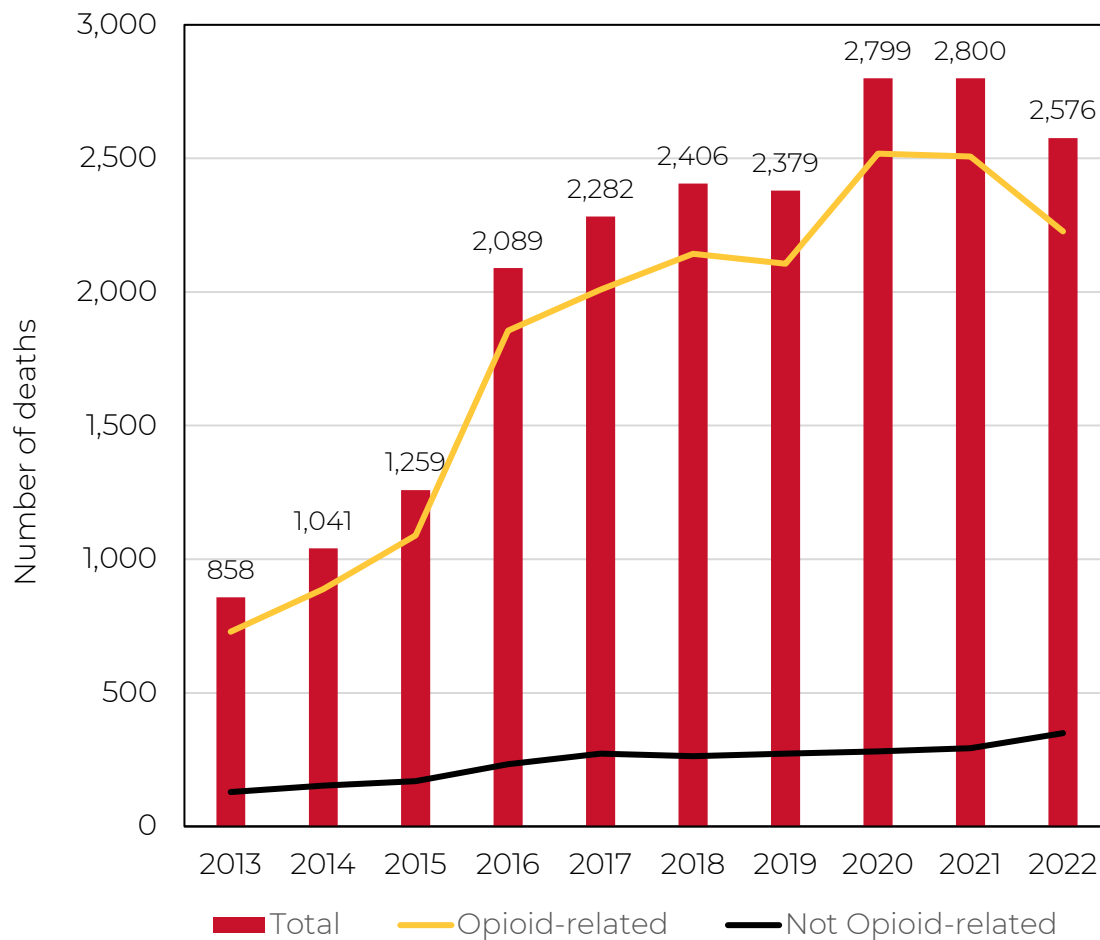


## Unintentional Drug- and Alcohol-Related Intoxication Deaths in Maryland, 2022

Release Date: August 2024



The services and facilities of the Maryland Department of Health (MDH) are operated on a non-discriminatory basis. This policy prohibits discrimination on the basis of race, color, sex, or national origin and applies to the provisions of employment and granting of advantages, privileges, and accommodations. The Department, in compliance with the Americans With Disabilities Act, ensures that qualified individuals with disabilities are given an opportunity to participate in and benefit from MDH services, programs, benefits, and employment opportunities.

## Table of Contents

Methods .....	iii
Total intoxication deaths.....	1
Opioid-related deaths .....	6
Fentanyl-related .....	8
Heroin-related .....	9
Prescription Opioid-related .....	10
Cocaine-related deaths .....	11
Methamphetamine-related deaths .....	13
Benzodiazepine-related deaths .....	15
Phencyclidine-related deaths .....	17
Alcohol-related deaths.....	19
Drug combinations .....	21
Age-adjusted mortality rates.....	23
<b>Tables</b>	
Table 1. Total Number of Unintentional Drug- and Alcohol-Related Intoxication Deaths by Place of Occurrence, Maryland, 2013-2022 .....	25
Table 2. Total Number of Unintentional Opioid-Related Intoxication Deaths by Place of Occurrence, Maryland, 2013-2022.....	26
Table 3. Total Number of Unintentional Heroin-Related Intoxication Deaths by Place of Occurrence, Maryland, 2013-2022.....	27
Table 4. Total Number of Unintentional Prescription Opioid-Related Intoxication Deaths by Place of Occurrence, Maryland, 2013-2022.....	28
Table 5. Total Number of Unintentional Oxycodone-Related Intoxication Deaths by Place of Occurrence, Maryland, 2013-2022.....	29
Table 6. Total Number of Unintentional Methadone-Related Intoxication Deaths by Place of Occurrence, Maryland, 2013-2022.....	30
Table 7. Total Number of Unintentional Fentanyl-Related Intoxication Deaths by Place of Occurrence, Maryland, 2013-2022.....	31
Table 8. Total Number of Unintentional Cocaine-Related Intoxication Deaths by Place of Occurrence, Maryland, 2013-2022 .....	32
Table 9. Total Number of Unintentional Benzodiazepine-Related Intoxication Deaths by Place of Occurrence, Maryland, 2013-2022.....	33
Table 10. Total Number of Unintentional Phencyclidine-Related Intoxication Deaths by Place of Occurrence, Maryland, 2013-2022.....	34

Table 11.	Total Number of Unintentional Methamphetamine-Related Intoxication Deaths by Place of Occurrence, Maryland, 2013-2022 .....	35
Table 12.	Total Number of Unintentional Alcohol-Related Intoxication Deaths by Place of Occurrence, Maryland, 2013-2022 .....	36
Table 13.	Total Number of Unintentional Drug- and Alcohol-Related Intoxication Deaths by Race and Hispanic Origin, Sex and Place of Occurrence, Maryland, 2022 .....	37
Table 13A.	Crude Death Rates for Unintentional Drug- and Alcohol-Related Intoxication Deaths by Race and Hispanic Origin, Sex and Place of Occurrence, Maryland, 2022 .....	38
Table 14.	Total Number of Unintentional Drug- and Alcohol-Related Intoxication Deaths by Age Group and Place of Occurrence, Maryland, 2022 .....	39
Table 14A.	Crude Death Rates for Unintentional Drug- and Alcohol-Related Intoxication Deaths by Age Group and Place of Occurrence, Maryland, 2022 .....	40
Table 15.	Age-Specific Crude Death Rates for Selected Unintentional Drug- and Alcohol-Related Intoxication Deaths by Race and Hispanic Origin and Sex, Maryland, 2022 .....	41

## **METHODS**

### **Introduction**

The purpose of this report is to describe trends in the number of unintentional drug- and alcohol-related intoxication deaths occurring in Maryland during the period 2013-2022. Trends are examined by age at time of death, race/ethnicity, gender, place of death, and substances related to death.

This report was prepared using drug and alcohol intoxication data housed in a registry developed and maintained by the Vital Statistics Administration (VSA) of the Maryland Department of Health (MDH). The methodology for reporting on drug-related intoxication deaths in Maryland was developed by VSA with assistance from the MDH Behavioral Health Administration, the Office of the Chief Medical Examiner (OCME) and the Maryland Poison Control Center. Assistance was also provided by authors of a Baltimore City Health Department report on intoxication deaths.<sup>1</sup>

### **Sources of data**

The data included in this report were obtained mainly from the OCME. Maryland law requires the OCME to investigate all drug deaths occurring in the State, as well as non-natural and unattended deaths. In these instances, information compiled during an investigation is used to determine the cause or causes of death. Depending on the circumstances, an investigation may involve a combination of scene examination, review of witness reports, review of medical and police reports, autopsy, and toxicological analysis of autopsy specimens. Toxicological analysis is routinely performed when there is suspicion that a death was the result of drug or alcohol intoxication. Information compiled during the investigation is used to complete the death certificate literal text fields for indicated cause of death, other significant conditions and circumstances of death.

A small number of death records involving intoxication deaths were filed by sources other than OCME and were identified through death records maintained by VSA. These included records filed by medical facilities rather than OCME, and records filed by federal investigators following deaths involving U.S. military personnel. Information available on these cases was included in the registry.

Information on place of death and race/ethnicity was missing for a small number of records provided by OCME and was obtained through death certificate data. Death

---

<sup>1</sup> Office of Epidemiology and Planning, Baltimore City Health Department. Intoxication Deaths Associated with Drugs of Abuse or Alcohol. Baltimore City, Maryland: Baltimore City Health Department. January 2007.

certificate data were also used to update demographic information on records that were amended after the records were filed with the Division of Vital Records.

### **Identification of drug-related intoxication deaths**

For this report, an intoxication death was defined as a death that occurred in Maryland (resident or non-resident) that was the result of recent ingestion or exposure to alcohol or another type of drug, including heroin, fentanyl, prescription opioids, cocaine, methamphetamines, benzodiazepines, and other prescribed and unprescribed drugs. OCME provided all records to VSA for which the literal text of the cause of death included one or more of the following terms: poisoning, intoxication, toxicity, inhalation, ingestion, overdose, exposure, chemical, effects, or use. Any records provided by OCME that were not unintentional drug-related intoxication deaths, such as deaths due to smoke inhalation, carbon monoxide intoxication, cold exposure, and chronic use of alcohol or other drugs, were excluded in the registry. Also excluded from the registry were deaths for which the manner of death was determined to be natural, suicide, or homicide. It should be noted that this non-standardized definition limits comparisons of these data outside of Maryland.

### **Analyses**

Trends in the number of unintentional drug- and alcohol-related intoxication deaths occurring in Maryland during the years 2013-2022 were analyzed by age group, gender, place of occurrence of death, and substances related to the death. Beginning with 2021, race was reported in accordance with the 1997 OMB standards based on 6 categories and should not be directly compared with previous years. Deaths related to the following substances were examined in this report:

1. Opioids
  - a. Heroin
  - b. Prescription opioids
  - c. Fentanyl (prescribed and illicitly manufactured)
2. Cocaine
3. Methamphetamine
4. Benzodiazepines and related drugs
5. Phencyclidine (PCP)
6. Alcohol

As the drug supply continues to change, new trends in substances and drug combinations emerge. Xylazine, a non-opioid sedative not approved for human use, has been increasingly detected in the U.S. drug supply – particularly in illicitly manufactured fentanyl products. Beginning in 2021, drug combinations involving xylazine were added to this report (Figure 27).

The number of deaths by place of occurrence was computed by jurisdiction and by region, categorized as follows:

<b>Northwest Area</b>	<b>Baltimore Metro Area</b>	<b>National Capital Area</b>	<b>Southern Area</b>	<b>Eastern Shore Area</b>
Garrett Co. Allegany Co. Washington Co. Frederick Co.	Baltimore City Baltimore Co. Anne Arundel Co. Carroll Co. Howard Co. Harford Co.	Montgomery Co. Prince George's Co.	Calvert Co. Charles Co. St. Mary's Co.	Cecil Co. Kent Co. Queen Anne's Co. Caroline Co. Talbot Co. Dorchester Co. Wicomico Co. Somerset Co. Worcester Co.

### **Crude death rates**

Beginning in 2021, crude death rates (not age-adjusted) by place of occurrence are provided for all drug- and alcohol intoxication deaths. It's important to note that rates are based on a resident only population estimates (denominator), yet non-resident deaths are included in the calculation (numerator). Therefore, death rate estimates may be less accurate. These rates should also not be compared with jurisdictions outside of Maryland due to the non-standardized case definition.

Population estimates are produced by the U.S. Census Bureau's Population Estimates Program. The population estimates in this report for Maryland are from the Vintage 2022 estimates (released June 2023), which include population estimates for July 1, 2020, through July 1, 2022. Further information on the preparation of population estimates may be found on the U.S. Census Bureau website at <http://www.census.gov/popest/>.

### **Age-adjusted death rates**

Age-adjusted death rates by place of residence are shown in Figures 28 and 29. Unlike all other data included in this report, these rates are based on place of residence of the decedent rather than place where the drug-related incident occurred. Additionally, these rates are among all Maryland residents (i.e., do not include any out-of-state residents). This is different from other data in this report, both Maryland residents and non-residents are included if the death occurred in Maryland.

These age-adjusted rates use International Classification of Disease (ICD)-10 codes indicative of alcohol or drug intoxication or poisoning. Specifically, deaths for all unintentional alcohol and drug-related deaths were identified by underlying cause of

deaths ICD-10: X40-X45 and Y10-Y15. Drug category ICD-10 codes: T40.0-T40.4 and T40.6 were additionally used to identify opioid-related deaths.

The Vital Statistics Administration (VSA) compiles all death certificates from across Maryland and submits them to the National Center of Health Statistics to assign ICD-10 codes to the literal cause of death text fields. All literal cause of death text fields receive an ICD-10 code; however, only one cause of death and corresponding ICD-10 code is assigned as the underlying cause of death. The process for assigning ICD-10 codes is standardized in all states.

**\*\*Since an intoxication death may involve more than one substance, counts of deaths related to specific substances do not sum to the total number of deaths in this report. \*\***

### **Opioid-related deaths**

Opioids include heroin and prescription opioid drugs such as oxycodone, hydrocodone, hydromorphone, methadone, tramadol and codeine, and prescribed and illicit fentanyl. In this report, an opioid was associated with a death if a specific opioid was indicated in the cause of death. If the cause of death did not identify a specific drug (e.g., the cause of death indicated “Narcotic Intoxication”), OCME toxicology results were reviewed to determine whether the presence of any opioid drug was detected. If so, the cause of death was considered to be opioid-related, regardless of the level of the drug. Scene investigation notes were also reviewed in an attempt to better categorize death records with non-specific causes of death.

Since heroin is rapidly metabolized into morphine, the records of many deaths that are likely to be heroin-related do not list “heroin” as a cause of death, and therefore cannot be identified using only information listed in the cause of death. Therefore, a combination of information contained in the cause of death field, toxicology results, and scene investigation notes is used to identify heroin-related deaths. In this report, a death was heroin-related if:

1. “Heroin” was mentioned in the cause of death; or
2. The toxicology screen showed a positive result for 6-monacetylmorphine; or
3. The toxicology screen showed positive results for both morphine and quinine; or
4. The cause of death was nonspecific, and the scene investigation notes indicated that heroin was likely to have been involved in the death; or
5. The death was associated with morphine through either cause of death information or toxicology results unless information contained in the investigation notes did not support this assumption.

A record was not coded as heroin-related, despite the presence of morphine, if OCME determined that another substance caused the death.

Prescription opioid-related deaths were defined as deaths that involve one or more prescription opioids, as identified through cause of death information when a specific drug was indicated and through toxicology results when the cause of death was nonspecific. Prescription opioids include buprenorphine, codeine, hydrocodone, hydromorphone, meperidine, methadone, morphine, oxycodone, pentazocine, propoxyphene, tramadol and prescribed fentanyl. Prescribed fentanyl is an opioid analgesic approved for patient use to manage severe or chronic pain. There are also forms of fentanyl that are produced illicitly in clandestine laboratories and mixed with (or substituted for) heroin or other illicit drugs. Although in some cases it was difficult to determine whether a prescribed or illicit form of fentanyl was related to a death, the count of prescription opioid-related drugs in this report includes only fentanyl deaths in which a prescription form of the drug was clearly involved.

Fentanyl-related deaths began increasing in late 2013 as a result of overdoses involving illicitly manufactured fentanyl, that is, nonprescription fentanyl produced in clandestine laboratories and mixed with, or substituted for, heroin or other illicit substances. Nearly all fentanyl-related deaths have involved the use of illicitly manufactured fentanyl. Fentanyl is many times more potent than heroin, and greatly increases the risk of an overdose death.

### **Cocaine-related deaths**

Cocaine is a highly addictive psychostimulant drug that is frequently mixed with other non-psychoactive substances, such as cornstarch or talcum powder, to dilute its potency. Cocaine has also been mixed with fentanyl.

### **Methamphetamine-related deaths**

Methamphetamine is another highly addictive psychostimulant drug with abuse potential. Methamphetamine has also been found to be mixed with fentanyl or other opioids.

### **Benzodiazepine-related deaths**

Benzodiazepines are a class of depressants that include drugs such as alprazolam, clonazepam, diazepam, and multiple related drugs. The category of benzodiazepine-related drugs in this report includes both benzodiazepines and related drugs, such as zolpidem, which have similar sedative effects.

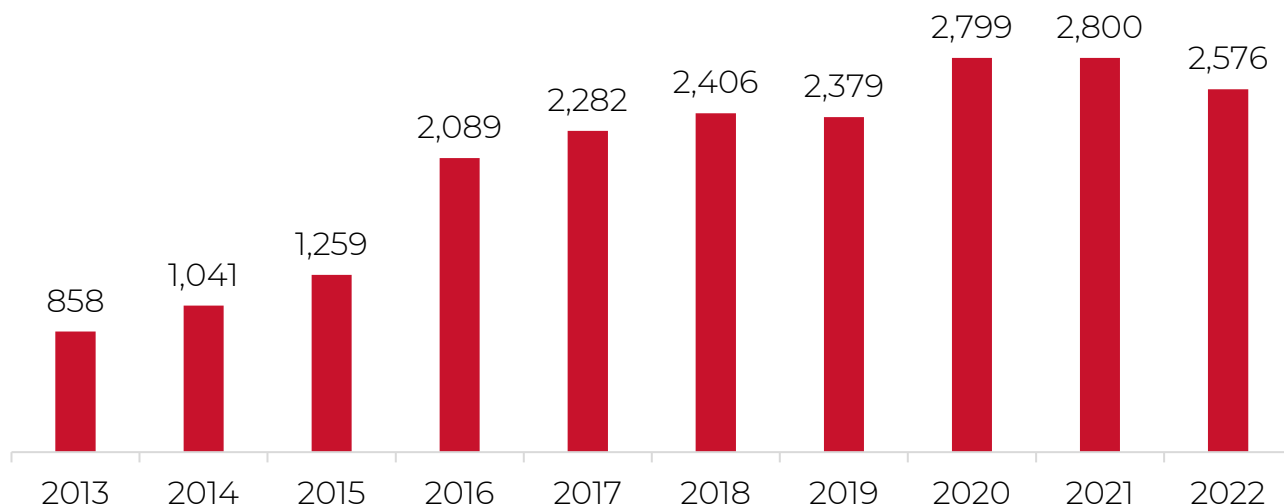
### **Phencyclidine-related deaths**

Phencyclidine, or phenylcyclohexyl piperidine (PCP), is an illicit hallucinogenic drug that can induce acute psychosis and aggressive behaviors. In the last few years, this substance has been mixed with fentanyl.

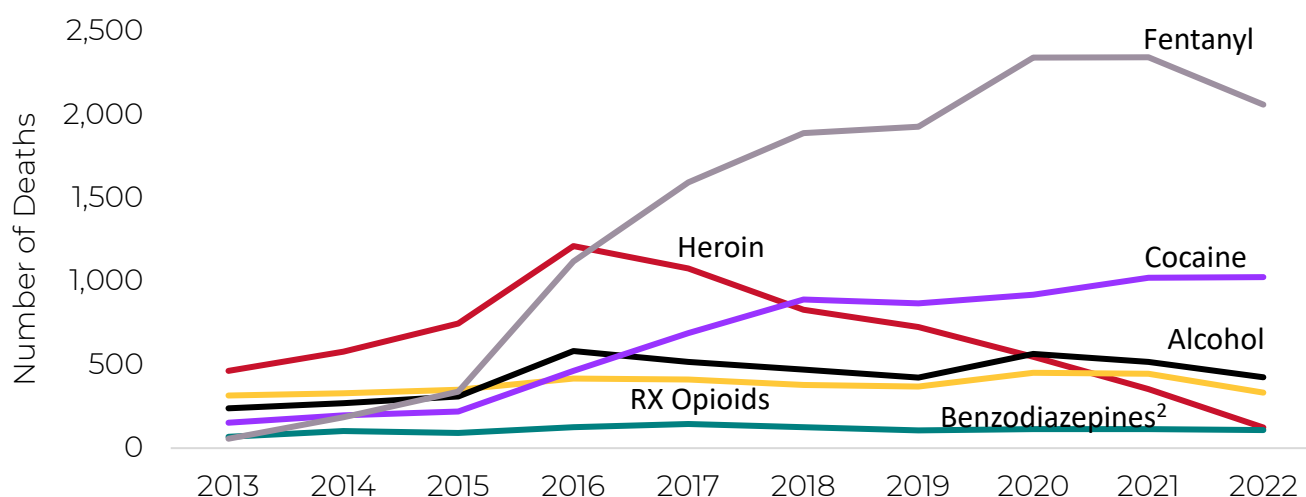
# TOTAL INTOXICATION DEATHS

Unintentional drug- and alcohol-related intoxication deaths occurring in Maryland rose from 858 in 2013 to 2,800 in 2021. In 2022, the number of deaths decreased to 2,576 [Figure 1]. Opioids, particularly illicitly manufactured fentanyl, are the most involved substance in intoxication deaths [Figure 2]. In recent years, the number of heroin-related deaths has decreased while the number of cocaine-related deaths has increased.

**Figure 1. Total Number of Unintentional Drug- and Alcohol-Related Intoxication Deaths Occurring in Maryland, 2013-2022**



**Figure 2. Total Number of Unintentional Drug- and Alcohol-Related Intoxication Deaths by Selected Substances<sup>1</sup>, Maryland, 2013-2022**



<sup>1</sup>Since an intoxication death may involve more than one substance, counts of deaths related to specific substances do not sum to the total number of deaths.

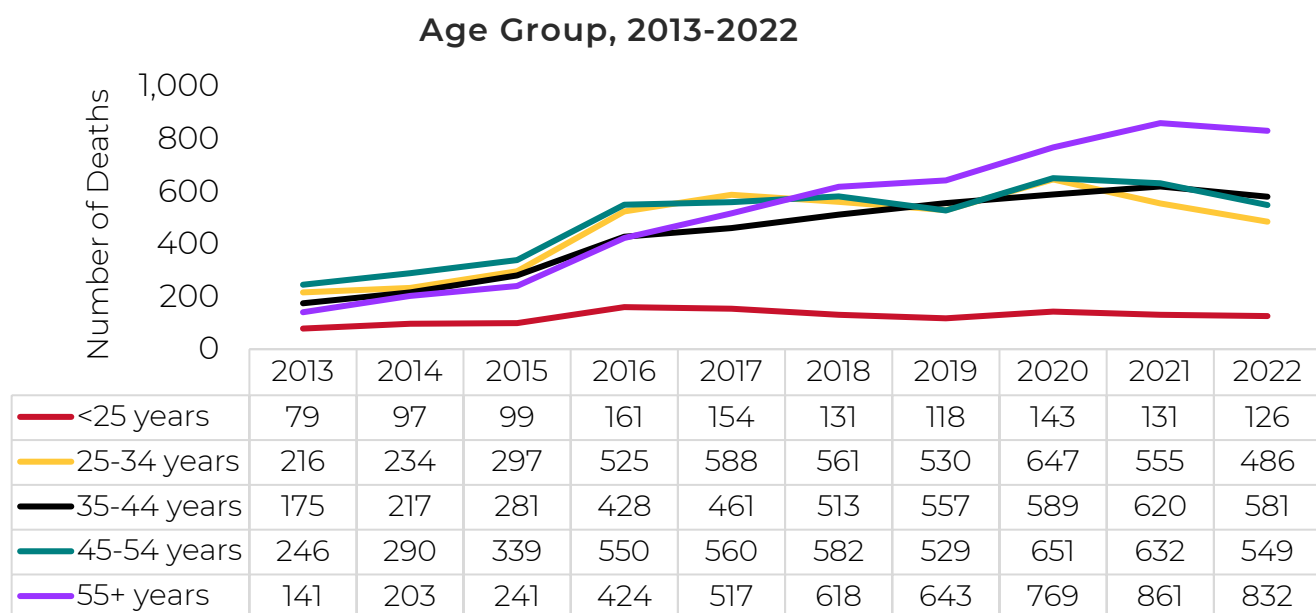
<sup>2</sup>Includes deaths caused by benzodiazepines and related drugs with similar sedative effects.

