Maryland Vital Statistics

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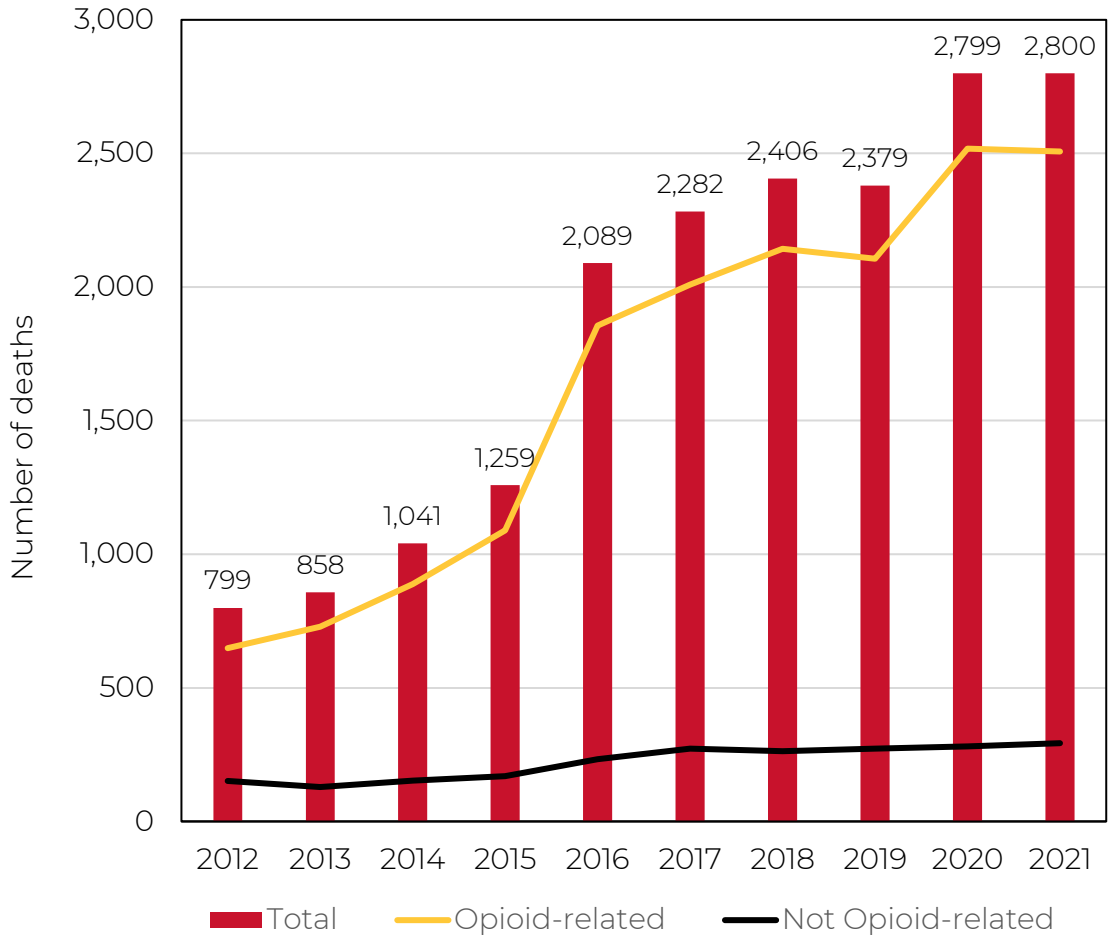
DEPARTMENT OF HEALTH

Unintentional Drug- and Alcohol-Related Intoxication Deaths in Maryland, 2021

Release Date: August 2023



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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 2012-2021. 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.[1]

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

[1] 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 2012-2021 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). In 2021, more than 99% of xylazine-related deaths occurred in combination with fentanyl.

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

Northwest Area	Baltimore Metro Area	National Capital Area	Southern Area	Eastern Shore Area
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 (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.

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

In 2021, there were 2,800 unintentional drug- and alcohol-related intoxication deaths occurring in Maryland. Over a ten-year period, the number of intoxication deaths has increased in the state [Figure 1], with a slight decrease in 2019. Opioids, particularly illicitly manufactured fentanyl, is the substance most commonly involved 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, 2012-2021

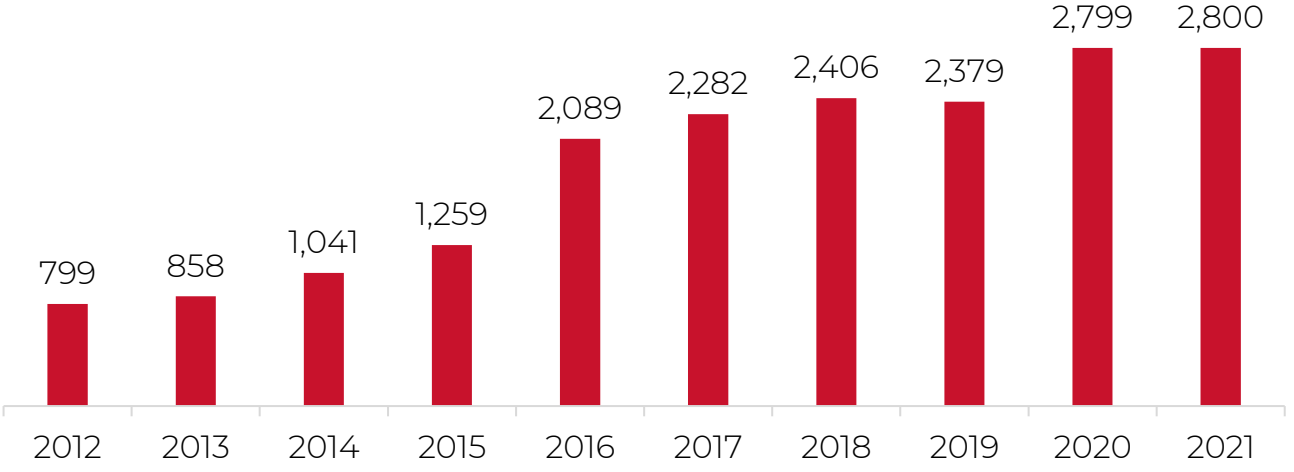
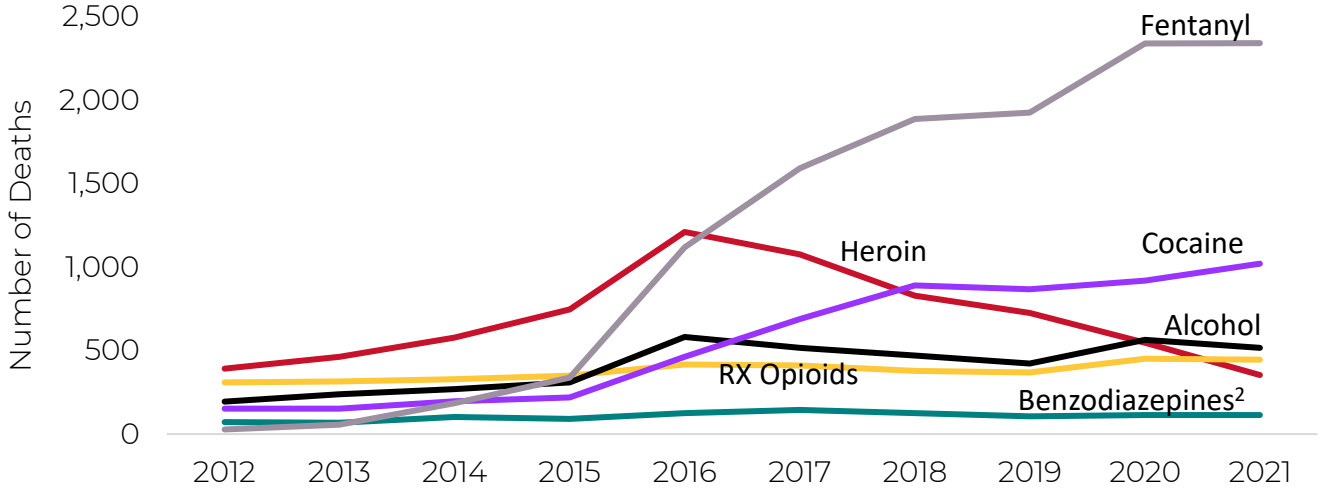


