

Overdose and Suicide Fatality Reporting, 2020-2021









Eric J. Holcomb Governor Kristina M. Box, MD, FACOG State Health Commissioner

Nov. 28, 2022

Dear Public Health Partner:

Reducing the burden of overdose and suicide is a priority for the State of Indiana and requires a collaborative approach among multiple partners, including state agencies, first responders, health care, and local organizations, all with a shared mission of connecting Hoosiers to prevention and treatment services.

Sadly, Indiana saw increases in both overdose deaths and suicides between 2020 and 2021. The state is addressing these issues on multiple fronts, led by the Office of Drug Prevention, Treatment and Enforcement and the Next Level Recovery initiative, which recognizes that people with substance use disorder have a disease and recovery involves support, respect, and growth in the community and the individual.

Many efforts are already underway.

Indiana is able to detect increased overdose activity and identify hot spots through data collection and analysis, which are then used to inform local partners for response and intervention. Similarly, data analysis of unintentional drug overdoses has provided insight into the circumstances surrounding overdose deaths, which also informs local prevention efforts. Other efforts include:

- Linking data from the Prescription Drug Monitoring Program with other data systems to better understand the relationships between medication-assisted therapies and fatal and nonfatal overdoses
- Collaborating with the Marion County coroner's office and its syringe service program to examine drug paraphernalia to determine the prevalence of substances and inform community partners

In addition, the Indiana Department of Health and Family and Social Services Administration's Division of Mental Health and Addiction continue to distribute naloxone and provide training and education to enable first responders, local health departments and other non-traditional partners to effectively administer this life-saving medication. Indiana has implemented the Indiana Communities Advancing Recovery Efforts (IN CAREs) ECHO in 14 counties, connecting state and local experts with community-based teams focused on reducing overdose deaths. In addition, the state has:

To promote, protect, and improve the health and safety of all Hoosiers.



- Expanded harm reduction training for law enforcement, including appropriate practices and precautions when dealing with fentanyl or other drugs
- Funded comprehensive toxicology testing for all Indiana coroners

This work complements evidence-based efforts to prevent suicide which includes: development of programs to help local community members identify the warning signs of a suicide crisis, providing intervention and developing a safety plan for the individual, and funding for attachment-based family therapy, Crisis Intervention Teams, and peer-support programming, which includes school-based programming to prevent suicide, substance use and bullying.

Moving forward, we must continue to monitor and analyze data trends to inform state and local programming and prevention efforts. It is crucial to build on existing partnerships and collaboration to raise awareness, reduce stigma, and support those impacted by substance use disorder and at risk for suicide. Continued efforts to address the challenges associated with overdose and suicide will require all of us working together.

Sincerely,

Kristina M. Box, M.D., FACOG State Health Commissioner

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Douglas W. Huntsinger

Executive Director for Drug Treatment, Prevention, and Enforcement Chairman, Indiana Commission to Combat Substance Use Disorder

Executive Summary



Overdose and suicide continue to be leading causes of death both nationally and in Indiana. The purpose of this report is to describe the burden of overdose and suicide in Indiana from 2020-2021, with consideration for (1) county, (2) incident month, (3) sex, race and age, (4) weapon type, and (5) veteran status, to inform prevention efforts.

Nationally, more than 90,000 people died by an overdose in 2020 and more than 105,000 people died in 2021 (National Center for Health Statistics, 2022). In Indiana, more than 2,000 individuals in 2020 and more than 2,500 individuals in 2021 died from an overdose. Similar to the nation, synthetic opioids (other than methadone), namely fentanyl and its analogs, were the most common substance contributing to overdose deaths in Indiana.

Individuals between the ages of 35-54, biological males, and Black individuals had the highest rates of overdose in Indiana in 2020 and 2021. Biological males in the United States also had a higher overdose mortality rate compared to females, and the age group with the highest rate of overdose deaths was 35-44, mirroring Indiana's findings. The CDC reports rates of fatal overdose increased among all racial and ethnic groups in 2020; American Indian or Alaska Native individuals had the highest rate, followed by non-Hispanic Black individuals (Hedegaard, Miniño, Spencer, Warner, 2021). The difference in race between the United States and Indiana is likely explained by Indiana's population demographics.