## Population Characteristics: Drug and Alcohol-Related Deaths

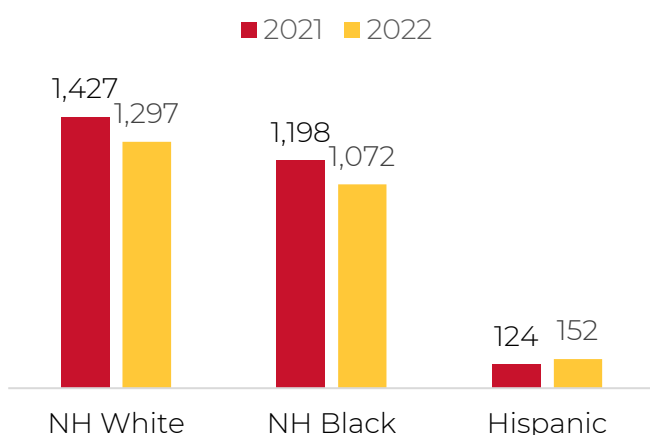
In 2022, approximately 5% of deaths were among those under 25 years of age and nearly two thirds of deaths were among those between 25 and 54 years of age. Individuals aged 55 years and over had the highest number of deaths among all age groups (832), accounting for approximately 32 percent of all intoxication deaths occurring in Maryland. Deaths in this older age group have been increasing over the last decade. [Figure 3]

In 2022, there were 1,297 unintentional drug- and alcohol-related deaths occurring in Maryland among non-Hispanic white individuals, which accounted for approximately half of all deaths [Figure 3]. From 2021 to 2022 there were no statistically significant changes in the death rate among non-Hispanic white, non-Hispanic black or Hispanic individuals [Figure 3A].

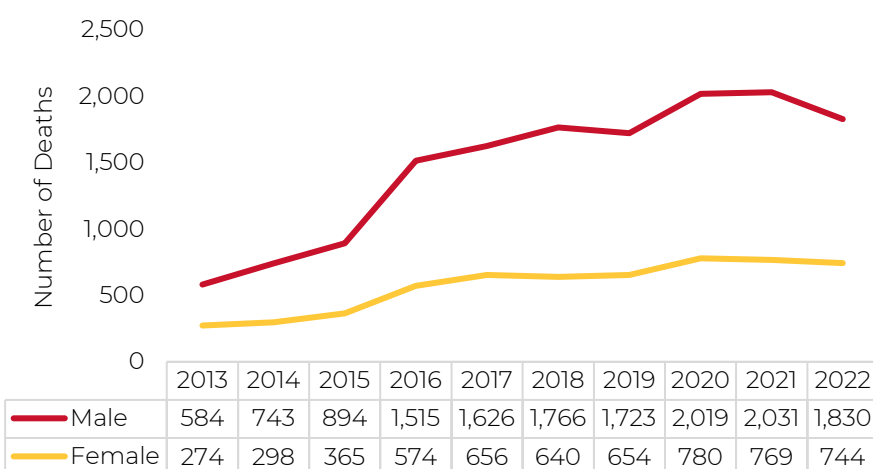
**Figure 3. Number of Unintentional Drug- and Alcohol-Related Intoxication Deaths Occurring in Maryland by:**



**Race/Ethnicity, 2021-2022**



**Sex, 2013-2022**

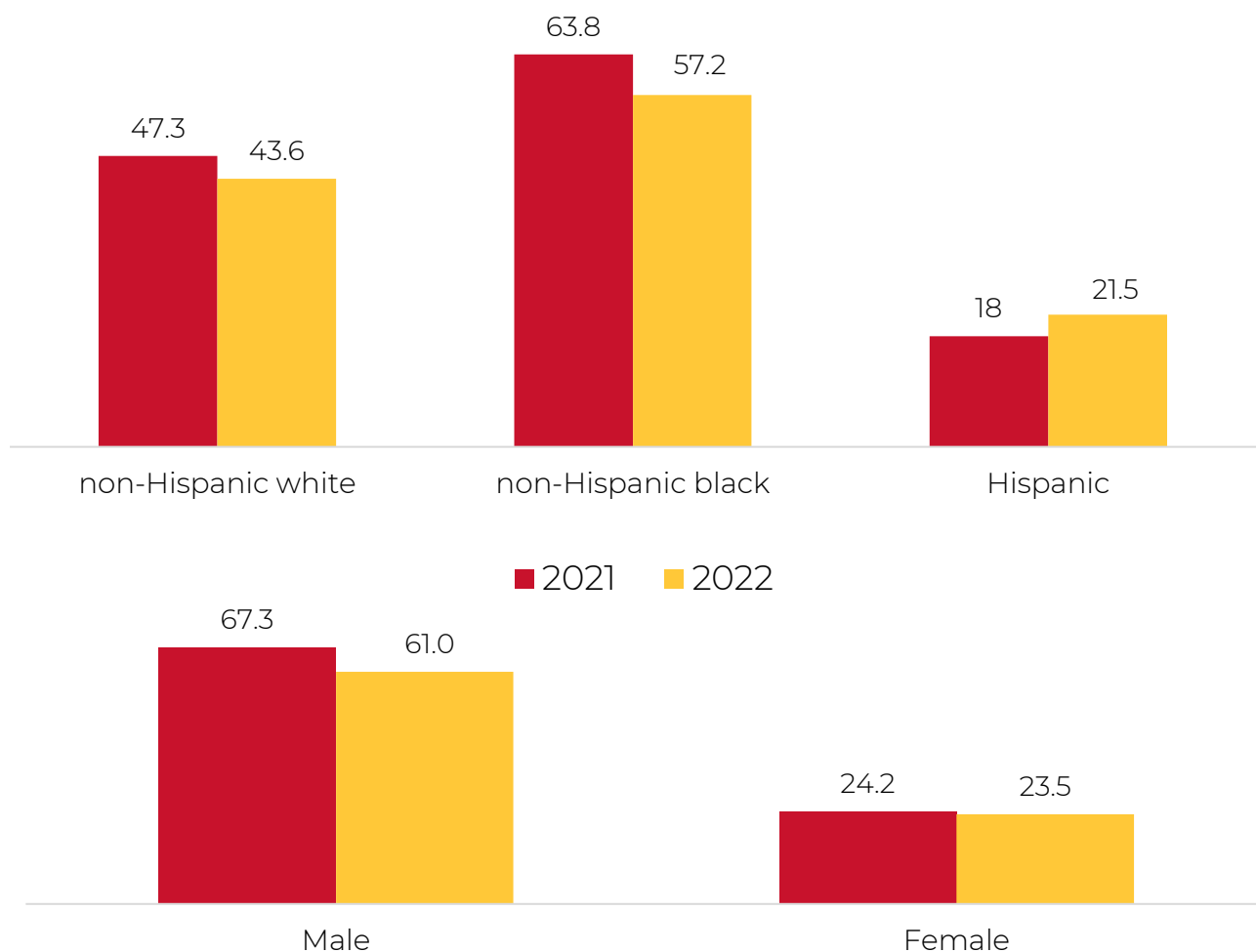


## Population Characteristics: Drug and Alcohol-Related Deaths

Yet, disparities between race and ethnicity groups persist. In 2022 the overall death rate was 1.3 times higher for non-Hispanic black individuals (57.2 per 100,000) compared to non-Hispanic white individuals (43.6 per 100,000). The overall death rate was 21.5 per 100,000 for Hispanic individuals in 2022. [Figure 3A].

By age group, non-Hispanic white individuals aged 25-34 or 35-44 had higher rates of death compared to non-Hispanic black or Hispanic individuals. In the 25-34 age group, the death rate was 1.5 times as high among non-Hispanic white individuals (93.7) compared to non-Hispanic blacks (65.5). Conversely, non-Hispanic black individuals had higher rates of death in the 45-54 and 55 and over age groups compared to non-Hispanic white individuals. In the 55 and over age group, the death rate among non-Hispanic black individuals (89.2) was nearly 3 times the rate among non-Hispanic whites (31.8) [Figure 3B, Table 15].

**Figure 3A. Crude Rates by Race/Ethnicity or Sex for Unintentional Drug- and Alcohol-Related Intoxication Death Occurring in Maryland,<sup>1</sup> 2021-2022**



<sup>1</sup> Death occurred in Maryland; calculation of crude rates includes resident and non-resident data in numerator and resident only population estimates from the U.S. Census in denominator for the corresponding year. This may result in less accurate rates compared to resident only data. Further, these rates are not comparable with rates from other jurisdictions outside of Maryland as these rates are based on data from the literal text in the cause of death field on the death certificate rather than standardized ICD-10 codes.

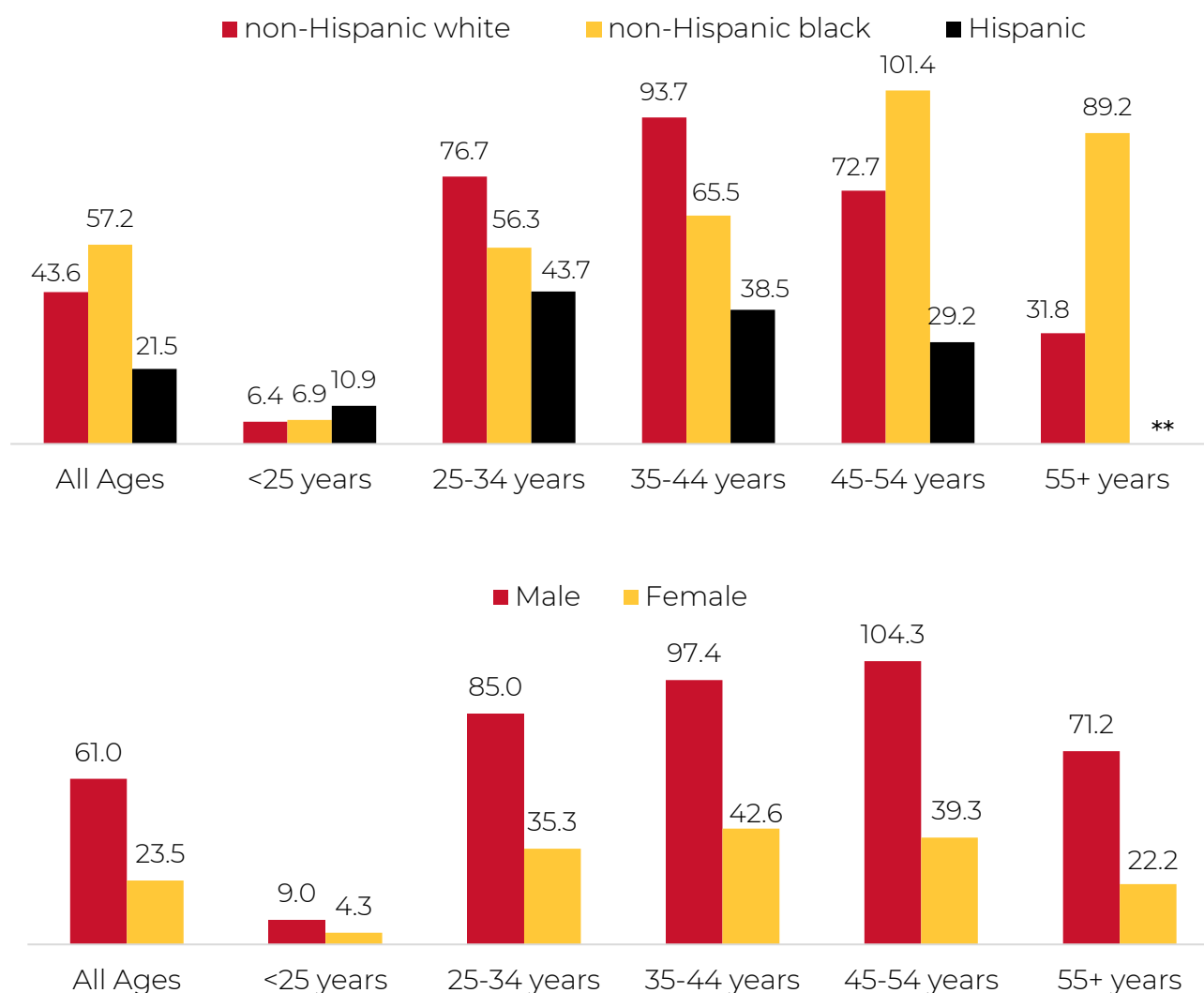
## Population Characteristics: Drug and Alcohol-Related Deaths

Over the last decade, more males than females died of an intoxication death in Maryland [Figure 3]. In 2022, intoxication death rates (per 100,000) were more than 2.5 times higher among males (61.0) than females (23.5) [Figure 3A].

Notably, in 2022 the death rate among males (61.0) was a statistically significant decrease from the 2021 rate (67.3). From 2021 to 2022 there were no statistically significant changes in the death rate among females [Figure 3A].

Among males, the highest rates were among those aged 45-54-years (104.3). Among females, the highest rates were among those aged 35-44-years, respectively [Figure 3B, Table 15].

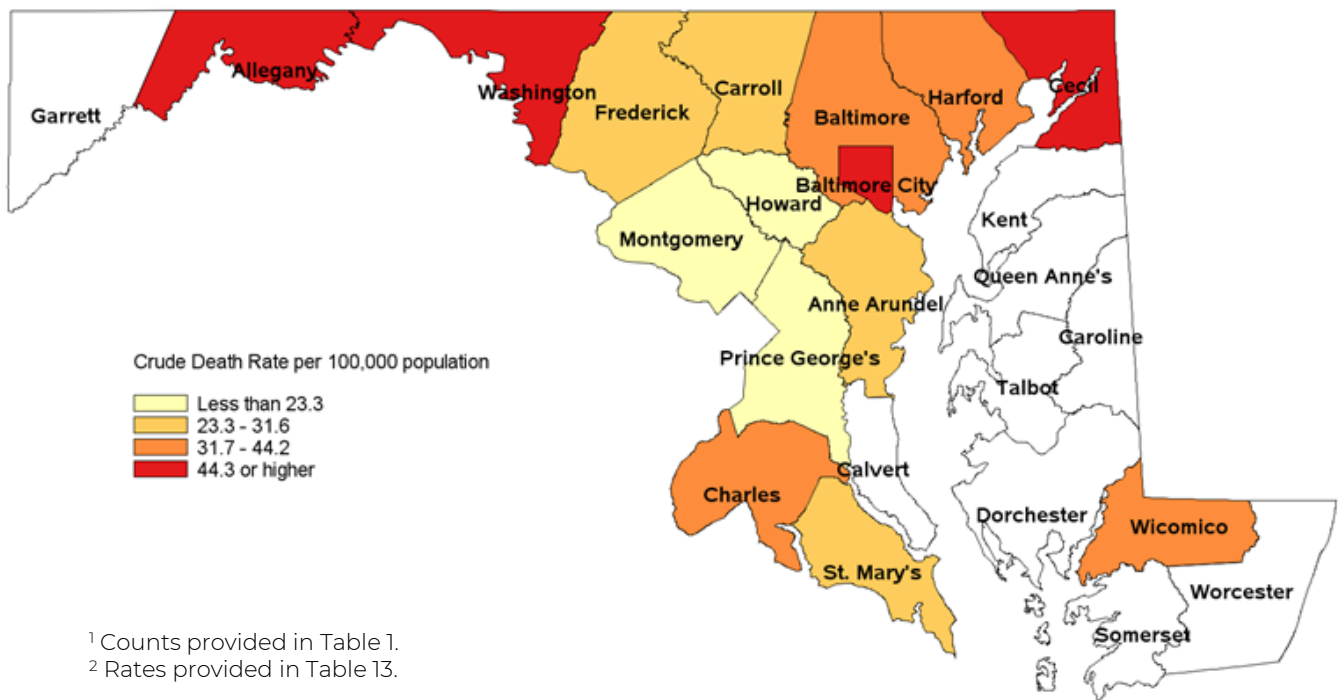
**Figure 3B. Age-Specific Rates by Race/Ethnicity or Sex for Unintentional Drug- and Alcohol-Related Intoxication Death Occurring in Maryland,<sup>1</sup> 2022**



<sup>1</sup> Death occurred in Maryland; calculation of crude rates includes resident and non-resident data in numerator and 2022 resident only population estimates from the U.S. Census in denominator. This may result in less accurate rates compared to resident only data. Further, these rates are not comparable with rates from other jurisdictions outside of Maryland as these rates are based on data from the literal text in the cause of death field on the death certificate rather than standardized ICD-10 codes.

\*\* Rates with less than 20 deaths in the numerator are not calculated.

**Figure 4. Crude Rate of Unintentional Drug and Alcohol-Related Intoxication Deaths by Place of Occurrence, 2022<sup>1,2,3</sup>**



<sup>1</sup> Counts provided in Table 1.

<sup>2</sup> Rates provided in Table 13.

<sup>3</sup> Death occurred in Maryland; calculation of crude rates includes resident and non-resident data in numerator and 2022 resident only population estimates from the U.S. Census in denominator. This may result in less accurate rates compared to resident only data. Further, these rates are not comparable with rates from other jurisdictions outside of Maryland as these rates are based on data from the literal text in the cause of death field on the death certificate rather than standardized ICD-10 codes.

## Geographic Variation

In 2022, jurisdictions with the highest number of deaths were: Baltimore City (989), Baltimore County (336), Prince George's (210), Anne Arundel (184), and Washington (114) [Table 1]. Accounting for population size, jurisdictions with highest crude death rates (per 100,000) were: Baltimore City (173.5), Cecil (82.0), Washington (73.3), and Allegany (58.0) [Figure 4, Table 13].

Several jurisdictions had rates among non-Hispanic black individuals that were higher than the state rate: Baltimore City (186.9) and Washington (106.4). Similarly, the jurisdictions with the highest death rates among non-Hispanic white individuals included: Baltimore City (175.9) and Cecil (82.9), Washington (77.4), Charles (71.4), and Allegany (60.1). Race-specific rates for all jurisdictions can be found in Table 13A.

Rates were highest among males in Baltimore City (268.3) and Cecil (120.4). Among females, Baltimore City (90.5) and Washington (48.5) saw the highest rates. Sex-specific rates for all jurisdictions can be found in Table 13A.

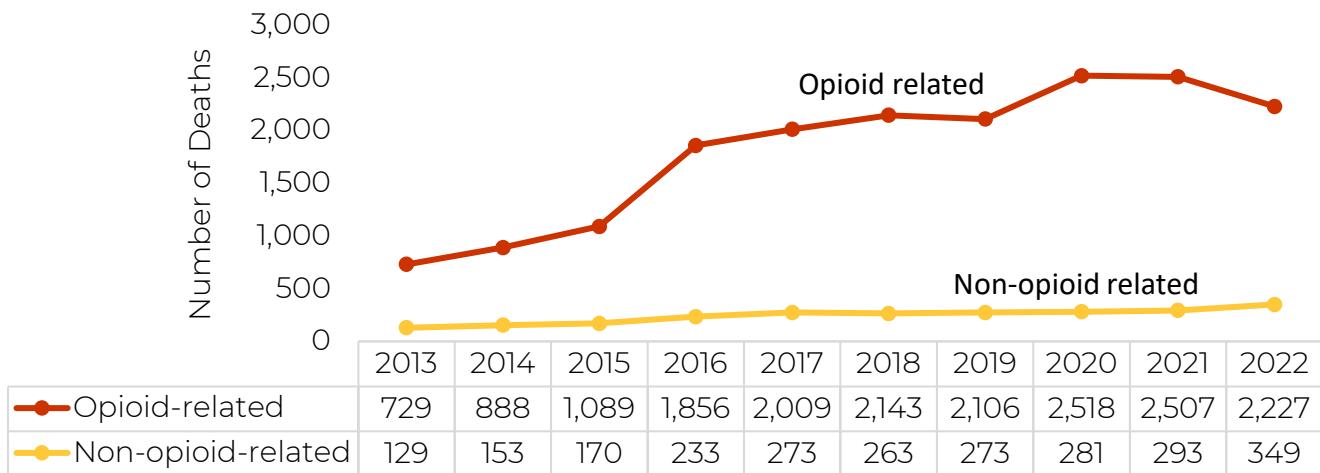
In Baltimore City, the highest death rates were among those aged 45-54 years (365.4), followed by those 55 and over (269.7) and those 35-44 years (229.3). Age-specific rates for all other jurisdictions can be found in Table 14A.

# OPIOID-RELATED DEATHS

Approximately 86% of all intoxication deaths that occurred in Maryland in 2022 were opioid-related. This is a slight decrease from accounting for approximately 90% of death in 2021 [Figure 5, Table 2].

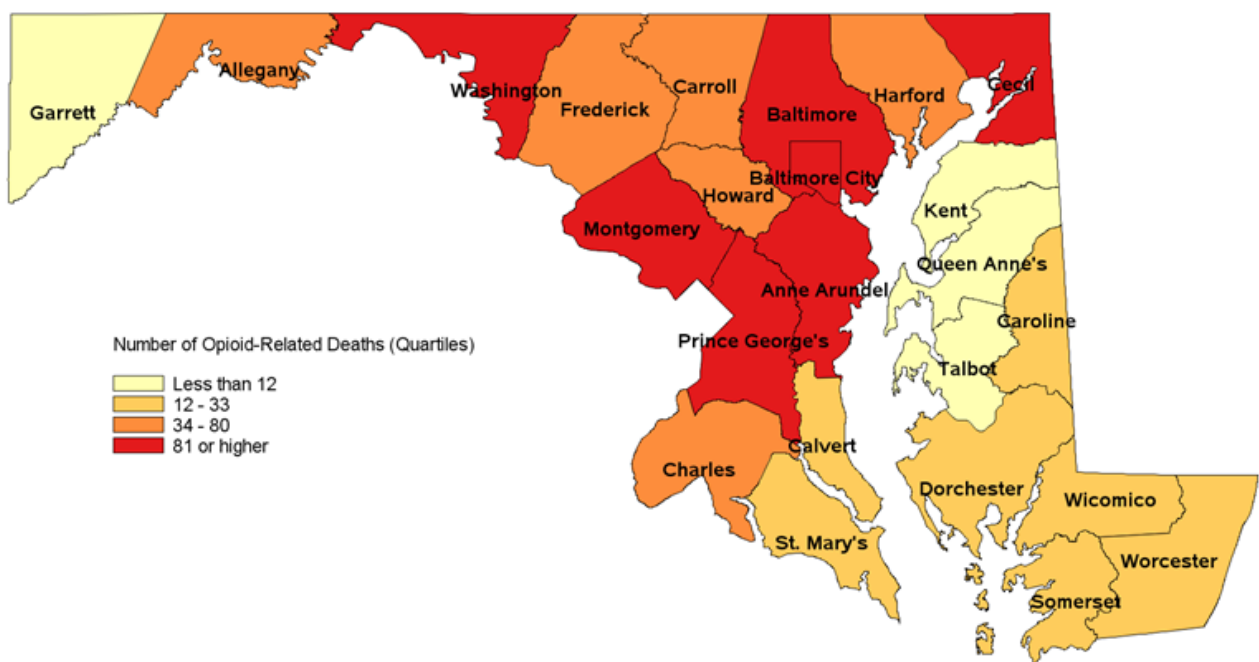
Fentanyl-related deaths continued to drive opioid-related deaths in 2022 and were involved in about 8 out of 10 intoxication deaths [Figure 7, Table 7]. The number of heroin-related deaths declined for the sixth straight year, decreasing by nearly 90% between 2016 and 2022 [Figure 7, Table 3].

