

Statewide Semiannual Overdose Report

Illinois Department of Public Health

October 2023

ALL DRUG OVERDOSES

From January 2022 – January 2023, the Centers for Disease Control and Prevention (CDC) predicts a loss of 110,640 people will have died from drug overdoses in the United States,¹ which equates to one person dying from a drug overdose every five minutes. The number includes 3,908 Illinois residents who died from drug overdoses in 2022.

In 2022, there was a 5.1% increase in overdose deaths from any drug (Table 1). Many of the individuals who died from drug overdose tested positive for more than one substance at their time of death. A single individual may be included in multiple categories. Deaths involving any opioids increased by 8.2%, and deaths involving synthetic opioids (i.e., fentanyl and fentanyl analogs) increased 12.1%. Deaths involving heroin, natural and semi-synthetic opioids decreased by 29.7% and 13.3%, respectively.

Other substances include cocaine, alcohol, psychostimulants, benzodiazepines, and xylazine. Alcohol and psychostimulants-related fatalities increased by 2.9% and 3.3%, respectively. Benzodiazepine-related overdoses decreased by 2.6%. Overdose fatalities involving cocaine increased by 16.3%. Of the 1,492 cocaine-involved deaths, 81% also tested positive for opioids. Similarly, 100% of the people who tested positive for xylazine also tested positive for a synthetic opioid. Xylazine, a non-opioid veterinary sedative, has been increasingly prevalent in the past two years, with xylazine-involved deaths increasing by 39.9% in 2022. Additional information on xylazine is located at the end of this brief.

With increasing drug overdose deaths, opioids continue to account for the majority of deaths (79%-83%; Fig. 1). Additionally, opioids are responsible for the highest drug overdose fatality rates across all Illinois geographic categories (Fig. 2).

Table 1. Drug Overdose Deaths, Illinois Residents, 2021-2022

Drug Involved	2021	2022	Percent Change
Any Drug	3,717	3,908	5.1%
Any Opioid	3,013	3,261	8.2%
Synthetic Opioid	2,672	2,994	12.1%
Heroin	747	525	-29.7%
Natural and Semi-synthetic	504	437	-13.3%
Cocaine	1,283	1,492	16.3%
Alcohol	614	632	2.9%
Psychostimulants	540	558	3.3%
Benzodiazepines	466	454	-2.6%
Xylazine	163	228	39.9%

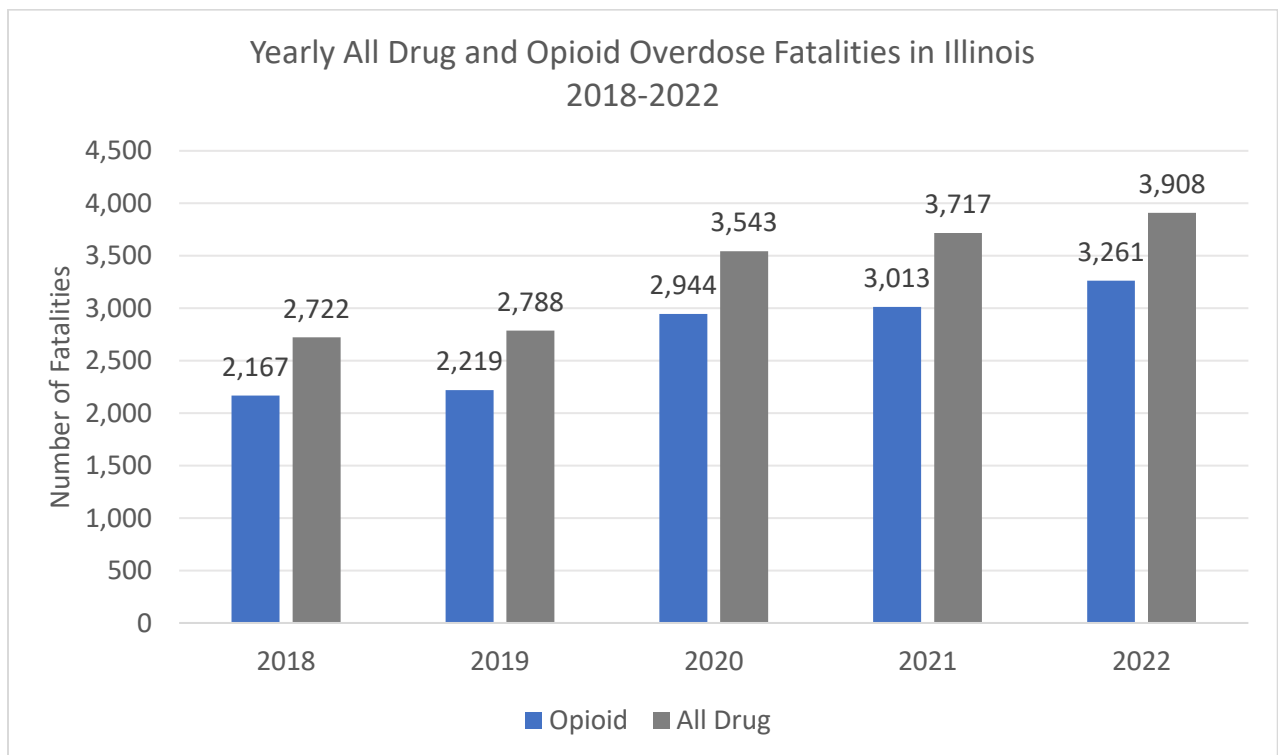


Figure 1. The number of all drug and opioid overdose deaths in Illinois per year from 2018-2022.