Figure 2. Total Number of Unintentional Drug- and Alcohol-Related Intoxication Deaths by Selected Substances[1], Maryland, 2012-2021



[1]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.
[2]Includes deaths caused by benzodiazepines and related drugs with similar sedative effects.

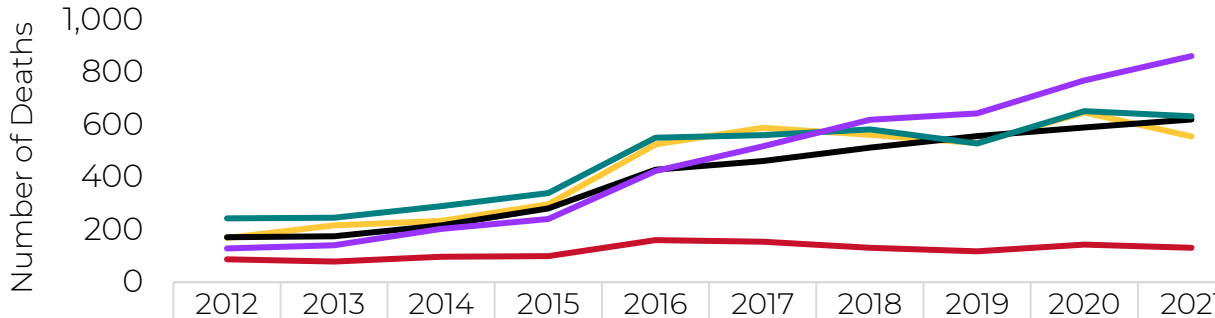
Population Characteristics: Drug and Alcohol-Related Deaths

In 2021, individuals aged 55 years and over had the highest number of deaths among all age groups (861), accounting for approximately 30 percent of all intoxication deaths occurring in Maryland. Deaths in this older age group have been increasing over the last decade. In 2021, approximately two-thirds of deaths were among those aged 25-54 years. [Figure 3]

In 2021, there were 1,427 unintentional drug- and alcohol-related deaths occurring in Maryland among non-Hispanic white individuals, which accounted for approximately half of all deaths. Yet, the overall death rate was nearly 1.5 times higher for non-Hispanic black individuals (64.3 per 100,000) compared to non-Hispanic white individuals (47.2 per 100,000). The overall death rate was 18.1 per 100,000 for Hispanic individuals in 2021 [Figure 3A].

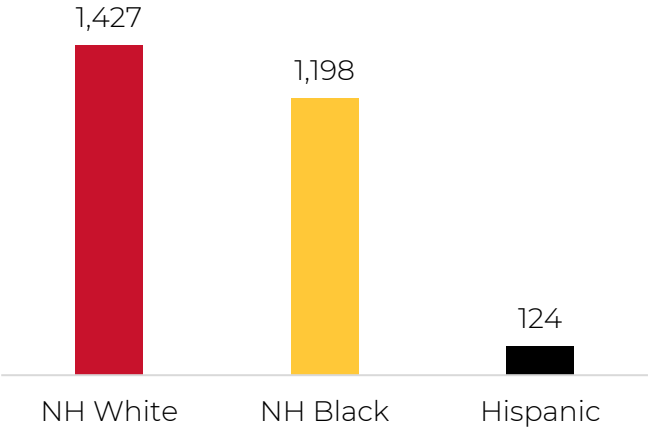
Figure 3. Number of Unintentional Drug- and Alcohol-Related Intoxication Deaths Occurring in Maryland by:

Age Group, 2012-2021

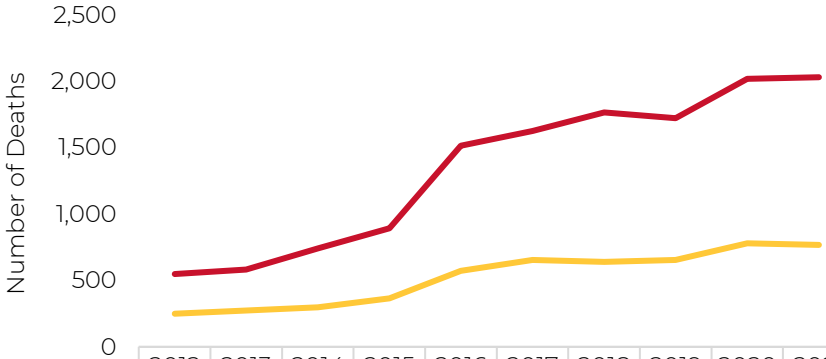


	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021
<25 years	87	79	97	99	161	154	131	118	143	131
25-34 years	169	216	234	297	525	588	561	530	647	555
35-44 years	171	175	217	281	428	461	513	557	589	620
45-54 years	243	246	290	339	550	560	582	529	651	632
55+ years	129	141	203	241	424	517	618	643	769	861