**Figure 5. Number of Unintentional Opioid<sup>1</sup> and non-Opioid Related Deaths Occurring in Maryland, 2013-2022**

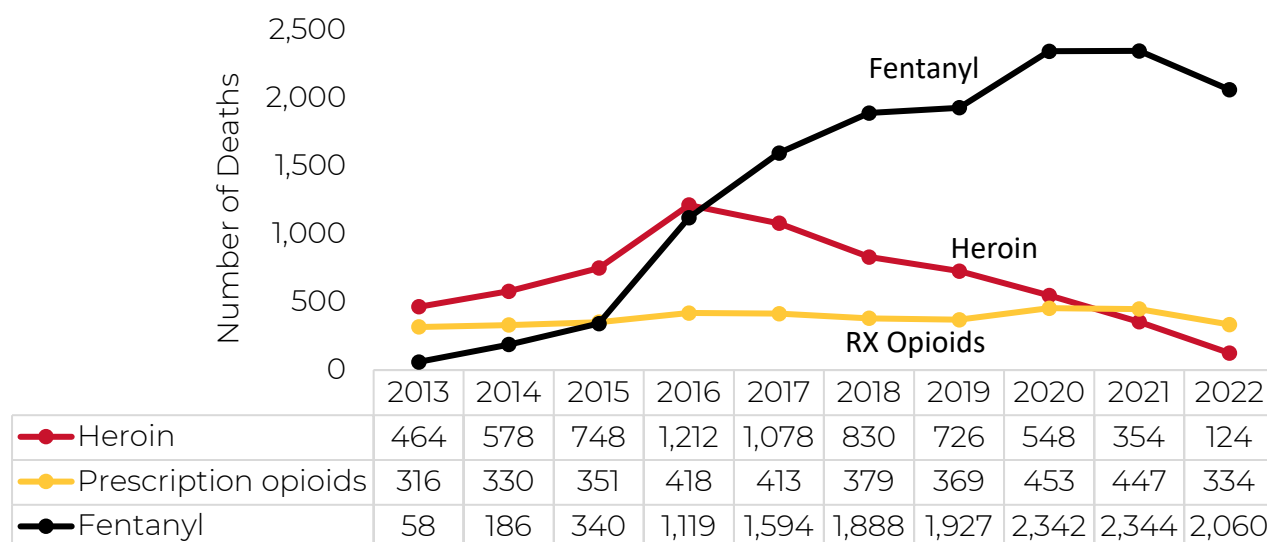


<sup>1</sup>Total opioids include heroin, prescription opioids, and illicit forms of fentanyl.

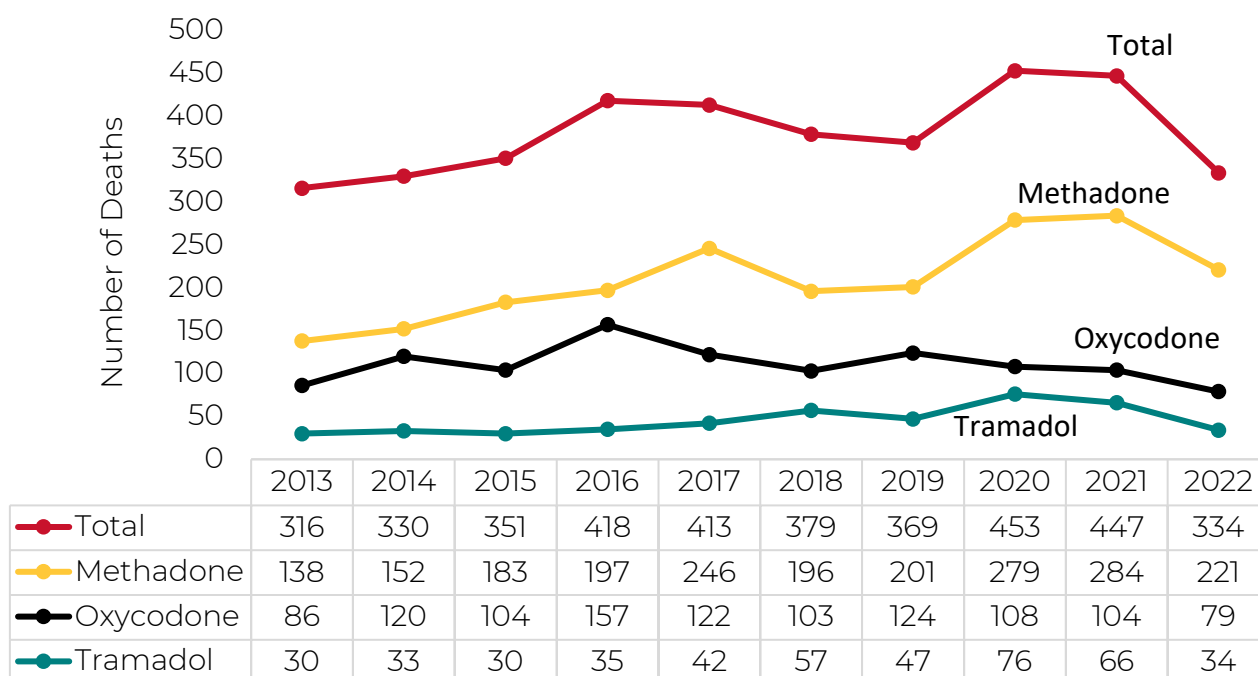
**Figure 6. Number of Unintentional Opioid-Related Intoxication Deaths by Place of Occurrence, 2022<sup>1</sup>**



**Figure 7. Number of Unintentional Opioid-Related Deaths Occurring in Maryland by Substance, 2013-2022**



**Figure 8. Number of Unintentional Intoxication Deaths Occurring in Maryland by Selected Prescription Opioids, 2013-2022 <sup>1</sup>**



<sup>1</sup> Counts by jurisdiction provided in provided in Tables 4, 5, and 6.

The number of prescription opioid-related deaths was 334 or 13% of all intoxication deaths in 2022 [Figure 7, Table 4]. Previously, the number of prescription opioid-related deaths had increased from 2013 to 2016. Then after a three-year decrease, deaths increased between 2019 and 2021, rising by 21%. The trends in the number of unintentional prescription opioid-related deaths continues to be driven by methadone, the substance most commonly involved. The number of deaths involving oxycodone have continued to decrease from an all-time high of 157 deaths in 2016. The number of deaths involving tramadol increased by nearly 57% from 2017 to 2021, though in 2022 deaths were cut nearly in half. [Figure 8]

## Population Characteristics: Fentanyl-Related Deaths

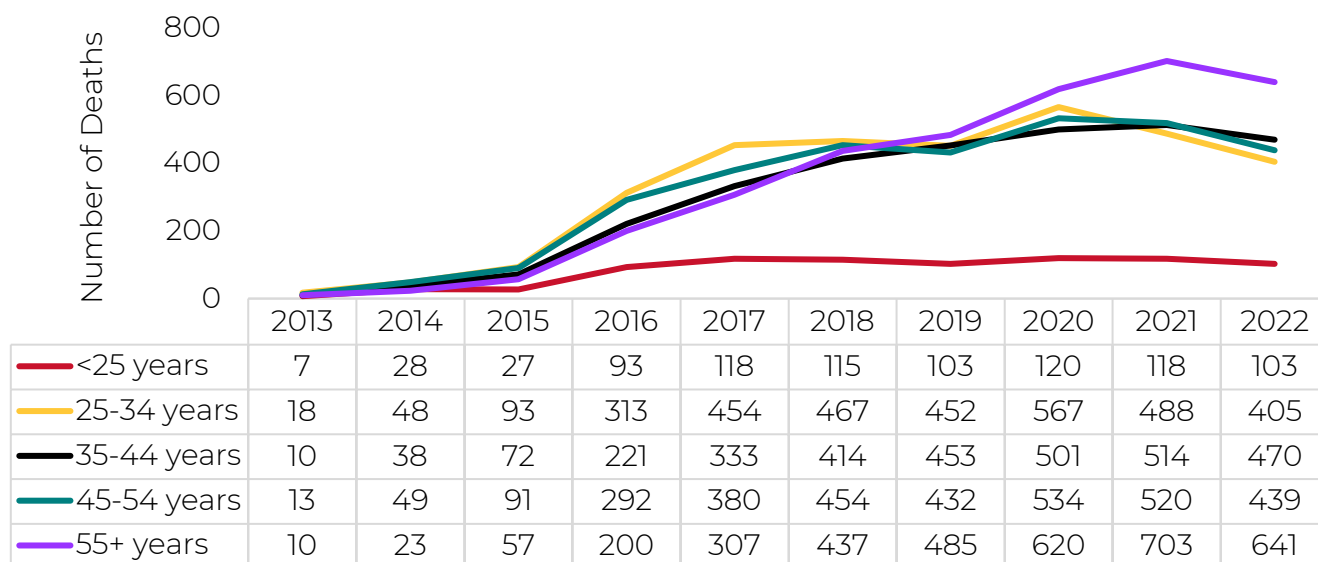
In 2022, the highest number of fentanyl-related deaths occurring in Maryland were among those aged 55 or over. This age demographic accounted for 31% of fentanyl-related deaths in 2022 compared to 13.5% of deaths in 2017.

Approximately 43% of fentanyl-related deaths were among non-Hispanic black individuals and half of deaths were in non-Hispanic white individuals in 2022. From 2021 to 2022 fentanyl-related deaths increased nearly 30% among Hispanic individuals.

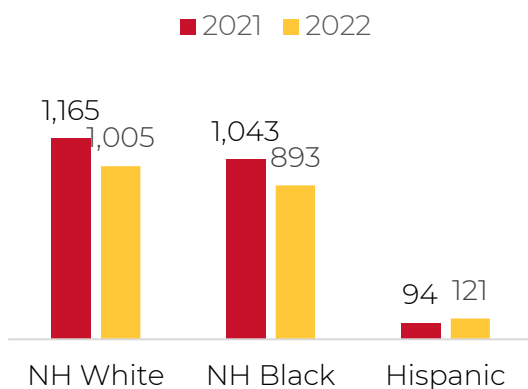
Seven out of ten fentanyl-related deaths occurring in Maryland were among males in 2022. [Figure 9]

**Figure 9. Number of Unintentional Fentanyl-Related Intoxication Deaths Occurring in Maryland by:**

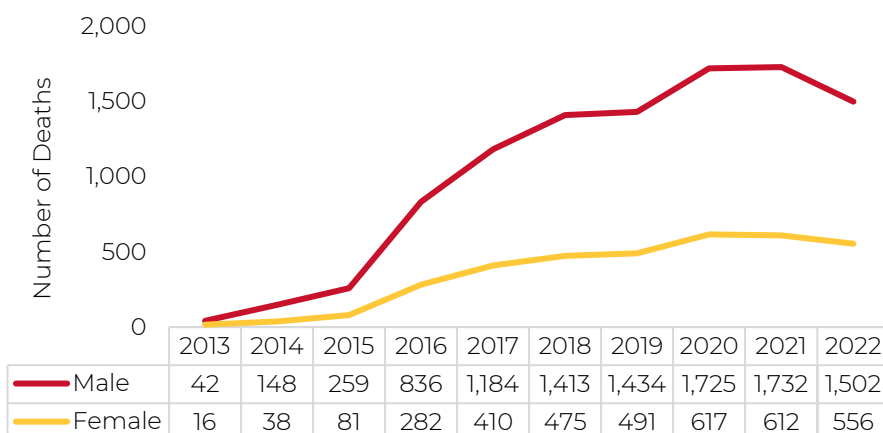
### Age Group, 2013-2022



### Race/Ethnicity, 2021-2022



### Sex, 2013-2022



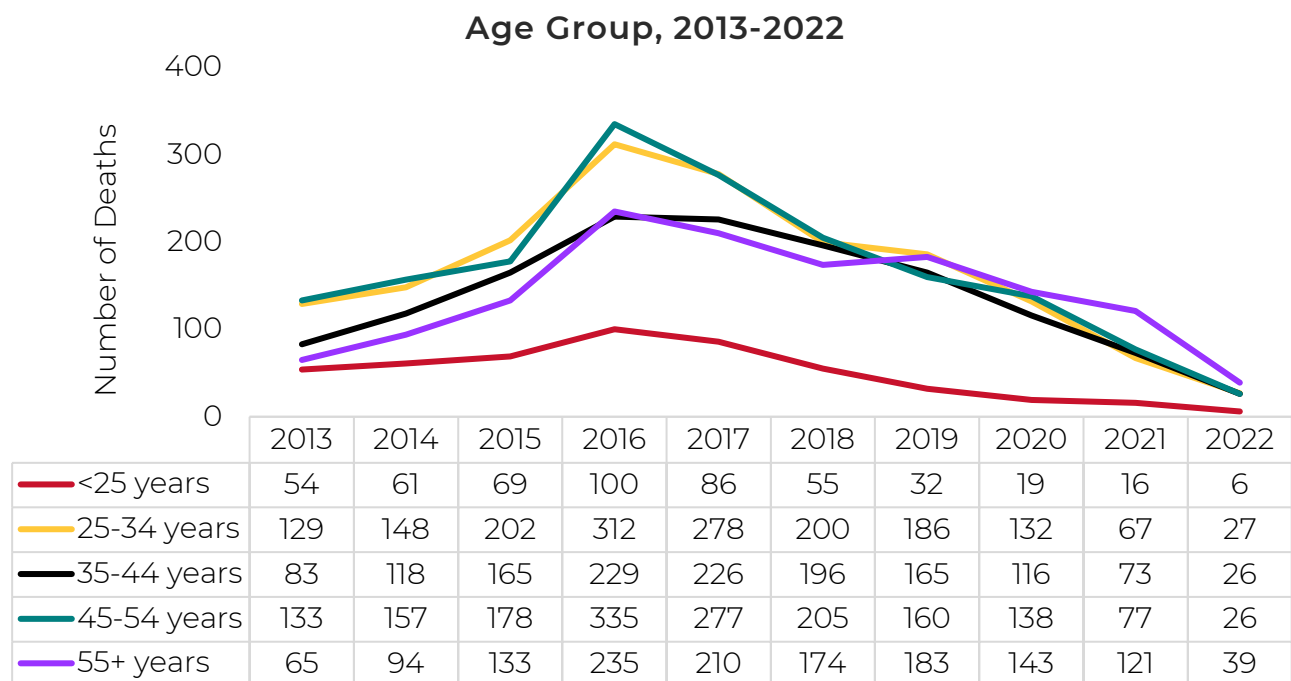
## Population Characteristics: Heroin-Related Deaths

Since 2017, the overall number of heroin-related deaths across all age groups is decreasing. In 2022, those 55 years and over experienced the most heroin-related deaths.

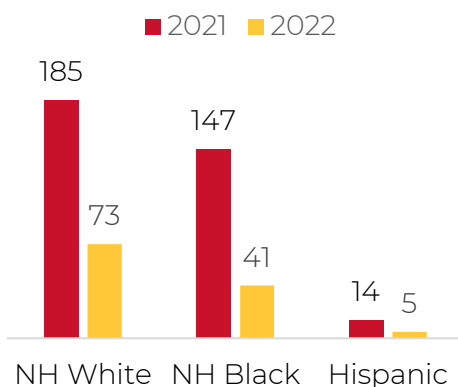
Near 60% of heroin-related deaths were among non-Hispanic white individuals, 33% were among non-Hispanic black individuals, and 4% among Hispanic individuals [Figure 10]. The heroin-related death rate among non-Hispanic black individuals (2.2 per 100,000) was similar to the rate among non-Hispanic white individuals (2.5 per 100,000) [Table 15].

Males accounted for two thirds of heroin-related deaths in 2022. The heroin-related death rate among males was 1.9 times the rate among females [Table 15].

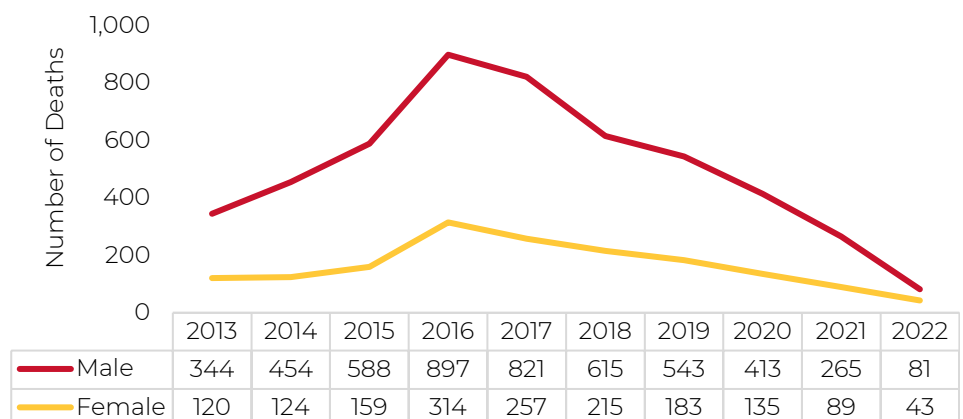
**Figure 10. Number of Unintentional Heroin-Related Intoxication Deaths Occurring in Maryland by:**



### Race/Ethnicity, 2021-2022



### Sex, 2013-2022



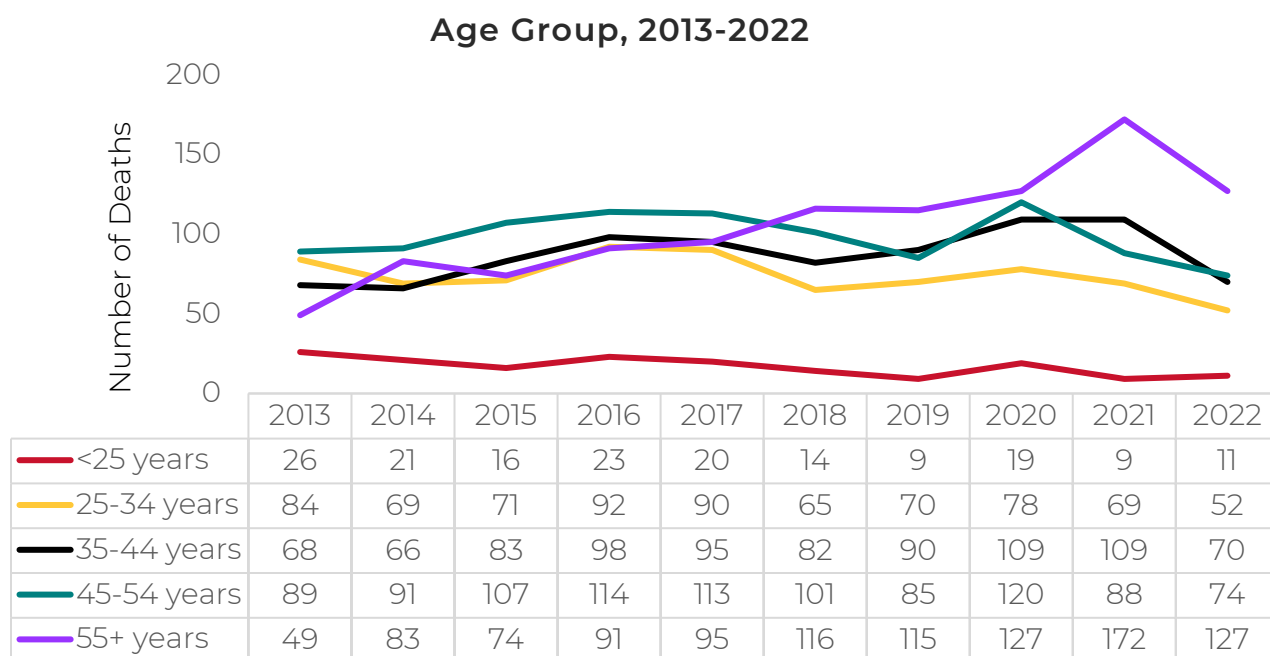
## Population Characteristics: Prescription Opioid-Related Deaths

In 2022, the highest number of prescription opioid related deaths were among those aged 55 or over. This age demographic accounted for 38% of prescription opioid related deaths in 2022 compared to 22.3% of deaths in 2017.

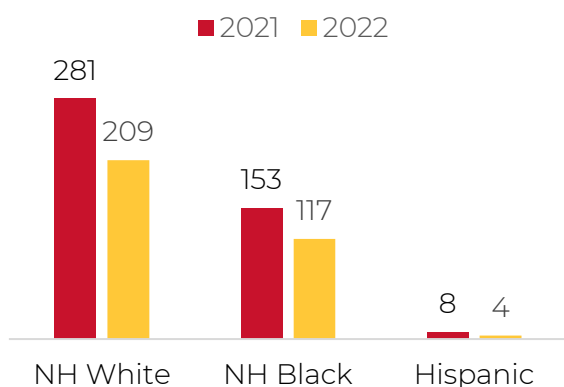
Approximately 62% of prescription opioid-related deaths were among non-Hispanic white individuals and 35% were among non-Hispanic black individuals.

