Drug Overdose Surveillance Report Lake County, Ohio: February 2019

The following report outlines Emergency Department (ED) and Urgent Care (UC) drug overdose (OD) visits by Lake County residents during the month of February, 2019, and includes only nonfatal events, as no ED/UC fatal events were reported. During the aforementioned timeframe, a total of 48 recorded drug overdose ED/UC visits met the inclusion criteria listed below and occurred among Lake County residents, accounting for 0.7% of all February ED/UC visits, and increasing from the previous month's 47 drug overdose ED/UC visits.

February Lake County drug overdoses occurred among individuals ranging from 18 to 79 years of age. In total, three events involved an illicit substance, two involved a prescription medication, and 43 involved an unspecified substance (Figure 1). Moreover, 25 ED/UC visits resulted in routine discharge, five were discharged to treatment, five left against medical advice, and 13 lacked reported discharge information.

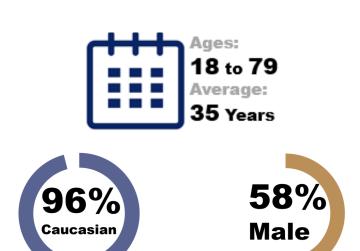
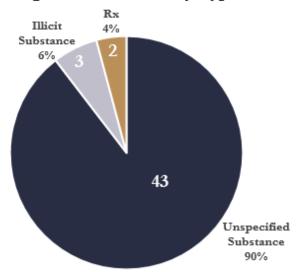




Figure 1. Overdoses by Type



Inclusion Criteria:

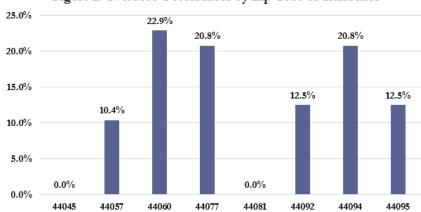
The data presented in this report was retrieved from Ohio's EpiCenter Health Monitoring System, as identified by the "Traumatic Injury: Drugs" classifier. This report contains information about Lake County residents, regardless of ED/UC location, and drug—related cases include all ED/UC admits specifying 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

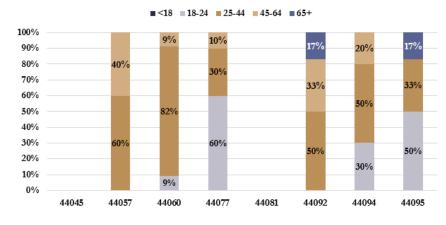
In what areas were overdoses most prevalent?

Figure 2. Overdose Occurrences by Zip Code of Residence



The greatest frequency of overdose events occurred amongst those residing in zip code 44060, and were lowest in zip codes 44045 and 44081 (Figure 2). The proportion of overdose events decreased by 4.7% for zip code 44077 and 8.8% for 44095, and increased by 8.3% for 44092 and 12.3% for 44094.

Figure 3. Overdose Ages by Zip Code of Residence



Overdose events varied by age across each of the reported zip codes (Figure 3). As in January, overdose event frequency was highest among those 25 to 44 years of age (52%), followed by those 18 to 24 years of age (27%), 45 to 64 years of age (17%), and 65 years of age and over (4%). Overdose events among those under 18 years of age were not observed during the month of February.

At which Lake County facilities did overdose events present?

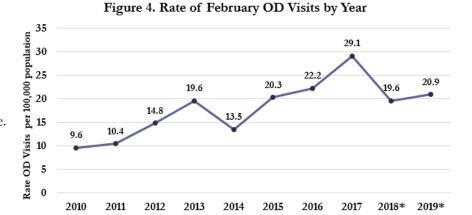
Table 1. Overdose Reporting Facility

Facility	N	(%)
Madison Campus	3	6
TriPoint Medical Center	5	10
West Medical Center	29	60
Outside of County	11	23
Total	48	100*

* Percentage may not equal 100% due to rounding.