Race/Ethnicity, 2021



Sex, 2012-2021



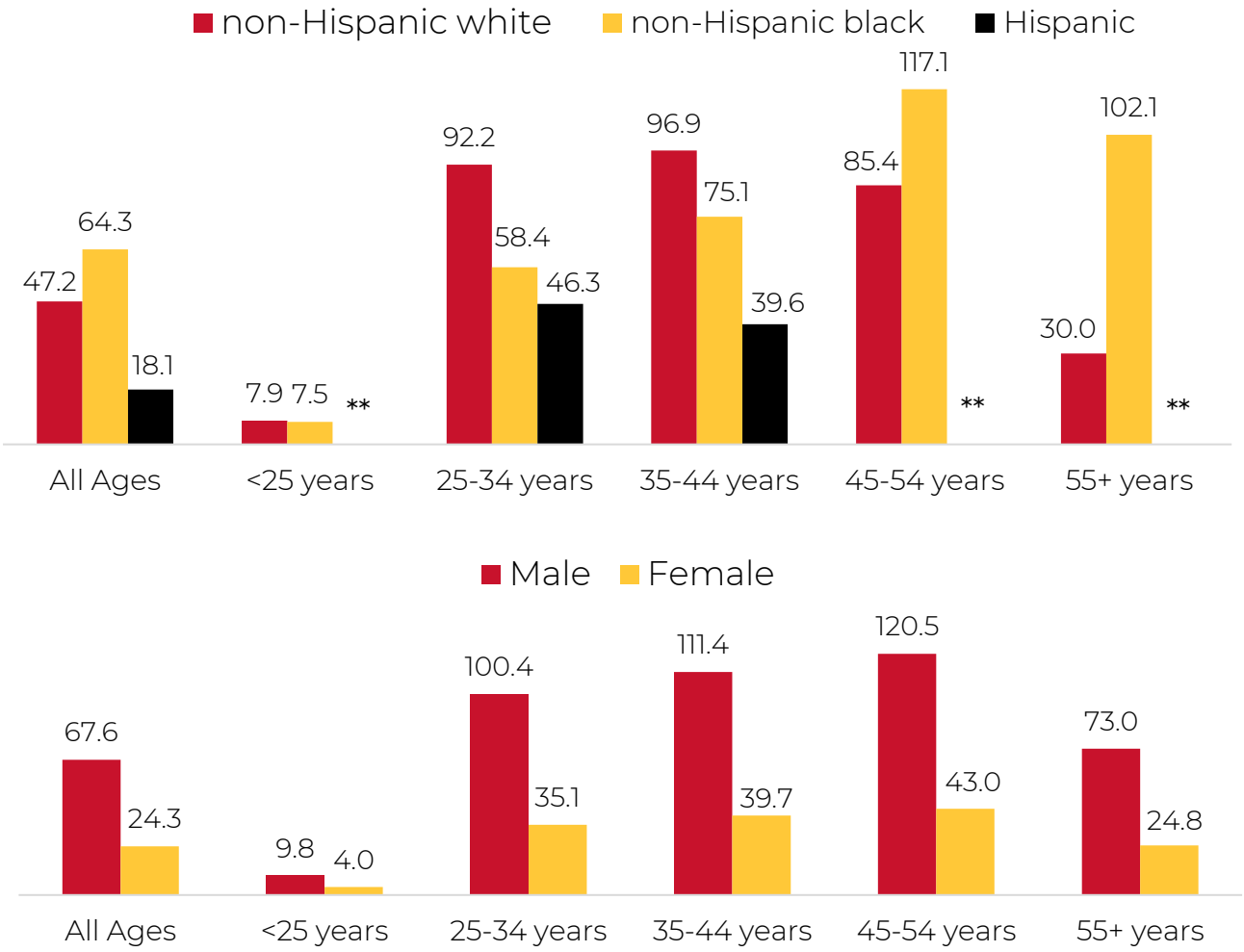
	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021
Male	548	584	743	894	1,515	1,626	1,766	1,723	2,019	2,031
Female	251	274	298	365	574	656	640	654	780	769

Population Characteristics: Drug and Alcohol-Related Deaths

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 nearly twice as high among non-Hispanic white individuals (92.2) compared to non-Hispanic blacks (58.4). 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 (102.1) was nearly 3.5 times the rate among non-Hispanic whites (30.0) [Figure 3A, Table 15].

Over the last decade, more males than females died of an intoxication death in Maryland [Figure 3]. In 2021, intoxication death rates (per 100,000) were more than 2.5 times higher among males (67.6) than females (24.3) in 2021. Among both males and females, the highest rates were among those aged 45-54-years, 120.5 and 43.0, respectively [Figure 3A, Table 15].