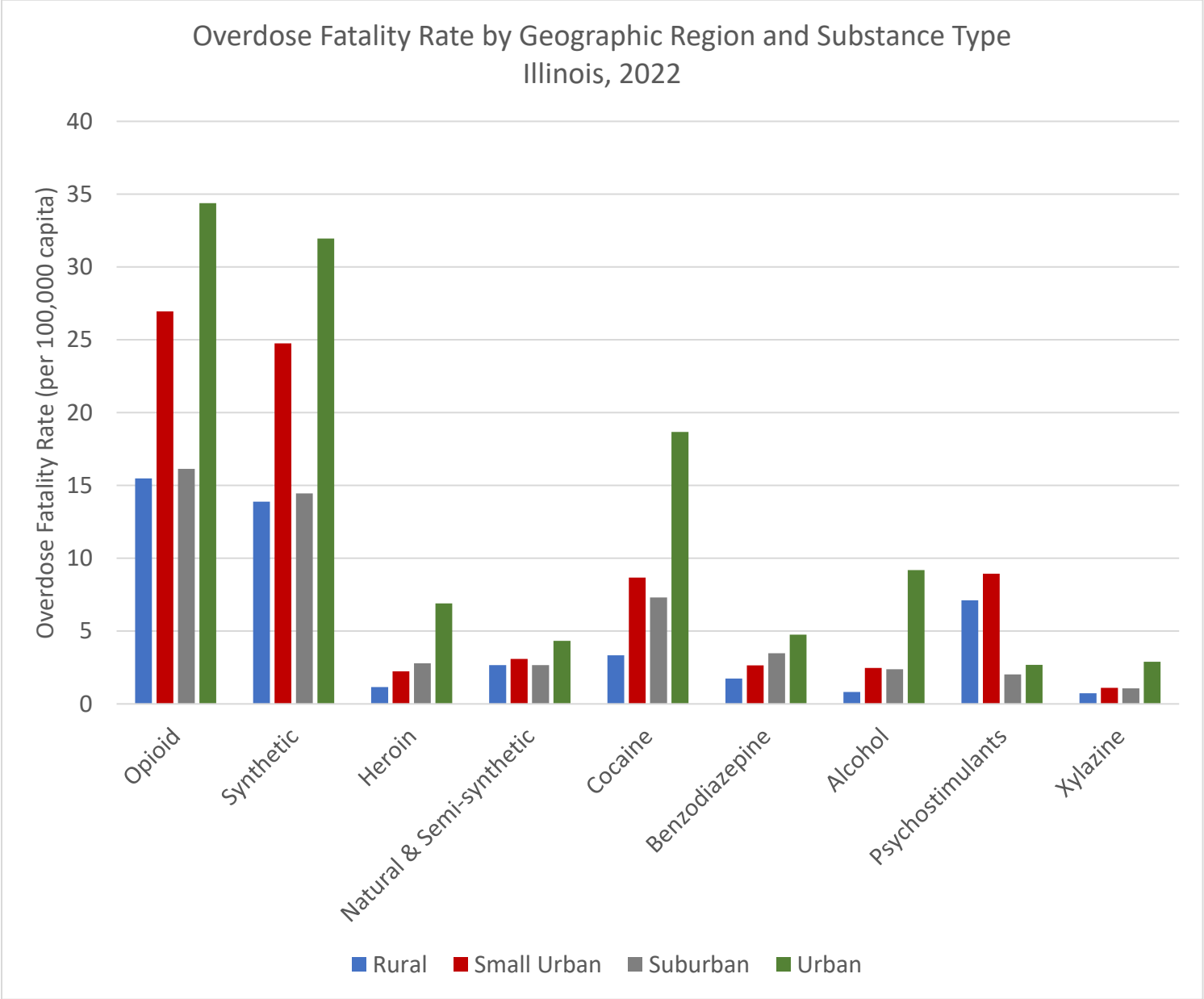


Figure 2. The overdose fatality rates (per 100,000 capita) by geographic region and substance type in Illinois in 2022.

FATAL OPIOID OVERDOSES

In 2022, there were 3,261 fatalities due to opioid overdose in Illinois. This represents an 8.2% increase from 2021 (Fig. 3). Monthly trends, although variable, have not shown the same peak that occurred in May 2020 (Fig. 4). Instead, the monthly totals were generally higher in 2021, with the median number of fatalities in 2020 totaling 241 and the median number of fatalities in 2021 at 257. The 12-month rolling average has remained steady since autumn 2020.

