Circumstances of Opioid-Related Overdose Deaths in Maryland Region of Injury: Baltimore County

2020 State Unintentional Drug Overdose Reporting System (SUDORS)

<u>Please note</u>: The Maryland Vital Statistics Administration provides official death counts and rates for the State of Maryland. They can be viewed online at https://health.maryland.gov/vsa/Pages/reports.aspx. The State Unintentional Drug Overdose Reporting System (SUDORS) is designed to supplement vital statistics data by providing information about the circumstances of overdose death. Please refer to the Vital Statistics Administration for case counts and rates.

Prepared on February 27, 2023

What is SUDORS?

The State Unintentional Drug Overdose Reporting System (SUDORS) is an enhanced surveillance system collecting over 600 variables about the circumstances of fatal overdose in Maryland. The Maryland SUDORS program works closely with the Office of the Chief Medical Examiner, the Vital Statistics Administration, and multiple law enforcement agencies in Maryland to access, review, and systematically document information about overdose death in Maryland. There is an 8-13 month lag in availability of data due to federal requirements for SUDORS data abstraction.

What will you find here?

This data packet includes a select set of variables from the 2020 Maryland SUDORS data set. These include: substances contributing to the cause of death, mental health, substance use, place of overdose death, recent release from an institution, presence of potential bystanders, previous overdose, treatment for pain, prescribed buprenorphine or methadone, naloxone administration, route of administration, usual industry, and usual occupation.

How can SUDORS data be used?

The information in this data packet can be used to inform local prevention and response activities around partner engagement, identification of priority populations, provision of services, and evaluation of existing programs. Please refer to the OD2A Toolkit for additional information.

What if you need more information?

If you need information not provided in this report, please send an email with your contact information, a description of needed data and/or a request for a variable list, and the subject line "SUDORS data needed" to mdh.mvdrs@maryland.gov.

KEY FINDINGS:

Baltimore County

- 95% (343) of fatal overdoses were opioid-related; for consistency with previous reports, those opioid-related deaths are the focus of this report.
- About 1 in 4 decedents (25%) were in treatment for mental health or substance use at the time of overdose death.
- More than 3 out of 5 (62%) decedents died in their own home.
- 1 in 11 decedents (9%) had recently been released from an institution, such as a hospital, jail or prison, detention facility, or supervised residential facility.
- Just under 3 in 4 decedents (74%) were in the vicinity of a potential bystander during or shortly before the fatal overdose.
- 1 in 25 decedents (4%) were treated for pain at the time of the fatal overdose.
- Almost 1 in 6 decedents (16%) were administered naloxone.
- 1 in 5 decedents (20%) had evidence of injection drug use.
- About 1 in 5 decedents (19%) worked in the construction industry.

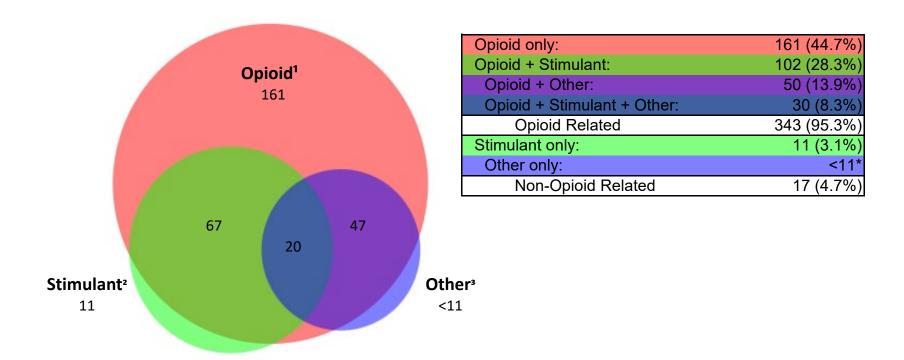
See pages 3-15 for additional information!