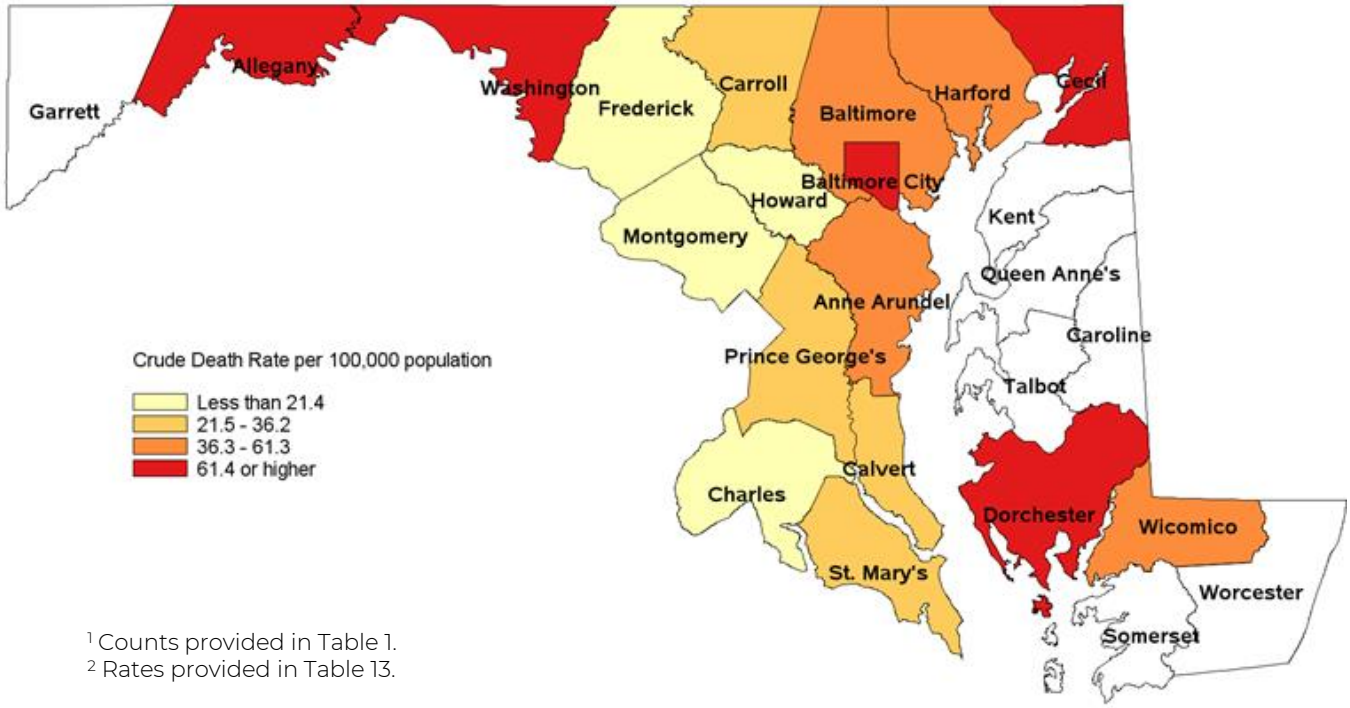
Figure 3A. Age-Specific Rates by Race/Ethnicity or Sex for Unintentional Drug- and Alcohol-Related Intoxication Death Occurring in Maryland[1]:



[1] Death occurred in Maryland; calculation of crude rates includes resident and non-resident data in numerator and 2021 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, 2021[1,2,3]



[1] Counts provided in Table 1.
[2] Rates provided in Table 13.

[3] Death occurred in Maryland; calculation of crude rates includes resident and non-resident data in numerator and 2021 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 2021, jurisdictions with the highest number of deaths were: Baltimore City (1079), Baltimore County (390), Anne Arundel (230), Prince George's (225) and Montgomery (142) [Table 1].

Accounting for population size, jurisdictions with highest crude death rates (per 100,000) were: Baltimore City (187.2), Cecil (83.7), Dorchester (67.7), Washington (66.5), and Allegany (66.4) [Figure 4, Table 13].

Several jurisdictions had rates among non-Hispanic black individuals that were higher than the state rate: Baltimore City (205.9) and Washington (149.7). Similarly, the jurisdictions with the highest death rates among non-Hispanic white individuals included: Baltimore City (192.0) and Cecil (90.8), Allegany (61.8), Baltimore County (59.8), and Washington (59.6). Race-specific rates for all jurisdictions can be found in Table 13A.

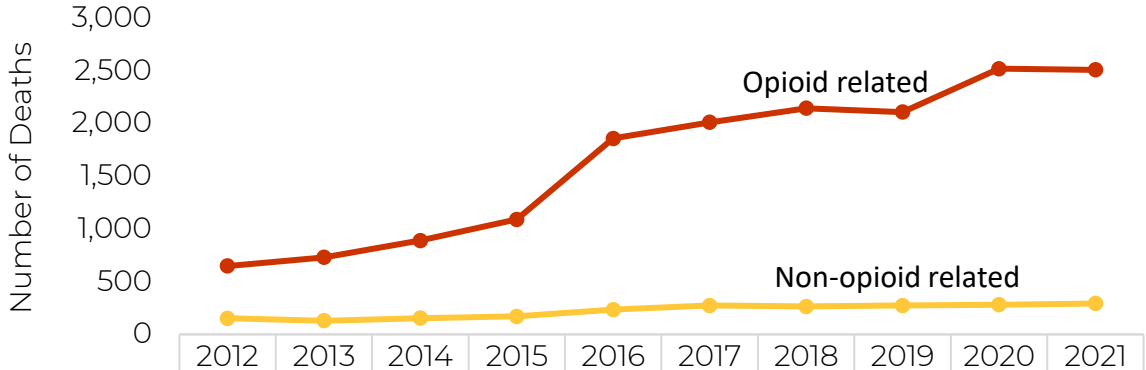
In Baltimore City, the highest death rates were among those aged 45-54 years (375.7), followed by those 55 and over (294.3) and those 35-44 years (237.0). Age-specific rates for all other jurisdictions can be found in Table 14A.

OPIOID-RELATED DEATHS

Nearly ninety percent of all intoxication deaths that occurred in Maryland in 2021 were opioid-related. The number of opioid-related deaths remained similar between 2020 and 2021 (2,518 vs 2,507, respectively), following a 20% increase between 2019 and 2020 [Figure 5, Table 2].

Fentanyl-related deaths continued to drive opioid-related deaths in 2021 and were involved in about 84% of all intoxication deaths [Figure 7, Table 7]. The number of heroin-related deaths declined for the fifth straight year, decreasing by nearly 71% between 2016 and 2021 [Figure 7, Table 3].

Figure 5. Number of Unintentional Opioid[1] and non-Opioid Related Deaths Occurring in Maryland, 2012-2021



	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021
Opioid-related	648	729	888	1,089	1,856	2,009	2,143	2,106	2,518	2,507
Non-opioid-related	151	129	153	170	233	273	263	273	281	293

[1]Total opioids include heroin, prescription opioids, and illicit forms of fentanyl.