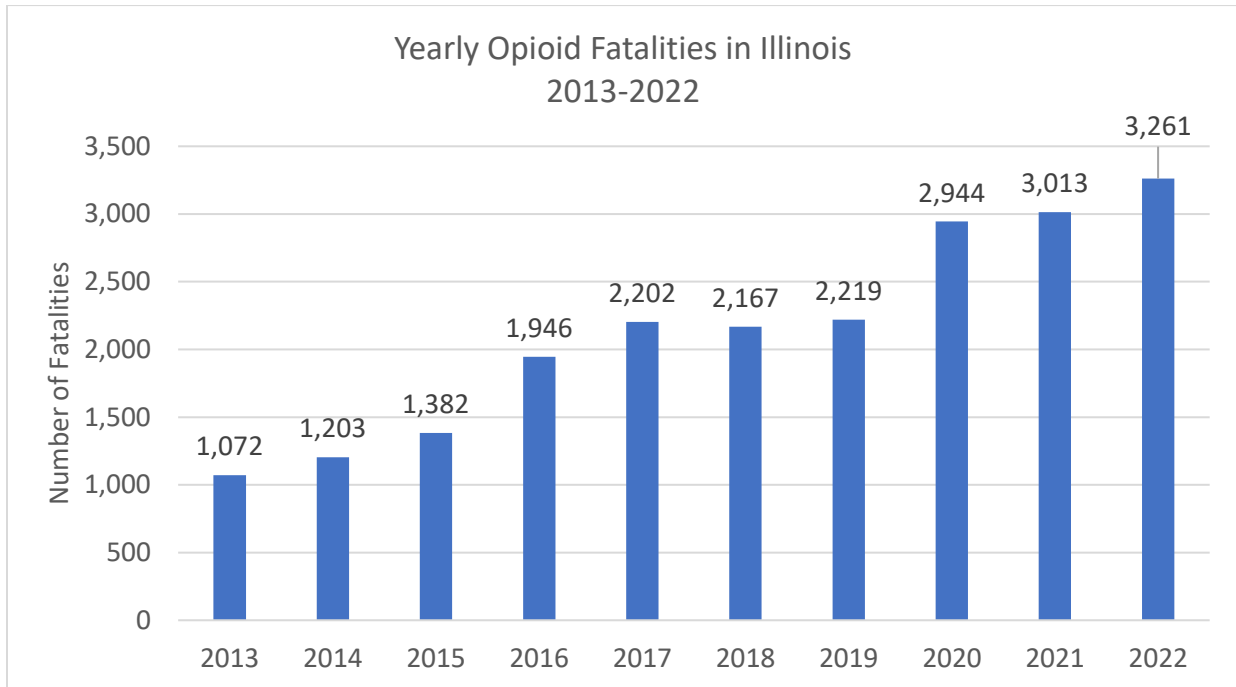


Figure 3. Yearly opioid fatalities in Illinois from 2013-2022 as reported by the Illinois Vital Records System, IDPH.

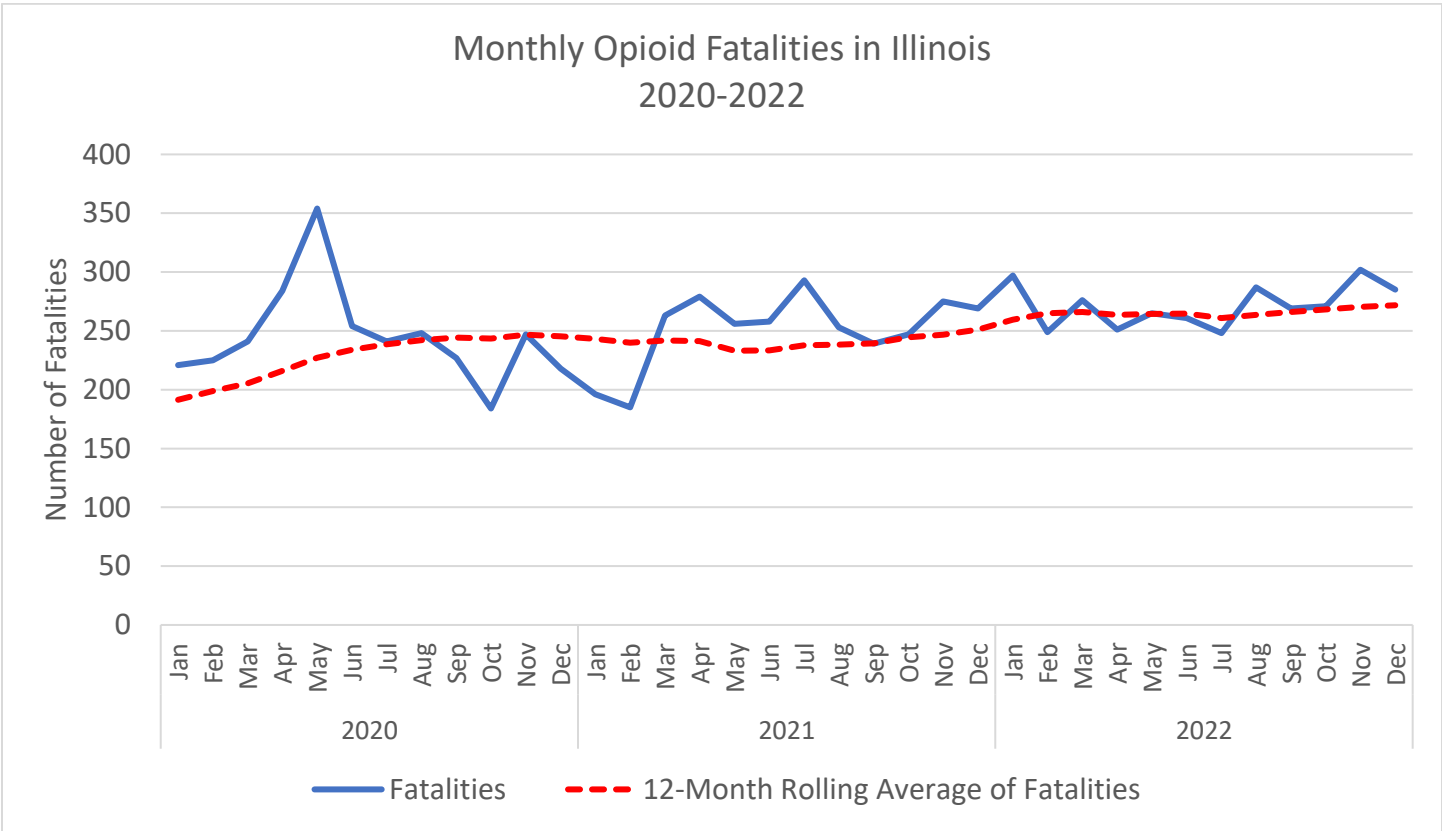


Figure 4. Monthly and 12-month rolling averages of opioid fatalities in Illinois from 2020-2022 as reported by the Illinois Vital Records System, IDPH.