Males continue to account for about 60% of prescription opioid-related deaths. [Figure 11]

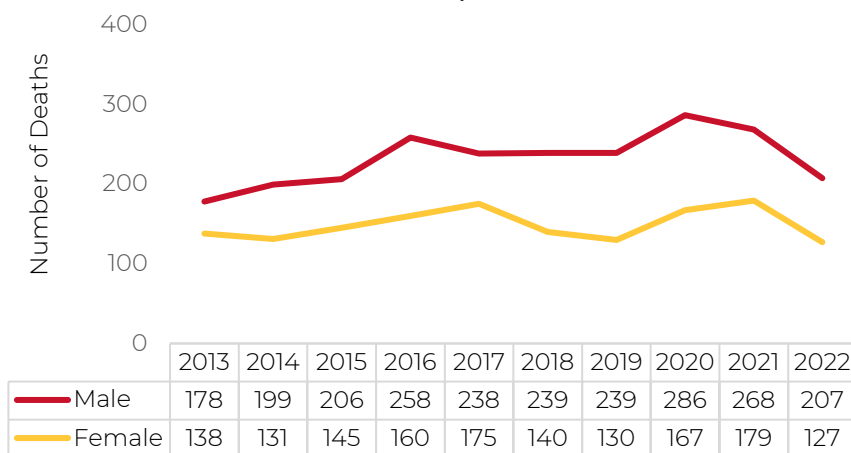
**Figure 11. Number of Unintentional Prescription Opioid-Related Intoxication Deaths Occurring in Maryland by:**



### Race/Ethnicity, 2021-2022



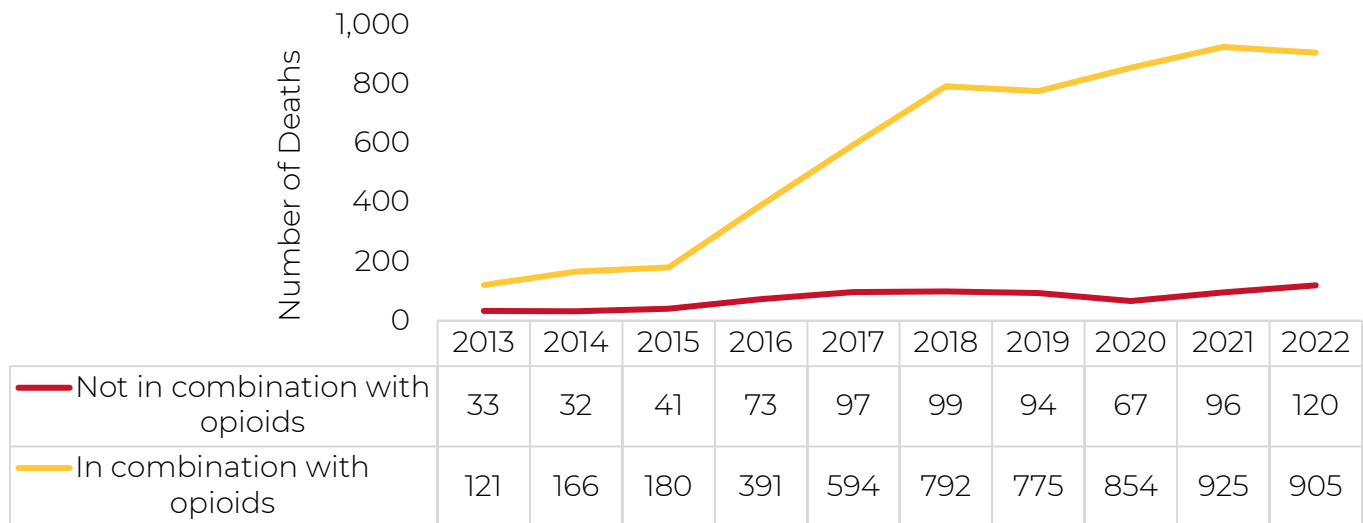
### Sex, 2013-2022



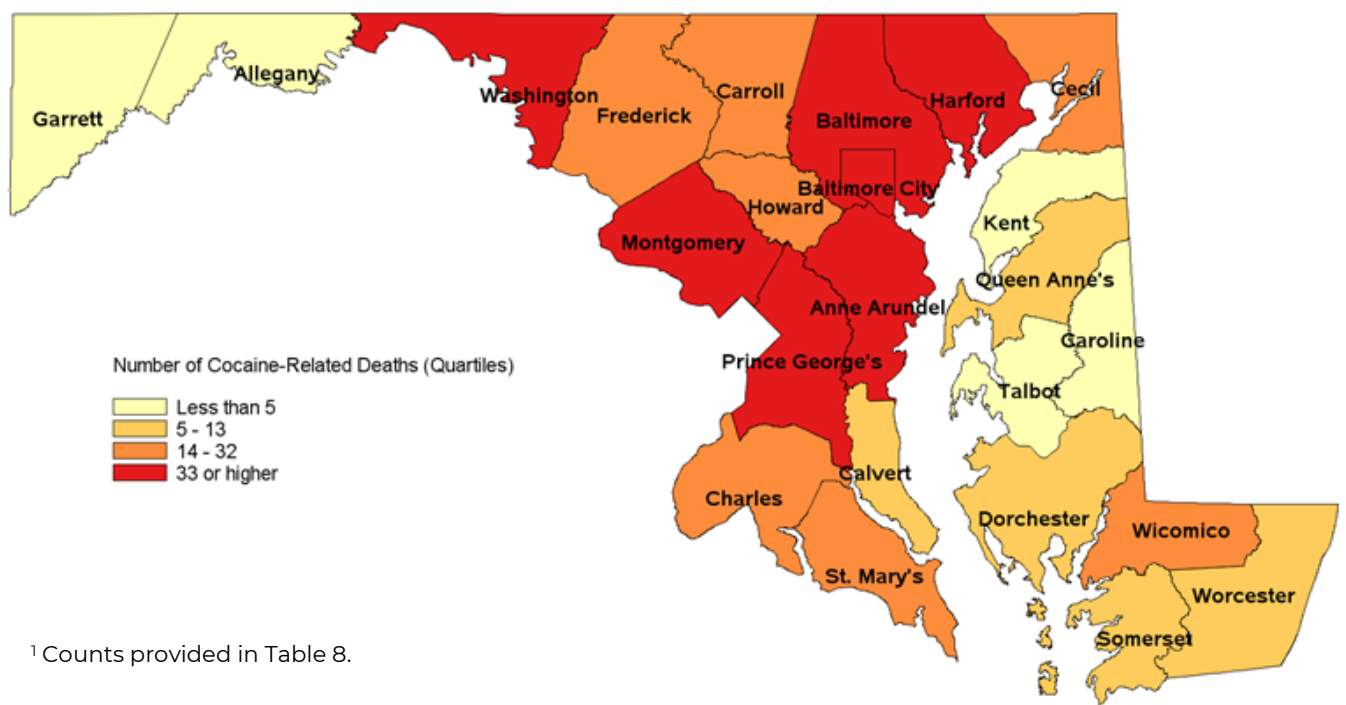
## COCAINE-RELATED DEATHS

Over a 10-year period, the number of cocaine-related deaths is increasing in Maryland. In more than 8 out of 10 decedents, cocaine-related deaths are occurring in combination with opioids. In 2022, cocaine-related deaths occur 88% of the time in combination with opioids. This is down slightly from about 92.7% in 2020 [Figure 12].

**Figure 12. Number of Unintentional Cocaine-Related Deaths Occurring in Maryland, 2013-2022**



**Figure 13. Number of Unintentional Cocaine-Related Deaths by Place of Occurrence in Maryland, 2022<sup>1</sup>**



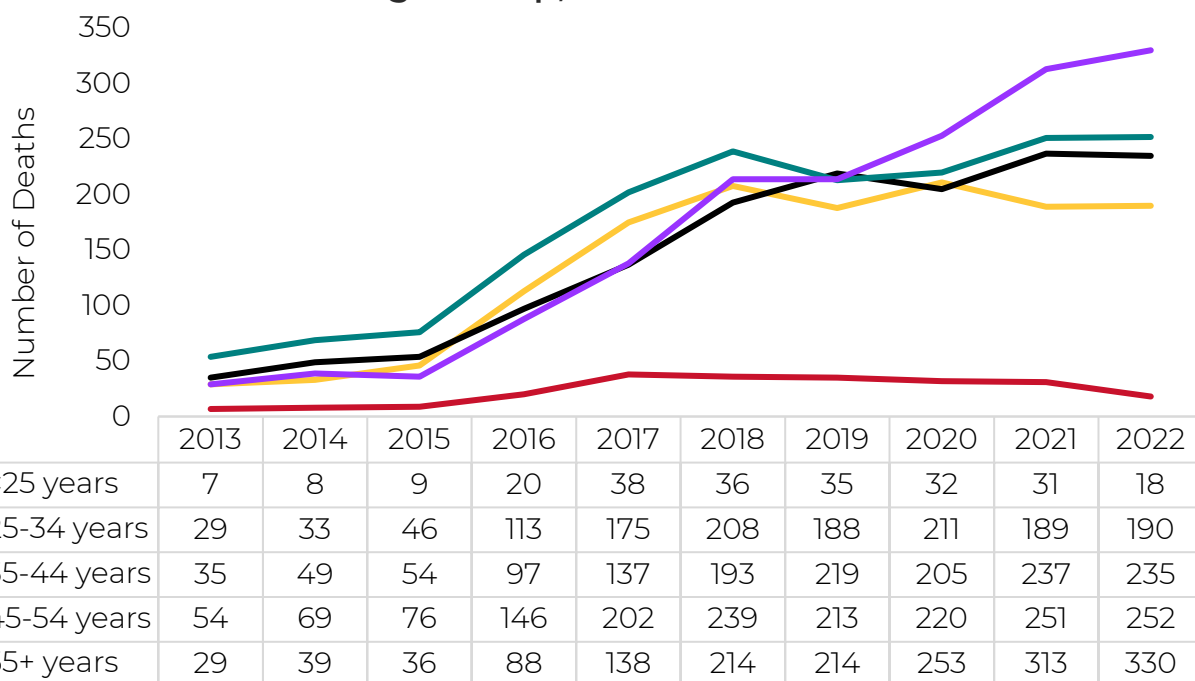
<sup>1</sup> Counts provided in Table 8.

## Population Characteristics: Cocaine-Related Deaths

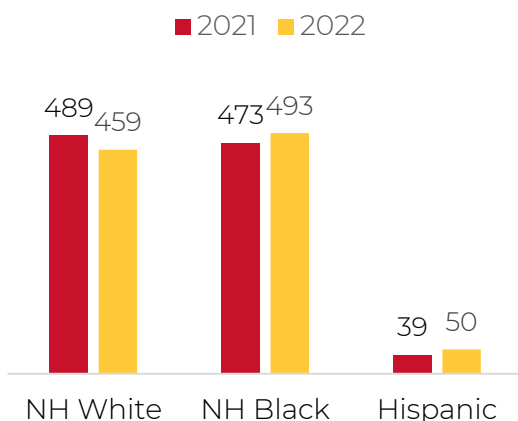
Those 55 years and over experienced the most cocaine-related deaths in 2022, a nearly 24% increase from 2020. Forty-eight percent of cocaine-related deaths were among non-Hispanic black individuals and 45% were among non-Hispanic white individuals. The cocaine-related death rate among non-Hispanic black individuals was 1.7 times the rate among non-Hispanic white individuals [Table 15]. In 2022, 7 out of 10 cocaine-related deaths were among males (727) compared to 298 deaths among females. The cocaine-related death rate among males was 1.5 the rate among females [Table 15].

**Figure 14. Number of Unintentional Cocaine-Related Intoxication Deaths Occurring in Maryland by:**

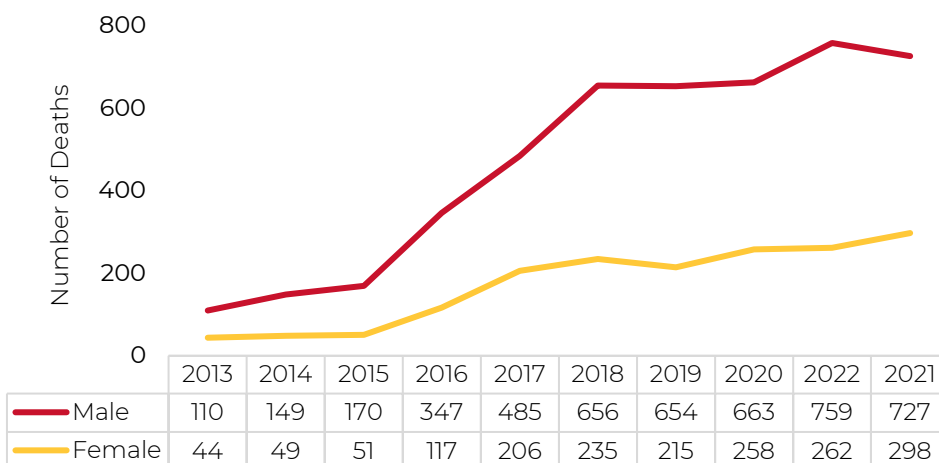
### Age Group, 2013-2022



### Race/Ethnicity, 2021-2022



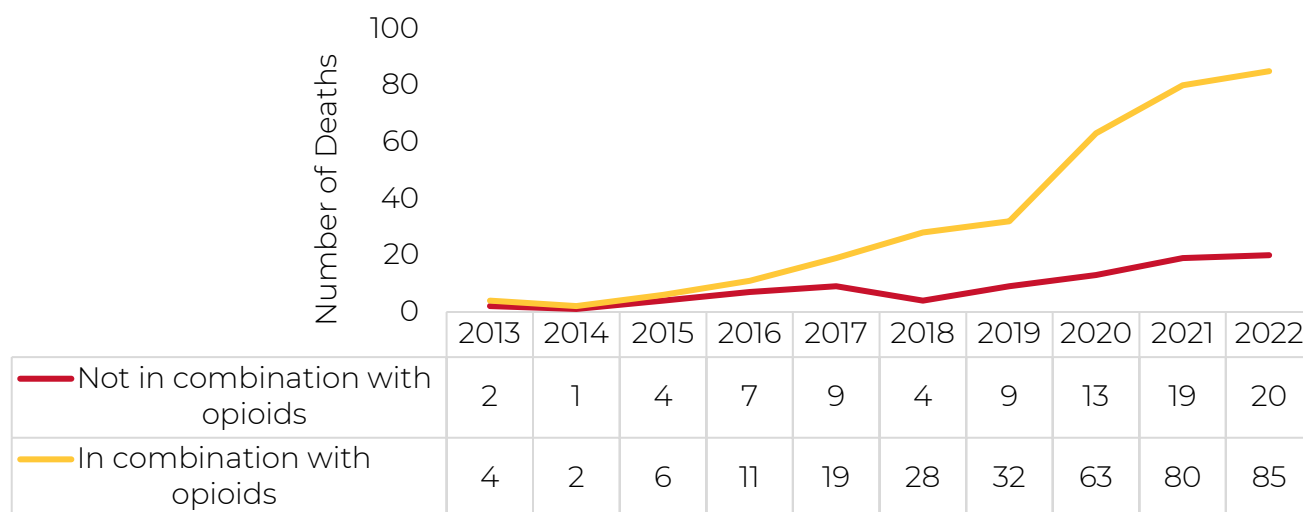
### Sex, 2013-2022



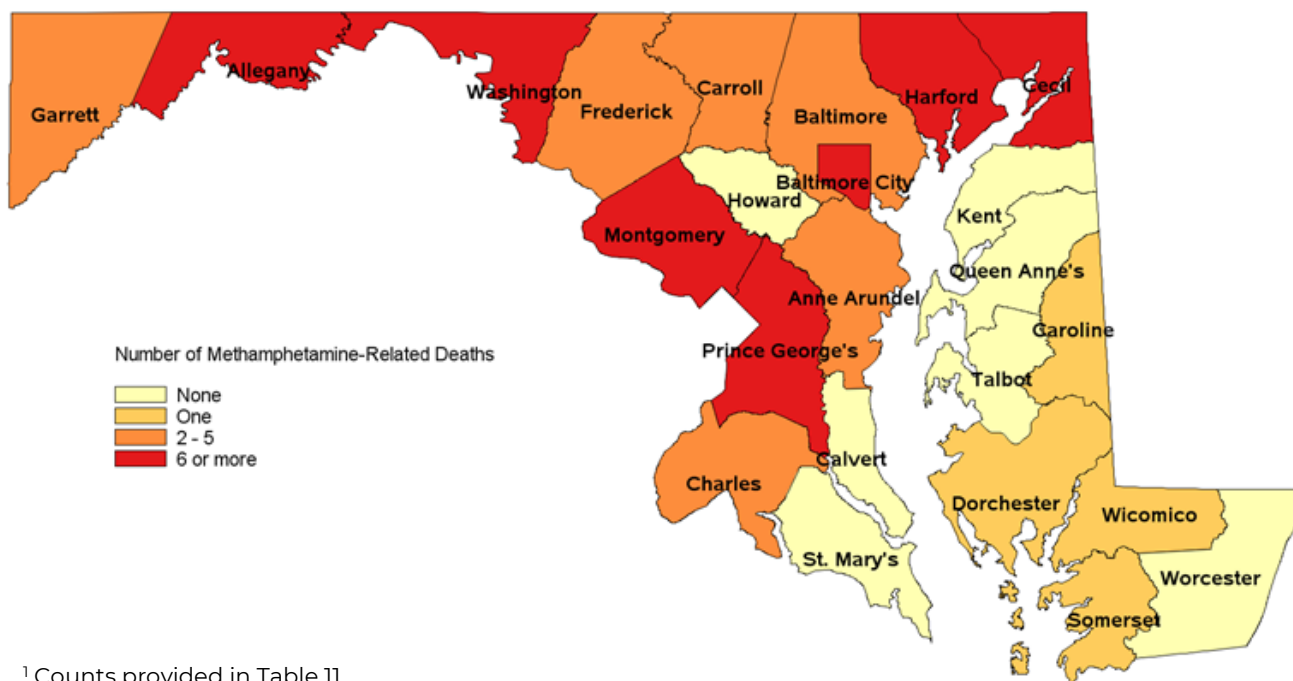
# METHAMPHETAMINE-RELATED DEATHS

The number of methamphetamine-related deaths increased 6% in 2022 to 105 deaths, an all-time high. Since 2015, the number of methamphetamine-related deaths is increasing, particularly in combination with opioids. In 2022, methamphetamine-related deaths occur about 81% of the time in combination with opioids [Figure 15]. Though the number of deaths per county from this substance remains sparse, Cecil County had 30 deaths in 2022, which was more than twice as high as the next highest jurisdiction [Figure 16, Table 11].

**Figure 15. Number of Unintentional Methamphetamine-Related Deaths Occurring in Maryland, 2013-2022**



**Figure 16. Number of Unintentional Methamphetamine-Related Deaths by Place of Occurrence in Maryland, 2022<sup>1</sup>**



<sup>1</sup> Counts provided in Table 11.

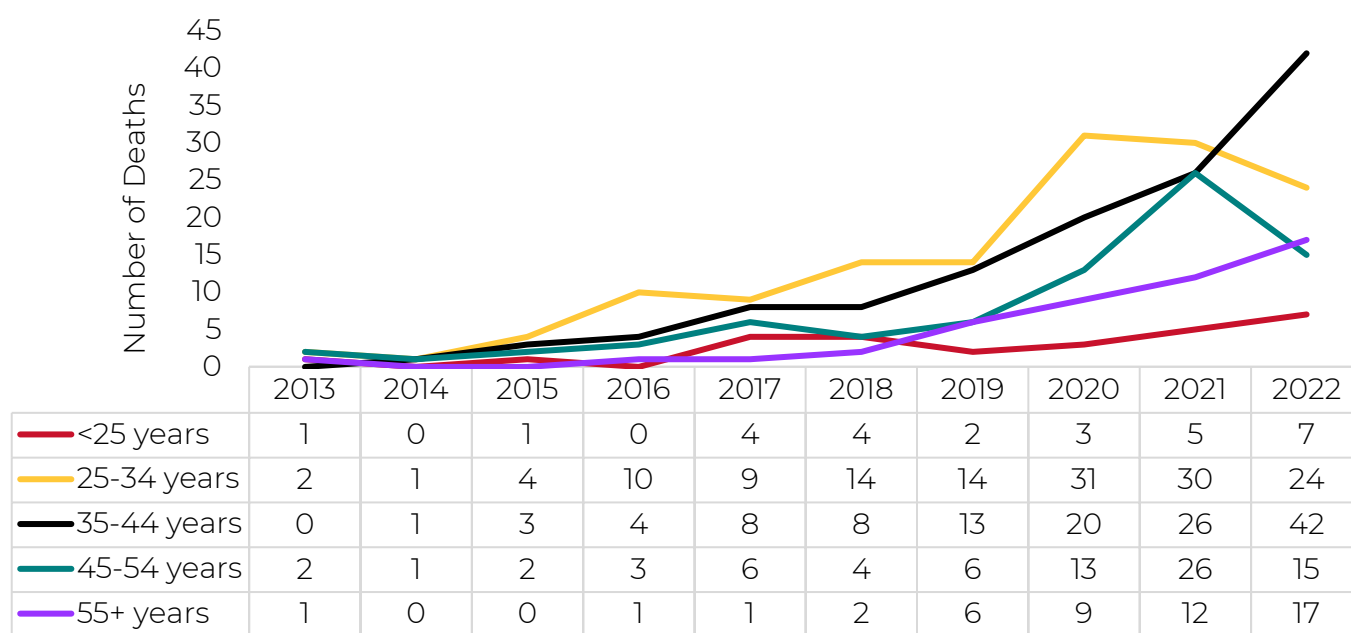
## Population Characteristics: Methamphetamine-Related Deaths

Those aged 35-44 years experienced the most methamphetamine-related deaths in 2022, after more than doubling since 2020. This age demographic accounted for 40% of methamphetamine-related deaths.

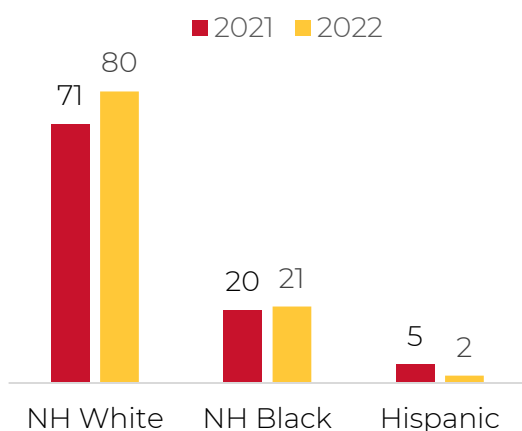
Nearly 76% percent of methamphetamine-related deaths were among non-Hispanic white individuals and 20% were among non-Hispanic black individuals. The methamphetamine-related death rate among non-Hispanic white individuals was nearly 2.5 times the rate among non-Hispanic black individuals [Table 15]. Eight out of 10 methamphetamine-related deaths were among males, 86 compared to 19 deaths among females in 2022. [Figure 17]

**Figure 17. Number of Unintentional Methamphetamine-Related Intoxication Deaths Occurring in Maryland by:**

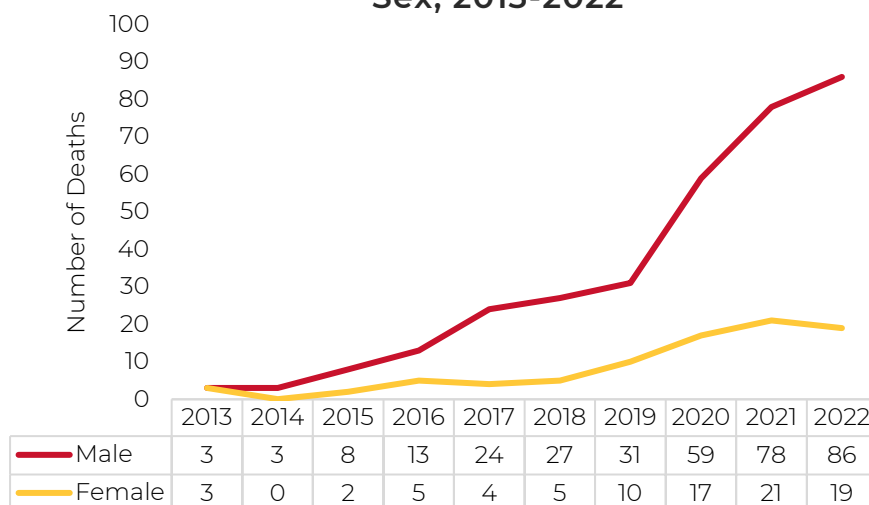
**Age Group, 2013-2022**



**Race/Ethnicity, 2021-2022**



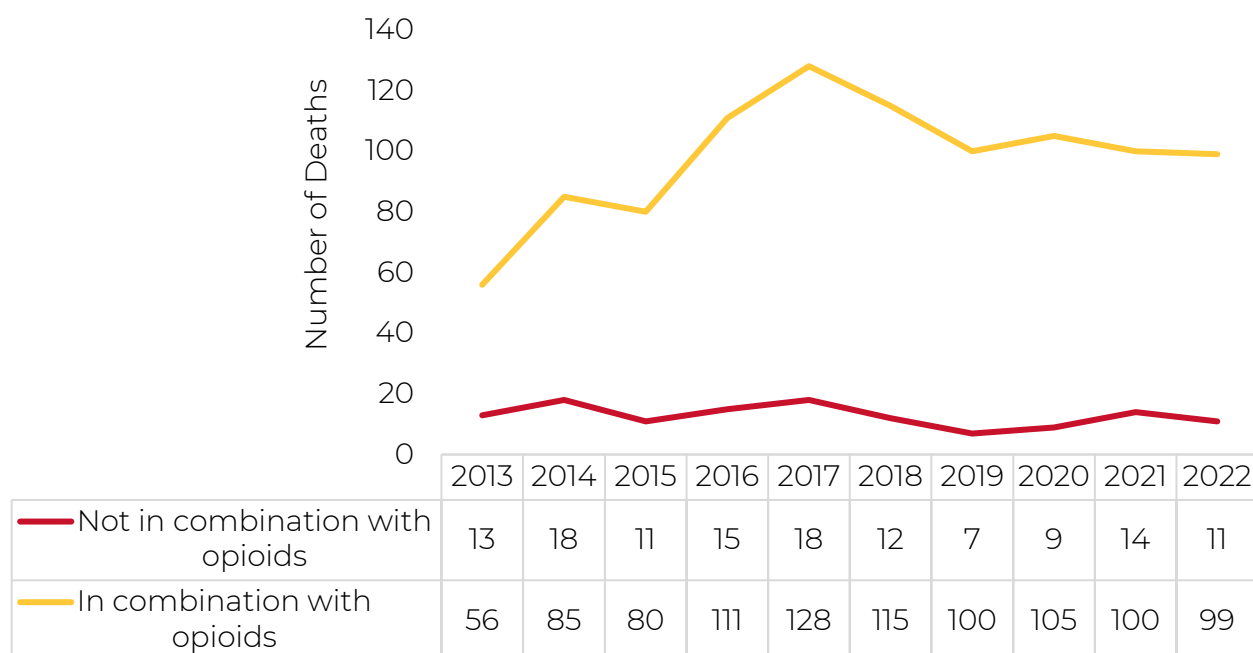
**Sex, 2013-2022**



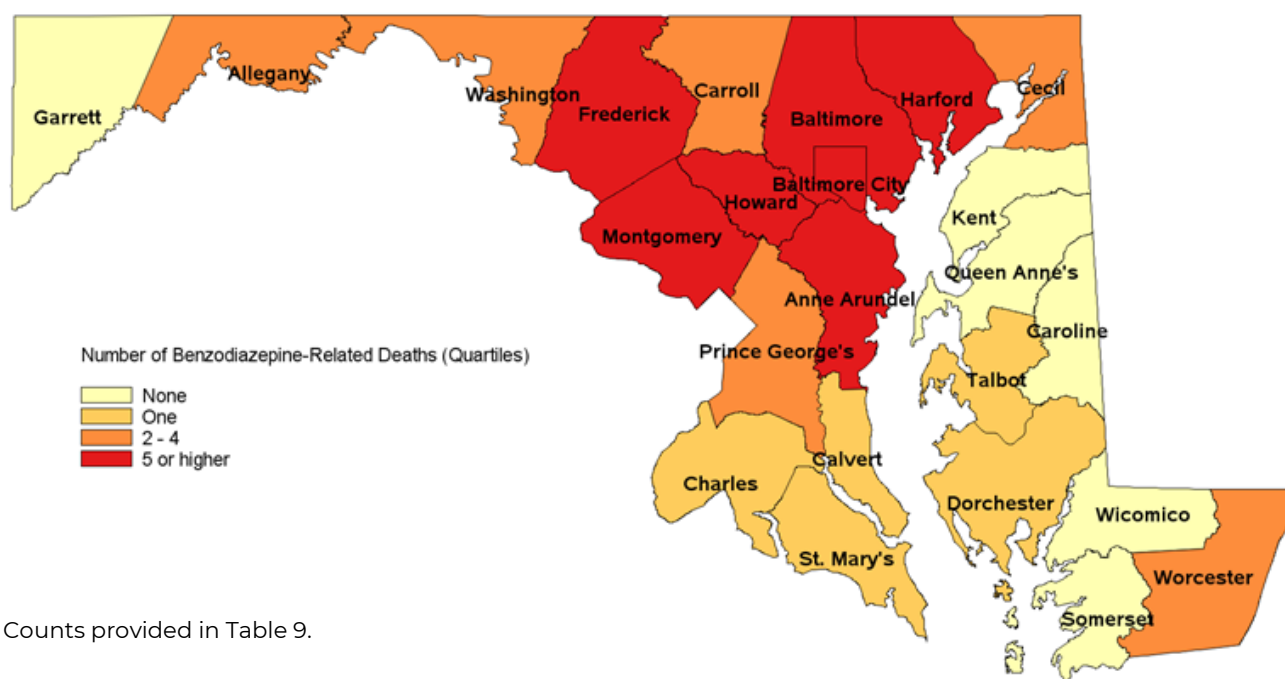
## BENZODIAZEPINE-RELATED DEATHS

The number of benzodiazepine-related deaths remained the similar between 2021 and 2022 (114 vs 110 deaths) and remains below the all-time high of 146 deaths in 2017. The number of benzodiazepine-related deaths increased from 2015 to 2017, particularly in combination with opioids and began to decline since 2018. [Figure 18]

