The following report outlines emergency department (ED) and urgent care (UC) drug overdose events by Lake County residents during the month of January. During the aforementioned timeframe, a total of 51 recorded drug overdose ED/UC events met the inclusion criteria listed below and occurred among Lake County residents, accounting for 0.6% of all January ED/UC visits, and decreasing from the previous month’s 58 drug overdose ED/UC visits. No fatalities were reported among the cases presenting to EDs/UCs during the month of January.

In January, Lake County drug overdoses occurred among individuals ranging from 14 to 59 years of age. In total, one event involved a prescription medication, one involved a poisoning, four involved illicit substances, one involved alcohol poisoning, and 45 involved an unspecified substance (Figure 1). Moreover, 29 ED/UC visits resulted in routine discharge, while seven were discharged to treatment, five left against medical advice, three were transferred to other hospitals, and seven 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 January, the greatest frequency of ED/UC overdose events occurred amongst those residing in zip code 44077, followed closely by 44060 (Figure 2). The proportion of ED/UC overdose events increased by 3.5% in 44077 and 1.9% in 44095 as compared to the month of December, while decreasing 0.5% in 44057, 2.1% in 44060, 1.7% in 44081, 1.0% in 44092, and 0.1% in 44094. For the fourth consecutive month, no cases were observed among residents of 44045.

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 (55%), followed by those 45 to 64 years of age (25%), 18 to 24 years of age (12%), and under 18 years of age (8%). In January, no overdoses were observed among those 65 years of age and older.

At which Lake County facilities did overdose events present?

<table>
<thead>
<tr>
<th>Overdose Reporting Facility</th>
<th>N</th>
<th>(%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Madison Campus</td>
<td>2</td>
<td>3.9</td>
</tr>
<tr>
<td>TriPoint Medical Center</td>
<td>16</td>
<td>31.4</td>
</tr>
<tr>
<td>West Medical Center</td>
<td>23</td>
<td>45.0</td>
</tr>
<tr>
<td>Outside of County</td>
<td>10</td>
<td>19.6</td>
</tr>
<tr>
<td>Total</td>
<td>51</td>
<td>100</td>
</tr>
</tbody>
</table>

During the month of January, Lake Health West Medical Center experienced nearly half of all ED/UC visits observed among Lake County residents (45%), followed by TriPoint Medical Center (31.4%), facilities outside of Lake County (19.6%), and the Lake Health Madison Campus (3.9%; Table 1).
The January 2020 Lake County ED/UC overdose visit rate per 100,000 population was the second highest observed in the past 10 years. The rate is 8.3% higher than that of January 2019, and 19% below the peak 2017 rate (Figure 4).

Figure 5. January Drug Overdose Daily Frequencies, 2018 to 2020

In order to provide for comparisons of daily ED/UC overdose event frequency, January ED/UC overdose events by day are illustrated for 2018, 2019, and 2020 (Figure 5). The daily maximum of six ED/UC overdose events in January 2020 (six) is 50% higher than the daily maximum of four, as reported in both 2018 and 2019. Moreover, mean daily ED/UC overdose frequency for January 2020 (1.7) is higher than both January of 2018 (1.2), and January of 2019 (1.5).

A total of eight days with no ED/UC overdose events were observed during January of 2020, as compared to six days in 2019, and 14 in 2018. January 2020 overdose events peaked on January 18, with subsequent increases on January 14 and January 25, as compared to the 2019 peak, which occurred on January 4, and the 2018 peaks, which occurred on January 19 and 29, respectively.
When organized by day of week, the frequency of ED/UC visits for overdose events were lowest on Mondays, while approximately one in three cases presented on a Saturday (Figure 6). Friday experienced the second highest case frequency (17.6%), followed by Wednesday (13.7%), and Tuesday and Sunday (11.8%, respectively).

January ED/UC overdose events were more prominent during the early to mid-afternoon and late night hours, and lowest during morning hours (Figure 7). ED/UC overdose events peaked around 3:00 pm and 8:00 pm, with additional increases at 1:00 pm and 10:00 p.m. No ED/UC overdose events were reported during the hours of 6:00 am or 8:00 am during the month of January.

When organized by month, ED/UC overdose events increased 17% between January and April, decreased 23.6% from April to June, increased 57.1% from June to August, decreased 31.8% from August to November, increased 28.8% from November to December, and decreased 12.1% from December to January (Figure 8). A total of 51 ED/UC visits for drug-related overdose events have been observed thus far in 2020, as compared to 47 drug-related overdoses in January 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.

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

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: 2/4/2020