Demographics of opioid fatalities are listed in Table 2. The highest number of opioid fatalities in 2022 occurred in non-Hispanic White individuals (1,587), while the highest age-adjusted fatality rate was among non-Hispanic Black individuals (73.9 per 100,000). There is marked disparity between the fatality rates with non-Hispanic Black individuals 3.5 times more likely to die from an opioid overdose than a non-Hispanic White individual.

The highest number of opioid fatalities occurred in the 55-64-year age group (728), followed closely by the 35-44-year age group (710). Similarly, the highest age-adjusted fatality rate occurred in the 55-64-year age group (44.1 per 100,000), followed by the 35-44-year and 45-54-year age groups (42.3 per 100,000). Finally, the highest number and rate of opioid fatalities occurred in males (2,357; 37.6 per 100,000), which accounted for 74% of the fatalities.

Table 2. Statewide opioid fatality rate by race/ethnicity, age group, and sex for 2022 as reported by the Illinois Vital Records System, IDPH

	Total Number	Fatality Rate (per 100,000 of each population)
Statewide*	3,261	26
Race/Ethnicity*		
Non-Hispanic White	1,587	20.8
Non-Hispanic Black	1,271	73.9
Hispanic/Latinx	356	15.9
Non-Hispanic Other	47	4.4
Age Groups		
< 25	191	4.8
25 - 34	603	35.2
35 - 44	710	42.3
45 - 54	669	42.3
55 - 64	728	44.1
65 +	360	17.1
Sex		
Female	904	14.1
Male	2,357	37.6

*Statewide and race/ethnicity fatality rates are age-adjusted.

The rise in the number of opioid fatalities in the past decade nationwide is attributed to the influx of synthetic opioids (fentanyl and its analogs) into the drug supply and to an increase in polysubstance use. In 2022, toxicology testing found 2,994 (92%) of the opioid fatalities involved a synthetic opioid. Further, 2,111 (65%) of the opioid fatalities involved at least one additional substance (Table 3).

Table 3. Substance involvement in opioid-related fatalities for 2022 as reported by the Illinois Vital Records System, IDPH

Total Opioid-Involved Fatalities	3,261
Opioid Only	1,150
Opioid + Another Substance	2,111
<i>Cocaine</i>	740
<i>Multiple substances</i>	697
<i>Psychostimulant</i>	257
<i>Benzodiazepine</i>	213
<i>Alcohol</i>	204

Opioid use and opioid fatalities are spread across the state. High opioid overdose rates occur in both urban, small urban, and rural counties, with 17 counties having a rate above the statewide opioid fatality rate of 26 deaths per 100,000 capita. Figure 5 and Table 4 depict the provisional county-level opioid overdose fatality rate per 100,000 capita.