Figure 6. Number of Unintentional Opioid-Related Intoxication Deaths by Place of Occurrence, 2021[1]

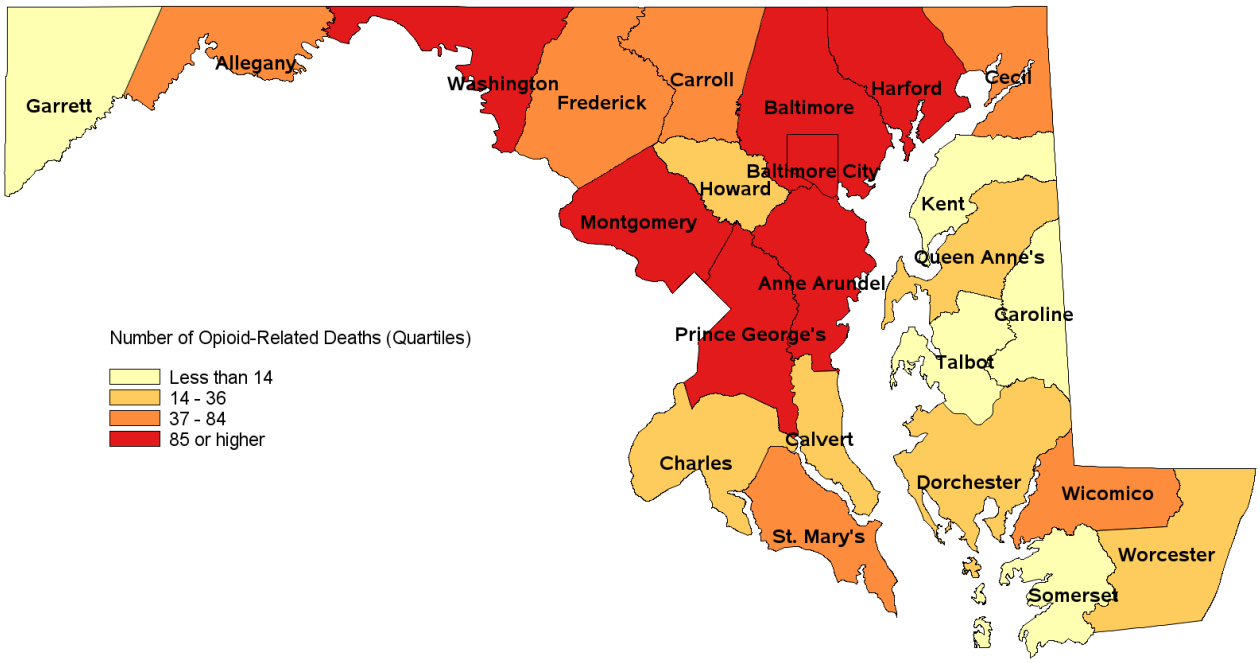
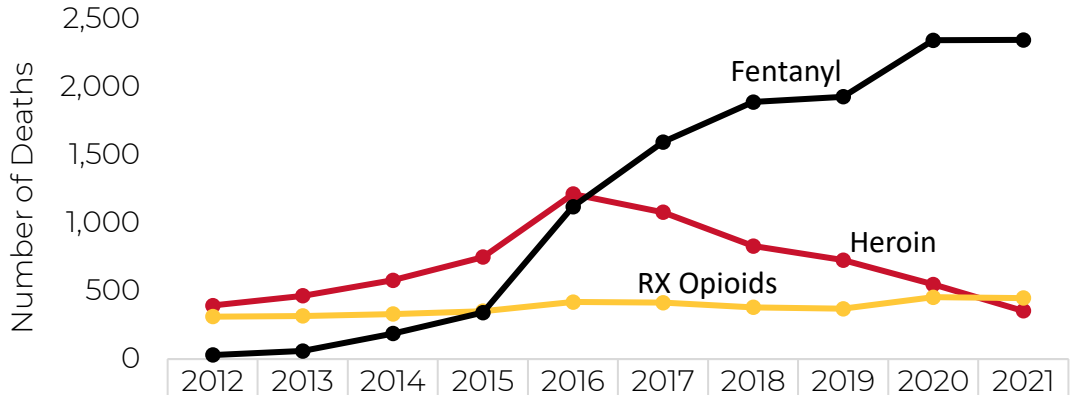
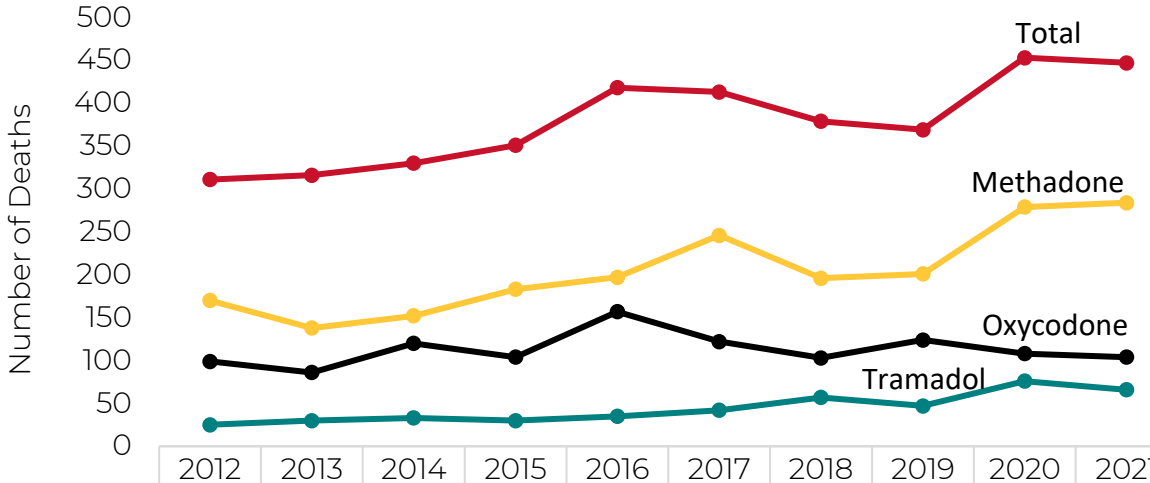


Figure 7. Number of Unintentional Opioid-Related Deaths Occurring in Maryland by Substance, 2012-2021



	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021
Heroin	392	464	578	748	1,212	1,078	830	726	548	354
Prescription opioids	311	316	330	351	418	413	379	369	453	447
Fentanyl	29	58	186	340	1,119	1,594	1,888	1,927	2,342	2,344

Figure 8. Number of Unintentional Intoxication Deaths Occurring in Maryland by Selected Prescription Opioids, 2012-2021[1]



	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021
Total	311	316	330	351	418	413	379	369	453	447
Methadone	170	138	152	183	197	246	196	201	279	284
Oxycodone	99	86	120	104	157	122	103	124	108	104
Tramadol	25	30	33	30	35	42	57	47	76	66

[1] Counts by jurisdiction provided in provided in Tables 4, 5, and 6.