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<u>Important Note on Data Sources</u>: Circumstance data is limited to information documented in the law enforcement and/or medical examiner files; these are likely underestimated as death investigators might have limited information. Information on mental health and substance use history comes solely from these sources and not medical records or other treatment records.

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Figure 1: Substance(s) Contributing to Cause of Death, 2020



¹Opioid includes: illicitly manufactured fentanyl, heroin, prescription opioids, and any other opioids.

In 2020, 95% of overdose deaths were opioid related.

The remaining analysis is limited to opioid-related fatal overdose, and consequently excludes:

- Stimulant only deaths (n=11)
- Other only deaths (n<11)

²Stimulant includes: cocaine, eutylone, methamphetamine, and any other stimulants.

³Other includes substances such as: antidepressants, antipsychotics, benzodiazepines, muscle relaxants, PCP, and others.

^{*}Per Centers for Disease Control and Prevention (CDC) requirement: data suppressed due to fewer than 11 cases.

Figure 2: Prevalence of Mental Health, Substance Abuse, and Other Addiction¹, 2020

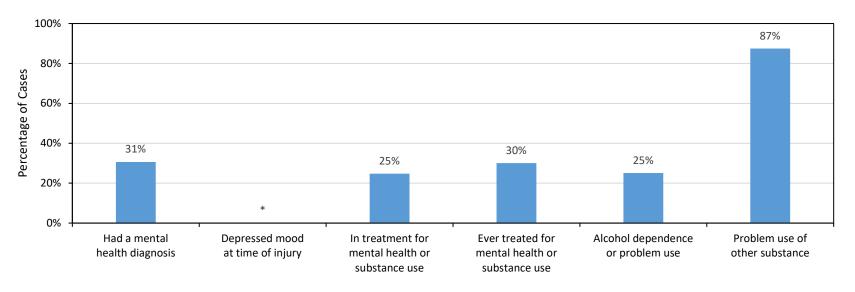


Figure 3: Prevalence of Mental Health, Substance Abuse, and Other Addiction¹ by Sex, 2020

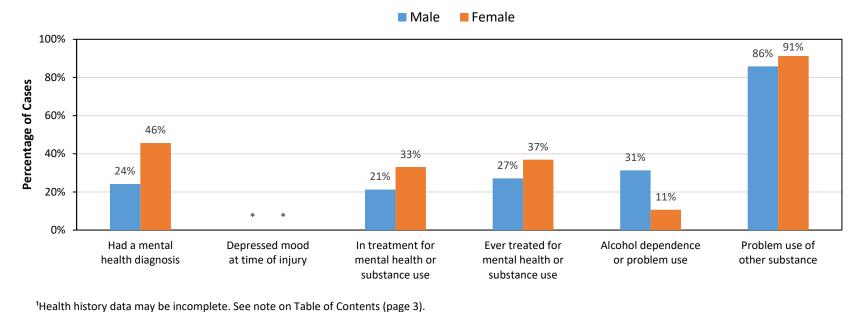


Figure 4: Prevalence of Mental Health, Substance Abuse, and Other Addiction by Age (Years), 2020

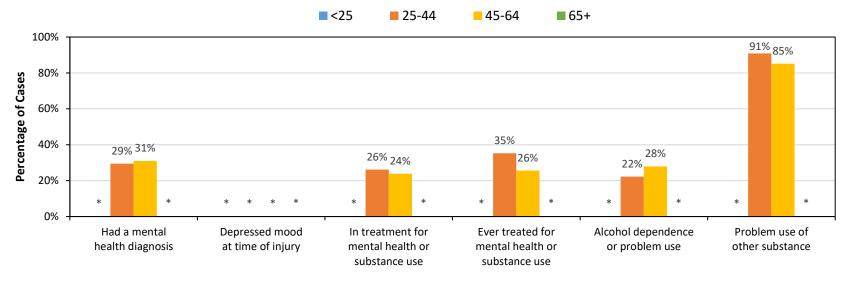
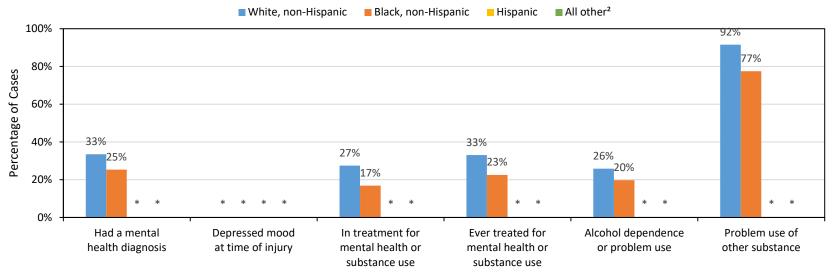


