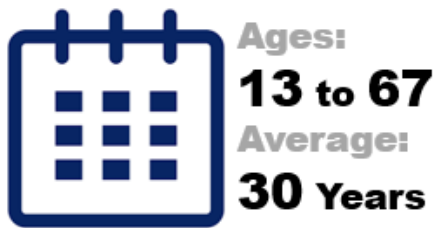
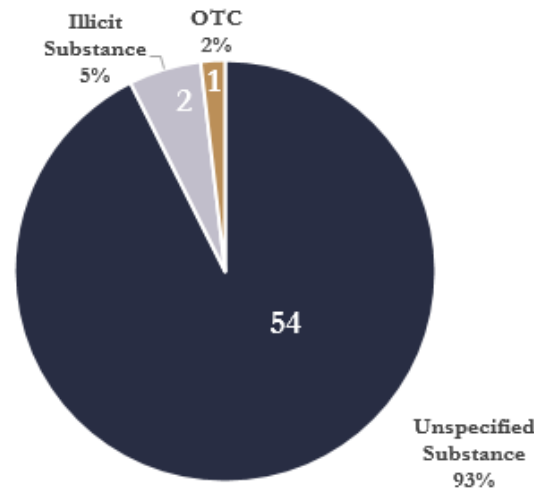


Figure 1. Overdoses by Type



Inclusion Criteria:

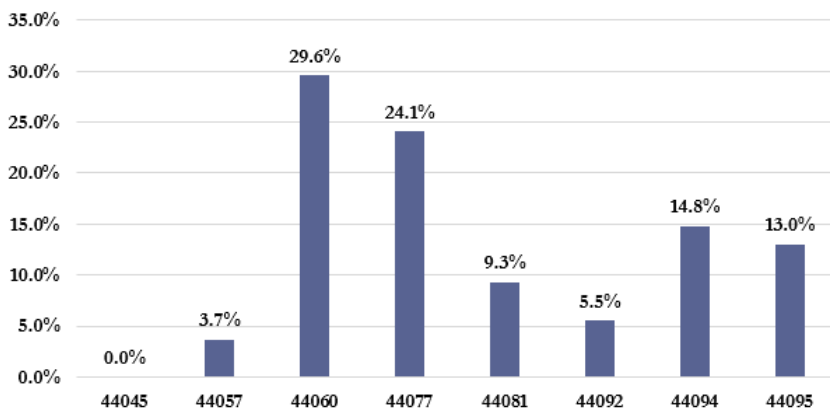
The data presented in this report was retrieved from Ohio's EpiCenter Health Monitoring System, as identified by the "Ohio Opioid-Related: Suspected Drug Overdose" classifier. Data prior to August 2019 was identified using the "Traumatic Injury: Drugs" classifier. This report contains information about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

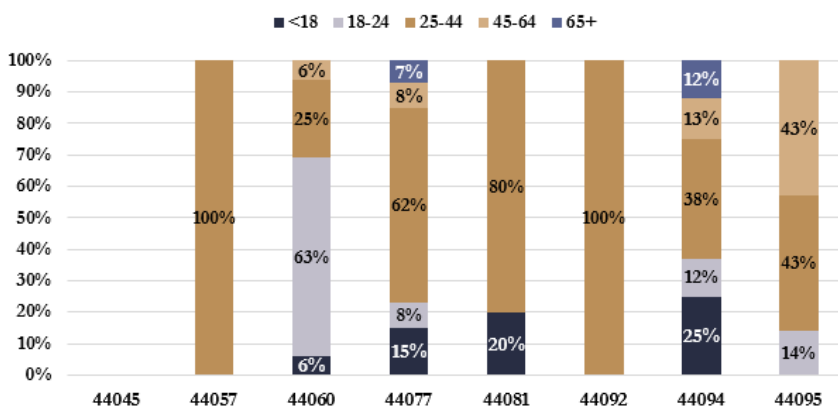
In what areas were overdoses most prevalent?

Figure 2. Overdose Occurrences by Zip Code of Residence



The greatest frequency of ED/UC overdose events occurred amongst those residing in zip code 44060 (Figure 2). The proportion of ED/UC overdose events increased by 13.8% for 44060, 9.3% for 44081, and 0.2% for 44092, as compared to the month of September, while decreasing 1.7% for 44045, 6.8% for 44057, 11.0% for 44077, 1.0% for 44094, and 2.8% for 44095.

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 (50%), followed by those 18 to 24 years of age (24%), those 45-64 years of age (11%) and those under 18 (11%). Overdose event frequency was lowest among those 65 years of age and older (4%).

At which Lake County facilities did overdose events present?