The number of prescription opioid-related deaths remained similar between 2020 and 2021, from 453 to 447, respectively [Figure 7]. 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 2020, rising by 23%. 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 have increased by nearly 57% from 2017 to 2021. [Figure 8]

Population Characteristics: Fentanyl-Related Deaths

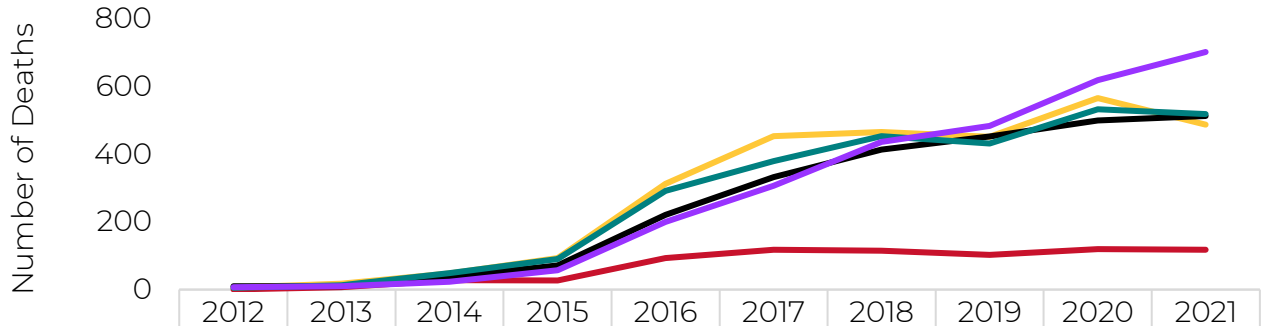
In 2021, the highest number of fentanyl-related deaths occurring in Maryland were among those aged 55 or over, a nearly 14% increase from 2020. Among those aged 25-34 years, the number of fentanyl-related deaths decreased nearly 14% between 2020 and 2021.

Approximately 45% of fentanyl-related deaths were among non-Hispanic black individuals and nearly half of deaths were in non-Hispanic white individuals.

Seven out of ten fentanyl-related deaths occurring in Maryland were among males. The number of deaths by sex remained stable in 2021, following a 20% increase among males and 26% increase among females in 2020 from 2019.

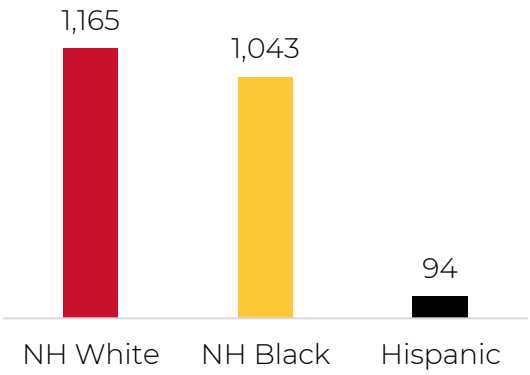
Figure 9. Number of Unintentional Fentanyl-Related Intoxication Deaths Occurring in Maryland by:

Age Group, 2012-2021

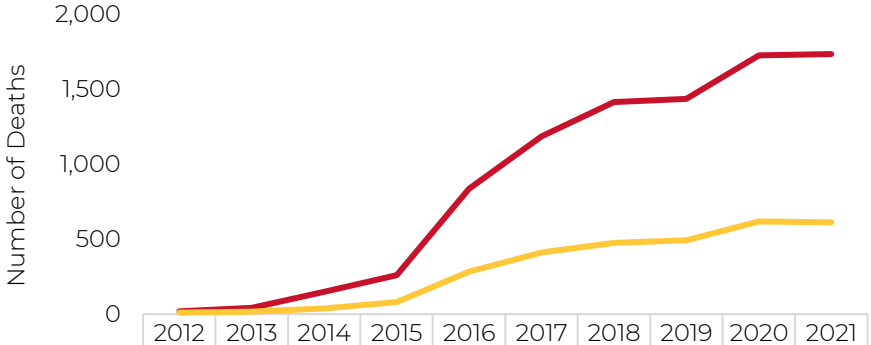


	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021
<25 years	1	7	28	27	93	118	115	103	120	118
25-34 years	6	18	48	93	313	454	467	452	567	488
35-44 years	10	10	38	72	221	333	414	453	501	514
45-54 years	5	13	49	91	292	380	454	432	534	520
55+ years	7	10	23	57	200	307	437	485	620	703

Race/Ethnicity, 2021



Sex, 2012-2021



	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021
Male	18	42	148	259	836	1,184	1,413	1,434	1,725	1,732
Female	11	16	38	81	282	410	475	491	617	612

Population Characteristics: Heroin-Related Deaths

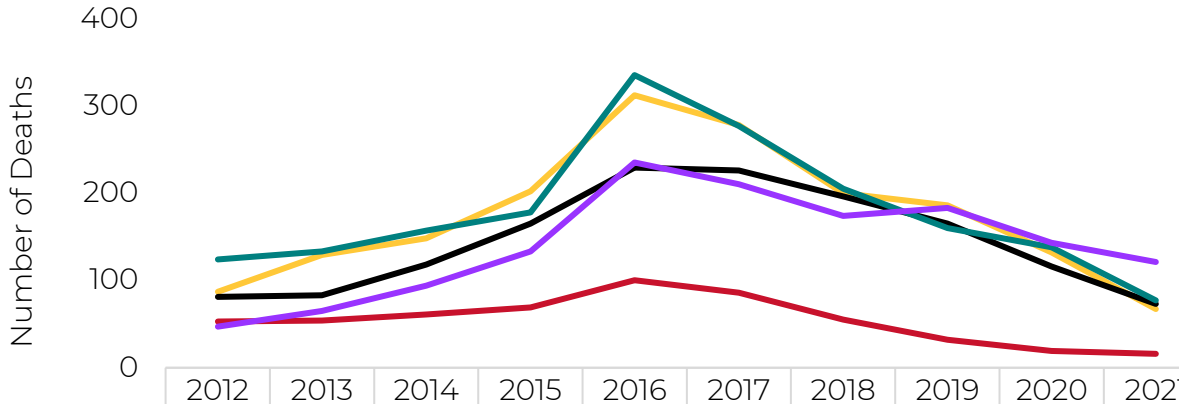
The overall number of heroin-related deaths across all age groups has been decreasing since 2017. In 2021, those 55 years and over experienced the most heroin-related deaths.