Illinois Opioid Overdose Fatality Rates by County 2022

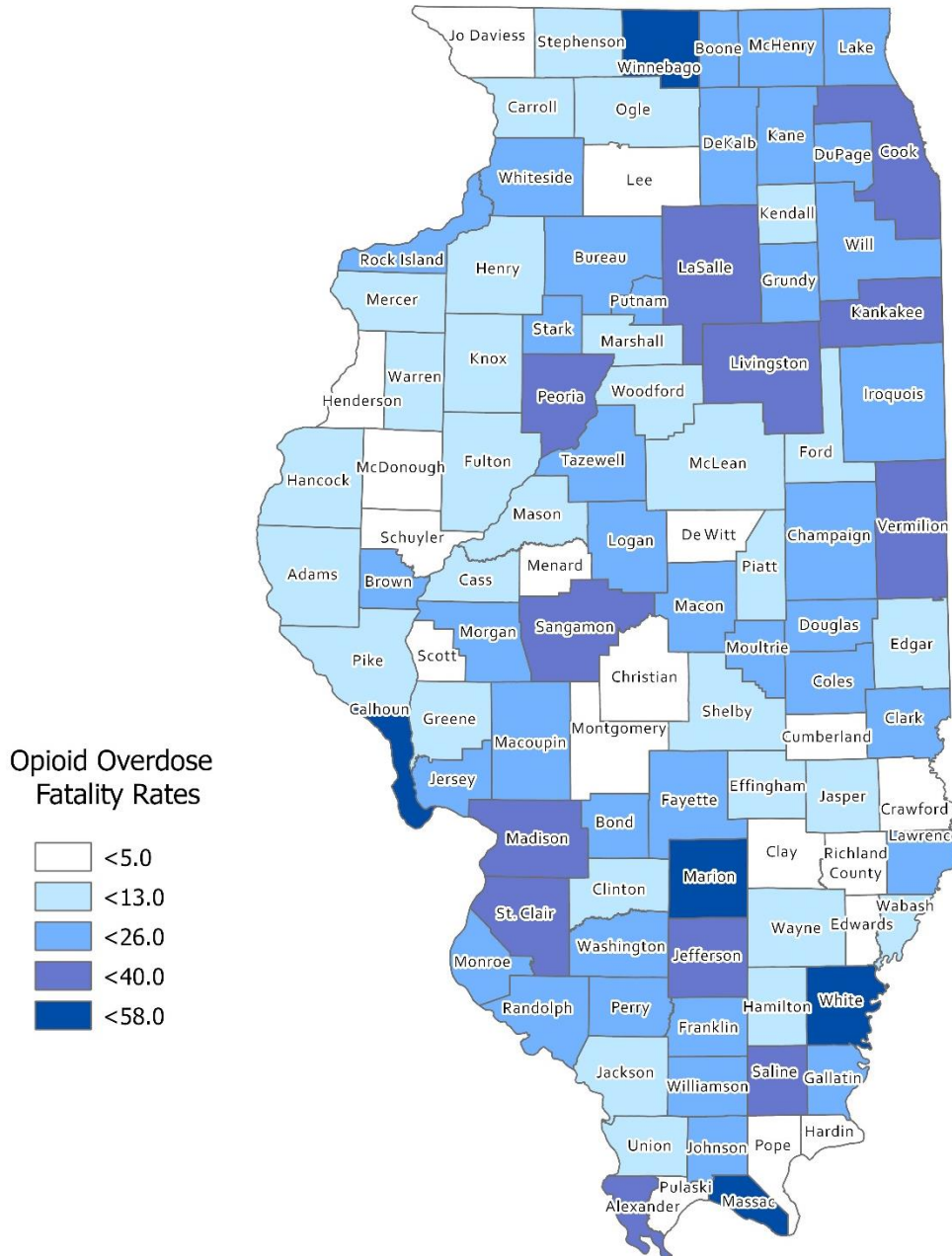


Figure 5. 2022 Illinois opioid fatality rate per 100,000 capita by county as reported by the Illinois Vital Records System, IDPH. County-level fatality rates are calculated by the number of county residents who died due to opioid overdose per year divided by the population of the county and multiplied by 100,000. Counties with smaller populations could have higher rates than counties with larger populations, even though there are fewer opioid fatalities.

Table 4. 2022 number of opioid fatalities and opioid fatality rate per 100,000 capita by county.

County	Number of Opioid Fatalities	Opioid Fatality Rate per 100,000 Capita
Adams	6	9.2
Alexander	2	39.8
Bond	4	24.1
Boone	9	16.9
Brown	1	15.6
Bureau	7	21.3
Calhoun	2	45.8
Carroll	1	6.4
Cass	1	7.8
Champaign	40	19.4
Christian	1	3.0
Clark	2	13.1
Clay	0	0.0
Clinton	3	8.2
Coles	7	15.0
Cook	1779	34.4
Crawford	0	0.0
Cumberland	0	0.0
De Witt	0	0.0
DeKalb	19	18.9
Douglas	4	20.3
DuPage	132	14.3
Edgar	2	12.1
Edwards	0	0.0
Effingham	3	8.7
Fayette	4	18.7
Ford	1	7.4
Franklin	6	16.0
Fulton	2	6.0
Gallatin	1	20.4
Greene	1	8.4
Grundy	11	20.8
Hamilton	1	12.6
Hancock	2	11.5
Hardin	0	0.0
Henderson	0	0.0
Henry	6	12.3
Iroquois	5	18.6

County	Number of Opioid Fatalities	Opioid Fatality Rate per 100,000 Capita
Jackson	4	7.6
Jasper	1	10.9
Jefferson	12	32.5
Jersey	5	23.4
Jo Daviess	1	4.6
Johnson	2	14.9
Kane	75	14.5
Kankakee	39	36.6
Kendall	13	9.6
Knox	6	12.2
La Salle	30	27.5
Lake	111	15.6
Lawrence	2	13.2
Lee	1	2.9
Livingston	10	28.0
Logan	4	14.3
Macon	18	17.6
Macoupin	9	20.3
Madison	98	37.1
Marion	19	50.8
Marshall	1	8.6
Mason	1	7.8
Massac	8	57.3
McDonough	0	0.0
McHenry	44	14.1
McLean	17	9.9
Menard	0	0.0
Mercer	1	6.4
Monroe	8	22.9
Montgomery	1	3.6
Morgan	5	15.3
Moultrie	3	20.7
Ogle	5	9.7
Peoria	54	30.1
Perry	4	19.1
Piatt	2	11.9
Pike	1	6.8
Pope	0	0.0

County	Number of Opioid Fatalities	Opioid Fatality Rate per 100,000 Capita
Pulaski	0	0.0
Putnam	1	18.0
Randolph	5	16.6
Richland	0	0.0
Rock Island	25	17.5
Saline	7	30.0
Sangamon	54	27.7
Schuyler	0	0.0
Scott	0	0.0
Shelby	2	9.6
St. Clair	78	30.6
Stark	1	18.9
Stephenson	4	9.1
Tazewell	22	16.9
Union	2	11.8
Vermilion	22	30.1
Wabash	1	8.9
Warren	1	6.0
Washington	2	14.6
Wayne	2	12.5
White	6	43.5
Whiteside	11	19.9
Will	148	21.2
Williamson	10	15.0
Winnebago	135	47.7
Woodford	2	5.2

Special Populations

With fatalities due to opioid overdoses increasing, there are certain populations disproportionately affected or show concerning trends. One such group is the older non-Hispanic Black population which has the highest rates of opioid overdose fatalities across all age groups with the peak in the 55–64-year age group (Table 5). Non-Hispanic Black individuals of any age are 3.5 times more likely to die from an opioid overdose than non-Hispanic White individuals of any age (Table 2). However, when separated by age, the disparities are exacerbated in certain age groups. The fatality rate of non-Hispanic Black individuals aged 45-54 and 65+ is 4.1 and 6.2 times higher than non-Hispanic White individuals of the same age, respectively. Moreover, the fatality rate of non-Hispanic Black individuals 55-64 years of age is 10.2 times higher than non-Hispanic White individuals of the same age.

