October Lake County drug overdoses occurred among individuals ranging in age from less than one to 73 years of age, with a mean age of 36 years old. The youngest overdose event involved an infant, and resulted from an accidental poisoning by an unspecified drug. The majority of overdose patients were male (60%) and Caucasian (88%). In total, one event involved an accidental poisoning, two involved unspecified prescription medications, five involved an illicit substance, and 49 involved an unspecified substance (Figure 1).

Inclusion Criteria:

The data presented in this report was retrieved from Ohio’s EpiCenter Health Monitoring System. 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. 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 codes 44077 and 44060, respectively, and were lowest in zip codes 44045 and 44081 (Figure 2), and this trend largely mirrors September overdose event distribution.

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 (64%), followed by those 18 to 24 years of age (13%), and 45 to 64 years of age (13%). Concurrently, overdose event frequencies were lowest amongst those under the age of 18 (4%), and those 65 years of age and over (6%).

At which Lake County facilities do overdose events present?

During the month of October, the majority of overdose events presented in the western portion of the county (46%), and to facilities outside of Lake County (31%) (Table 1). This represents a shift from September’s high density of cases in the central portion of the county.

<table>
<thead>
<tr>
<th>Facility</th>
<th>N</th>
<th>(%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Madison Campus</td>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td>TriPoint Medical Center</td>
<td>10</td>
<td>21</td>
</tr>
<tr>
<td>West Medical Center</td>
<td>22</td>
<td>46</td>
</tr>
<tr>
<td>Outside of County</td>
<td>15</td>
<td>31</td>
</tr>
<tr>
<td>Total</td>
<td>48</td>
<td>100</td>
</tr>
</tbody>
</table>
The 2018 October Lake County ED/UC overdose visit rate showed a continued decrease from the peak in 2016. The rate decreased by 25% between 2017 and 2018 (Figure 4).

In order to provide for comparisons of daily overdose frequency, October overdose events by day are illustrated for 2016, 2017, and 2018, respectively (Figure 5). Daily overdose count maximums were lowest in 2018 (4), as compared to 2017 (5) and 2016 (10). Daily overdose averages decreased from 2017 (2.1) to 2018 (1.5), remaining considerably lower than 2016 daily averages (3.2).

Consistently observed across each of the three years, a rise in overdose events on October 2 and 3, and October 12 and 13, precipitates a decline in overdose events around October 19 and 20, and October 25 and 26, peaking again on or around October 28.
When organized by day of week, October overdose events peak on Wednesday (21%), followed by a decline from Thursday to Friday, and a gradual increase into the weekend (Figure 6). This is a shift from September, where weekends experienced the highest overdose event frequency, with a second peak midweek.

Albeit variable, October overdose times by hour seem to peak mid-afternoon (3 pm), and decline at roughly 3 am, 4 am, and 6 am, respectively (Figure 7). The aforementioned mid-afternoon peak was also observed in September.

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, and a 16% decrease from September to October (Figure 8). To date in 2018, a total of 506 ER/UC visits for drug overdose events have been observed amongst 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 (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