More than half of heroin-related deaths were among non-Hispanic white individuals (52.3%)., 41.5% were among non-Hispanic black individuals, and 4% among Hispanic individuals. The heroin-related death rate among non-Hispanic black individuals was 1.3 times the rate among non-Hispanic white individuals [Table 15].

Males continue to account for nearly three quarters of heroin-related deaths. The heroin-related death rate among males was more than 3 times the rate among females [Table 15].

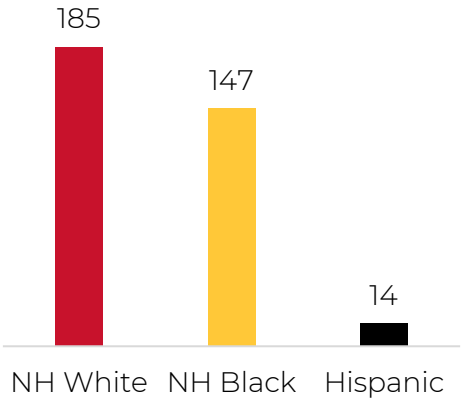
Figure 10. Number of Unintentional Heroin-Related Intoxication Deaths Occurring in Maryland by:

Age Group, 2012-2021

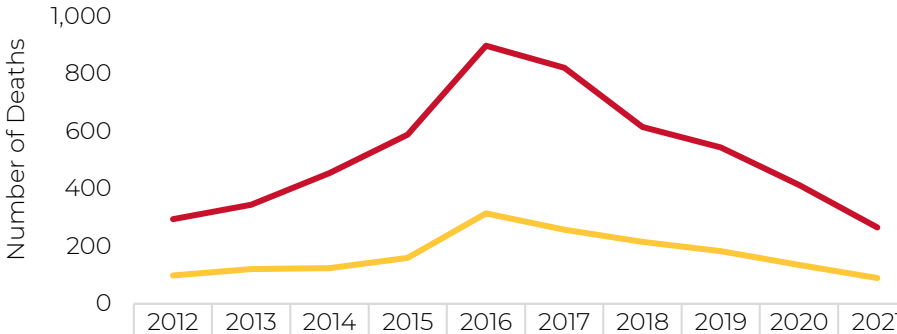


	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021
<25 years	53	54	61	69	100	86	55	32	19	16
25-34 years	87	129	148	202	312	278	200	186	132	67
35-44 years	81	83	118	165	229	226	196	165	116	73
45-54 years	124	133	157	178	335	277	205	160	138	77
55+ years	47	65	94	133	235	210	174	183	143	121

Race/Ethnicity, 2021



Sex, 2012-2021



	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021
Male	294	344	454	588	897	821	615	543	413	265
Female	98	120	124	159	314	257	215	183	135	89

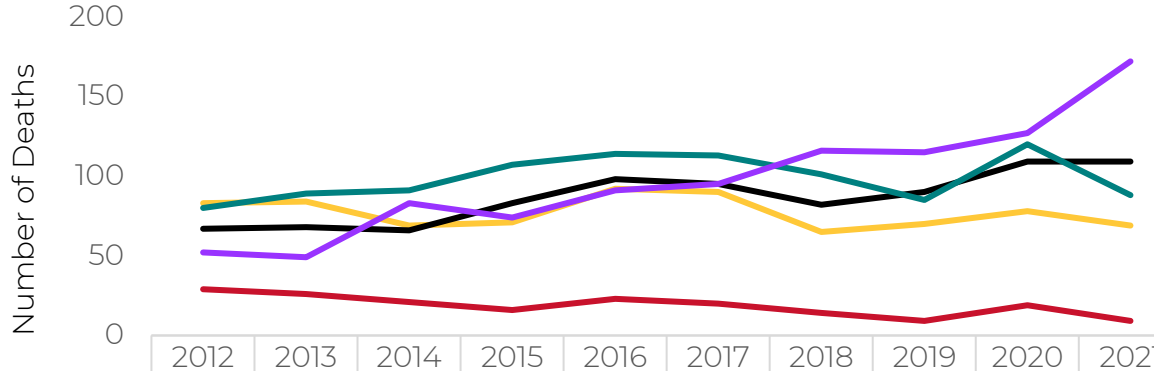
Population Characteristics: Prescription Opioid-Related Deaths

In 2021, the highest number of prescription opioid related deaths were among those aged 55 or over, a 35% increase from 2020. Among those aged 45-54 years, the number of prescription-opioid related-deaths decreased nearly 27% between 2020 and 2021.

Nearly two thirds of prescription opioid-related deaths were among non-Hispanic white individuals and 34% were among non-Hispanic black individuals. Though males continue to account for nearly 60% of prescription opioid-related deaths, deaths among females has increased slightly, account for about 40% of deaths in 2021 compared to 35% in 2019.