Table 5. Age-Specific Opioid Fatality Rate (per 100,000 capita) by Race/Ethnicity in Illinois, 2022

Race/Ethnicity	Age Group					
	< 25	25 - 34	35 - 44	45 - 54	55 - 64	65+
Non-Hispanic Black	8.6	49.3	76.6	131.3	207.0	69.2
Non-Hispanic White	4.7	36.8	44.9	31.8	20.2	11.1
Hispanic/Latinx	3.6	30.9	26.4	26.7	20.3	7.4
Non-Hispanic Other	2.7	9.7	8.7	4.1	2.2	1.7

Another Illinois population with a concerning trend is adolescents, specifically ages 13-17 years. The number of fatalities due to synthetic opioids increased from three in 2020 to 14 deaths in 2021. The number remained elevated in 2022 with 11 deaths from synthetic opioids (Fig. 6).

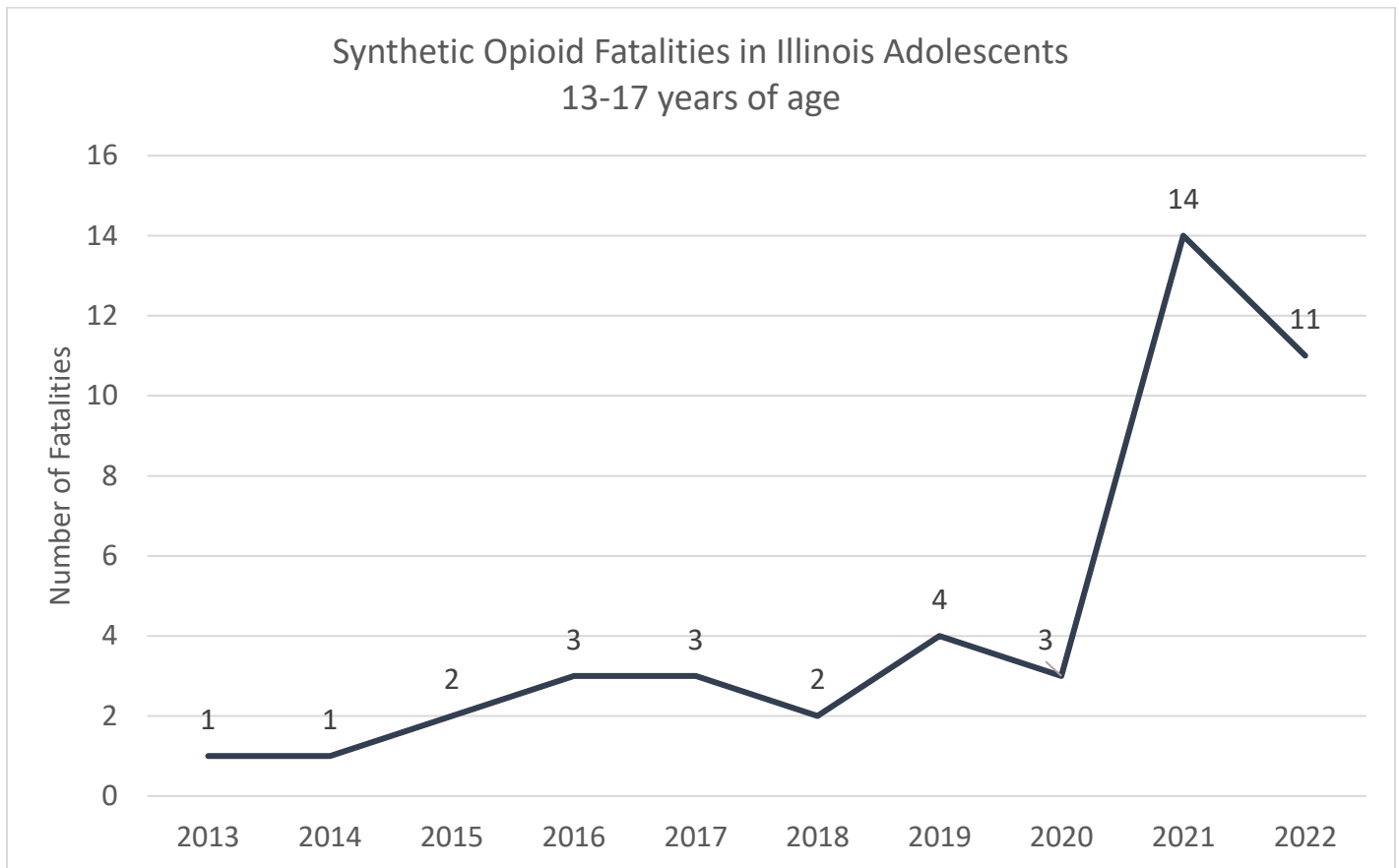


Figure 6. Synthetic opioid overdose fatalities in Illinois adolescents 13-17 years of age.

Non-Fatal Opioid Overdoses

Monthly opioid overdose-related hospitalization, emergency department (ED) visit and emergency medical services (EMS) encounter trends are showing seasonality with the number of overdoses rising through the spring into summer and decreasing through autumn into winter (Figs. 7 and 8). The peak number of opioid overdose-related ED visits and EMS encounters occurred in July and August of 2022 and then decreased through the winter. However, early spring of 2023 showed a sharp increase from February through May, bringing the number of opioid overdose-related incidents above the 2022 peaks. Opioid overdose-related hospitalizations are following a similar trend with an increase from January through March 2023 (Fig. 8).

