

**Mid-Year Analysis of West Virginia SUDORS Data,
January 1, 2022 – June 30, 2022,
With Comparison to Prior Full Years, 2019 - 2021**

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The following tables contains analyses of drug overdose fatalities that occurred in West Virginia from January 1, 2022, to June 30, 2022, as compiled in the State Unintentional Drug Overdose Reporting System (SUDORS). Overdose fatalities from 2019 – 2020 are also included for comparison. Descriptions of data sources, methods, and further analyses are included in a comprehensive report from January 2023 available from the West Virginia Office of Maternal, Child and Family Health (OMCFH).

Key Findings:

- There were 662 overdose deaths from January 1 to June 30, 2022, which, annualized, represents an 8.9% decline in overdose deaths from the full year 2021.
- The age of overdose deaths increased in the first half of 2022, with smaller percentages of overdose deaths in the under 25 and 25-34 age categories and larger percentages in the 45-54 and 55+ age categories compared to prior years.
- Data from the first half of 2022 had larger percentages of unknown values for race, marital status, and education than in prior full years.
- Marijuana reached the top 5 substance class contributing to death in the first half of 2022, replacing antidepressants.

Table 1. Demographic characteristics of decedents by year

	2019		2020		2021		January 1 – June 30, 2022	
	n	(%)	n	(%)	n	(%)	n	(%)
Total decedents	847		1,301		1,453		662	
State of Residence								
West Virginia	805	(95.0)	1,222	(93.9)	1,357	(93.4)	619	(93.5)
Other State or Unknown	42	(5.0)	79	(6.1)	96	(6.6)	43	(6.5)
Sex								
Male	572	(67.5)	931	(71.6)	1,032	(71.0)	474	(71.6)
Female	275	(32.5)	370	(28.4)	421	(29.0)	188	(28.4)
Age¹								
Under 25	52	(6.1)	49	(3.8)	75	(5.2)	19	(2.9)
25-34	197	(23.3)	321	(24.7)	309	(21.3)	136	(20.5)
35-44	243	(28.7)	394	(30.3)	468	(32.2)	210	(31.7)
45-54	199	(23.5)	308	(23.7)	327	(22.5)	169	(25.5)
55+	156	(18.4)	229	(17.6)	272	(18.7)	127	(19.2)
Race								
White, non-Hispanic	767	(90.6)	1,190	(91.5)	1,312	(90.3)	587	(88.7)
Black, non-Hispanic	50	(5.9)	76	(5.8)	96	(6.6)	34	(5.1)
Other or multi-race	11	(1.3)	21	(1.6)	16	(1.1)	1	(0.2)
Unknown or missing	19	(2.2)	14	(1.1)	29	(2.0)	40	(6.0)
Marital Status								
Never married	349	(41.2)	555	(42.7)	596	(41.0)	277	(41.8)
Married, civil union, or domestic partnership	161	(19.0)	231	(17.8)	224	(15.4)	87	(13.1)
Divorced, widowed, married but separated	318	(37.5)	495	(38.0)	587	(40.4)	236	(35.6)
Unknown or not specified	19	(2.2)	20	(1.5)	46	(3.2)	62	(9.4)
Education								
Did not complete high school	167	(19.7)	276	(21.2)	337	(23.2)	133	(20.1)
High school graduate or GED	482	(56.9)	747	(57.4)	840	(57.8)	356	(53.8)
Some college or associate's	127	(15.0)	192	(14.8)	172	(11.8)	85	(12.8)
Bachelor's or higher	52	(6.1)	62	(4.8)	60	(4.1)	21	(3.2)
Unknown	19	(2.2)	24	(1.8)	44	(3.0)	67	(10.1)

*Source: SUDORS*¹ Two decedents in 2021 and one decedent in 2022 had an unknown age.

Table 2. Administration of naloxone during fatal overdose episode

	2019		2020		2021		January 1 – June 30, 2022	
	n	(%)	n	(%)	n	(%)	n	(%)
Total decedents	847		1,301		1,453		662	
Decedents administered naloxone	168	(19.8)	472	(36.3)	493	(33.9)	243	(36.7)
One Administrator								
Bystander	27	(16.1)	53	(11.2)	62	(12.6)	33	(13.6)
EMS	64	(38.1)	222	(47.0)	184	(37.3)	72	(29.6)
Hospital	3	(1.8)	9	(1.9)	7	(1.4)	2	(0.8)
Law enforcement	6	(3.6)	8	(1.7)	6	(1.2)	0	(0.0)
Other	2	(1.2)	2	(0.4)	1	(0.2)	1	(0.4)
Unknown	46	(27.4)	141	(29.9)	201	(40.8)	122	(50.2)
Two Administrators								
Bystander and EMS	5	(3.0)	17	(3.6)	16	(3.2)	7	(2.9)
Bystander and hospital	2	(1.2)	1	(0.2)	0	(0.0)	0	(0.0)
Bystander and law enforcement	2	(1.2)	2	(0.4)	1	(0.2)	0	(0.0)
Bystander and other	1	(0.6)	2	(0.4)	0	(0.0)	0	(0.0)
EMS and hospital	6	(3.6)	13	(2.8)	14	(2.8)	4	(1.6)
EMS and law enforcement	2	(1.2)	0	(0.0)	0	(0.0)	1	(0.4)
EMS and other	0	(0.0)	1	(0.2)	0	(0.0)	1	(0.4)
Three Administrators								
Bystander, EMS, and law enforcement	1	(0.6)	0	(0.0)	1	(0.2)	0	(0.0)
Bystander, EMS, and other	1	(0.6)	1	(0.2)	0	(0.0)	0	(0.0)

