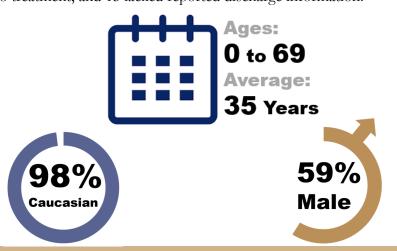
Drug Overdose Surveillance Report Lake County, Ohio: December 2019

The following report outlines emergency department (ED) and urgent care (UC) drug overdose events by Lake County residents during the month of December. During the aforementioned timeframe, a total of 58 recorded drug overdose ED/UC events met the inclusion criteria listed below and occurred among Lake County residents, accounting for 0.7% of all December ED/UC visits, and increasing from the previous month's 45 drug overdose ED/UC visits. No fatalities were reported among the cases presenting to EDs/UCs during the month of December.

In December, Lake County drug overdoses occurred among individuals ranging from 0 to 69 years of age, with a prescription opioid poisoning occurring in an infant less than one year of age. In total, two events involved a prescription medication, two involved poisoning, two involved illicit substances, one involved alcohol poisoning, and 51 involved an unspecified substance (Figure 1). Moreover, 25 ED/UC visits resulted in routine discharge, 11 left against medical advice, seven were discharged to treatment, and 15 lacked reported discharge information.



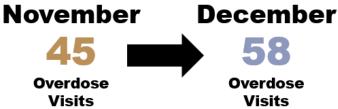
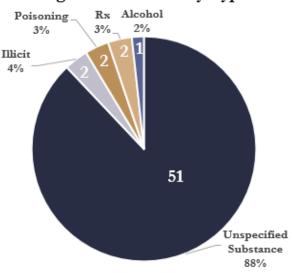


Figure 1. Overdose by Type



Inclusion Criteria:

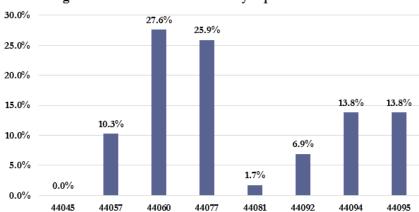
The data presented in this report was retrieved from Ohio's EpiCenter Health Monitoring System, as identified by the "Ohio Opioid-Related: Suspected Drug Overdose" classifier. Data prior to August 2019 was identified using the "Traumatic Injury: Drugs" classifier. This report contains information about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

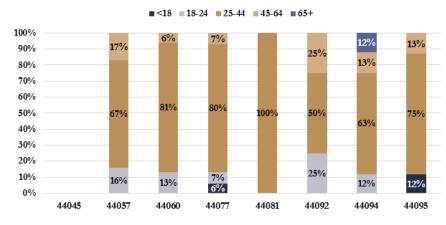
In what areas were overdoses most prevalent?

Figure 2. Overdose Occurrences by Zip Code of Residence



In December, the greatest frequency of ED/UC overdose events occurred amongst those residing in zip code 44060, followed closely by 44077 (Figure 2). The proportion of ED/UC overdose events increased by 3.6% in 44057, 16.5% in 44060, and 2.5% in 44092 as compared to the month of November, while decreasing 3% in 44077, 5% in 44081, 4% in 44094, and 10.6% in 44095. For the third consecutive month, no cases 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 (71%), followed by those 45 to 64 years of age (14%), 18 to 24 years of age (10%), under 18 years of age (3%), and 65 years of age and older (2%).

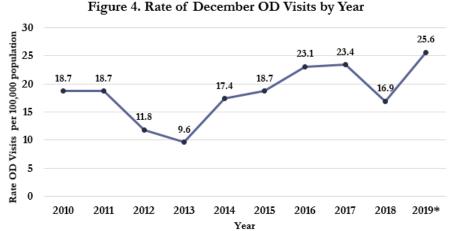
At which Lake County facilities did overdose events present?