The most common lethal means used by individuals who died by suicide in Indiana during 2020 and 2021 were firearms, accounting for 60% of all suicide deaths compared to 52.8% of suicide deaths in the nation (National Center for Health Statistics, 2022). Nearly 46,000 people in the United States died by suicide in 2020. Indiana lost 1,015 people due to suicide in 2020 and 1,119 people in 2021.

In contrast to overdose fatalities in Indiana, suicide rates were higher among younger individuals and white individuals in both 2020 and 2021. Furthermore, the age group in Indiana with the highest rate of suicide, 18-34, differs from the age groups with the highest rates in the U.S. which is 85 and older (Ehlman, Yard, Stone, Jones, Mack, 2022). American Indians or Alaska Natives were also the racial group with the highest rate of suicide deaths in the country, followed by White, non-Hispanic individuals, which is the race highest for Indiana's suicide rate (U.S Dept of HHS, OMH, 2022). Indiana suicide and overdose data is alike to the United States in that rates were highest among males in 2020 and 2021.

Data



Death certificate data are used for surveillance of deaths to better inform prevention strategies. The underlying cause of death is the disease or injury that initiated the events leading to death, while the contributing causes of death are diseases or injuries that contributed to the fatal outcome. The mortality dataset is collected by the IDOH Division of Vital Records and provided by the IDOH Office of Data Analytics. The IDOH Division of Trauma and Injury Prevention analyzes the dataset to identify suicide and overdose deaths among Indiana residents.

The identified suicide and overdose deaths are based on ICD-10 codes derived from the death certificate information provided by the county's coroner or medical examiner.

Rates based on counts fewer than 20 are considered unstable/unreliable and should be interpreted with caution.

Table 1. Definitions for Vital Statistics Mortality Data

Definition	Underlying Cause of Death ICD-10 Codes
Suicide	X60-X84, Y87.0
Overdose/Poisoning	X40-X44, Y10-Y14

FATALITIES BY COUNTY OF RESIDENCE

Data are reported from the county of residence of the decedent similar to the online Indiana Overdose Dashboard that can be viewed here: https://www.in.gov/health/overdose-prevention/data/indiana/. This may or may not be where the death occurred. All rates are per 100,000 persons. All rates that are unstable are denoted with a "U".

Table 2. Number and Rate of Overdose Deaths by County

County Name	Number of Overdose Deaths in 2020**	Crude Rate of Overdose Deaths in 2020	Number of Overdose Deaths in 2021***	Crude Rate of Overdose Deaths in 2021
Adams	7	U	3	U
Allen	113	29.57	138	35.51
Bartholomew	25	29.60	27	32.74
Benton	1	U	2	U
Blackford	6	U	3	U
Boone	20	28.84	23	31.48

Brown	5	U	9	U
Carroll	5	U	5	U
Cass	10	U	5	U
Clark	55	46.12	59	48.07
Clay	0	0.00	4	U
Clinton	11	U	11	U
Crawford	6	U	5	U
Daviess	0	0.00	4	U
Dearborn	15	U	6	U
Decatur	10	U	9	U
DeKalb	13	U	4	U
Delaware	59	52.00	84	75.09
Dubois	5	U	6	U
Elkhart	25	12.13	37	17.88
Fayette	21	91.74	19	U
Floyd	22	27.87	35	43.50
Fountain	4	U	3	U
Franklin	8	U	8	U
Fulton	6	U	8	U
Gibson	2	U	1	U
Grant	29	44.46	50	75.46
Greene	4	U	9	U
Hamilton	40	11.62	41	11.50
Hancock	22	27.65	24	29.34
Harrison	11	U	14	U
Hendricks	49	28.28	46	25.65
Henry	8	U	16	U
Howard	38	45.93	40	47.80
Huntington	11	U	19	U
Jackson	20	45.23	20	43.42
Jasper -	6	U	11	U
Jay	5	U	12	U
Jefferson	5	U	12	U
Jennings	8	U	10	U
Johnson	55	34.25	58	35.30
Knox	3	U	3	U