Source: SUDORS

Table 3. Timing of previous overdose

	2019		2020		2021		January 1 – June 30, 2022	
	n	(%)	n	(%)	n	(%)	n	(%)
Total decedents	847		1,301		1,453		662	
No previous OD reported ¹	706	(83.4)	971	(74.6)	1,146	(78.9)	517	(78.1)
Previous OD, anytime	141	(16.6)	330	(25.4)	306	(21.1)	145	(21.9)
Previous OD:								
Within last month	36	(4.3)	47	(3.6)	37	(2.5)	20	(3.0)
1 month to 1 year ago	56	(6.6)	129	(9.9)	98	(6.7)	37	(5.6)
More than 1 year ago	21	(2.5)	121	(9.3)	159	(10.9)	85	(12.8)
Timing unknown	28	(3.3)	33	(2.5)	12	(0.8)	3	(0.5)

Source: SUDORS

¹ One decedent in 2021 was missing data on previous overdose.

Table 4. Decedent seen in ED during fatal incident and subsequent location of death

	2019		2020		2021		January 1 – June 30, 2022	
	n	(%)	n	(%)	n	(%)	n	(%)
Total decedents	847		1,301		1,453		662	
Decedent seen in ED during fatal incident								
Yes	241	(28.5)	392	(30.1)	375	(25.8)	166	(25.1)
No	601	(71.0)	901	(69.3)	1,066	(73.4)	494	(74.6)
Unknown	5	(0.6)	8	(0.6)	12	(0.8)	2	(0.3)
Death location after decedent seen in ED								
ED / Outpatient	145	(60.2)	246	(62.8)	221	(58.9)	103	(62.0)
Hospital Inpatient	70	(29.0)	110	(28.1)	120	(32.0)	45	(27.1)
Dead on Arrival	1	(0.4)	12	(3.1)	12	(3.2)	9	(5.4)
Hospice Facility	4	(1.7)	4	(1.0)	1	(0.3)	1	(0.6)
Decedent's Home	9	(3.7)	2	(0.5)	0	(0.0)	0	(0.0)
Other or unknown	12	(5.0)	18	(4.6)	21	(5.6)	8	(4.8)

Source: SUDORS

Table 5a. Top 5 substance classes contributing to cause of death

2019	2020	2021	January 1 – June 30, 2022
Opiates (1,735)	Opiates (3,880)	Opiates (4,041)	Opiates (1,850)
Amphetamines (642)	Amphetamines (1,119)	Amphetamines (1,537)	Amphetamines (668)
Cocaine (249)	Benzodiazepines (421)	Antidepressants (472)	Benzodiazepines (159)
Benzodiazepines (237)	Antidepressants (297)	Benzodiazepines (432)	Cocaine (153)
Alcohol (111)	Cocaine (246)	Cocaine (313)	Marijuana (147)

Source: SUDORS

Note: Substances contributing to cause of death exceed decedents as many individuals had multiple substances involved in the death.

Table 5b. Top 5 drugs or metabolites contributing to cause of death

2019	2020	2021	January 1 – June 30, 2022
Fentanyl (480)	Fentanyl (988)	Fentanyl (1,139)	Fentanyl (480)
Methamphetamine (375)	Despropionyl Fentanyl ² (777) (4-ANPP)	Despropionyl Fentanyl ² (996) (4-ANPP)	Despropionyl Fentanyl ² (462) (4-ANPP)
Norfentanyl ¹ (302)	Norfentanyl ¹ (765)	Norfentanyl ¹ (946)	Norfentanyl ¹ (447)
Amphetamine (264)	Methamphetamine (605)	Methamphetamine (784)	Amphetamine (335)
Morphine (140)	Amphetamine (513)	Amphetamine (751)	Methamphetamine (333)

Source: SUDORS

Note: Substances contributing to cause of death exceed decedents as many individuals had multiple substances involved in the death.

1. Norfentanyl is a fentanyl metabolite with a rapid onset and short duration of action. It is used as a pre-op pain reliever (<https://premierbiotech.com/innovation/facing-fentanyl-p2/>).
2. Despropionyl fentanyl (4-ANPP) is both a fentanyl metabolite and precursor used for the manufacture of fentanyl and related opioids (<https://www.overdosepreventionstrategies.org/glossary/4-anpp/>).