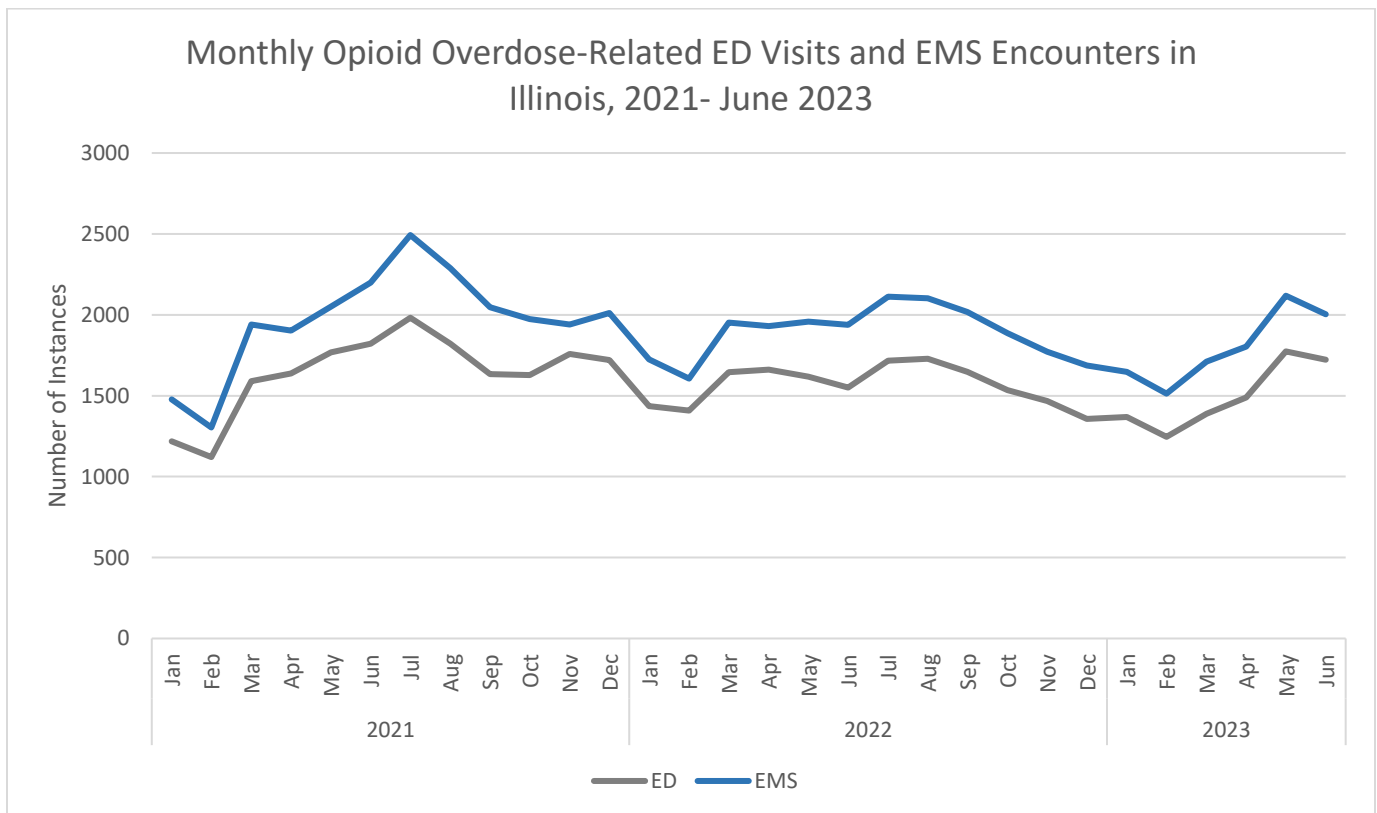


Figure 7. Monthly opioid overdose-related ED visits and EMS encounters in Illinois, 2021-June 2023. ED visits as reported by IDPH Syndromic Surveillance System; EMS encounters as reported by IDPH Prehospital Emergency Medical Services. The definition for EMS encounters was updated in May 2023 based upon updated recommendations from the Council of State and Territorial Epidemiologists (CSTE), resulting in more cases considered “suspected opioid overdoses.”