Table 1. Overdose Reporting Facility

1 8 3		
Facility	N	(%)
Madison Campus	0	0
TriPoint Medical Center	14	24
West Medical Center	27	47
Outside of County	17	29
Total	58	100

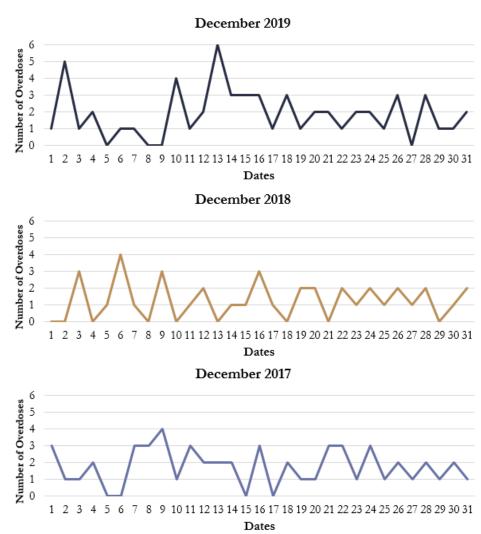
During the month of December, Lake Health West Medical Center experienced nearly half of all ED/UC visits observed among Lake County residents (47%), followed by facilities outside of Lake County (29%), and TriPoint Medical Center (24%; Table 1). No visits were recorded at Lake Health's Madison Campus during the month of December.

The December 2019 Lake County ED/UC overdose visit rate per 100,000 population was the highest observed in the past 10 years, and is 51% higher than that of December 2018 (Figure 4).



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

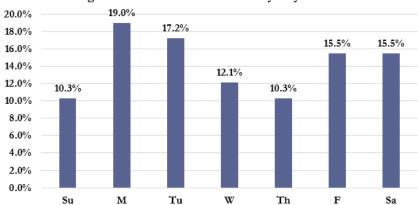
Figure 5. December Drug Overdose Daily Frequencies, 2017 to 2019



In order to provide for comparisons of daily ED/UC overdose event frequency, December 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 December 2019 is 50% higher than the daily maximum of four, as reported in both 2017 and 2018. Moreover, mean daily ED/UC overdose frequency for December 2019 (1.9) is higher than both December of 2018 (1.3) and December of 2017 (1.7).

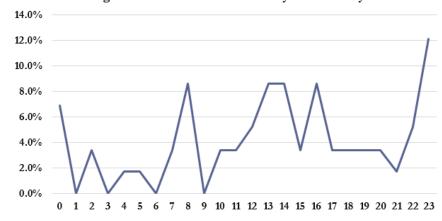
A total of four days with no ED/UC overdose events were observed during December of 2019, as compared to nine days in 2018, and four in 2017. December 2019 overdose events peaked on December 13, whereas a 2018 peak occurred on December 6, and a 2017 peak occurred on December 9.

Figure 6. Overdose Occurrences by Day of Week



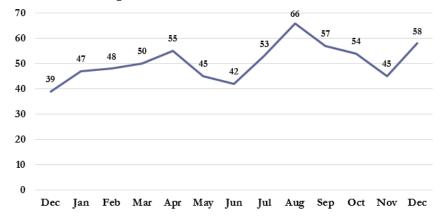
When organized by day of week, December ED/UC overdose events were lowest on Sunday and Thursday, increased Friday and Saturday, and peaked on Monday (Figure 6).

Figure 7. Overdose Occurrences by Hour of Day



November ED/UC overdose events were more prominent during the early to midafternoon and late night hours, and lowest in the early to mid-morning hours (Figure 7). The ED/UC overdose events peaked around 11:00 pm, with additional increases at 8:00 am, 1:00 pm, 2:00 pm, and 4:00 pm. No ED/UC overdose events were reported during the hours of 1:00 am, 3:00 am, 6:00 am, or 9:00 am during the month of December.

Figure 8. Overdose Counts - Past 12 Months



When organized by month, ED/UC overdose events increased 41% between December and April, decreased 24% from April to June, increased 57% from June to August, decreased 32% from August to November, and increased 29% from November to December (Figure 8). A total of 620 ED/UC visits for drug overdose events were observed in 2019, as compared to 608 in 2018, representing an increase of approximately 2%.

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: 1/7/2020