	U 3.91 3.60 U 9.76 0.95
LaPorte 45 41.03 49 4	3.60 U 9.76 0.95
	U 9.76 0.95
Lawrence 9 U 18	9 <mark>.76</mark> 0.95
	0.95
Madison 51 39.33 52 3	
Marshall U 13	U
Martin 2 U 1	U
Miami 6 U 13	U
Monroe 41 27.66 47 3	3.60
Montgomery 9 U 16	U
	1.85
Newton 2 U 7	U
Noble 5 U 12	U
	0.00
Orange 3 U 4	U
Owen 6 U 5	U
Parke 2 U 5	U
Perry 2 U 2	U
Pike 2 U 1	U
Porter 38 22.22 47 2	5.97
Posey 2 U 3	U
Pulaski 4 U 6	U
Putnam 8 U 11	U
Randolph 10 U 19	U
Ripley 8 U 5	U
Rush 2 U 5	U
St. Joseph 86 31.68 89	2.70
Scott 24 100.89 14	U
Shelby 16 U 14	U
Spencer 2 U 2	U
Starke 11 U 14	U
Steuben 2 U 4	U
Sullivan 1 U 1	U

Switzerland	1	U	3	U
Tippecanoe	32	16.32	38	20.31
Tipton	1	U	1	U
Union	2	U	2	U
Vanderburgh	45	24.66	76	42.23
Vermillion	3	U	3	U
Vigo	16	U	28	26.42
Wabash	8	U	8	U
Warren	1	U	0	0.00
Warrick	16	U	15	U
Washington	11	U	14	U
Wayne	42	63.85	54	81.26
Wells	4	U	6	U
White	9	U	5	U
Whitley	6	U	7	U
TOTAL	2188	32.39	2694	39.58

^{**} missing 79 decedents with county of residence
*** missing 121 decedents with county of residence

Figures 1 and 2. Rate of Overdose Deaths by County

Figure 1. 2020

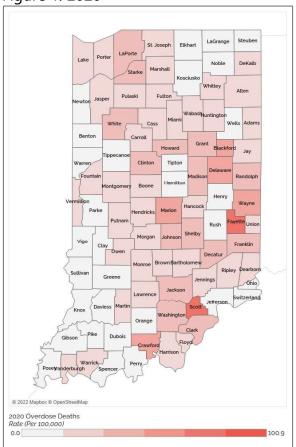


Figure 2. 2021

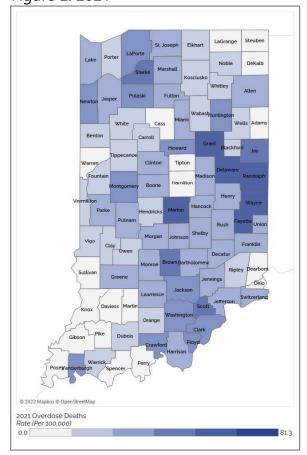


Table 3. Number and Rate of Suicide Deaths by County

County Name	Number of Suicide Deaths in 2020**	Crude Rate of Suicide Deaths in 2020	Number of Suicide Deaths in 2021***	Crude Rate of Suicide Deaths in 2021
Adams	2	U	4	U
Allen	42	10.99	72	18.53
Bartholomew	12	U	13	U
Benton	5	U	1	U
Blackford	2	U	2	U
Boone	7	U	10	U
Brown	3	U	4	U
Carroll	1	U	1	U
Cass	5	U	6	U

Clark	11	U	15	U
Clay	4	U	7	U
Clinton	4	U	6	U
Crawford	2	U	1	U
Daviess	5	U	3	U
Dearborn	8	U	8	U
Decatur	2	U	4	U
DeKalb	4	U	9	U
Delaware	17	U	14	U
Dubois	5	U	6	U
Elkhart	16	U	21	10.15
Fayette	2	U	9	U
Floyd	13	16.47	8	U
Fountain	0	0.00	1	U
Franklin	6	U	4	U
Fulton	3	U	4	U
Gibson	4	U	7	U
Grant	9	U	16	U
Greene	5	U	5	U
Hamilton	31	9.01	43	12.06
Hancock	11	U	11	U
Harrison	8	U	8	U
Hendricks	23	13.28	21	11.71
Henry	13	U	7	U
Howard	17	U	13	U
Huntington	3	U	7	U
Jackson	6	U	4	U
Jasper	7	U	4	U
Jay	2	U	7	U
Jefferson	3	U	6	U
Jennings	12	U	8	U
Johnson	27	16.81	28	17.04
Knox	7	U	8	U
Kosciusko	11	U	12	U
LaGrange	4	U	7	U
Lake	49	10.05	63	12.64

