The following report outlines emergency department (ED) and urgent care (UC) drug overdose events by Lake County residents during the month of February. During the aforementioned timeframe, a total of 31 recorded drug overdose ED/UC events met the inclusion criteria listed below and occurred among Lake County residents, accounting for 0.4% of all February ED/UC visits, and decreasing from the previous month’s 51 drug overdose ED/UC visits. One fatality was reported among the cases presenting to EDs/UCs during the month of February.

In February, Lake County drug overdoses occurred among individuals ranging from 13 to 63 years of age. In total, one event involved a prescription medication, one involved an illicit substance, and 29 involved an unspecified substance (Figure 1). Moreover, 18 ED/UC visits resulted in routine discharge, while five were discharged to treatment, one left against medical advice, one was not seen, one resulted in a fatality, and five lacked reported discharge information.

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?

In February, 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 9.3% in 44077, 7% in 44092, and 0.4% in 44095 as compared to the month of January, while decreasing 3.3% in 44057, 6.2% in 44060, and 7.2% in 44094. For the fourth consecutive month, no ED/UC overdose events were observed among residents of 44045, and for the second consecutive month, no ED/UC overdose events were observed among residents of 44081.

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 (61%), followed by those 45 to 64 years of age (29%), under 18 years of age (7%), and 18 to 24 years of age (3%). During the month of February, no ED/UC overdose events occurred amongst those 65 years of age and older.

At which Lake County facilities did overdose events present?

During the month of February, the Lake Health West Medical Center experienced nearly half of all ED/UC visits observed among Lake County residents (48.4%), followed by TriPoint Medical Center (32.3%), facilities outside of Lake County (16.1%), and the Lake Health Madison Campus (3.2%; Table 1).

Table 1. Overdose Reporting Facility

<table>
<thead>
<tr>
<th>Facility</th>
<th>N</th>
<th>(%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Madison Campus</td>
<td>1</td>
<td>3.2</td>
</tr>
<tr>
<td>TriPoint Medical Center</td>
<td>10</td>
<td>32.3</td>
</tr>
<tr>
<td>West Medical Center</td>
<td>15</td>
<td>48.4</td>
</tr>
<tr>
<td>Outside of County</td>
<td>5</td>
<td>16.1</td>
</tr>
<tr>
<td>Total</td>
<td>31</td>
<td>100</td>
</tr>
</tbody>
</table>
The February 2020 Lake County ED/UC overdose event rate per 100,000 population was the second lowest observed in the past 10 years, is 36% lower than that of February 2019, and was 54% below the peak 2017 rate of 29.1 (Figure 4).

![Figure 4. Rate of February OD Visits by Year](image)

*I Rates based on most current available annual population estimates, as obtained from American Fact Finder; 2019 and 2020 rates are based on 2018 population estimates.*

In order to provide for comparisons of daily ED/UC overdose event frequency, February ED/UC overdose events by day are illustrated for 2018, 2019, and 2020 (Figure 5). The daily maximum of four ED/UC overdose events in February of 2020 is 43% lower than the daily maximum of seven reported in 2019, and equivalent to the daily maximum of four reported in 2018. Moreover, mean daily ED/UC overdose event frequency for February of 2020 (1.1) is lower than both February of 2018 (1.6) and 2019 (1.8), respectively.

A total of ten days with no ED/UC overdose events were observed during February of 2020, as compared to four days in February of 2019, and six in February of 2018. February 2020 overdose events peaked on February 27, as compared to the 2019 peak, which occurred on February 22, and 2018 peaks, which occurred on February 7, 21, and 22.
When organized by day of week, the frequency of ED/UC overdose events was highest on Thursdays and Saturdays, with nearly one in four ED/UC overdose events occurring each of those two days (Figure 6). Sundays experienced the second highest event frequency (19.3%), followed by Tuesdays and Fridays (12.9% each), and Wednesdays (9.7%). No ED/UC overdose events presented on Mondays during the month of February.

February ED/UC overdose events were more prominent during the early to mid-afternoon and early evening hours, and lowest during morning hours (Figure 7). ED/UC overdose events peaked around 1:00 to 2:00 pm and 7:00 pm, with additional increases around 1:00 am, 10:00 to 11:00 am, 3:00 to 5:00 pm, and 8:00 to 9:00 pm. No ED/UC overdose events were reported during the hours of 2:00 am, 5:00 am, 7:00 to 9:00 am, or 12:00 pm during the month of February.

When organized by month, ED/UC overdose events increased 15% between February and April, decreased 24% from April to June, increased 57% from June to August, decreased 32% from August to November, increased 29% from November to December, and decreased 47% from December to February (Figure 8). A total of 82 ED/UC visits for drug-related overdose events have been observed thus far in 2020, as compared to 95 during the same time frame in 2019.
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.

Training and registration to receive a naloxone kit
is now 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

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: 3/5/2020