The following report outlines Emergency Department (ED) and Urgent Care (UC) drug overdose (OD) visits by Lake County residents during the month of January, 2019, and includes only nonfatal events, as no ED/UC fatal events were reported. During the aforementioned timeframe, a total of 47 recorded drug overdose ED/UC visits met the inclusion criteria listed below and occurred among Lake County residents, accounting for 0.6% of all January ED/UC visits, and increasing from the previous month’s 39 drug overdose ED/UC visits.

January Lake County drug overdoses occurred among individuals ranging in age from 14 to 66 years of age. In total, one event involved an over-the-counter medication, five involved an illicit substance, and 41 involved an unspecified substance (Figure 1). Moreover, 24 ED/UC visits resulted in routine discharge, six were discharged to treatment, three left against medical advice, one was transferred to another hospital, two were transferred to skilled nursing facilities, and eight 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 “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?

The greatest frequency of overdose events occurred amongst those residing in zip code 44077, and were lowest in zip codes 44045 and 44096 (Figure 2). The proportion of overdose events decreased by 10.7% in zip code 44057, and increased by 10.1% in 44077, as compared to the month of December.

Overdose events varied by age across each of the reported zip codes (Figure 3). As in December, overdose event frequency was highest among those 25 to 44 years of age (49%), followed by those 18 to 24 years of age (23%), and 25 to 44 years of age (17%). Concurrently, overdose event frequencies were lowest amongst those under the age of 18 years of age (9%), and those 65 years of age and over (2%).

At which Lake County facilities did overdose events present?

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>6</td>
<td>13</td>
</tr>
<tr>
<td>TriPoint Medical Center</td>
<td>15</td>
<td>32</td>
</tr>
<tr>
<td>West Medical Center</td>
<td>18</td>
<td>38</td>
</tr>
<tr>
<td>Outside of County</td>
<td>8</td>
<td>17</td>
</tr>
<tr>
<td>Total</td>
<td>47</td>
<td>100</td>
</tr>
</tbody>
</table>

During the month of January, the majority of overdose events presented in the western and central portions of the county (38% and 32%, respectively), and to facilities outside of Lake County (17%; Table 1). This distribution is similar to that of November and December, despite variation in residential zip codes.
The January 2019 County ED/UC overdose visit rate increased 31% (Figure 4) from January 2018, is 25% lower than the peak of January 2017, and remains similar to the January 2016 rate.

In order to provide for comparisons of daily overdose frequency, January overdose events by day are illustrated for 2017, 2018, and 2019, respectively (Figure 5). Daily overdose count maximums for 2019 and 2018 (4) were lower than 2017 (5). Daily overdose averages decreased from 2017 (2.0) to 2018 (1.2), and increased from 2018 to 2019 (1.5). January 2019 was characterized by less than half as many days with no ED/UC overdose admits (6), as compared to 2018 (14).

Unlike the two previous years, 2019 overdose counts peaked early in the month, and experienced secondary peaks in the later part of the month. In 2018 and 2017, peaks occurred mid-month, and on the 29th.

*2018 and 2019 rates based on 2017 population estimate, as obtained from American Fact Finder.
When organized by day of week, January overdose events peaked on Wednesday and Saturday (20.5% each), with lows occurring on Sunday and Monday (Figure 6). This trend varied from the month of December, wherein overdose occurrences were highest on Sunday and Monday, and lowest on Tuesday and Saturday.

Overdose events peaked around midnight with secondary peaks in the late evening hours (9:00 and 11:00 p.m.), with lows in the early and late morning (3:00, 7:00, and 9:00–11:00 a.m.) hours (Figure 7). This pattern represents a shift from previous months, where single peaks occurred in the mid-afternoon (September and October), during evening hours (November), and in the mid-afternoon and late evening (December).

When organized by month, 2018 overdose events increased linearly between February and May, thereafter experiencing a 33% decrease between May and July, a 35% increase between July and August, a 17% decrease between August and October, a 31% increase from October to November, a 38% decrease from November to December, and a 21% increase from December to January (Figure 8). In 2018, a total of 608 ED/UC visits for drug overdose events were observed among Lake County residents, with 47 to date for 2019.
Lake County General Health District Resources

Project DAWN Naloxone Clinics
Lake County General Health District
5966 Heisley Road, Mentor, OH 44060;
First Wednesday of each month at 4:30 pm.

Signature Health
38882 Mentor Avenue, Willoughby, OH 44094;
Third Tuesday of each month at 10:00 am.

Lake Area Recovery Center
2711 Donahoe Drive, Ashtabula, OH 44004;
Second Thursday of each month at 7:00 pm.

Signature Health
4726 Main Avenue, Ashtabula, OH 44004;
Last Wednesday of each month at 11:00 am.

Ravenwood
12557 Ravenwood Drive, Chardon, OH 44024;
First Tuesday of each month at 5:30 pm.

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

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