LaPorte	22	20.06	28	24.91
Lawrence	7	U	11	U
Madison	23	17.74	25	19.12
Marion	140	14.49	137	14.11
Marshall	8	U	7	U
Martin	2	U	3	U
Miami	10	U	5	U
Monroe	16	U	17	U
Montgomery	11	U	5	U
Morgan	13	U	14	U
Newton	1	U	2	U
Noble	7	U	5	U
Ohio	1	U	1	U
Orange	2	U	2	U
Owen	4	U	4	U
Parke	1	U	2	U
Perry	2	U	2	U
Pike	1	U	2	U
Porter	25	14.62	26	14.92
Posey	5	U	4	U
Pulaski	2	U	4	U
Putnam	13	U	9	U
Randolph	5	U	6	U
Ripley	6	U	4	U
Rush	4	U	3	U
St. Joseph	43	15.84	33 7	12.12 U
Scott	0	0.00		
Shelby	8	U	8	U
Spencer	6	U	5	U
Starke Steuben	3 9	U	3	U
Sullivan	4	U	6	U
Switzerland	1	U	1	U
Tippecanoe	23	11.73	32	17.11
Tipton	3	U	7	U
Union	0	0.00	4	U
Vanderburgh	35	19.18	36	20.00
vanuerburgn	33	13.10	50	20.00

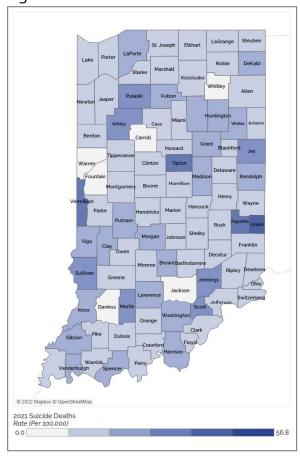
Vermillion	6	U	7	U
Vigo	20	18.76	21	19.81
Wabash	3	U	8	U
Warren	2	U	0	0.00
Warrick	10	U	12	U
Washington	2	U	6	U
Wayne	9	U	11	U
Wells	4	U	7	U
White	6	U	9	U
Whitley	7	U	0	0.00
TOTAL	1015	15.03	1119	16.44

Figures 3 and 4. Rate of Suicide Deaths by County

Figure 3. 2020



Figure 4. 2021



^{**} missing 47 decedents with county of residence
*** missing 46 decedents with county of residence

FATALITIES BY MONTH OF DEATH

Date of death is reported from the death certificate submitted by the county coroners.

Figure 5. Number of Overdose Deaths by Month

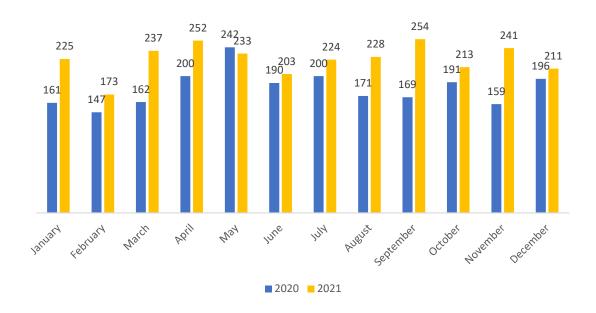
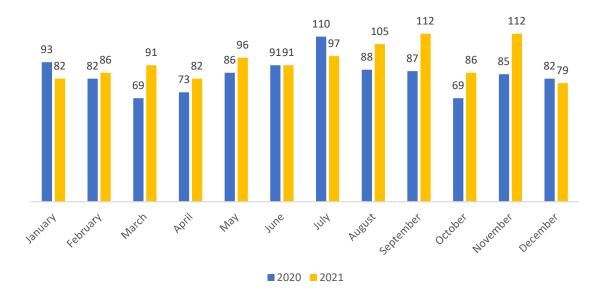


Figure 6. Number of Suicide Deaths by Month



FATALITIES BY DEMOGRAPHICS

Death certificate submitted by the county coroner's denotes age, sex, and race. All rates are per 100,000 persons.