**Figure 18. Number of Unintentional Benzodiazepine-Related Deaths Occurring in Maryland, 2013-2022**



**Figure 19. Number of Unintentional Benzodiazepine-Related Deaths by Place of Occurrence in Maryland, 2022<sup>1</sup>**

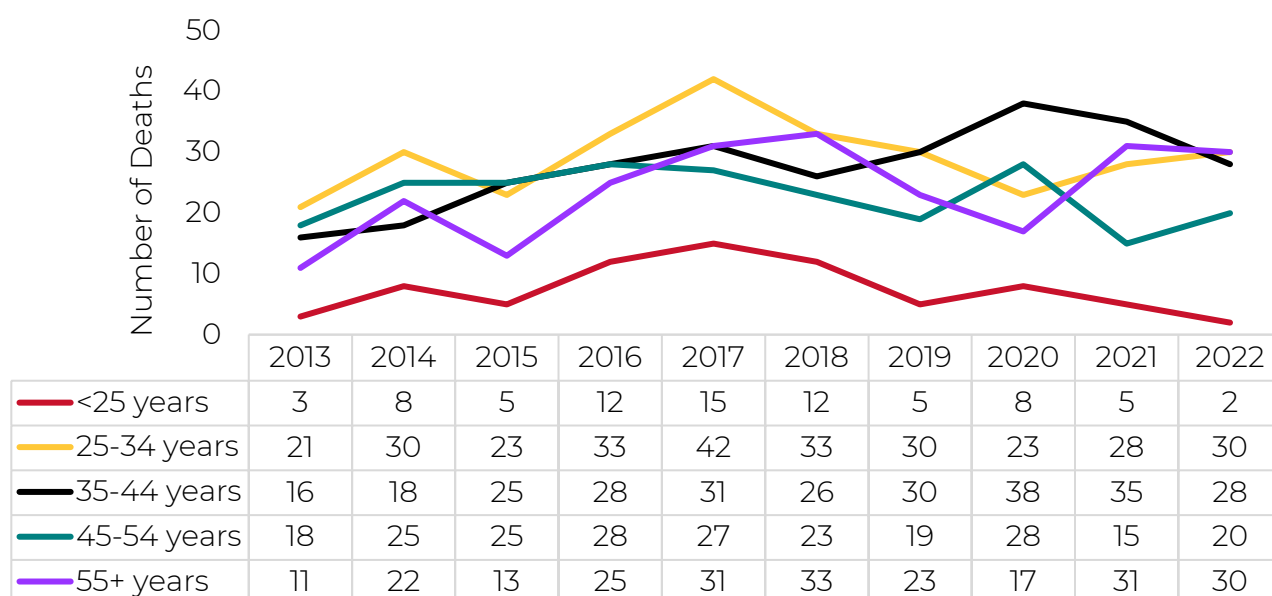


<sup>1</sup> Counts provided in Table 9.

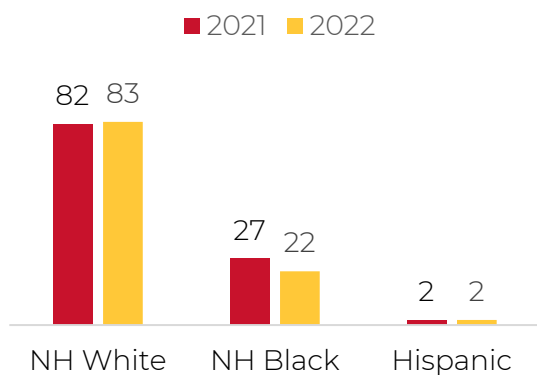
## Population Characteristics: Benzodiazepine-Related Deaths

Those aged 25-34 years and 55 years and over experienced the most benzodiazepine-related deaths in 2022. Benzodiazepine-related deaths increased from 20.1% in 2020 to 27.3% in 2022 among those aged 25-34 years and from 14.9% to 27.3% among those 55 years and over. Three quarters of benzodiazepine-related deaths in 2022 were among non-Hispanic white individuals and a fifth occurred among non-Hispanic black individuals. The benzodiazepine-related death rate among non-Hispanic white individuals was 2.3 times the rate among non-Hispanic black individuals [Table 15]. Men experienced the most benzodiazepine-related deaths in 2022 (60.9%). The benzodiazepine-related death rate was similar for men (2.2) and women (1.8) [Table 15].

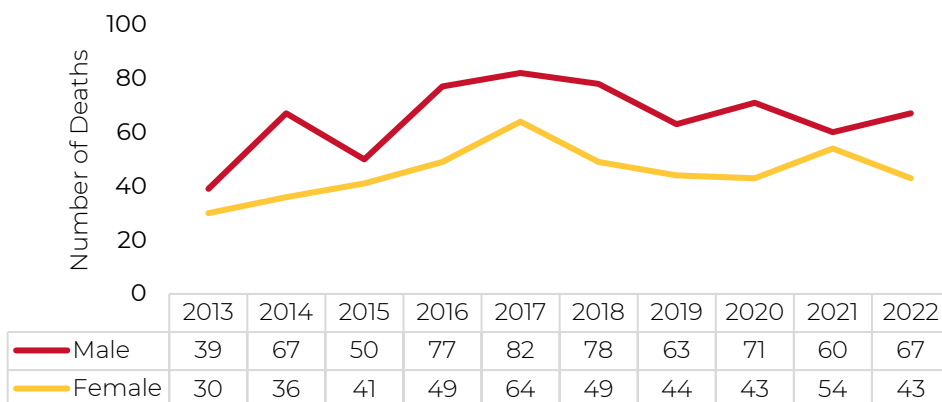
**Figure 20. Number of Unintentional Benzodiazepine-Related Intoxication Deaths Occurring in Maryland by: Age Group, 2013-2022**



## Race/Ethnicity, 2021-2022



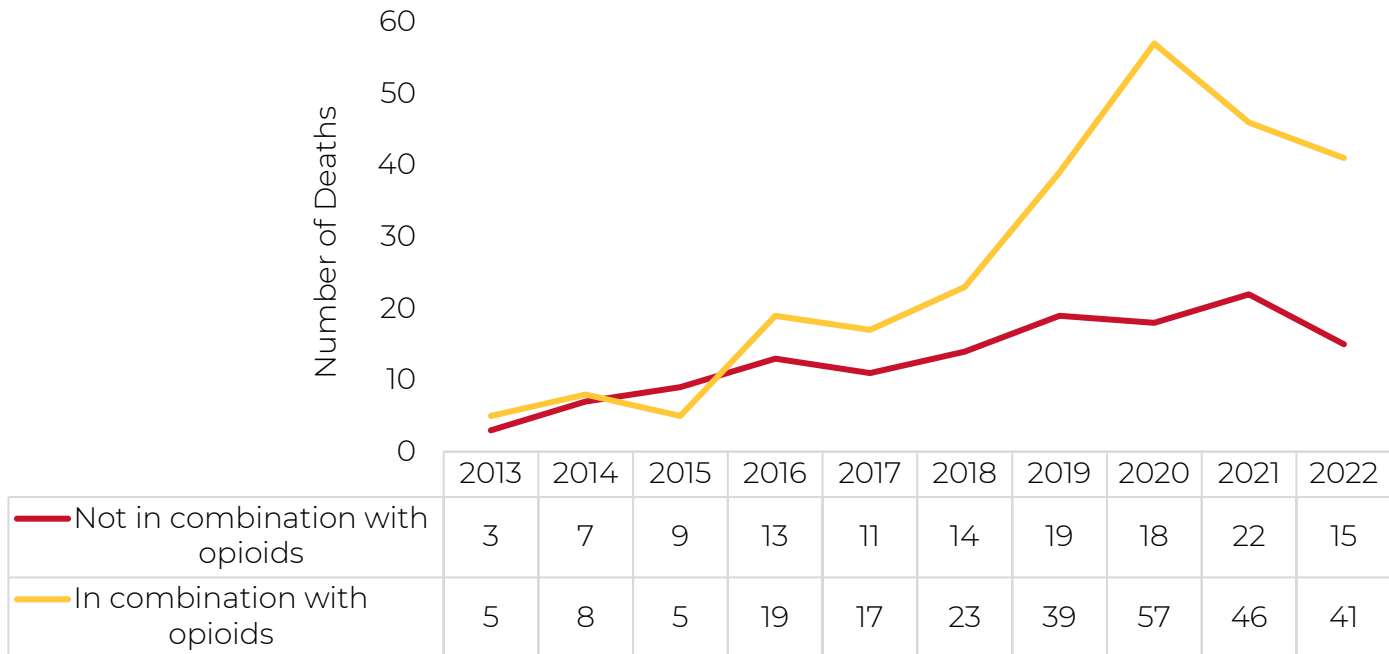
## Sex, 2013-2022



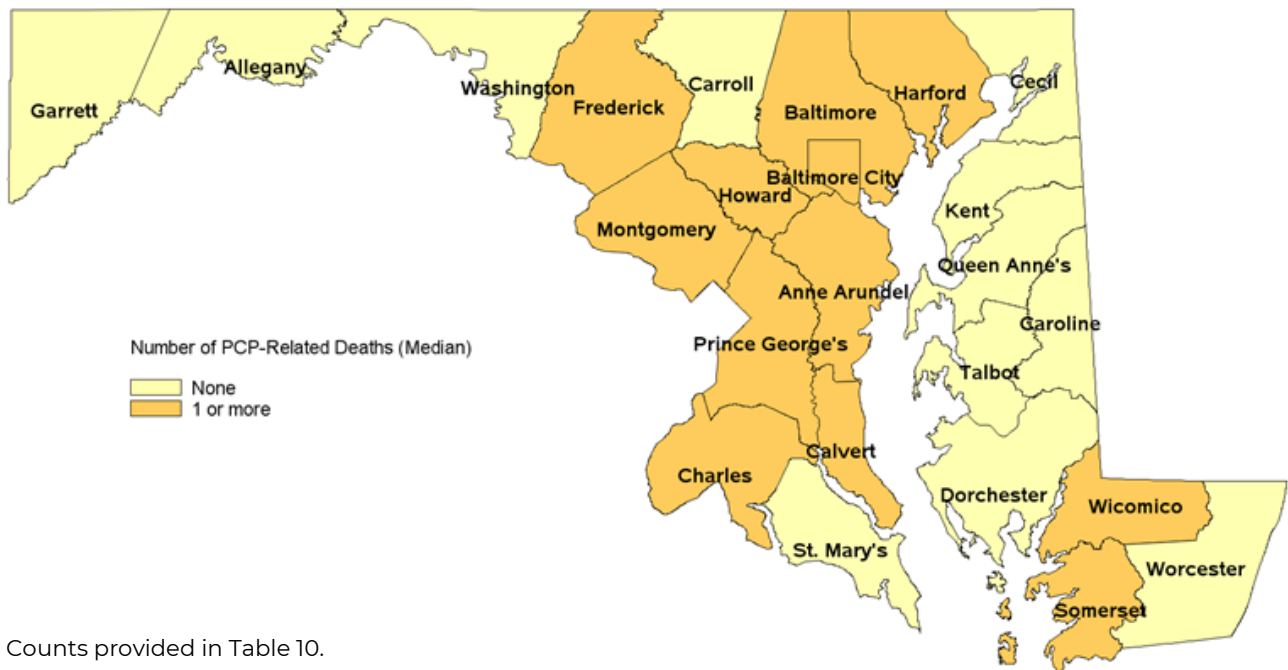
## PHENCYCLIDINE-RELATED DEATHS

The number of phencyclidine-related deaths decreased to 56 deaths in 2022, down 25% from the all-time high of 75 deaths in 2020. The number of phencyclidine-related deaths has increased over the last decade, particularly in combination with opioids. [Figure 21]

**Figure 21. Number of Unintentional Phencyclidine-Related Deaths Occurring in Maryland, 2013-2022**



**Figure 22. Number of Unintentional Phencyclidine-Related Deaths by Place of Occurrence in Maryland, 2022<sup>1</sup>**



<sup>1</sup> Counts provided in Table 10.

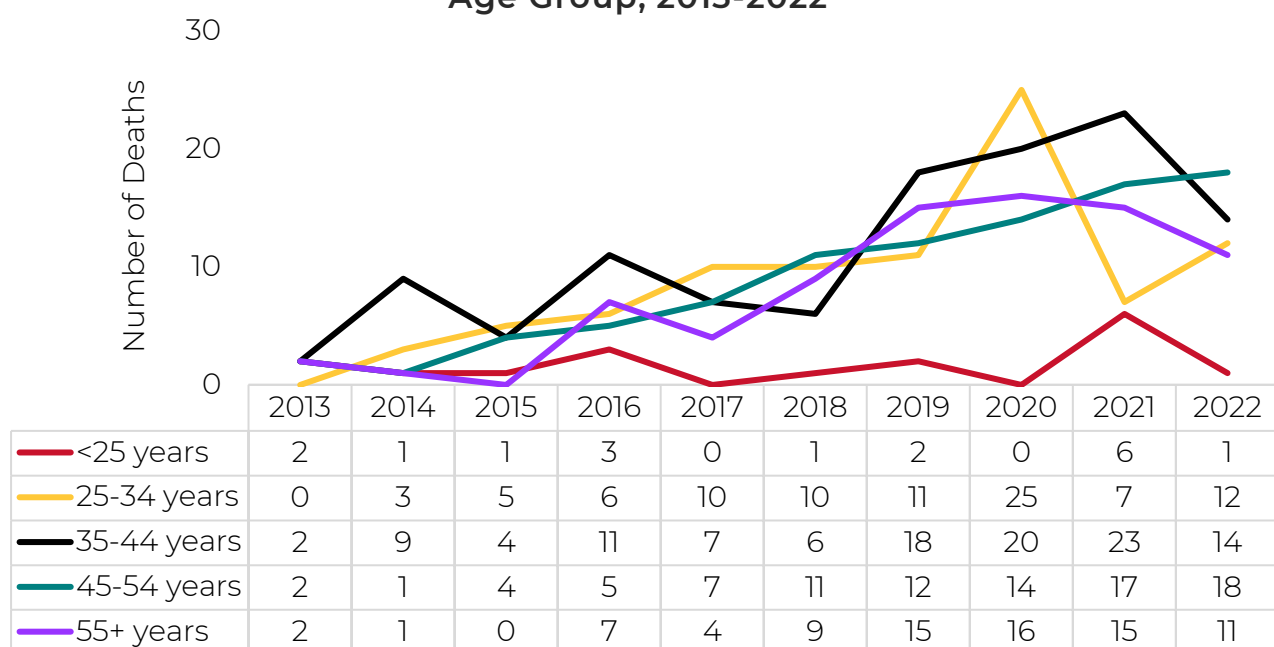
## Population Characteristics: Phencyclidine-Related Deaths

Those aged 45-54 years experienced the most phencyclidine-related deaths in 2022. In this age demographic, phencyclidine-related deaths have increased from 18.7% in 2020 to 32.1% in 2022.

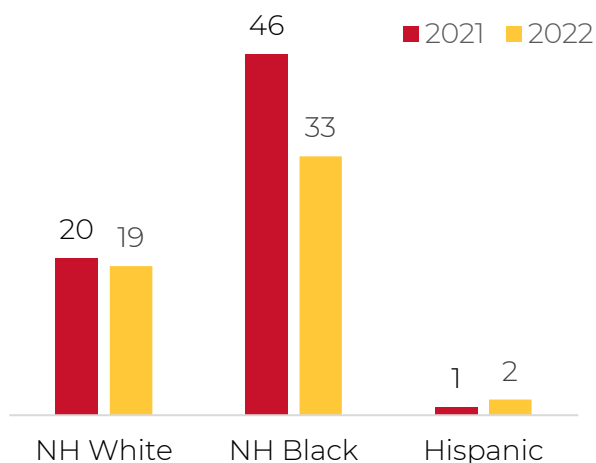
Approximately 59% of phencyclidine-related deaths in 2022 were among non-Hispanic black individuals and about a third occurred among non-Hispanic white individuals. Males continue to experience the highest numbers of phencyclidine-related deaths, accounting for 76.7% of deaths. [Figure 23]

**Figure 23. Number of Unintentional Phencyclidine-Related Intoxication Deaths Occurring in Maryland by:**

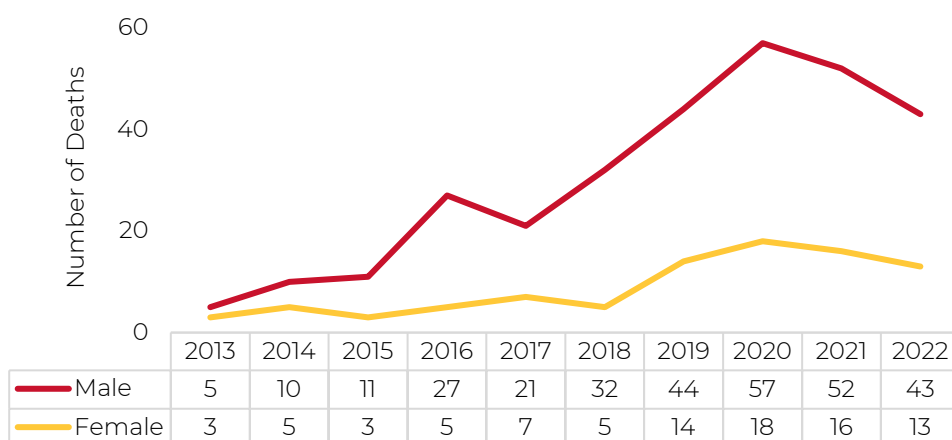
### Age Group, 2013-2022



### Race/Ethnicity, 2021-2022



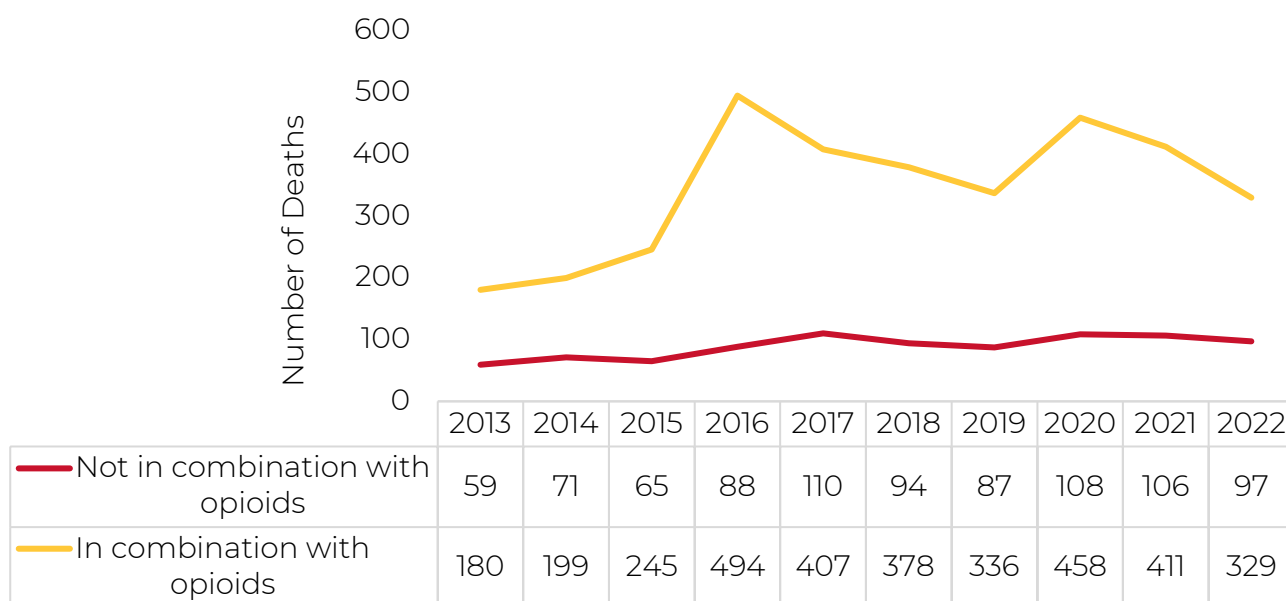
### Sex, 2013-2022



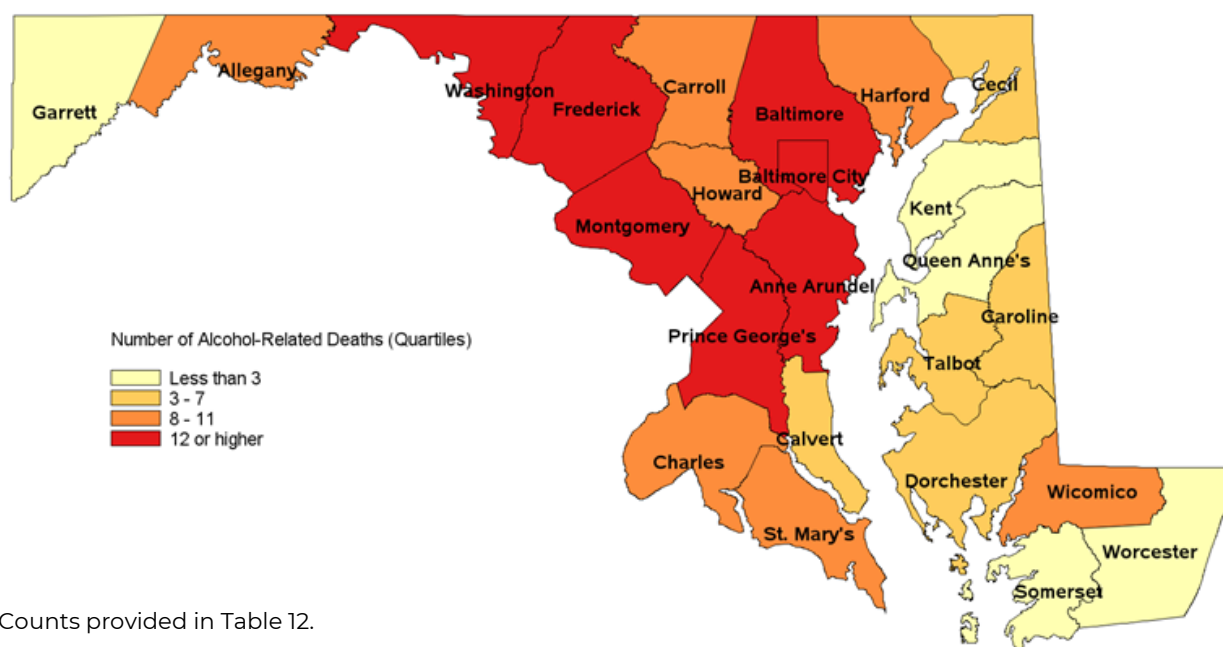
## ALCOHOL-RELATED DEATHS

Since 2020, the number of alcohol-related deaths decreased about 25% to 426 deaths and remains below the all-time high of 582 deaths in 2017. Particularly in combination with opioids, the number of alcohol-related deaths increased sharply from 2015 to 2016, then began to decline until another 24% increase from 2019 to 2020. About 77% of alcohol-related deaths in 2022 occurred in combination with any opioid. [Figure 24]

