The following report outlines Emergency Department (ED) and Urgent Care (UC) drug overdose (OD) visits by Lake County residents during the month of November, 2018, and includes only nonfatal events, as no ED/UC fatal events were reported. During the aforementioned timeframe, a total of 63 recorded drug overdose ED/UC visits met the inclusion criteria listed below and occurred among Lake County residents, accounting for 0.9% of all November ED/UC visits, and increasing from the previous month’s 48 drug overdose ED/UC visits.

November Lake County drug overdoses occurred among individuals ranging in age from three to 65 years of age. The youngest overdose event involved a toddler, and resulted from an accidental poisoning by an unspecified drug (this case was removed from the average age calculation below). In total, three events involved an accidental poisoning, two each involved unspecified prescription and OTC medications, 10 involved an illicit substance, and 46 involved an unspecified substance (Figure 1). Moreover, 36 ED/UC visits resulted in routine discharge, 13 were discharged to treatment, four left against medical advice, one was transferred to another hospital, and nine lacked reported discharge information.

Inclusion Criteria:

The data presented in this report was retrieved from Ohio’s EpiCenter Health Monitoring System under 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 are overdoses most prevalent?

The greatest frequency of overdose events occurred amongst those residing in zip code 44060, and were lowest in zip codes 44045, 44092, and 44081, respectively (Figure 2). Overdose events decreased in zip codes 44077 and 44092, and increased in 44094, as compared to the month of October.

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 (68%), followed by those 45 to 64 years of age (14%), and 18 to 24 years of age (10%). Concurrently, overdose event frequencies were lowest amongst those under the age of 18 years of age (6%), and those 65 years of age and over (2%).

At which Lake County facilities do overdose events present?

During the month of November, the majority of overdose events presented in the western and central portions of the county (37% and 30%, respectively), and to facilities outside of Lake County (30%) (Table 1), representing a shift from October’s high density of cases in the western portion of the county.

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>2</td>
<td>3</td>
</tr>
<tr>
<td>TriPoint Medical Center</td>
<td>19</td>
<td>30</td>
</tr>
<tr>
<td>West Medical Center</td>
<td>23</td>
<td>37</td>
</tr>
<tr>
<td>Outside of County</td>
<td>19</td>
<td>30</td>
</tr>
<tr>
<td>Total</td>
<td>63</td>
<td>100</td>
</tr>
</tbody>
</table>
The 2018 November Lake County ED/UC overdose visit rate increased 17% (Figure 4) from November 2017, but remains below the November 2016 peak.

Figure 4. Rate of November OD Visits by Year

*2018 rate based on 2017 population estimate, as obtained from American Fact Finder.

Figure 5. November Drug Overdose Daily Counts, 2016 to 2018

In order to provide for comparisons of daily overdose frequency, November overdose events by day are illustrated for 2016, 2017, and 2018, respectively (Figure 5). Daily overdose count maximums for 2018 (6) were higher than 2017(5), but lower than 2016 (9). Daily overdose averages increased slightly from 2017 (1.8) to 2018 (2.1), while remaining considerably lower than 2016 daily averages (3).

Consistently observed across each of the three years, a rise in overdose events around November 3 or November 4 precipitates a relative decline in overdose events from November 9 to November 13. Overall, 2018 and 2016 exhibited similar count patterns, which peaked early in the month, whereas 2017 counts peaked late in the month.
When organized by day of week, November overdose events peaked on Wednesday and Friday (19% each), with weekday lows occurring on Tuesday (Figure 6). The aforesaid trend varies from the previous month of October, wherein overdose occurrences were lowest on Thursday and Friday, and gradually built to a midweek peak.

Albeit variable, November overdose times by hour seem to peak during the late evening hours (10 pm), and were lowest in the early morning (4 am to 5 am; Figure 7). This represents a shift from September and October, where primary peaks occurred mid-afternoon (3 pm).

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, and a 31% increase from October to November (Figure 8). To date, a total of 569 ER/UC visits for drug overdose events have been observed amongst Lake County residents in 2018.
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 (South St. Location)
695 South Street, Chardon, OH 44024;
First Monday 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.