Figures 7 and 8. Number and Rate of Overdose Deaths by Age

Figure 7 Figure 8

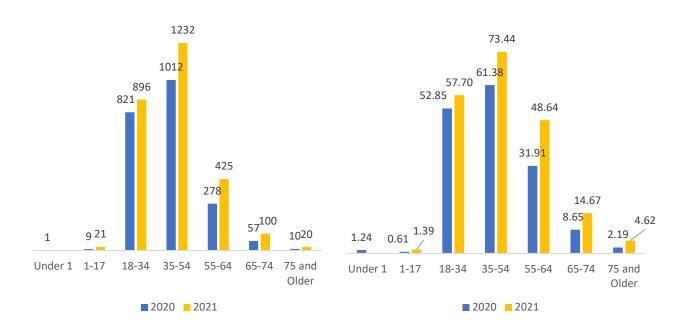
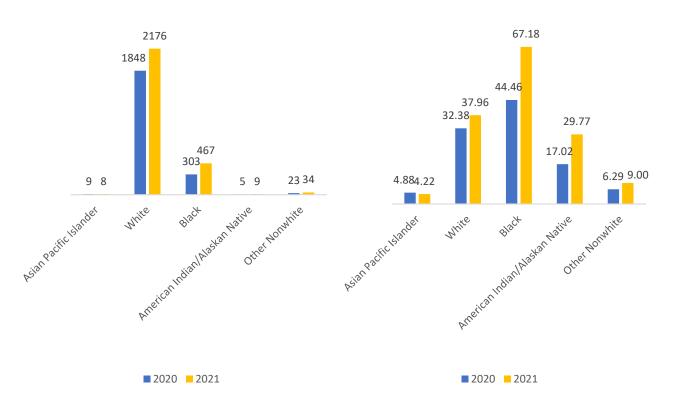


Table 4. Number and Rate of Overdose Deaths by Sex

Overdose Deaths by Sex					
Sex	Number of	Crude Rate of	Number of	Crude Rate of	
	Overdose	Overdose	Overdose	Overdose	
	Deaths in 2020	Deaths in 2020	Deaths in 2021	Deaths in 2021	
Female	671	19.60	881	25.70	
Male	1,517	45.53	1,813	53.68	

Figures 9 and 10. Number and Rate of Overdose Deaths by Race
Figure 9 Figure 10



Figures 11 and 12. Number and Rate of Suicide Deaths by Age
Figure 11 Figure 12

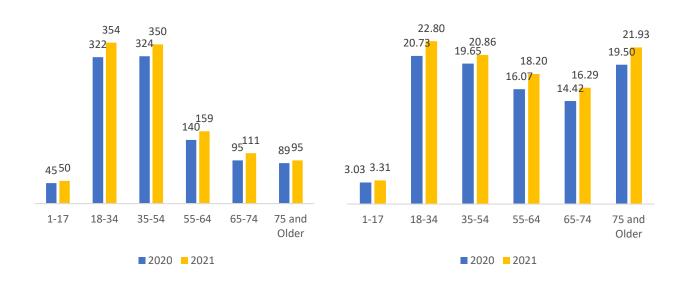
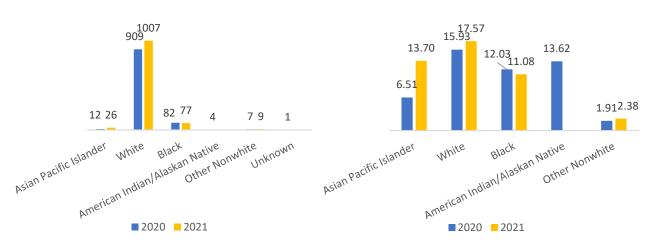


Table 5. Number and Rate of Suicide Deaths by Sex

Suicide Deaths by Sex					
Sex	Number of Suicide Deaths in 2020	Crude Rate of Suicide Deaths in 2020	Number of Suicide Deaths in 2021	Crude Rate of Suicide Deaths in 2021	
Female	192	5.61	205	5.98	
Male	823	24.7	914	27.06	

Figures 13 and 14. Number and Rate of Suicide Deaths by Race





FATALITIES BY METHOD

Data is reported from the Indiana Violent Death Reporting System (INVDRS), which records weapon type for suicide deaths. The State Unintentional Drug Overdose Reporting System (SUDORS) records the class and name of substances found in the victim at the time of death.