**Figure 24. Number of Unintentional Alcohol-Related Deaths Occurring in Maryland, 2013-2022**



**Figure 25. Number of Unintentional Alcohol-Related Deaths by Place of Occurrence in Maryland, 2022<sup>1</sup>**

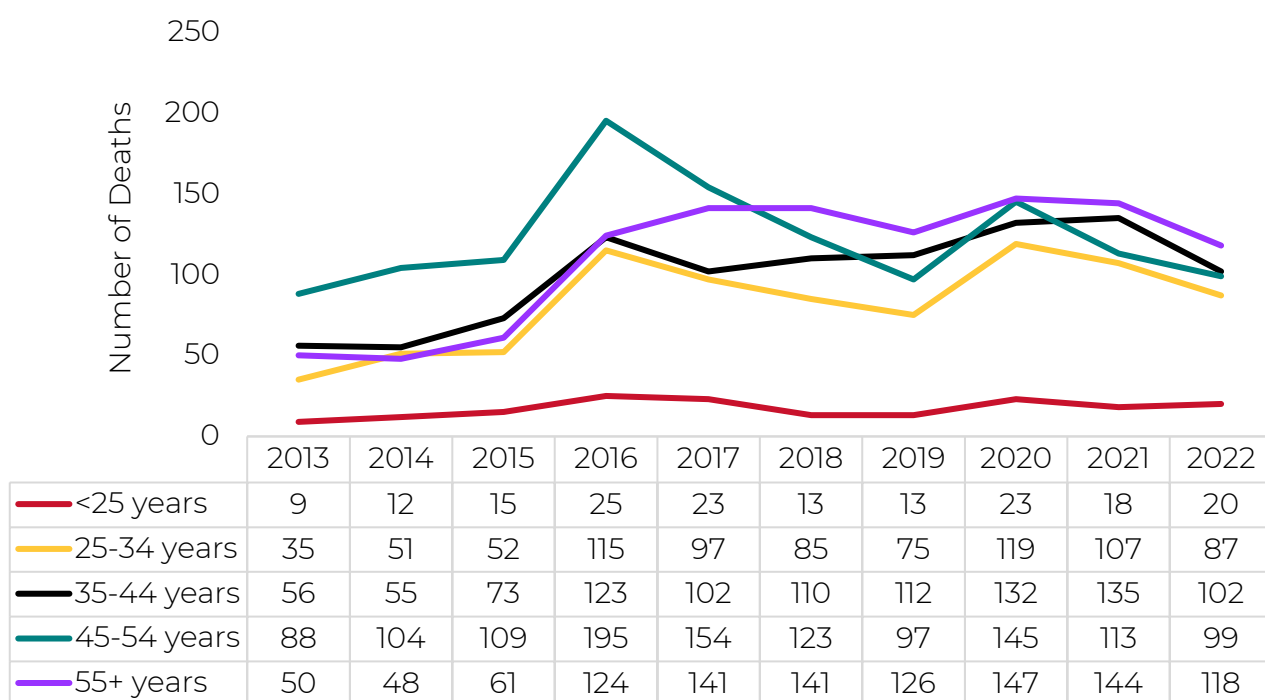


<sup>1</sup> Counts provided in Table 12.

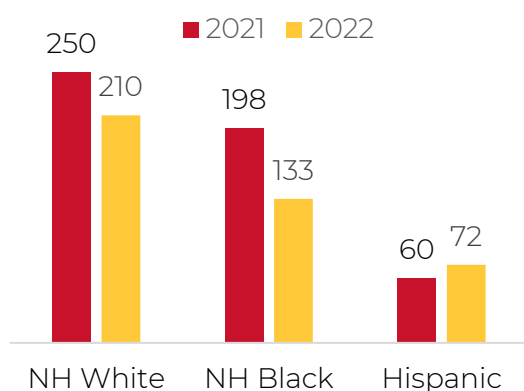
## Population Characteristics: Alcohol-Related Deaths

Those aged 55 years and over experienced the most alcohol-related deaths in 2022, followed by the 35–44-year age group. Alcohol-related deaths decreased between 2020 and 2022 among those aged 45–54 years. Approximately half of alcohol-related deaths in 2022 were among non-Hispanic white individuals, 31.2% occurred among non-Hispanic black individuals, and 17% among Hispanic individuals. In 2022, almost 8 out of 10 alcohol-related deaths were among males (329) compared to 97 deaths among females. [Figure 26]

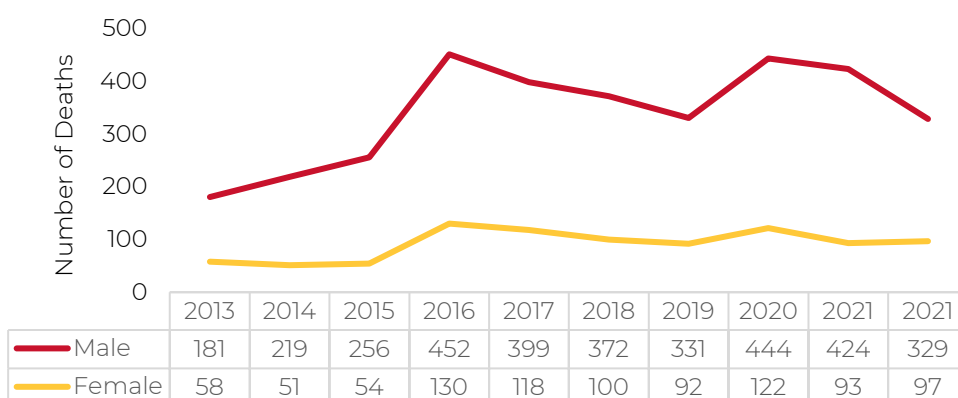
**Figure 26. Number of Unintentional Alcohol-Related Intoxication Deaths Occurring in Maryland by:**  
**Age Group, 2013-2022**



**Race/Ethnicity, 2021-2022**



**Sex, 2013-2022**



## DRUG COMBINATIONS

Figure 27. Combinations of Substances Related to Unintentional Drug- and Alcohol-Related Intoxications Deaths, Maryland, 2022

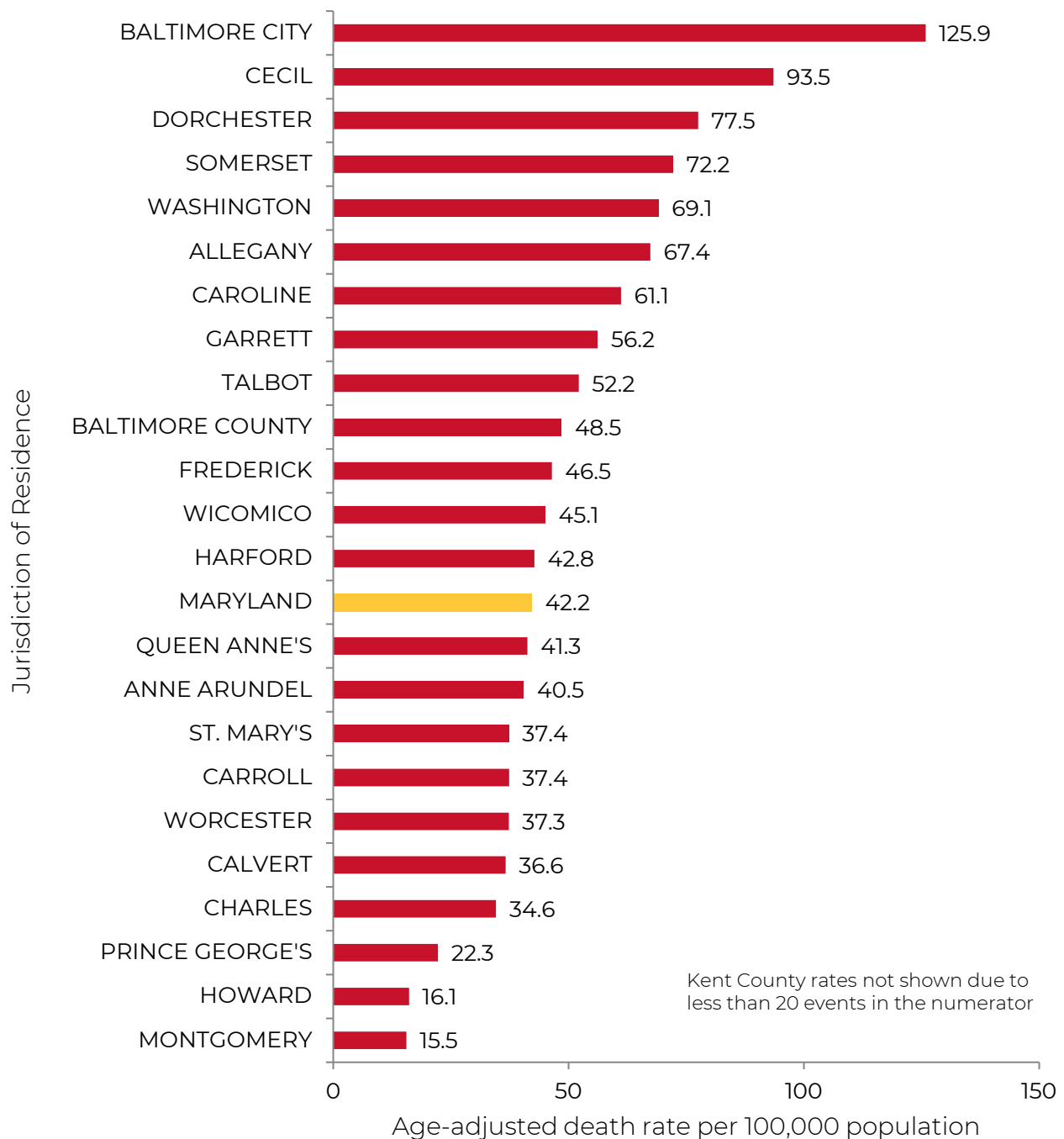
		Number	Percent
<b>Fentanyl</b>	Total	2,060	
	In combination		
	With cocaine	885	43.0
	With xylazine	352	24.4
	With alcohol	312	15.1
	With prescription opioids	196	9.5
	With heroin	99	4.8
	With methamphetamine	82	4.0
	With benzodiazepines	79	3.8
	With phencyclidine	40	1.9
<b>Cocaine</b>	Total	1,025	
	In combination		
	With fentanyl	885	86.3
	With alcohol	158	15.4
	With xylazine	139	22.0
	With prescription opioids	83	8.1
	With heroin	38	3.7
	With phencyclidine	24	2.3
	With benzodiazepines	23	2.2
	With methamphetamine	19	1.9
<b>Heroin</b>	Total	124	
	In combination		
	With fentanyl	99	79.8
	With cocaine	38	30.6
	With xylazine	30	24.2
	With prescription opioids	21	16.9
	With alcohol	16	12.9
	With methamphetamine	9	7.3
	With benzodiazepines	5	4.0
	With phencyclidine	2	1.6
<b>Prescription opioids</b>	Total	334	
	In combination		
	With fentanyl	196	58.7
	With cocaine	83	24.9
	With xylazine	47	20.3
	With benzodiazepines	43	12.9
	With alcohol	27	8.1
	With heroin	21	6.3
	With methamphetamine	12	3.6
	With phencyclidine	2	0.6

**Figure 27. Combinations of Substances Related to Unintentional Drug- and Alcohol-Related Intoxications Deaths, Maryland, 2022 (Continued)**

		Number	Percent
<b>Alcohol</b>			
	Total	426	
	In combination		
	With fentanyl	312	73.2
	With cocaine	158	37.1
	With xylazine	53	12.1
	With prescription opioids	27	6.3
	With heroin	16	3.8
	With phencyclidine	13	3.1
	With benzodiazepines	12	2.8
	With methamphetamine	8	1.9
<b>Benzodiazepines</b>			
	Total	110	
	In combination		
	With fentanyl	79	71.8
	With prescription opioids	43	39.1
	With cocaine	23	20.9
	With xylazine	19	17.3
	With alcohol	12	10.9
	With heroin	5	4.5
	With methamphetamine	3	2.7
	With phencyclidine	1	0.9
<b>Phencyclidine</b>			
	Total	56	
	In combination		
	With fentanyl	40	71.4
	With cocaine	24	42.9
	With alcohol	13	23.2
	With methamphetamine	5	8.9
	With heroin	2	3.6
	With prescription opioids	2	3.6
	With xylazine	2	3.6
	With benzodiazepines	1	1.8
<b>Methamphetamine</b>			
	Total	105	
	In combination		
	With fentanyl	82	78.1
	With xylazine	24	29.3
	With cocaine	19	18.1
	With prescription opioids	12	11.4
	With heroin	9	8.6
	With alcohol	8	7.6
	With phencyclidine	5	4.8
	With benzodiazepines	3	2.9
<b>Xylazine</b>			
	Total	352	
	In combination		
	With fentanyl	352	100.0
	With cocaine	139	39.5
	With alcohol	53	15.1
	With prescription opioids	47	13.4
	With heroin	30	8.5
	With methamphetamine	24	6.8
	With benzodiazepines	19	5.4
	With phencyclidine	2	0.6

## AGE-ADJUSTED MORTALITY RATES

**Figure 28. Age-adjusted Mortality Rates<sup>1</sup> for Unintentional Drug- and Alcohol-Related Deaths by Place of Residence<sup>2,3</sup>, Maryland, 2020-2022**



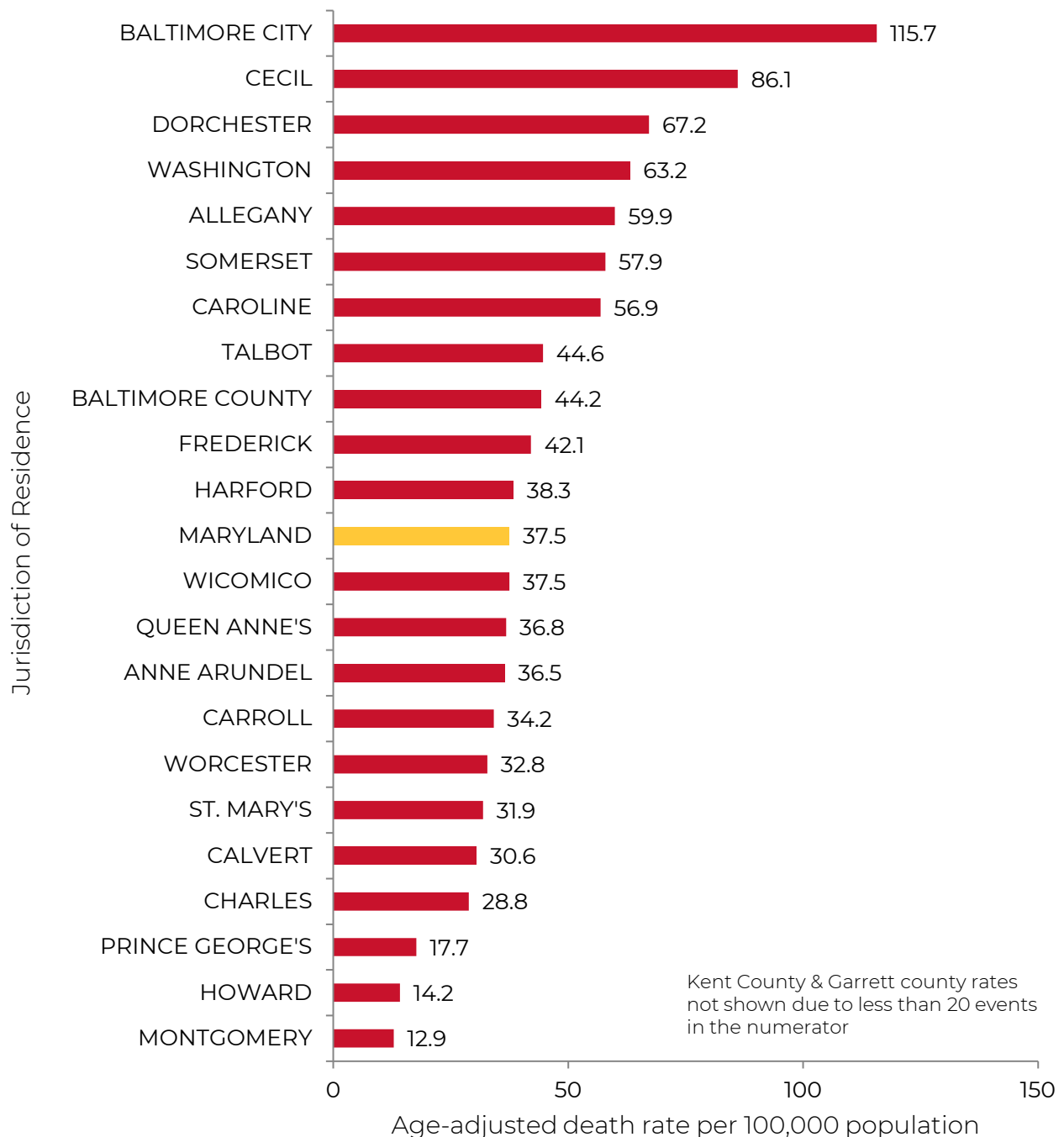
<sup>1</sup>Age-adjusted to the 2000 U.S. standard population by the direct method.

<sup>2</sup>Rates are based on place of residence, not place of occurrence.

<sup>3</sup>Deaths identified by underlying cause of death ICD-10: X40-X45 and Y10-Y15

# AGE-ADJUSTED MORTALITY RATES

**Figure 29. Age-Adjusted Mortality Rates<sup>1,2</sup> for Opioid-Related Deaths by Place of Residence<sup>3,4</sup>, Maryland, 2020-2022**



<sup>1</sup>Age-adjusted to the 2000 U.S. standard population by the direct method.

<sup>2</sup>Since age-adjusted rates based on fewer than 20 deaths are considered unreliable, rates are only shown for jurisdictions with 20 or more intoxication deaths.

<sup>3</sup>Rates are based on place of residence, not place of occurrence.

<sup>4</sup>Deaths identified by underlying cause of death ICD-10: X40-X45 and Y10-Y15 and drug category codes: T40.0-T40.4 and T40.6.

**TABLE 1. TOTAL NUMBER OF UNINTENTIONAL DRUG- AND ALCOHOL-RELATED INTOXICATION DEATHS BY PLACE OF OCCURRENCE, MARYLAND, 2013-2022.<sup>1,2</sup>**

REGION AND POLITICAL SUBDIVISION	TOTAL INTOXICATION DEATHS										
	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	TOTAL
MARYLAND .....	858	1,041	1,259	2,089	2,282	2,406	2,379	2,799	2,800	2,576	20,489
NORTHWEST AREA .....	86	96	131	214	183	211	189	234	207	228	1,779
GARRETT .....	6	2	5	1	8	3	9	8	6	7	55
ALLEGANY .....	15	12	22	59	38	39	28	52	45	39	349
WASHINGTON .....	28	40	64	66	59	91	88	110	103	114	763
FREDERICK .....	37	42	40	88	78	78	64	64	53	68	612
BALTIMORE METRO AREA .....	557	678	841	1,402	1,549	1,731	1,652	1,860	1,892	1,712	13,874
BALTIMORE CITY .....	246	305	393	694	761	888	914	1,028	1,079	989	7,297
BALTIMORE COUNTY .....	144	170	220	336	367	388	350	394	390	336	3,095
ANNE ARUNDEL .....	78	101	112	195	214	241	208	251	230	184	1,814
CARROLL .....	24	38	40	47	55	72	56	46	59	54	491
HOWARD .....	29	21	26	46	51	41	37	57	38	54	400
HARFORD .....	36	43	50	84	101	101	87	84	96	95	777
NATIONAL CAPITAL AREA .....	111	128	140	231	283	216	251	342	367	319	2,388
MONTGOMERY .....	52	65	70	102	116	89	105	139	142	109	989
PRINCE GEORGE'S .....	59	63	70	129	167	127	146	203	225	210	1,399
SOUTHERN AREA .....	25	47	59	88	103	86	95	111	101	107	822
CALVERT .....	6	17	20	28	32	28	31	25	25	18	230
CHARLES .....	9	21	22	45	37	27	31	53	35	55	335
ST MARY'S .....	10	9	17	15	34	31	33	33	41	34	257
EASTERN SHORE AREA .....	79	92	88	154	164	162	192	252	233	210	1,626
CECIL .....	26	29	32	30	59	59	62	92	87	86	562
KENT .....	4	6	3	6	5	2	10	6	10	3	55
QUEEN ANNE'S .....	8	10	4	8	8	17	13	14	15	9	106
CAROLINE .....	2	7	3	10	11	7	12	17	10	12	91
TALBOT .....	7	4	5	10	11	10	14	17	13	13	104
DORCHESTER .....	5	0	1	6	12	7	11	17	22	18	99
WICOMICO .....	17	20	18	48	35	36	41	47	47	38	347
SOMERSET .....	4	3	6	8	4	8	10	16	10	13	82
WORCESTER .....	6	13	16	28	19	16	19	26	19	18	180

<sup>1</sup> Includes deaths that were the result of recent ingestion or exposure to alcohol or another type of drug, including heroin, cocaine, prescription opioids, benzodiazepines, and other prescribed and unprescribed drugs.

<sup>2</sup> Includes only deaths for which the manner of death was classified as accidental or undetermined.