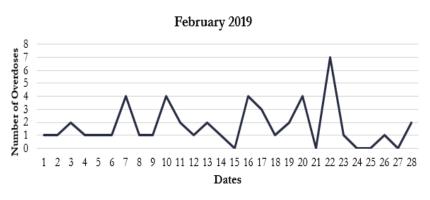
During the month of February, the majority of overdose events presented in the western portion of the county (60%), and to facilities outside of Lake County (23%; Table 1). This distribution represents a shift from previous months, where cases predominantly presented in the western and central portions of Lake County.

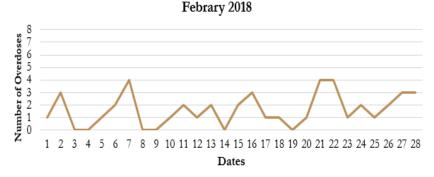
The February 2019 Lake County ED/UC overdose visit rate increased 7% (Figure 4) from February 2018, is 28% lower than the peak of February 2017, and is similar to the February 2015 rate.



*2018 and 2019 rates based on 2017 population estimate, as obtained from American Fact Finder.

Figure 5. January Drug Overdose Daily Counts, 2017 to 2019





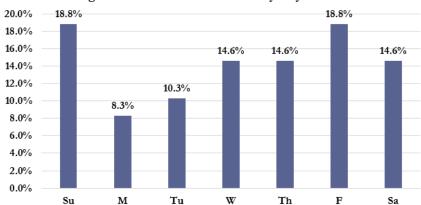


In order to provide for comparisons of daily overdose frequency, February overdose events by day are illustrated for 2017, 2018, and 2019, respectively (Figure 5). On February 22, 2019, Lake County experienced a three-year high for the number of overdose visits in a single day in February. Daily overdose averages increased slightly from 2018 (1.6) to 2019 (1.7), but remain less than 2017 (2.4). February 2019 was characterized by five days with no overdose events, as compared to six in 2018, and one in 2017.

Unlike the two previous years, February 2019 overdose counts peaked late in the month, with several secondary peaks spaced throughout. In previous years, multiple peaks have occurred near the beginning and end of the month.

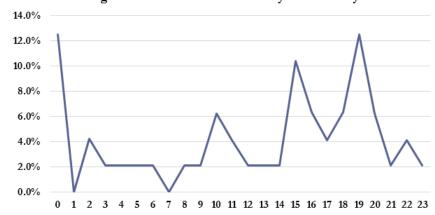
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Figure 6. Overdose Occurrences by Day of Week



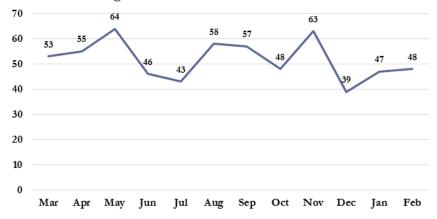
When organized by day of week, February overdose events peaked on Sunday (18.8%) and Friday (18.8%), followed by a weekly low occurring on Monday (Figure 6). This trend varied from the month of January, wherein overdose occurrences were highest on Wednesday and Saturday, and lowest on Sunday and Monday.

Figure 7. Overdose Occurrences by Hour of Day



Overdose events peaked around midnight and 7:00 p.m. with a secondary peak in the mid-afternoon (3:00 p.m.) and lows in the early and mid morning hours (1:00 a.m. and 7:00 a.m.; Figure 7). This pattern is similar to January, wherein a peak occurred at midnight; however, secondary peaks in January were later in the evening (9:00 p.m. and 11:00 p.m.).

Figure 8. Overdose counts - Past 12 Months



When organized by month, 2018 overdose events increased linearly between March 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 23% increase from December to February (Figure 8). To date in 2019, a total of 95 ED/UC drug overdose event visits have been observed.

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 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

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

REV: 3/12/2019