Figure 15. Substances Present at Time of Death in Overdose Decedents

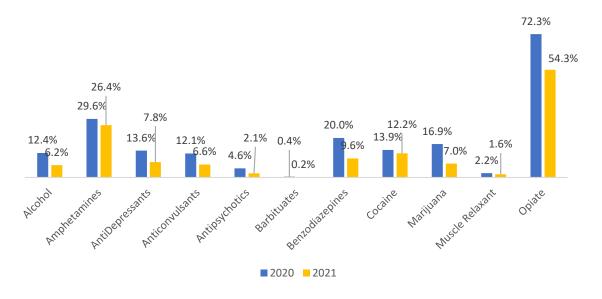


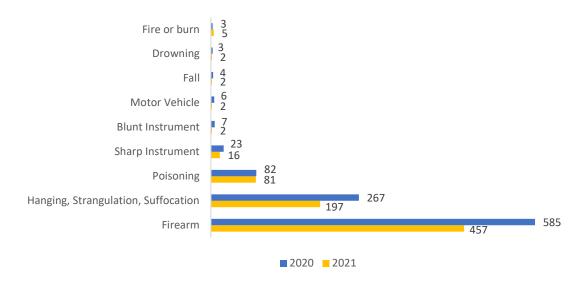
Table 6. Top 5 Opiates Found in Overdose Death Decedents, 2020

Opiate Name	Number of Overdoses
Fentanyl	1022
Norfentanyl	663
4-ANPP/despropionylfentanyl/4-anilino-N	628
Cotinine	324
Methamphetamine	299

Table 7. Top 5 Opiates Found in Overdose Death Victims, 2021

Opiate Name	Number of Overdoses
Fentanyl	1156
Methamphetamine	432
4-ANPP/despropionylfentanyl/4-anilino-N	414
Norfentanyl	362
Cocaine	175

Figure 16. Weapon Type used in Suicide Death



FATALITIES BY VETERAN STATUS

Veteran status is denoted on death certificates. Due to this being self-reported, the actual number of veteran deaths may be undercounted. Future reports will include a reconciliation of veteran status with the Indiana Department of Veterans Affairs.

Table 8. Veteran Status for Overdose Death Decedent

Year	Number of Veteran Overdose Deaths	Percentage of Overdose Decedents that Identify as Veteran
2020	152	6.94%
2021	192	7.13%

Table 9. Veteran Status for Suicide Death Decedent

Year		Percentage of Suicide Decedents that Identify as Veteran
2020	175	17.24%
2021	160	14.30%

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REFERENCES

Ehlman DC, Yard E, Stone DM, Jones CM, Mack KA. Changes in Suicide Rates — United States, 2019 and 2020. MMWR. Morbidity and Mortality Weekly Report, 71. 2022;71:306–312. DOI: http://dx.doi.org/10.15585/mmwr.mm7108a5externalicon.

Hedegaard H, Miniño AM, Spencer MR, Warner M. Drug overdose deaths in the United States, 1999-2020. NCHS Data Brief, no 428. Hyattsville, MD: National Center for Health Statistics. 2021. DOI: https://dx.doi.org/10.15620/cdc:112340.

National Center for Health Statistics. Centers for Disease Control and Prevention. U.S. Overdose Deaths In 2021 Increased Half as Much as in 2020 – But Are Still Up 15%. Hyattsville, MD: National Center for Health Statistics. 2022.

U.S. Department of Health and Human Services Office of Minority Health. American Indian/Alaska Native: Mental and Behavioral Health. 2022.



