The following report outlines Emergency Department (ED) and Urgent Care (UC) drug overdose (OD) visits by Lake County residents during the month of December, 2018, and includes only nonfatal events, as no ED/UC fatal events were reported. During the aforementioned timeframe, a total of 39 recorded drug overdose ED/UC visits met the inclusion criteria listed below and occurred among Lake County residents, accounting for 0.5% of all December ED/UC visits, and decreasing from the previous month’s 63 drug overdose ED/UC visits.

December Lake County drug overdoses occurred among individuals ranging in age from 14 to 66 years of age. In total, one event each involved prescription and over-the-counter medications, seven involved an illicit substance, and 30 involved an unspecified substance (Figure 1). Moreover, 18 ED/UC visits resulted in routine discharge, five were discharged to treatment, six left against medical advice, two were transferred to another hospital, 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 where overdoses most prevalent?

The greatest frequency of overdose events occurred amongst those residing in zip code 44057, and were lowest in zip codes 44045, 44081, 44092, and 44096, respectively (Figure 2). The proportion of overdose events decreased in zip codes 44060 and 44077, and increased considerably in 44057, as compared to the month of November.

[Figure 2. Overdose Occurrences by Zip Code of Residence]

Overdose events varied by age across each of the reported zip codes (Figure 3). As in November, overdose event frequency was highest among those 25 to 44 years of age (54%), followed by those 45 to 64 years of age (18%), and 18 to 24 years of age (15%). Concurrently, overdose event frequencies were lowest amongst those under the age of 18 years of age (10%), and those 65 years of age and over (3%).

[Figure 3. Overdose Ages by Zip Code of Residence]

At which Lake County facilities did overdose events present?

<table>
<thead>
<tr>
<th>Table 1. Overdose Reporting Facility</th>
</tr>
</thead>
<tbody>
<tr>
<td>Facility</td>
</tr>
<tr>
<td>Madison Campus</td>
</tr>
<tr>
<td>TriPoint Medical Center</td>
</tr>
<tr>
<td>West Medical Center</td>
</tr>
<tr>
<td>Outside of County</td>
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<tr>
<td>Total</td>
</tr>
</tbody>
</table>

During the month of December, the majority of overdose events presented in the western and central portions of the county (38% and 23%, respectively), and to facilities outside of Lake County (26%; Table 1). This distribution is similar to that of November, despite the increase in overdose events among 44057 residents.
The December 2018 Lake County ED/UC overdose visit rate decreased 28% (Figure 4) from a peak in December 2017, and has reached a five-year low.

In order to provide for comparisons of daily overdose frequency, December overdose events by day are illustrated for 2016, 2017, and 2018, respectively (Figure 5). Daily overdose count maximums for 2018 and 2017 (4) were lower than 2016 (5). Daily overdose averages decreased from 2016 and 2017 (1.7 each) to 2018 (1.2). December 2018 saw more days with no ED/UC overdose admits (9), as compared to 2017 (4) or 2016 (7).

Consistently observed across each of the included three years, overdose admit peaks occurred during the beginning of the month, although exact dates varied.

*2018 rate based on 2017 population estimate, as obtained from American Fact Finder.
When organized by day of week, December overdose events peaked on Sunday and Monday (20.5% each), with a weekday low occurring on Tuesday, followed by a secondary peak on Wednesday and Thursday, and a decline from Friday to Saturday (Figure 6). This trend varied from the month of November, wherein overdose occurrences were lowest on Tuesday, with peaks on both Wednesday and Friday.

Overdose events peaked during the early afternoon (1 pm to 2 pm) and late evening hours (9 pm to 10 pm), decreasing overnight and into the morning hours, with secondary peaks around 2 am and 11 am (Figure 7). This pattern represents a shift from previous months, where single peaks occurred in the mid-afternoon (September and October), and during evening hours (November). Overdose occurrences appear to remain lowest during the early morning hours (between 3 and 6 am).

When organized by month, 2018 overdose events increased linearly between January and May, thereafter experiencing a 28% decrease between May and June, a 7% decrease between June and July, a 34% increase between July and August, a 2% decrease between August and September, a 16% decrease from September to October, a 31% increase from October to November, and a 38% decrease from November to December (Figure 8). In 2018, a total of 608 ED/UC visits for drug overdose events were observed among Lake County residents.
Lake County General Health District Resources

**Project DAWN Naloxone Clinics**
Lake County General Health District
5966 Heisley Road, Mentor, OH 44060;
Second Wednesday of each month at 5:00 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

Lake County General Health District
Public Health
Prevent. Promote. Protect.

5966 Heisley Road • Mentor, Ohio 44060 • 440.350.2543 • www.lcghd.org

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