**TABLE 2. TOTAL NUMBER OF UNINTENTIONAL OPIOID-RELATED INTOXICATION DEATHS BY PLACE OF OCCURRENCE, MARYLAND, 2013-2022.<sup>1,2</sup>**

REGION AND POLITICAL SUBDIVISION	OPIOID-RELATED DEATHS										
	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	TOTAL
MARYLAND .....	729	888	1,089	1,856	2,009	2,143	2,106	2,518	2,507	2,227	18,072
NORTHWEST AREA .....	74	81	118	198	157	189	168	219	184	196	1,584
GARRETT .....	4	2	4	0	4	3	6	5	6	6	40
ALLEGANY .....	11	11	20	55	36	33	23	48	40	34	311
WASHINGTON .....	26	34	57	63	51	83	80	105	94	101	694
FREDERICK .....	33	34	37	80	66	70	59	61	44	55	539
BALTIMORE METRO AREA .....	485	591	742	1,262	1,404	1,578	1,508	1,715	1,747	1,527	12,559
BALTIMORE CITY .....	212	275	354	628	692	814	851	964	1,008	904	6,702
BALTIMORE COUNTY .....	125	146	195	305	323	352	316	356	361	295	2,774
ANNE ARUNDEL .....	67	85	89	169	198	218	183	226	209	158	1,602
CARROLL .....	21	29	34	44	51	68	51	43	52	48	441
HOWARD .....	26	18	25	40	47	36	34	52	32	42	352
HARFORD .....	34	38	45	76	93	90	73	74	85	80	688
NATIONAL CAPITAL AREA .....	78	101	104	190	215	158	188	268	289	243	1,834
MONTGOMERY .....	40	53	59	84	91	64	86	109	121	83	790
PRINCE GEORGE'S .....	38	48	45	106	124	94	102	159	168	160	1,044
SOUTHERN AREA .....	24	40	48	74	94	71	82	93	85	84	695
CALVERT .....	5	16	19	25	27	25	25	19	17	13	191
CHARLES .....	9	16	17	36	34	19	26	42	31	45	275
ST MARY'S .....	10	8	12	13	33	27	31	32	37	26	229
EASTERN SHORE AREA .....	68	75	77	132	139	147	160	223	202	177	1,400
CECIL .....	22	25	26	28	57	58	53	85	76	81	511
KENT .....	4	3	3	4	4	2	10	6	7	3	46
QUEEN ANNE'S .....	7	9	4	6	6	16	11	13	14	6	92
CAROLINE .....	2	7	3	9	8	7	11	15	8	12	82
TALBOT .....	6	4	5	10	8	10	13	13	12	8	89
DORCHESTER .....	5	0	1	5	10	6	10	15	20	12	84
WICOMICO .....	14	15	17	44	28	30	29	39	40	29	285
SOMERSET .....	4	2	4	6	3	8	9	13	9	12	70
WORCESTER .....	4	10	14	20	15	10	14	24	16	14	141

<sup>1</sup> Includes deaths confirmed or suspected to be related to recent ingestion of opioids.

<sup>2</sup> Includes only deaths for which the manner of death was classified as accidental or undetermined.

**TABLE 3. TOTAL NUMBER OF UNINTENTIONAL HEROIN-RELATED INTOXICATION DEATHS BY PLACE OF OCCURRENCE, MARYLAND, 2013-2022.<sup>1,2</sup>**

REGION AND POLITICAL SUBDIVISION	HEROIN-RELATED DEATHS										
	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	TOTAL
MARYLAND .....	464	578	748	1,212	1,078	830	726	548	354	124	6,662
NORTHWEST AREA .....	40	53	80	119	72	68	58	44	18	15	567
GARRETT .....	2	1	3	0	1	1	1	1	1	0	11
ALLEGANY .....	3	5	13	34	14	15	9	14	4	1	112
WASHINGTON .....	14	21	38	39	22	29	25	20	9	7	224
FREDERICK .....	21	26	26	46	35	23	23	9	4	7	220
BALTIMORE METRO AREA .....	319	379	519	858	772	572	505	364	240	65	4,593
BALTIMORE CITY .....	150	192	260	454	380	286	279	205	128	36	2,370
BALTIMORE COUNTY .....	76	86	134	208	170	119	111	74	54	12	1,044
ANNE ARUNDEL .....	41	53	60	105	118	75	63	45	29	6	595
CARROLL .....	14	16	22	25	28	34	18	13	6	2	178
HOWARD .....	16	9	16	24	23	15	10	15	4	2	134
HARFORD .....	22	23	27	42	53	43	24	12	19	7	272
NATIONAL CAPITAL AREA .....	53	65	69	115	104	78	81	76	49	20	710
MONTGOMERY .....	28	33	37	48	52	34	39	32	15	6	324
PRINCE GEORGE'S .....	25	32	32	67	52	44	42	44	34	14	386
SOUTHERN AREA .....	13	28	29	48	45	31	30	24	8	7	263
CALVERT .....	2	13	15	17	17	8	10	3	2	2	89
CHARLES .....	5	10	8	22	16	11	12	15	5	3	107
ST MARY'S .....	6	5	6	9	12	12	8	6	1	2	67
EASTERN SHORE AREA .....	39	53	51	72	85	81	52	40	39	17	529
CECIL .....	11	15	16	19	37	40	16	12	10	6	182
KENT .....	0	2	1	1	1	0	3	2	1	0	11
QUEEN ANNE'S .....	5	7	1	4	5	8	3	4	0	1	38
CAROLINE .....	2	6	2	6	4	3	5	4	2	4	38
TALBOT .....	2	4	3	4	3	4	4	1	0	1	26
DORCHESTER .....	3	0	1	3	4	3	5	2	10	0	31
WICOMICO .....	11	12	13	21	20	12	9	8	11	3	120
SOMERSET .....	1	1	3	3	2	5	1	1	3	0	20
WORCESTER .....	4	6	11	11	9	6	6	6	2	2	63

<sup>1</sup> Includes deaths confirmed or suspected to be related to recent heroin use.

<sup>2</sup> Includes only deaths for which the manner of death was classified as accidental or undetermined.

**TABLE 4. TOTAL NUMBER OF UNINTENTIONAL PRESCRIPTION OPIOID-RELATED INTOXICATION DEATHS BY PLACE OF OCCURRENCE, MARYLAND, 2013-2022.<sup>1,2</sup>**

REGION AND POLITICAL SUBDIVISION	PRESCRIPTION OPIOID-RELATED DEATHS										
	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	TOTAL
MARYLAND .....	316	330	351	418	413	379	369	453	447	334	3,810
NORTHWEST AREA .....	35	33	39	56	35	34	33	38	32	31	366
GARRETT .....	2	2	1	0	1	1	1	1	0	0	9
ALLEGANY .....	8	6	6	15	9	5	5	8	4	5	71
WASHINGTON .....	11	16	20	23	8	19	17	18	20	14	166
FREDERICK .....	14	9	12	18	17	9	10	11	8	12	120
BALTIMORE METRO AREA .....	207	217	233	265	298	272	258	325	323	239	2,637
BALTIMORE CITY .....	86	84	105	113	123	128	134	168	164	124	1,229
BALTIMORE COUNTY .....	54	59	62	67	87	71	60	71	69	48	648
ANNE ARUNDEL .....	28	32	27	48	43	36	27	40	45	32	358
CARROLL .....	12	15	14	15	13	16	13	16	18	7	139
HOWARD .....	13	7	9	6	13	2	9	11	7	5	82
HARFORD .....	14	20	16	16	19	19	15	19	20	23	181
NATIONAL CAPITAL AREA .....	30	35	36	42	33	27	28	37	30	19	317
MONTGOMERY .....	16	19	23	26	19	16	15	16	20	8	178
PRINCE GEORGE'S .....	14	16	13	16	14	11	13	21	10	11	139
SOUTHERN AREA .....	12	19	19	25	26	22	23	24	20	14	204
CALVERT .....	3	7	6	11	5	6	5	5	3	3	54
CHARLES .....	5	9	8	10	11	8	7	8	5	5	76
ST MARY'S .....	4	3	5	4	10	8	11	11	12	6	74
EASTERN SHORE AREA .....	32	26	24	30	21	24	27	29	42	31	286
CECIL .....	12	12	10	8	8	5	6	10	18	17	106
KENT .....	4	2	2	0	2	0	0	0	2	0	12
QUEEN ANNE'S .....	3	3	3	2	2	4	0	3	5	0	25
CAROLINE .....	0	1	0	4	1	1	3	3	1	1	15
TALBOT .....	4	0	2	3	4	2	5	2	2	3	27
DORCHESTER .....	3	0	0	2	2	2	3	0	3	2	17
WICOMICO .....	4	3	5	7	0	5	5	7	5	4	45
SOMERSET .....	2	1	1	0	1	2	2	1	2	1	13
WORCESTER .....	0	4	1	4	1	3	3	3	4	3	26

<sup>1</sup> Includes deaths confirmed or suspected to be related to recent ingestion of one or more prescription opioids.

<sup>2</sup> Includes only deaths for which the manner of death was classified as accidental or undetermined.

**TABLE 5. TOTAL NUMBER OF UNINTENTIONAL OXYCODONE-RELATED INTOXICATION DEATHS BY PLACE OF OCCURRENCE, MARYLAND, 2013-2022.<sup>1,2</sup>**

REGION AND POLITICAL SUBDIVISION	OXYCODONE-RELATED DEATHS										
	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	TOTAL
MARYLAND .....	86	120	104	157	122	103	124	108	104	79	1,107
NORTHWEST AREA .....	12	10	11	25	16	13	18	15	14	8	142
GARRETT .....	1	0	0	0	0	0	1	1	0	0	3
ALLEGANY .....	3	3	2	7	3	2	2	5	3	1	31
WASHINGTON .....	5	5	6	11	2	7	9	2	7	5	59
FREDERICK .....	3	2	3	7	11	4	6	7	4	2	49
BALTIMORE METRO AREA .....	44	69	56	77	73	67	64	59	53	46	608
BALTIMORE CITY .....	11	20	18	22	23	21	22	21	13	18	189
BALTIMORE COUNTY .....	14	22	16	22	21	20	18	14	15	6	168
ANNE ARUNDEL .....	9	10	12	23	15	15	11	14	16	9	134
CARROLL .....	3	4	3	3	4	7	4	5	4	3	40
HOWARD .....	4	4	4	2	5	0	3	3	3	2	30
HARFORD .....	3	9	3	5	5	4	6	2	2	8	47
NATIONAL CAPITAL AREA .....	13	17	16	25	13	7	15	14	18	8	146
MONTGOMERY .....	7	11	8	16	8	4	6	7	12	2	81
PRINCE GEORGE'S .....	6	6	8	9	5	3	9	7	6	6	65
SOUTHERN AREA .....	6	11	13	13	14	10	16	13	9	10	115
CALVERT .....	3	3	3	7	3	1	4	4	2	2	32
CHARLES .....	1	5	8	4	7	5	4	3	1	3	41
ST MARY'S .....	2	3	2	2	4	4	8	6	6	5	42
EASTERN SHORE AREA .....	11	13	8	17	6	6	11	7	10	7	96
CECIL .....	6	6	3	2	2	0	2	2	4	2	29
KENT .....	1	0	1	0	0	0	0	0	1	0	3
QUEEN ANNE'S .....	1	1	2	1	0	1	0	1	0	0	7
CAROLINE .....	0	0	0	3	0	1	2	2	0	0	8
TALBOT .....	1	0	0	2	2	0	2	0	0	2	9
DORCHESTER .....	0	0	0	2	1	1	1	0	2	0	7
WICOMICO .....	1	2	1	5	0	2	3	0	2	3	19
SOMERSET .....	1	1	0	0	0	1	1	1	0	0	5
WORCESTER .....	0	3	1	2	1	0	0	1	1	0	9

<sup>1</sup> Includes deaths confirmed or suspected to be related to recent ingestion of oxycodone.

<sup>2</sup> Includes only deaths for which the manner of death was classified as accidental or undetermined.

**TABLE 6: TOTAL NUMBER OF UNINTENTIONAL METHADONE-RELATED INTOXICATION DEATHS BY PLACE OF OCCURRENCE, MARYLAND, 2013-2022.<sup>1,2</sup>**

REGION AND POLITICAL SUBDIVISION	METHADONE-RELATED DEATHS										
	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	TOTAL
MARYLAND .....	138	152	183	197	246	196	201	279	284	221	2,097
NORTHWEST AREA .....	8	20	14	12	11	14	10	17	10	19	135
GARRETT .....	1	1	0	0	0	0	0	0	0	0	2
ALLEGANY .....	1	3	2	4	3	2	2	1	0	3	21
WASHINGTON .....	3	10	6	5	4	10	6	14	8	9	75
FREDERICK .....	3	6	6	3	4	2	2	2	2	7	37
BALTIMORE METRO AREA .....	110	112	145	158	198	155	166	226	235	177	1,682
BALTIMORE CITY .....	57	54	78	82	87	85	98	131	136	100	908
BALTIMORE COUNTY .....	29	31	34	36	63	37	36	46	49	36	397
ANNE ARUNDEL .....	6	14	9	21	23	12	12	21	23	21	162
CARROLL .....	7	5	9	9	6	6	8	9	12	3	74
HOWARD .....	5	2	5	2	8	1	6	3	2	1	35
HARFORD .....	6	6	10	8	11	14	6	16	13	16	106
NATIONAL CAPITAL AREA .....	7	6	9	13	14	7	6	13	8	7	90
MONTGOMERY .....	3	5	6	7	6	4	4	5	5	3	48
PRINCE GEORGE'S .....	4	1	3	6	8	3	2	8	3	4	42
SOUTHERN AREA .....	2	7	6	6	9	7	6	11	7	2	63
CALVERT .....	0	2	3	2	3	4	0	1	0	1	16
CHARLES .....	1	4	2	2	3	2	2	4	1	1	22
ST MARY'S .....	1	1	1	2	3	1	4	6	6	0	25
EASTERN SHORE AREA .....	11	7	9	8	14	13	13	12	24	16	127
CECIL .....	4	4	3	3	4	5	4	6	11	10	54
KENT .....	2	1	1	0	2	0	0	0	1	0	7
QUEEN ANNE'S .....	1	0	1	1	2	3	0	0	4	0	12
CAROLINE .....	0	1	0	2	1	0	1	0	1	0	6
TALBOT .....	2	0	1	1	2	1	2	1	1	1	12
DORCHESTER .....	0	0	0	0	2	1	2	0	0	1	6
WICOMICO .....	2	0	2	0	0	1	2	3	2	1	13
SOMERSET .....	0	0	1	0	1	0	1	0	2	1	6
WORCESTER .....	0	1	0	1	0	2	1	2	2	2	11

<sup>1</sup> Includes deaths confirmed or suspected to be related to recent ingestion of methadone.

<sup>2</sup> Includes only deaths for which the manner of death was classified as accidental or undetermined.

**TABLE 7: TOTAL NUMBER OF UNINTENTIONAL FENTANYL-RELATED INTOXICATION DEATHS BY PLACE OF OCCURRENCE, MARYLAND, 2013-2022.<sup>1,2</sup>**

REGION AND POLITICAL SUBDIVISION	FENTANYL-RELATED DEATHS										
	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	TOTAL
MARYLAND .....	58	186	340	1,119	1,594	1,888	1,927	2,342	2,344	2,060	13,858
NORTHWEST AREA .....	7	8	32	109	119	166	146	200	172	174	1,133
GARRETT .....	0	0	2	0	2	2	5	5	6	6	28
ALLEGANY .....	1	1	5	29	29	29	19	44	38	32	227
WASHINGTON .....	4	1	14	31	39	70	70	95	87	89	500
FREDERICK .....	2	6	11	49	49	65	52	56	41	47	378
BALTIMORE METRO AREA .....	35	142	248	792	1,118	1,415	1,395	1,605	1,639	1,416	9,805
BALTIMORE CITY .....	12	72	120	419	573	758	810	920	973	860	5,517
BALTIMORE COUNTY .....	11	36	65	182	244	308	285	328	330	271	2,060
ANNE ARUNDEL .....	6	23	29	98	152	184	164	209	193	141	1,199
CARROLL .....	2	4	11	20	40	55	47	37	39	41	296
HOWARD .....	3	5	7	27	36	34	28	44	28	36	248
HARFORD .....	1	2	16	46	73	76	61	67	76	67	485
NATIONAL CAPITAL AREA .....	6	15	32	101	175	115	167	251	274	230	1,366
MONTGOMERY .....	0	8	17	43	72	40	76	102	112	78	548
PRINCE GEORGE'S .....	6	7	15	58	103	75	91	149	162	152	818
SOUTHERN AREA .....	4	9	9	32	74	60	74	79	76	78	495
CALVERT .....	0	5	2	11	22	23	23	16	16	12	130
CHARLES .....	3	1	4	17	26	14	24	37	29	43	198
ST MARY'S .....	1	3	3	4	26	23	27	26	31	23	167
EASTERN SHORE AREA .....	6	12	19	85	108	132	145	207	183	162	1,059
CECIL .....	0	1	7	9	44	52	49	81	71	75	389
KENT .....	0	1	0	3	3	2	10	6	5	3	33
QUEEN ANNE'S .....	1	1	0	4	5	16	10	12	11	5	65
CAROLINE .....	0	0	1	3	7	6	9	14	7	11	58
TALBOT .....	0	2	2	7	3	10	11	11	11	6	63
DORCHESTER .....	2	0	1	3	7	4	9	15	18	11	70
WICOMICO .....	1	7	1	34	24	24	26	34	37	26	214
SOMERSET .....	2	0	1	6	3	8	9	12	9	12	62
WORCESTER .....	0	0	6	16	12	10	12	22	14	13	105

<sup>1</sup> Includes deaths confirmed or suspected to be related to recent ingestion or exposure to pharmaceutical or nonpharmaceutical fentanyl.

<sup>2</sup> Includes only deaths for which the manner of death was classified as accidental or undetermined.

**TABLE 8: TOTAL NUMBER OF UNINTENTIONAL COCAINE-RELATED INTOXICATION DEATHS BY PLACE OF OCCURRENCE, MARYLAND, 2013-2022.<sup>1,2</sup>**

REGION AND POLITICAL SUBDIVISION	COCAINE-RELATED DEATHS										
	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	TOTAL
MARYLAND .....	154	198	221	464	691	891	869	921	1,021	1,025	6,455
NORTHWEST AREA .....	13	16	20	27	43	67	51	65	68	54	424
GARRETT .....	0	0	1	0	1	0	3	1	1	1	8
ALLEGANY .....	2	2	5	9	13	12	6	10	12	3	74
WASHINGTON .....	6	6	10	9	10	31	24	31	40	36	203
FREDERICK .....	5	8	4	9	19	24	18	23	15	14	139
BALTIMORE METRO AREA .....	102	138	167	348	522	693	647	666	749	746	4,778
BALTIMORE CITY .....	47	82	93	202	285	388	380	393	453	466	2,789
BALTIMORE COUNTY .....	27	28	38	80	123	132	138	135	150	134	985
ANNE ARUNDEL .....	12	19	19	31	66	91	72	89	82	77	558
CARROLL .....	7	2	6	8	14	23	24	8	19	17	128
HOWARD .....	5	3	6	7	16	19	9	16	8	17	106
HARFORD .....	4	4	5	20	18	40	24	25	37	35	212
NATIONAL CAPITAL AREA .....	25	29	16	44	62	49	74	86	117	111	613
MONTGOMERY .....	13	10	5	11	17	18	29	26	36	33	198
PRINCE GEORGE'S .....	12	19	11	33	45	31	45	60	81	78	415
SOUTHERN AREA .....	1	3	6	8	19	33	39	33	28	42	212
CALVERT .....	0	2	0	2	3	3	9	8	6	5	38
CHARLES .....	0	0	2	4	10	13	12	16	8	21	86
ST MARY'S .....	1	1	4	2	6	17	18	9	14	16	88
EASTERN SHORE AREA .....	13	12	12	37	45	49	58	71	59	72	428
CECIL .....	5	4	3	3	15	14	12	13	12	14	95
KENT .....	0	1	1	0	1	1	4	2	3	3	16
QUEEN ANNE'S .....	0	0	0	1	2	5	6	4	4	6	28
CAROLINE .....	0	1	0	5	2	1	2	2	0	3	16
TALBOT .....	3	0	1	2	2	3	6	5	2	4	28
DORCHESTER .....	1	0	0	1	7	2	5	6	5	8	35
WICOMICO .....	3	4	7	13	7	13	21	21	22	19	130
SOMERSET .....	0	0	0	4	2	6	2	7	5	10	36
WORCESTER .....	1	2	0	8	7	4	0	11	6	5	44

<sup>1</sup> Includes deaths confirmed or suspected to be related to recent use of cocaine.

<sup>2</sup> Includes only deaths for which the manner of death was classified as accidental or undetermined.

**TABLE 9: TOTAL NUMBER OF UNINTENTIONAL BENZODIAZEPINE-RELATED INTOXICATION DEATHS BY PLACE OF OCCURRENCE, MARYLAND, 2013-2022.<sup>1,2</sup>**

REGION AND POLITICAL SUBDIVISION	BENZODIAZEPINE-RELATED DEATHS										
	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	TOTAL
MARYLAND .....	69	103	91	126	146	127	107	114	114	110	1,107
NORTHWEST AREA .....	6	13	8	21	19	10	9	15	6	12	119
GARRETT .....	1	0	1	0	2	0	1	2	0	0	7
ALLEGANY .....	1	3	1	6	5	1	1	3	1	2	24
WASHINGTON .....	2	5	3	6	2	4	2	4	3	4	35
FREDERICK .....	2	5	3	9	10	5	5	6	2	6	53
BALTIMORE METRO AREA .....	44	66	56	78	98	90	64	69	80	78	723
BALTIMORE CITY .....	14	22	15	24	28	28	27	26	33	35	252
BALTIMORE COUNTY .....	16	24	18	29	25	32	17	21	21	19	222
ANNE ARUNDEL .....	3	9	11	9	27	16	11	10	10	8	114
CARROLL .....	3	3	4	1	4	4	3	2	10	2	36
HOWARD .....	5	0	6	8	5	1	1	4	2	5	37
HARFORD .....	3	8	2	7	9	9	5	6	4	9	62
NATIONAL CAPITAL AREA .....	7	12	8	12	15	15	17	17	18	9	130
MONTGOMERY .....	4	10	7	7	8	9	10	8	12	6	81
PRINCE GEORGE'S .....	3	2	1	5	7	6	7	9	6	3	49
SOUTHERN AREA .....	4	6	7	7	8	4	7	6	4	3	56
CALVERT .....	1	3	1	1	2	2	0	0	1	1	12
CHARLES .....	1	2	4	4	4	1	3	3	1	1	24
ST MARY'S .....	2	1	2	2	2	1	4	3	2	1	20
EASTERN SHORE AREA .....	8	6	12	8	6	8	10	7	6	8	79
CECIL .....	3	3	5	2	1	2	4	2	4	4	30
KENT .....	0	0	0	1	2	0	0	0	0	0	3
QUEEN ANNE'S .....	0	0	1	1	0	3	0	1	0	0	6
CAROLINE .....	0	0	0	0	1	0	1	2	0	0	4
TALBOT .....	3	0	1	1	1	0	1	0	0	1	8
DORCHESTER .....	1	0	0	1	0	0	1	0	0	1	4
WICOMICO .....	0	1	2	1	0	1	1	2	2	0	10
SOMERSET .....	1	0	0	0	0	0	0	0	0	0	1
WORCESTER .....	0	2	3	1	1	2	2	0	0	2	13

<sup>1</sup> Includes deaths confirmed or suspected to be related to recent ingestion of a benzodiazepine or related drug with sedative effects.

<sup>2</sup> Includes only deaths for which the manner of death was classified as accidental or undetermined.