Figure 5: Prevalence of Mental Health, Substance Abuse, and Other Addiction¹ by Race/Ethnicity, 2020



¹Health history data may be incomplete. See note on Table of Contents (page 3).

²All other includes: Asian/Pacific Islander, American Indian/Alaska Native, unknown/unspecified, and two or more races.

^{*}Per Centers for Disease Control and Prevention (CDC) requirement: data suppressed due to fewer than 11 cases.

Figure 6: Prevalence of Mental Health, Substance Abuse, and Other Addiction by Education Level, 2020

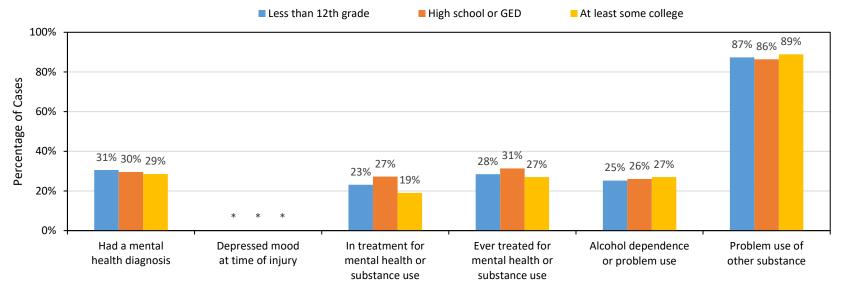
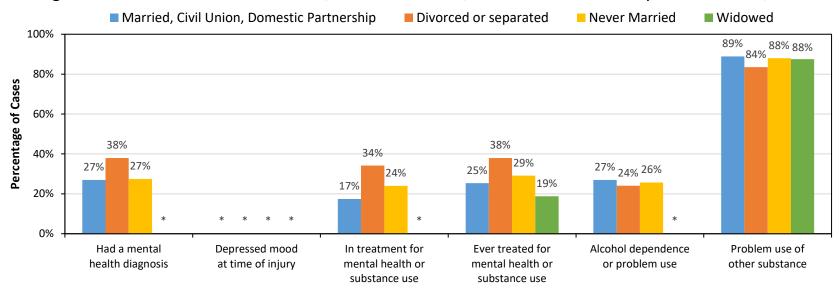


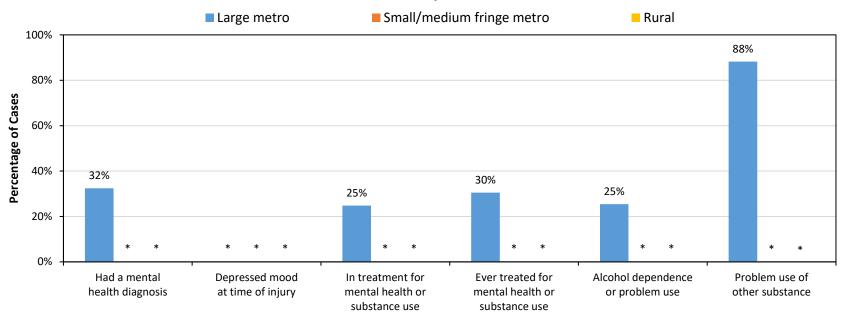
Figure 7: Prevalence of Mental Health, Substance Abuse, and Other Addiction¹ by Marital Status, 2020



¹Health history data may be incomplete. See note on Table of Contents (page 3).