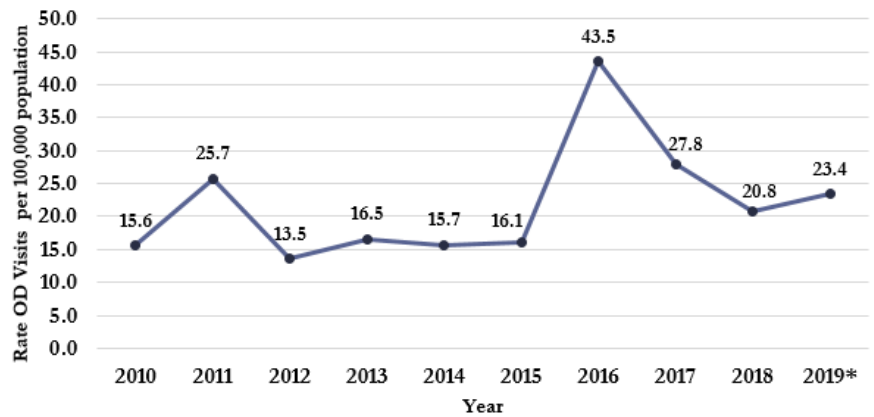
Table 1. Overdose Reporting Facility

Facility	N	(%)
Madison Campus	2	4
TriPoint Medical Center	21	39
West Medical Center	23	42
Outside of County	8	15
Total	54	100

During the month of October, Lake Health West Medical Center experienced the highest proportion of ED/UC visits (42%), followed by TriPoint (39%), facilities outside of Lake County (15%), and Lake Health's Madison Campus (4%; Table 1).

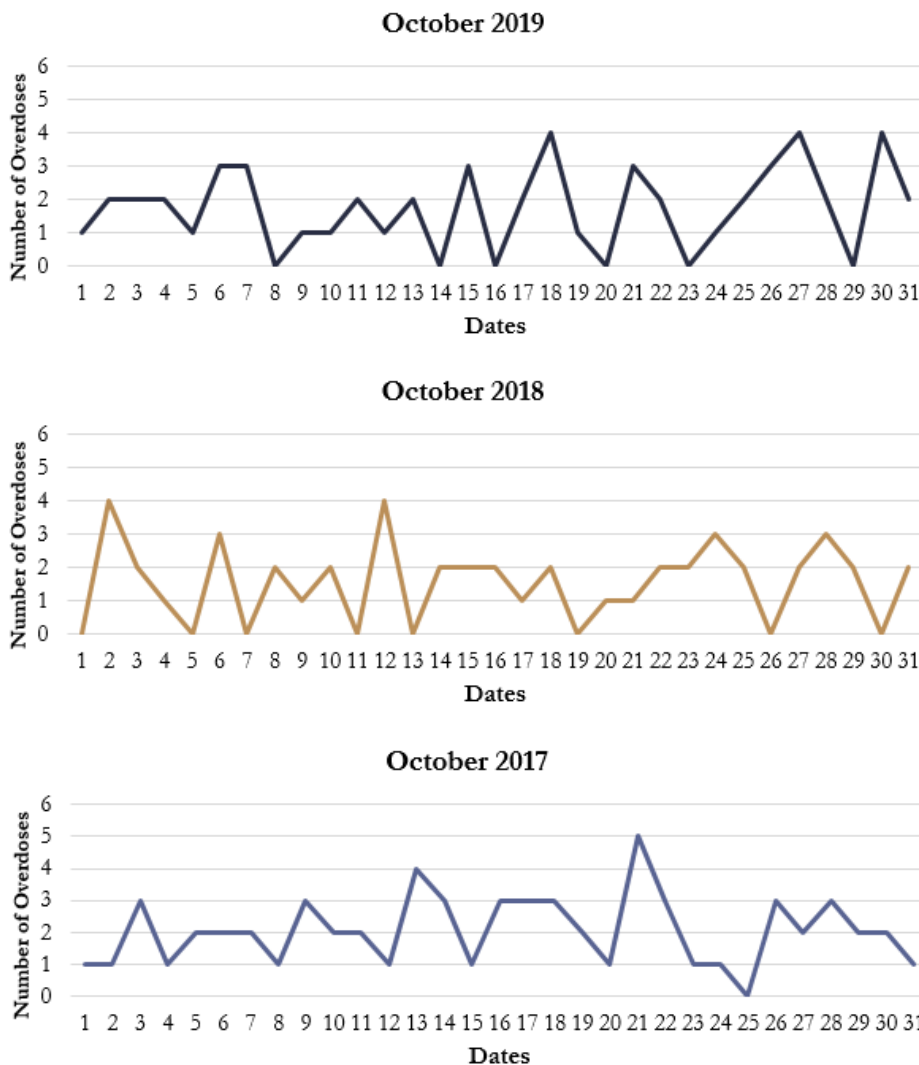
The October 2019 Lake County ED/UC overdose event rate is 13% higher than that of October 2018, and is 46% lower than the peak of 43.5 overdose visits per 100,000 population in October of 2016 (Figure 4).

Figure 4. Rate of October 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.

