The following report outlines emergency department (ED) and urgent care (UC) drug overdose events by Lake County residents during the month of August. During this timeframe, a total of 49 recorded drug overdose ED/UC events met the inclusion criteria listed below, accounting for 0.7% of all August ED/UC visits among Lake County residents. This represents a decrease from the previous month’s 61 drug overdose ED/UC visits. No fatalities were reported among those reporting to ED/UCs during the month of August.

In August, Lake County drug overdose ED/UC admissions occurred among individuals ranging from 14 to 63 years of age. Seven events involved an illicit substance, one involved a prescription medication, and 41 involved an unspecified substance (Figure 1). Moreover, 33 ED/UC visits resulted in routine discharge, while four left against medical advice, three were discharged to treatment, one was discharged to another hospital, and five 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 August, the greatest frequency of ED/UC overdose events occurred amongst those residing in zip code 44092 (Figure 2). ED/UC overdose events increased in 44057 (3.3%), 44060 (4.0%), 44081 (2.8%), 44092 (9.4%), and 44094 (3.6%), and decreased in 44077 (16.5%), and 44095 (6.6%). For the 10th consecutive month, no overdose visits 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 (41%), followed by those 45 to 64 years of age (31%), 18 to 24 years of age (16%), and those 18 years and younger (10%). One resident's age was unknown (2%). No ED/UC overdose events were observed among those 65 years and over in August.

At which Lake County facilities did overdose events present?

<table>
<thead>
<tr>
<th>Facility</th>
<th>N</th>
<th>(%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Madison Campus</td>
<td>2</td>
<td>4.1</td>
</tr>
<tr>
<td>TriPoint Medical Center</td>
<td>13</td>
<td>26.5</td>
</tr>
<tr>
<td>West Medical Center</td>
<td>14</td>
<td>28.6</td>
</tr>
<tr>
<td>Outside of County</td>
<td>20</td>
<td>40.8</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>49</td>
<td>100.0</td>
</tr>
</tbody>
</table>

During the month of August, the highest proportion of Lake County residents who presented to ERs/UCs for suspected drug overdoses presented to facilities outside of Lake County (40.8%), followed by West Medical Center (28.6%), TriPoint (26.5%), and Madison Campus (4.1%).
How does this compare with past years?

The August 2020 Lake County ED/UC overdose event rate per 100,000 population is the fourth highest rate observed for August in the past 10 years (Figure 4). It is 26% lower than the rate for August 2019, and 38% lower than the peak rate of 34.4 observed in August 2017.

Figure 4. Rate of August Overdose Visits by Year

*Rates based on most current available annual population estimates, as obtained from data.census.gov; 2019 and 2020 rates are based on 2019 population estimates.

In order to provide for comparisons of daily ED/UC overdose event frequency, August events by day are illustrated for 2018, 2019, and 2020 (Figure 5). The daily maximum of four for August of 2020 is 33% lower than the daily maximum of six reported in both 2019 and 2018. Moreover, mean daily ED/UC overdose event frequency for August of 2020 is 1.6 is lower than the rates in August of 2019 (2.1), and August 2018 (1.9).

A total of seven days with no ED/UC overdose events were observed during August of 2020, as compared to two days in August of 2019, and six in August of 2018. August 2020 overdose events peaked on August 11, as compared to the 2019 peak which occurred on August 3, and the 2018 peak, which occurred on August 2. There have been no ED/UC overdose visits on August 27 for the past three years.
When organized by month, ED/UC overdose events decreased 32% from August to November, increased 29% from November to December, decreased 47% from December to February, increased 97% from February to July, and decreased 20% from July to August (Figure 8). A total of 360 ED/UC visits for drug-related overdose events have been observed thus far in 2020, as compared to 406 during the same time frame in 2019.

When organized by day of week, the frequency of ED/UC overdose events was highest on Tuesdays 22.4%; Saturday and Sunday experienced the second highest frequency of overdose events (18.4%, respectively), followed by Monday (14.3%), Friday (14.3%), Wednesday (10.2%), and Thursday (2.0%).

August ED/UC overdose events were most prominent during the noon hours (Figure 7). Secondary peaks occurred around 1:00 a.m. and 11:00 pm. No overdose events presented to ED/UCs during the hours of 8:00 – 11:00 am or 1:00 pm in August.
Lake County General Health District Resources

Project DAWN Naloxone Clinics

Due to the ongoing situation with COVID-19 and response efforts, all in-person Project DAWN Clinics have been canceled until further notice.

Training and registration to receive a naloxone kit is available on our website for residents of Lake County, as well as other counties in Ohio without an active Project DAWN Program. For more information, please visit: https://www.lcghd.org/naloxone-distribution/.

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: 9/22/2020