^{*}Per Centers for Disease Control and Prevention (CDC) requirement: data suppressed due to fewer than 11 cases.

Figure 8: Prevalence of Mental Health, Substance Abuse, and Other Addiction¹ by Urban-Rural² Classification of County of Residence, 2020



¹Health history data may be incomplete. See note on Table of Contents (page 3).

²Large metro: counties in central or fringe metropolitan statistical areas of 1 million or more population; small or medium metro: counties in metropolitan statistical areas of populations less than 999,999; rural: counties in micropolitan statistical areas and nonmetropolitan counties of less than 49,999 (defined by the 2013 NCHS Urban-Rural Classification Scheme for Counties).

*Per Centers for Disease Control and Prevention (CDC) requirement: data suppressed due to fewer than 11 cases.

Figure 9: Prevalence of Mental Health, Substance Abuse, and Other Addiction¹ by Service in the U.S. Armed Forces, 2020

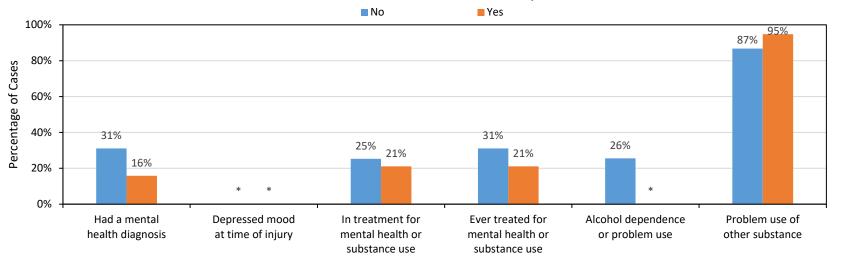
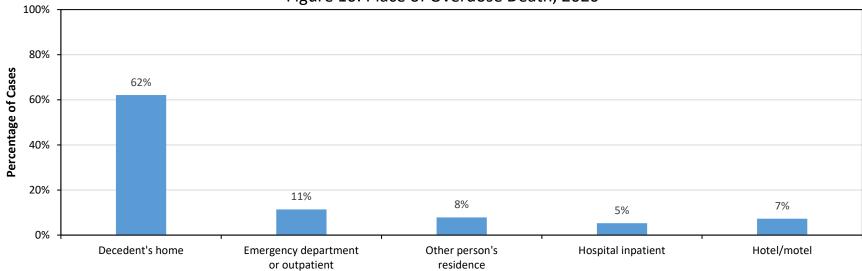


Figure 10: Place of Overdose Death, 2020



¹Health history data may be incomplete. See note on Table of Contents (page 3).

²All other includes: alley, commercial establishment, natural area, street/road, sidewalk, public use area, and vehicle.

^{*}Per Centers for Disease Control and Prevention (CDC) requirement: data suppressed due to fewer than 11 cases.