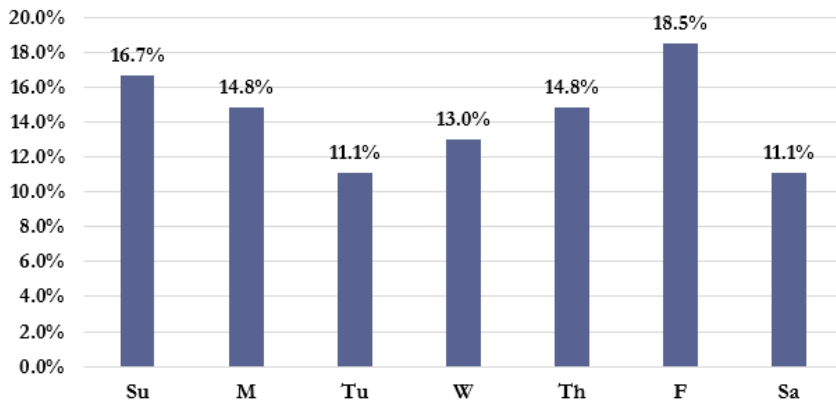
Figure 5. October Drug Overdose Daily Frequencies, 2017 to 2019



In order to provide for comparisons of daily ED/UC overdose event frequency, October ED/UC overdose events by day are illustrated for 2017, 2018, and 2019 (Figure 5). The daily maximum of four ED/UC overdose events in October 2019 is equivalent to the daily maximums observed during 2018, and lower than the daily maximum in 2017(5). Mean daily ED/UC overdose frequency for October 2019 (1.7) is higher than that observed in September of 2018 (1.5), but lower than 2017 (2.1). A total of six days with no ED/UC overdose events were observed during October of 2019, as compared to eight days in 2018, and one day in 2017.

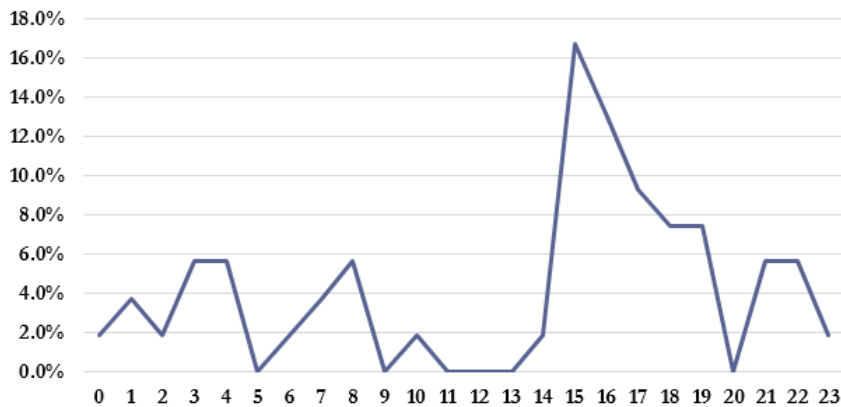
October 2019 overdose events peaked towards the end of the month (18, 27, and 30), whereas October 2018 peaks occurred during the first half of the month (2 and 12); a single overdose event peak was observed during October 2017 (21).

Figure 6. Overdose Occurrences by Day of Week



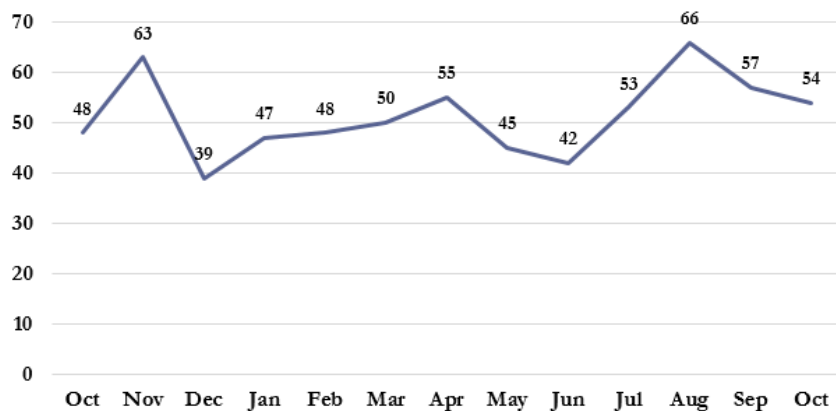
When organized by day of week, October ED/UC overdose events fluctuated throughout the week with a peak on Friday (18.5%), and lows on Tuesday (11.1%) and Saturday (11.1%), respectively (Figure 6).

Figure 7. Overdose Occurrences by Hour of Day



October ED/UC overdose events spiked during at 3:00 pm, and remained highest through 7:00 pm hour (Figure 7). Although afternoon peaks have been commonly observed in previous months, this trend is unique, as compared to observations from the past year. No ED/UC overdose events were reported during the hours of 5:00 am, 9:00 am, 11:00 am through 1:00 pm, or 8:00 pm, respectively.

Figure 8. Overdose Counts - Past 12 Months



When organized by month, ED/UC overdose events increased 31% between October and November 2018, decreased 38% between November and December, increased 41% between December and April, decreased 24% from April to June, increased 57% from June to August, and decreased 18% from August to October (Figure 8). To date, 517 ED/UC drug overdose events have been observed in 2019, as compared to 506 during the same timeframe in 2018.

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;
Fourth 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

REV: 11/8/2019



**Lake County
General Health District**

Public Health
Prevent. Promote. Protect.