**TABLE 10: TOTAL NUMBER OF UNINTENTIONAL PHENCYCLIDINE-RELATED INTOXICATION DEATHS BY PLACE OF OCCURRENCE, MARYLAND, 2013-2022.<sup>1,2</sup>**

REGION AND POLITICAL SUBDIVISION	PHENCYCLIDINE-RELATED DEATHS										
	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	TOTAL
MARYLAND .....	8	15	14	32	28	37	58	75	68	56	391
NORTHWEST AREA .....	0	1	2	4	1	4	3	5	6	2	28
GARRETT .....	0	0	0	0	0	0	0	0	0	0	0
ALLEGANY .....	0	0	0	0	0	0	0	0	0	0	0
WASHINGTON .....	0	0	1	0	1	0	0	2	3	0	7
FREDERICK .....	0	1	1	4	0	4	3	3	3	2	21
BALTIMORE METRO AREA .....	4	3	2	11	8	9	23	19	11	15	105
BALTIMORE CITY .....	1	1	1	2	2	3	8	5	2	5	30
BALTIMORE COUNTY .....	1	0	0	2	1	0	2	2	2	1	11
ANNE ARUNDEL .....	1	1	1	6	5	5	11	10	6	7	53
CARROLL .....	0	0	0	0	0	0	0	0	0	0	0
HOWARD .....	1	1	0	1	0	1	2	1	0	1	8
HARFORD .....	0	0	0	0	0	0	0	1	1	1	3
NATIONAL CAPITAL AREA .....	3	10	8	13	16	20	25	41	38	33	207
MONTGOMERY .....	0	1	1	2	2	4	2	10	6	4	32
PRINCE GEORGE'S .....	3	9	7	11	14	16	23	31	32	29	175
SOUTHERN AREA .....	1	1	2	3	2	4	6	8	12	4	43
CALVERT .....	0	0	1	0	2	1	2	3	3	2	14
CHARLES .....	1	1	0	3	0	3	4	4	8	2	26
ST MARY'S .....	0	0	1	0	0	0	0	1	1	0	3
EASTERN SHORE AREA .....	0	0	0	1	1	0	1	2	1	2	8
CECIL .....	0	0	0	0	0	0	1	0	1	0	2
KENT .....	0	0	0	0	0	0	0	0	0	0	0
QUEEN ANNE'S .....	0	0	0	0	0	0	0	0	0	0	0
CAROLINE .....	0	0	0	0	0	0	0	0	0	0	0
TALBOT .....	0	0	0	0	0	0	0	1	0	0	1
DORCHESTER .....	0	0	0	0	0	0	0	0	0	0	0
WICOMICO .....	0	0	0	1	1	0	0	1	0	1	4
SOMERSET .....	0	0	0	0	0	0	0	0	0	1	1
WORCESTER .....	0	0	0	0	0	0	0	0	0	0	0

<sup>1</sup> Includes deaths confirmed or suspected to be related to recent ingestion of phencyclidine.

<sup>2</sup> Includes only deaths for which the manner of death was classified as accidental or undetermined.

**TABLE 11: TOTAL NUMBER OF UNINTENTIONAL METHAMPHETAMINE-RELATED INTOXICATION DEATHS BY PLACE OF OCCURRENCE, MARYLAND, 2013-2022.<sup>1,2</sup>**

REGION AND POLITICAL SUBDIVISION	METHAMPHETAMINE-RELATED DEATHS										
	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	TOTAL
MARYLAND .....	6	3	10	18	28	32	41	76	99	105	418
NORTHWEST AREA .....	1	0	1	2	5	6	11	7	20	23	76
GARRETT .....	0	0	0	0	2	1	1	3	3	3	13
ALLEGANY .....	1	0	0	1	0	2	2	1	5	8	20
WASHINGTON .....	0	0	1	1	1	3	7	2	10	10	35
FREDERICK .....	0	0	0	0	2	0	1	1	2	2	8
BALTIMORE METRO AREA .....	3	1	4	12	12	13	13	28	33	31	150
BALTIMORE CITY .....	2	1	1	8	5	5	7	13	16	13	71
BALTIMORE COUNTY .....	1	0	0	1	1	4	4	7	7	5	30
ANNE ARUNDEL .....	0	0	0	0	2	2	2	1	3	4	14
CARROLL .....	0	0	1	0	1	1	0	2	1	2	8
HOWARD .....	0	0	2	2	1	1	0	1	1	0	8
HARFORD .....	0	0	0	1	2	0	0	4	5	7	19
NATIONAL CAPITAL AREA .....	2	0	4	3	4	4	6	9	12	13	57
MONTGOMERY .....	0	0	0	1	2	1	3	2	7	6	22
PRINCE GEORGE'S .....	2	0	4	2	2	3	3	7	5	7	35
SOUTHERN AREA .....	0	0	1	1	3	1	1	2	0	4	13
CALVERT .....	0	0	0	0	1	1	1	0	0	0	3
CHARLES .....	0	0	1	1	2	0	0	2	0	4	10
ST MARY'S .....	0	0	0	0	0	0	0	0	0	0	0
EASTERN SHORE AREA .....	0	2	0	0	4	8	10	30	34	34	122
CECIL .....	0	0	0	0	4	6	8	26	28	30	102
KENT .....	0	0	0	0	0	0	1	0	1	0	2
QUEEN ANNE'S .....	0	0	0	0	0	0	0	1	1	0	2
CAROLINE .....	0	1	0	0	0	0	1	1	0	1	4
TALBOT .....	0	0	0	0	0	0	0	0	1	0	1
DORCHESTER .....	0	0	0	0	0	0	0	0	0	1	1
WICOMICO .....	0	1	0	0	0	1	0	0	3	1	6
SOMERSET .....	0	0	0	0	0	0	0	0	0	1	1
WORCESTER .....	0	0	0	0	0	1	0	2	0	0	3

<sup>1</sup> Includes deaths confirmed or suspected to be related to recent ingestion of methamphetamine.

<sup>2</sup> Includes only deaths for which the manner of death was classified as accidental or undetermined.

**TABLE 12: TOTAL NUMBER OF UNINTENTIONAL ALCOHOL-RELATED INTOXICATION DEATHS BY PLACE OF OCCURRENCE, MARYLAND, 2013-2022.<sup>1,2</sup>**

REGION AND POLITICAL SUBDIVISION	ALCOHOL-RELATED DEATHS										
	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	TOTAL
MARYLAND .....	239	270	310	582	517	472	423	566	517	426	4,322
NORTHWEST AREA .....	21	27	30	47	31	34	37	37	56	44	364
GARRETT .....	2	1	1	1	2	1	2	1	0	1	12
ALLEGANY .....	2	3	6	14	4	7	3	7	15	8	69
WASHINGTON .....	6	11	10	17	14	15	20	17	24	23	157
FREDERICK .....	11	12	13	15	11	11	12	12	17	12	126
BALTIMORE METRO AREA .....	154	166	215	403	334	339	273	343	286	252	2,765
BALTIMORE CITY .....	86	86	114	222	198	187	165	169	158	135	1,520
BALTIMORE COUNTY .....	32	39	52	81	71	80	53	91	56	59	614
ANNE ARUNDEL .....	22	18	27	56	37	44	34	49	45	31	363
CARROLL .....	4	9	6	12	9	10	6	7	8	8	79
HOWARD .....	6	6	5	14	7	5	4	11	7	10	75
HARFORD .....	4	8	11	18	12	13	11	16	12	9	114
NATIONAL CAPITAL AREA .....	35	36	32	67	86	51	58	102	101	73	641
MONTGOMERY .....	13	18	15	22	35	19	19	43	37	26	247
PRINCE GEORGE'S .....	22	18	17	45	51	32	39	59	64	47	394
SOUTHERN AREA .....	7	12	11	22	24	17	18	28	22	22	183
CALVERT .....	1	4	3	7	4	9	5	10	6	4	53
CHARLES .....	4	5	4	12	9	3	10	14	7	10	78
ST MARY'S .....	2	3	4	3	11	5	3	4	9	8	52
EASTERN SHORE AREA .....	22	29	22	43	42	31	37	56	52	35	369
CECIL .....	9	5	8	8	12	10	5	16	13	7	93
KENT .....	1	1	0	1	1	0	1	2	2	1	10
QUEEN ANNE'S .....	1	7	0	2	4	3	1	1	2	1	22
CAROLINE .....	1	2	0	5	4	1	2	3	2	4	24
TALBOT .....	2	0	0	0	5	4	5	6	3	6	31
DORCHESTER .....	0	0	1	1	2	1	5	5	3	3	21
WICOMICO .....	6	7	3	12	9	8	12	8	12	9	86
SOMERSET .....	1	2	2	3	1	0	1	4	5	2	21
WORCESTER .....	1	5	8	11	4	4	5	11	10	2	61

<sup>1</sup> Includes deaths confirmed or suspected to be related to recent ingestion of alcohol.

<sup>2</sup> Includes only deaths for which the manner of death was classified as accidental or undetermined.

**TABLE 13. TOTAL NUMBER OF UNINTENTIONAL DRUG- AND ALCOHOL-RELATED INTOXICATION DEATHS BY RACE AND HISPANIC ORIGIN, SEX, AND PLACE OF OCCURRENCE, MARYLAND, 2022.<sup>1,2</sup>**

REGION AND POLITICAL SUBDIVISION	TOTAL INTOXICATION DEATH COUNTS					
	TOTAL	NON-HISPANIC WHITE	NON-HISPANIC BLACK	HISPANIC*	MALE	FEMALE
MARYLAND .....	2,576	1,297	1,072	152	1,830	744
NORTHWEST AREA .....	228	183	34	7	154	74
GARRETT .....	7	7	0	0	6	1
ALLEGANY .....	39	35	4	0	28	11
WASHINGTON .....	114	90	21	2	77	37
FREDERICK .....	68	51	9	5	43	25
BALTIMORE METRO AREA .....	1,712	791	817	70	1,218	492
BALTIMORE CITY .....	989	273	652	42	711	276
BALTIMORE COUNTY .....	336	228	91	12	228	108
ANNE ARUNDEL .....	184	131	40	9	128	56
CARROLL .....	54	51	1	1	34	20
HOWARD .....	54	32	19	2	38	16
HARFORD .....	95	76	14	4	79	16
NATIONAL CAPITAL AREA .....	319	93	149	66	249	70
MONTGOMERY .....	109	57	20	27	83	26
PRINCE GEORGE'S .....	210	36	129	39	166	44
SOUTHERN AREA .....	107	72	33	1	68	39
CALVERT .....	18	14	4	0	12	6
CHARLES .....	55	40	14	0	32	23
ST MARY'S .....	34	18	15	1	24	10
EASTERN SHORE AREA .....	210	158	39	8	141	69
CECIL .....	86	72	8	3	63	23
KENT .....	3	0	2	1	2	1
QUEEN ANNE'S .....	9	7	2	0	8	1
CAROLINE .....	12	9	3	0	5	7
TALBOT .....	13	11	0	2	10	3
DORCHESTER .....	18	12	6	0	11	7
WICOMICO .....	38	23	12	1	21	17
SOMERSET .....	13	9	4	0	9	4
WORCESTER .....	18	15	2	1	12	6

<sup>1</sup> Includes deaths that occurred in Maryland that were the result of recent ingestion or exposure to alcohol or another type of drug, including heroin, cocaine, prescription opioids, benzodiazepines, and other prescribed and unprescribed drugs.

<sup>2</sup> Includes only deaths that occurred in Maryland for which the manner of death was classified as accidental or undetermined.

\*Includes all persons of Hispanic origin of any race.

**TABLE 13A. CRUDE DEATH RATES FOR UNINTENTIONAL DRUG AND ALCOHOL-RELATED INTOXICATION DEATHS BY RACE AND HISPANIC ORIGIN, SEX, AND PLACE OF OCCURRENCE, MARYLAND, 2022.<sup>1,2,3</sup>**

REGION AND POLITICAL SUBDIVISION	TOTAL INTOXICATION DEATH RATES					
	TOTAL	NON-HISPANIC WHITE	NON-HISPANIC BLACK	HISPANIC*	MALE	FEMALE
MARYLAND .....	41.8	43.6	57.2	21.5	61.0	23.5
NORTHWEST AREA .....	42.3	46.2	59.4	**	56.8	27.7
GARRETT .....	**	**	**	**	**	**
ALLEGANY .....	58.0	60.1	**	**	79.3	**
WASHINGTON .....	73.3	77.4	106.4	**	97.1	48.5
FREDERICK .....	23.7	26.3	**	**	30.2	17.3
BALTIMORE METRO AREA .....	61.5	53.2	97.3	35.7	90.6	34.2
BALTIMORE CITY .....	173.5	175.9	186.9	116.3	268.3	90.5
BALTIMORE COUNTY .....	39.7	50.8	34.7	**	56.6	24.3
ANNE ARUNDEL .....	31.0	34.6	35.7	**	43.5	18.7
CARROLL .....	30.8	33.6	**	**	38.8	22.8
HOWARD .....	16.1	20.1	**	**	22.9	**
HARFORD .....	36.0	39.4	**	**	60.7	**
NATIONAL CAPITAL AREA .....	16.0	17.1	19.1	16.0	25.6	6.8
MONTGOMERY .....	10.4	13.1	9.9	12.6	16.2	4.8
PRINCE GEORGE'S .....	22.2	33.4	22.3	19.7	36.3	9.0
SOUTHERN AREA .....	28.2	34.2	27.8	**	36.3	20.3
CALVERT .....	**	**	**	**	**	**
CHARLES .....	32.3	71.4	**	**	38.8	26.2
ST MARY'S .....	29.6	**	**	**	41.4	**
EASTERN SHORE AREA .....	45.3	46.6	50.8	**	62.1	29.2
CECIL .....	82.0	82.9	**	**	120.4	43.7
KENT .....	**	**	**	**	**	**
QUEEN ANNE'S .....	**	**	**	**	**	**
CAROLINE .....	**	**	**	**	**	**
TALBOT .....	**	**	**	**	**	**
DORCHESTER .....	**	**	**	**	**	**
WICOMICO .....	36.3	36.4	**	**	42.2	**
SOMERSET .....	**	**	**	**	**	**
WORCESTER .....	**	**	**	**	**	**

<sup>1</sup> Includes deaths that occurred in Maryland that were the result of recent ingestion or exposure to alcohol or another type of drug, including heroin, cocaine, prescription opioids, benzodiazepines, and other prescribed and unprescribed drugs.

<sup>2</sup> Includes only deaths that occurred in Maryland for which the manner of death was classified as accidental or undetermined.

<sup>3</sup> Crude rate per 100,000 population. Calculation of crude rates includes resident and non-resident data in the numerator and 2022 resident population estimates from the U.S. Census in the denominator. This may result in less accurate rates compared to resident only data. Further, these rates are not comparable with rates from other jurisdictions outside of Maryland as these rates are based on data from the literal text in the cause of death field on the death certificate rather than standardized ICD-10 codes.

\*Includes all persons of Hispanic origin of any race.

\*\*Rates based on <20 events in the numerator are not presented since such rates are subject to instability.

**TABLE 14. TOTAL NUMBER OF UNINTENTIONAL DRUG- AND ALCOHOL-RELATED INTOXICATION DEATHS BY AGE GROUP AND PLACE OF OCCURRENCE, MARYLAND, 2022.<sup>1,2</sup>**

REGION AND POLITICAL SUBDIVISION	TOTAL INTOXICATION DEATH COUNTS				
	LESS THAN 25 YEARS	25-34 YEARS	35-44 YEARS	45-54 YEARS	55 YEARS OR MORE
MARYLAND .....	126	486	581	549	834
NORTHWEST AREA .....	16	57	64	44	47
GARRETT .....	0	2	2	1	2
ALLEGANY .....	5	5	12	7	10
WASHINGTON .....	6	31	32	22	23
FREDERICK .....	5	19	18	14	12
BALTIMORE METRO AREA .....	55	286	366	373	632
BALTIMORE CITY .....	24	135	183	217	430
BALTIMORE COUNTY .....	10	64	82	76	104
ANNE ARUNDEL .....	8	35	56	41	44
CARROLL .....	3	13	13	9	16
HOWARD .....	6	16	11	11	10
HARFORD .....	4	23	21	19	28
NATIONAL CAPITAL AREA .....	44	75	70	58	72
MONTGOMERY .....	17	29	32	15	16
PRINCE GEORGE'S .....	27	46	38	43	56
SOUTHERN AREA .....	4	21	20	27	35
CALVERT .....	1	4	0	4	9
CHARLES .....	3	9	9	15	19
ST MARY'S .....	0	8	11	8	7
EASTERN SHORE AREA .....	7	47	61	47	48
CECIL .....	2	19	29	20	16
KENT .....	0	0	1	2	0
QUEEN ANNE'S .....	0	2	3	1	3
CAROLINE .....	0	2	6	2	2
TALBOT .....	1	6	1	4	1
DORCHESTER .....	1	6	7	0	4
WICOMICO .....	2	5	9	12	10
SOMERSET .....	1	4	3	2	3
WORCESTER .....	0	3	2	4	9

<sup>1</sup> Includes deaths that occurred in Maryland that were the result of recent ingestion or exposure to alcohol or another type of drug, including heroin, cocaine, prescription opioids, benzodiazepines, and other prescribed and unprescribed drugs.

<sup>2</sup> Includes only deaths that occurred in Maryland for which the manner of death was classified as accidental or undetermined.

**TABLE 14A. CRUDE DEATH RATES FOR UNINTENTIONAL DRUG- AND ALCOHOL-RELATED INTOXICATION DEATHS BY AGE GROUP AND PLACE OF OCCURRENCE, MARYLAND, 2022.<sup>1,2,3</sup>**

REGION AND POLITICAL SUBDIVISION	TOTAL INTOXICATION DEATH RATES				
	LESS THAN 25 YEARS	25-34 YEARS	35-44 YEARS	45-54 YEARS	55 YEARS OR MORE
MARYLAND .....	6.7	60.1	69.7	71.1	44.6
NORTHWEST AREA .....	**	84.6	87.5	64.3	28.3
GARRETT .....	**	**	**	**	**
ALLEGANY .....	**	**	**	**	**
WASHINGTON .....	**	155.1	161.8	110.8	46.5
FREDERICK .....	**	**	**	**	**
BALTIMORE METRO AREA .....	6.5	74.4	95.8	111.4	75.4
BALTIMORE CITY .....	14.2	132.1	229.3	365.4	269.7
BALTIMORE COUNTY .....	**	58.4	75.1	75.5	38.8
ANNE ARUNDEL .....	**	43.0	65.5	55.8	25.2
CARROLL .....	**	**	**	**	**
HOWARD .....	**	**	**	**	**
HARFORD .....	**	71.4	**	**	33.4
NATIONAL CAPITAL AREA .....	7.2	29.4	25.5	21.9	12.2
MONTGOMERY .....	**	23.2	21.9	**	**
PRINCE GEORGE'S .....	9.2	35.4	29.6	34.8	20.6
SOUTHERN AREA .....	**	43.5	**	54.6	32.1
CALVERT .....	**	**	**	**	**
CHARLES .....	**	**	**	**	**
ST MARY'S .....	**	**	**	**	**
EASTERN SHORE AREA .....	**	87.1	116.6	87.6	29.1
CECIL .....	**	**	226.0	149.4	**
KENT .....	**	**	**	**	**
QUEEN ANNE'S .....	**	**	**	**	**
CAROLINE .....	**	**	**	**	**
TALBOT .....	**	**	**	**	**
DORCHESTER .....	**	**	**	**	**
WICOMICO .....	**	**	**	**	**
SOMERSET .....	**	**	**	**	**
WORCESTER .....	**	**	**	**	**

<sup>1</sup> Includes deaths that occurred in Maryland that were the result of recent ingestion or exposure to alcohol or another type of drug, including heroin, cocaine, prescription opioids, benzodiazepines, and other prescribed and unprescribed drugs.

<sup>2</sup> Includes only deaths that occurred in Maryland for which the manner of death was classified as accidental or undetermined.

<sup>3</sup> Crude rate per 100,000 population. Calculation of crude rates includes resident and non-resident data in the numerator and 2022 resident population estimates from the U.S. Census in the denominator. This may result in less accurate rates compared to resident only data. Further, these rates are not comparable with rates from other jurisdictions outside of Maryland as these rates are based on data from the literal text in the cause of death field on the death certificate rather than standardized ICD-10 codes.

\*\* Rates based on <20 events in the numerator are not presented since such rates are subject to instability.

**TABLE 15. AGE-SPECIFIC CRUDE DEATH RATES FOR SELECTED DRUG- AND ALCOHOL-RELATED INTOXICATION DEATHS BY RACE/ETHNICITY AND SEX, MARYLAND, 2022** <sup>1,2</sup>

SUBSTANCE	ALL AGES	< 25 YEARS	25-34 YEARS	35-44 YEARS	45-54 YEARS	55+ YEARS
<b>ALL DRUG- AND ALCOHOL-RELATED DEATHS</b>						
TOTAL .....	41.8	6.7	60.1	69.7	71.1	44.5
MALE .....	61.0	9.0	85.0	97.4	104.3	71.1
FEMALE .....	23.5	4.3	35.3	42.6	39.3	22.2
NON-HISPANIC WHITE .....	43.6	6.4	76.7	93.7	72.7	31.8
NON-HISPANIC BLACK .....	57.2	6.9	56.3	65.5	101.4	89.2
HISPANIC .....	21.5	10.9	43.7	38.5	29.2	*
<b>OPIOID-RELATED DEATHS</b>						
TOTAL .....	36.1	6.0	53.6	60.8	60.6	37.6
MALE .....	53.0	8.0	75.8	85.8	89.4	60.5
FEMALE .....	20.1	3.9	31.6	36.5	32.9	18.4
NON-HISPANIC WHITE .....	37.6	5.9	68.9	85.8	61.1	25.1
NON-HISPANIC BLACK .....	50.3	6.0	50.8	53.5	89.5	79.6
HISPANIC .....	17.4	9.9	36.4	29.5	*	*
<b>COCAINE-RELATED DEATHS</b>						
TOTAL .....	16.6	*	23.5	28.2	32.7	17.7
MALE .....	24.2	*	31.7	37.7	48.0	29.5
FEMALE .....	9.4	*	15.3	19.0	18.0	7.8
NON-HISPANIC WHITE .....	15.4	*	28.8	35.4	30.1	9.4
NON-HISPANIC BLACK .....	26.3	*	22.2	30.0	51.9	42.7
HISPANIC .....	7.1	*	*	*	*	*
<b>HEROIN-RELATED DEATHS</b>						
TOTAL .....	2.0	*	3.3	3.1	3.4	2.1
MALE .....	2.7	*	5.0	*	*	2.9
FEMALE .....	1.4	*	*	*	*	*
NON-HISPANIC WHITE .....	2.5	*	*	*	*	1.8
NON-HISPANIC BLACK .....	2.2	*	*	*	*	*
HISPANIC .....	*	*	*	*	*	*
<b>BENZODIAZAPINE-RELATED DEATHS</b>						
TOTAL .....	1.8	*	3.7	3.4	2.6	1.6
MALE .....	2.2	*	*	4.9	*	2.3
FEMALE .....	1.4	*	*	*	*	*
NON-HISPANIC WHITE .....	2.8	*	5.8	5.8	*	2.0
NON-HISPANIC BLACK .....	1.2	*	*	*	*	*
HISPANIC .....	*	*	*	*	*	*
<b>PHENCYCLIDINE-RELATED DEATHS</b>						
TOTAL .....	0.9	*	*	*	*	*
MALE .....	1.4	*	*	*	*	*
FEMALE .....	*	*	*	*	*	*
NON-HISPANIC WHITE .....	*	*	*	*	*	*
NON-HISPANIC BLACK .....	1.8	*	*	*	*	*
HISPANIC .....	*	*	*	*	*	*
<b>METHAMPHETAMINE-RELATED DEATHS</b>						
TOTAL .....	1.7	*	3.0	5.0	*	*
MALE .....	2.9	*	5.0	8.0	*	*
FEMALE .....	*	*	*	*	*	*
NON-HISPANIC WHITE .....	2.7	*	*	9.0	*	*
NON-HISPANIC BLACK .....	1.1	*	*	*	*	*
HISPANIC .....	*	*	*	*	*	*

<sup>1</sup> Includes only deaths that occurred in Maryland for which the manner of death was classified as accidental or undetermined.

<sup>2</sup> Crude rate per 100,000 population. Calculation of crude rates includes resident and non-resident data in the numerator and 2022 Maryland resident population estimates from the U.S. Census in the denominator.

\* Rates based on <20 events in the numerator are not presented since such rates are subject to instability.