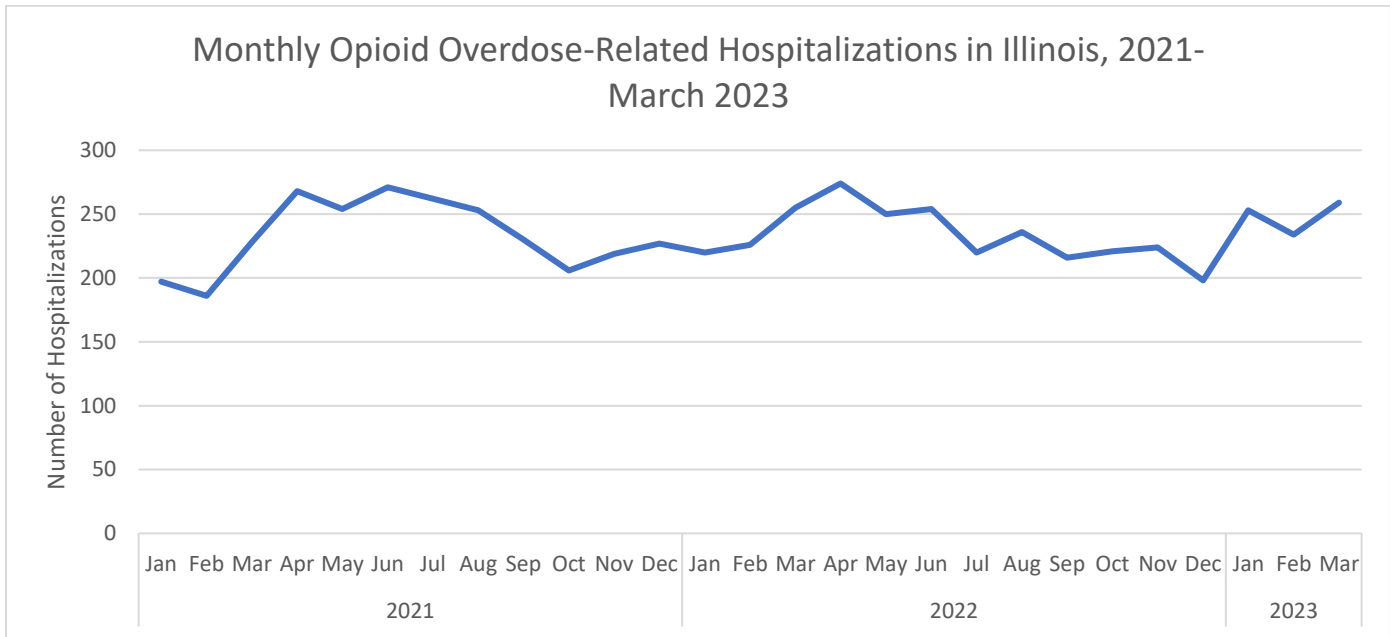


Figure 8. Monthly opioid overdose-related hospitalizations in Illinois in 2021-March 2023 as reported by IDPH Hospital Discharge Dataset.

Xylazine

Xylazine is a non-opioid veterinary tranquilizer found increasingly in illicit heroin, fentanyl, or benzodiazepines (benzos). It is known as “tranq” or “tranq dope.” Xylazine causes a long, deep sedation and is being added to illicit heroin, fentanyl, or benzos to extend the sedative effect. Adding xylazine also greatly increases the chance of overdose.

Xylazine was detected in 45 Illinois overdose deaths in 2020 and has been detected in more than 228 overdose deaths in 2022. The dramatic rise in two years suggests it is quickly becoming a common drug in Illinois.

Xylazine is not approved for human use and has been associated with severe wounds. The soft tissue wounds occur across the body, regardless of the use (injecting, smoking, swallowing, or snorting). These wounds can become severe quickly and require medical attention. Xylazine is also associated with other serious injuries caused by the fast, deep sedation, such as falling or being in a position that restricts blood flow or breathing for an extended time.

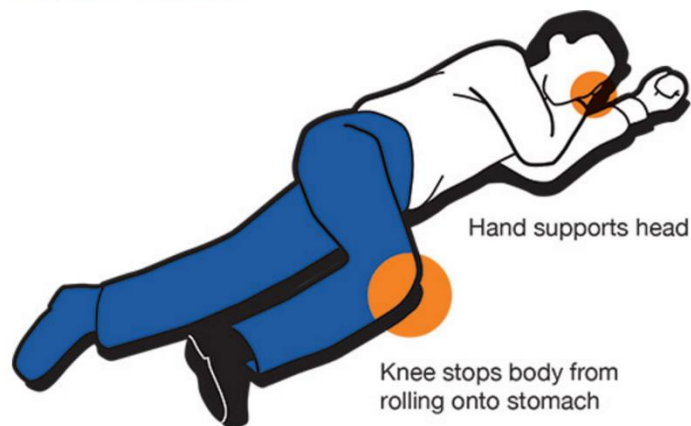
Regular users of xylazine can experience withdrawal symptoms, including anxiety, irritability, restlessness, and a feeling of unease. However, there are treatment options to help manage the withdrawal symptoms in a medical setting, which can be accessed using the Illinois Helpline listed below.

There is currently no recommended reversal agent or “antidote” for xylazine. Since xylazine is not an opioid, naloxone, commonly called by a brand name “Narcan,” will not reverse the effects of the drug;

however, xylazine is commonly mixed with fentanyl or heroin so the use of naloxone is still recommended when an overdose is suspected. The sedative effects of xylazine are strong, and the person may not become fully alert with naloxone. If the person is breathing, they do not need more naloxone. Make sure they are in a recovery position² (Fig. 9) and watch them to ensure their safety.

The Recovery Position

Keep the Airway Clear



Stay with person. If you must leave them alone at any point, or if they are unconscious, put them in this position to keep airway clear and prevent choking.

Illicit substances are not regulated and pose a significant risk of harm. If taking illicit substances, there are precautions that can be utilized. Consider testing the substance for fentanyl using fentanyl test strips. Carry naloxone and do not use substances alone. Also, be aware that more than one dose of naloxone may be required to reverse an overdose when a synthetic opioid is ingested. Naloxone can be obtained at your local health department or Drug Overdose Prevention Program. To find the closest provider near you, visit the Illinois Helpline online at <https://helplineil.org>, call 833-234-6343, or text "HELP" to 833234.

For more information on opioids, visit <https://dph.illinois.gov/topics-services/opioids.html>. If you or someone you know has an opioid use disorder, there is help, including treatment, available immediately, 24 hours a day, 7 days a week. With the Medication Assisted Recovery Now (MAR NOW) service, a care manager can help callers determine the best treatment options and connect them to a provider for an immediate telephone appointment and medication prescription. Care managers can also facilitate a same- or next-day, in-person appointment. Callers are connected to ongoing treatment with a community provider that best meets their needs. Access the MAR NOW service at the Illinois Helpline numbers above.

References

¹Ahmad FB, Cisewski JA, Rossen LM, Sutton P. Provisional drug overdose death counts. National Center for Health Statistics. 2023.

²Image credit: <https://preventoverdoseri.org/> (<https://preventoverdoseri.org/wp-content/uploads/2022/11/The-Recovery-Position-First-Aid.png>)