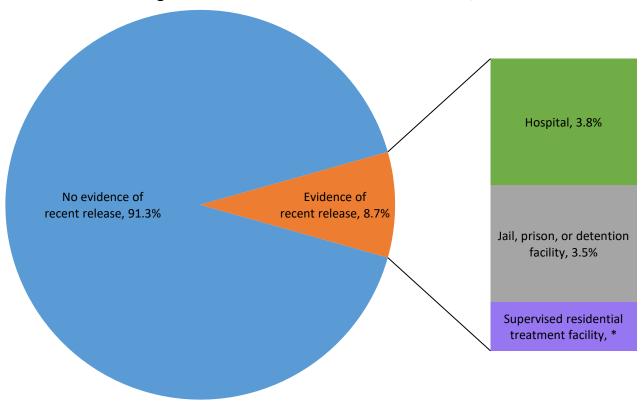
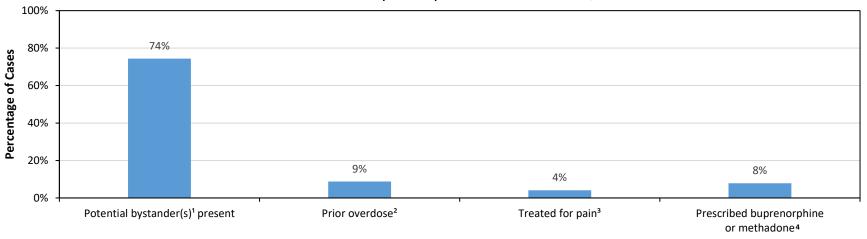


Figure 11: Recent Release From Institution¹, 2020

¹Recent release from an institution is defined as deaths that occurred within a month of the decedent being released from or admitted to an institutional setting. The decedent is considered institutionalized if they spent one or more nights in the institution.

²All other includes: long term residential health facility (e.g., nursing home), other psychiatric treatment, psychiatric hospital, supervised residential facilities not related to alcohol or substance abuse treatment, and unknown type of institution.

Figure 12: Presence of Potential Bystanders, Previous Overdose, Treatment for Pain, and Prescribed Buprenorphine or Methadone, 2020



¹A potential bystander is defined as a person aged ≥11 years who was physically nearby either during or shortly preceding a drug overdose and potentially had an opportunity to intervene or respond to the overdose. This includes any persons in the same structure (e.g., same room or same building, but different room) as the decedent during that time. For example, the family member of an opioid overdose decedent who was in another room during the fatal incident would be considered a potential bystander if that person might have had an opportunity to provide life-saving measures such as naloxone administration, if adequate

²Prior overdose is defined by as a drug overdose related to ANY substance in which one of the following occurred: treatment in an emergency department of other medical center, medical services responded but the person refused to be transported to the hospital, or naloxone was administered by a layperson and medical treatment was not sought.

³Treated for pain is defined as a situation in which a decedent was receiving any type of treatment for acute and/or chronic pain at the time of the fatal overdose, including prescription opioid pain relievers.

⁴Prescribed buprenorphine or methadone is defined as a situation in which there is any evidence, including witness reports, prescription history, and/or scene evidence that suggests that the decedent was prescribed methadone or buprenorphine at the time of the fatal overdose for either medication-assisted treatment or pain relief.

100% 80% Percentage of Cases 60% 40% 20% 16% 8% 6% 0% Naloxone administered by Naloxone administered at Naloxone administered by Naloxone administered1 first responders² hospital³ lay-person⁴

Figure 13: Naloxone Administration, 2020

¹Naloxone administration is defined as EITHER a situation in which a decedent was administered naloxone for their fatal opioid overdose by an EMS responder, law enforcement officer, firefighter, or health care worker, OR a situation in which naloxone was *reportedly* administered by a layperson and there was evidence that naloxone was *actually* administered.

Note: Counts may exceed the total number of cases due to multiple administration.

²First responder includes: law enforcement, emergency medical services, firefighters, or other trained professional.

³Hospital includes: emergency department, inpatient hospital setting, or a critical care center.

⁴Lay-person includes: as a person using drugs/alcohol with the decedent, intimate partner, friend, family member, roommate, or a bystander with no relationship to the decedent.

100% 80% Percentage of Cases 60% 40% 26% 23% 20% 17% 20% 4% 0% Injection Snorting Smoking All other1 Ingestion Unknown

Figure 14: Route of Administration, 2020

¹All other includes: sublingual and transdermal.

<u>Note</u>: Counts may exceed the total number of cases due to multiple findings at the scene.

Table 1: Usual Industry¹ of Opioid Overdose Decedents, 2020

Usual Industry Sector ¹	n	%
Construction	64	19.3%
Accommodation and food services	34	10.2%
Not in workforce (homemaker, student, volunteer, unable to work)	30	9.0%
Other services (except public administration)	25	7.5%
Retail trade	23	6.9%
Health care and social assistance	22	5.7%
Administrative and support and waste management and remediation services	19	5.1%
Manufacturing	17	3.3%
Transportation and warehousing	11	4.5%
All other industries ²	32	9.6%
Missing, unknown, and not enough information	55	16.6%
Total	277	100.0%

¹Major industry sectors defined using the 2012

Most Common Usual Industry, by Sex			
Among males:	Among females :		
1. Construction (27.3%)	1. Not in workforce (23.8%)		
2. Accommodation and food services (9.1%)	2. Accommodation and food services (12.9%)		
3. Other services (except public administration) (7.4%)	3. Healthcare and social assistance (12.9%)		

Most Common Usual Industry, by Race and Ethnicity

Among White, Non-Hispanics:

- 1. Construction (23.5%)
- 2. Accommodation and food services (10.3%)
- 3. Not in workforce (10.3%)

Most Common Usual Industry, by Age Group

Among 25-44 year-olds: Among 45+ year-olds:

- 1. Construction (17.0%) 1. Construction (21.9%)
- 2. Accommodation and food services (11.8%)
- 3. Retail trade (11.8%)

- 2. Healthcare and social assistance (8.9%)
- 3. Not in workforce (8.3%)

²All other industries includes: professional, scientific, and technical services; wholesale trade; public administration; information; educational services; finance and insurance; arts, entertainment, and recreation; Military; agriculture, forestry, fishing and hunting; utilities; mining, quarrying, and oil and gas extraction.

^{*}Analysis limited to decedents of workforce age, 18-65 years.

Table 2: Usual Occupation¹ of Opioid Overdose Decedents, 2020

Usual Major Occupation ¹	n	%
Construction and extraction	59	17.8%
Not in workforce (homemaker, student, volunteer, unable to work)	31	9.3%
Installation, maintenance, and repair	29	8.7%
Transportation and material moving	28	8.4%
Food preparation and serving related	24	7.2%
Sales and related	19	5.7%
Building and grounds cleaning maintenance	16	4.8%
Management	14	4.2%
Production	13	3.9%
All other occupations ²	54	16.2%
Missing, unknown, and not enough information	45	13.6%
Total	332	100.0%

¹Usual occupation defined using the 2010 Standard Occupational Classification (SOC) system major groups.

Most Common Usual Occupation, by Sex		
Among males:	Among females :	
1. Construction and extraction (25.1%)	1. Not in workforce (24.8%)	
2. Installation, maintenance, and repair		
(12.6%)		
3. Transportation and material moving		
(10.4%)		

Most Common Usual Occupation, by Race and Ethnicity		
Among White, Non-Hispanics:	Among Black, Non-Hispanics:	
1. Construction and extraction (21.0%)	1. Transportation and material moving	
2. Not in workforce (10.7%)	(16.7%)	
3. Installation, maintenance, and repair (10.3%)		

Most Common Usual Occupation, by Age Group			
Among 18-44 year-olds:	Among 45+ year-olds:		
1. Construction and extraction (14.7%)	1. Construction and extraction (20.7%)		
2. Food preparation and serving related (10.4%)	Installation, maintenance, and repair (10.1%)		
3. Not in workforce (10.4%)	3. Transportation and material moving (9.5%)		

²All other occupations includes: healthcare support; office and administrative support; personal care and service; healthcare practitioners and technical occupations; business and financial operations; community and social service; protective service; architecture and engineering occupations; education, training, and library; arts, design, entertainment, sports, and media; Military; computer and mathematics; life, physical, and social science.

^{*}Analysis limited to decedents of workforce age, 18-65 years.