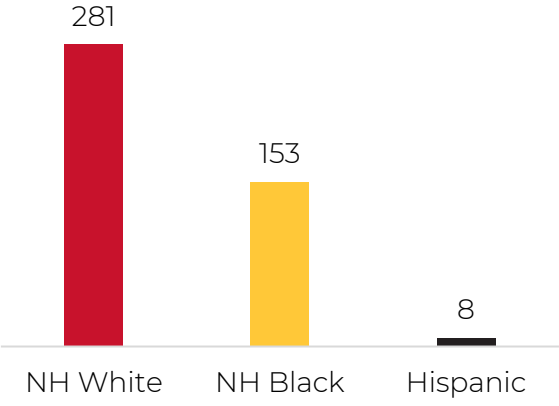
Figure 11. Number of Unintentional Prescription Opioid-Related Intoxication Deaths Occurring in Maryland by:

Age Group, 2012-2021

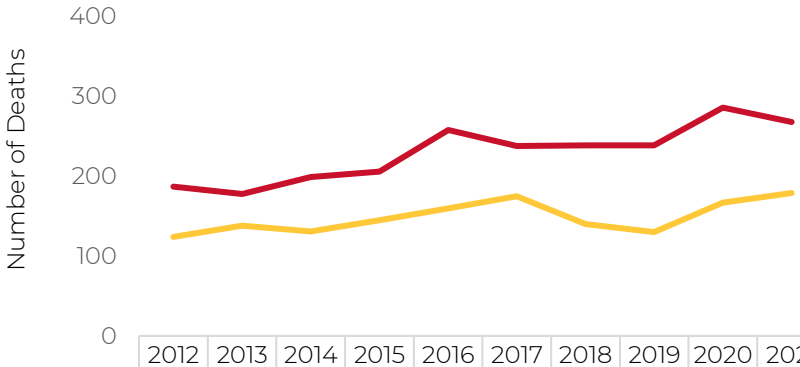


	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021
<25 years	29	26	21	16	23	20	14	9	19	9
25-34 years	83	84	69	71	92	90	65	70	78	69
35-44 years	67	68	66	83	98	95	82	90	109	109
45-54 years	80	89	91	107	114	113	101	85	120	88
55+ years	52	49	83	74	91	95	116	115	127	172

Race/Ethnicity, 2021



Sex, 2012-2021

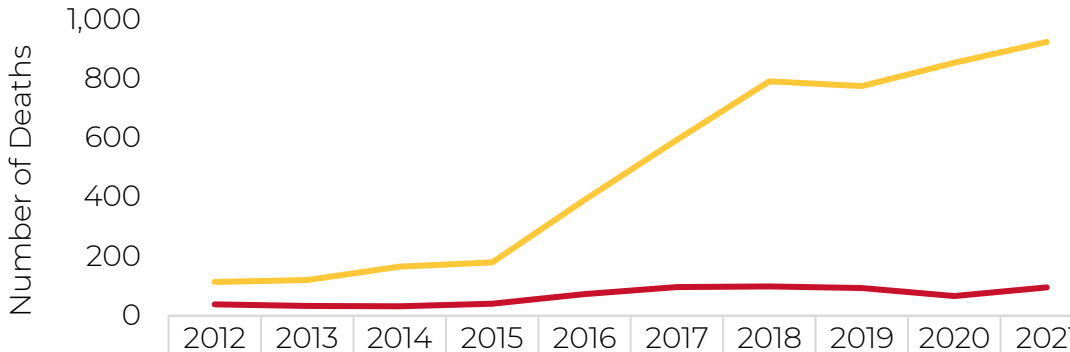


	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021
Male	187	178	199	206	258	238	239	239	286	268
Female	124	138	131	145	160	175	140	130	167	179

COCAINE-RELATED DEATHS

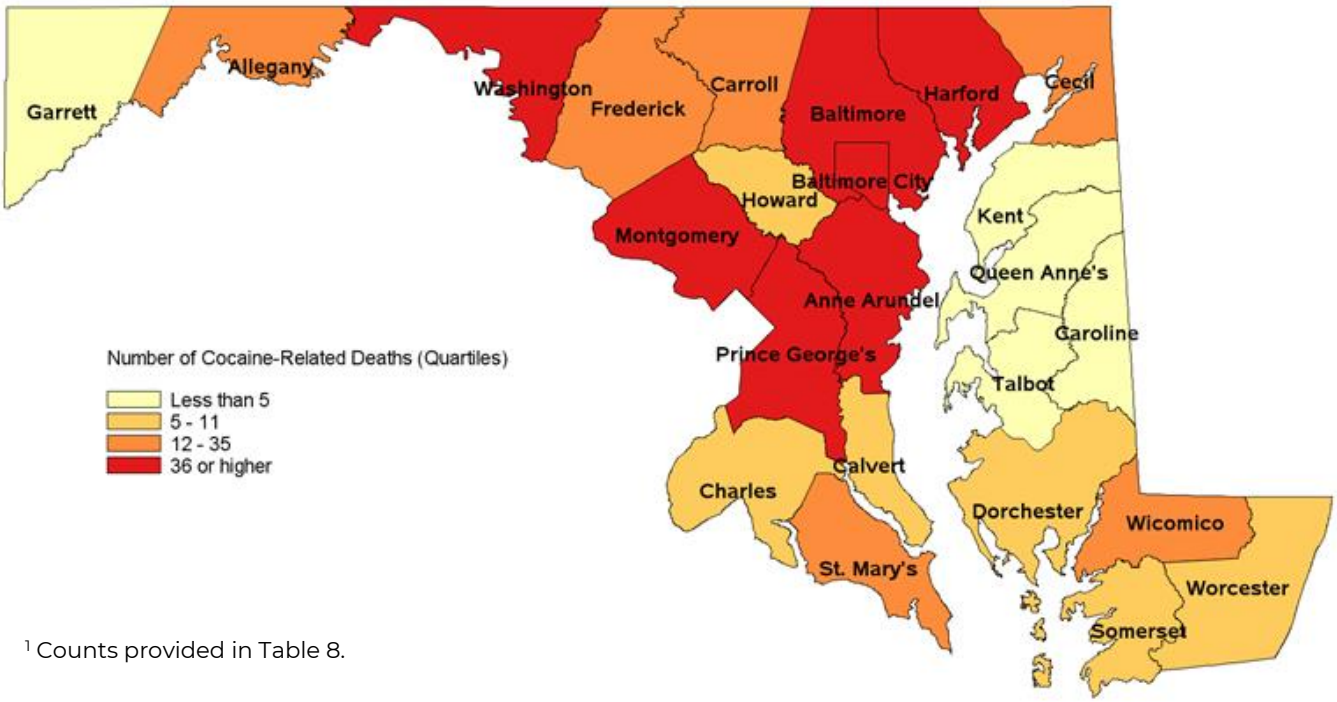
The number of cocaine-related deaths increased nearly 11% from 921 deaths in 2020 to 1,021 in 2021. Since 2015, the number of cocaine-related deaths in combination with opioids has increased. Cocaine-related deaths occurred more than 90% of the time in combination with opioids in 2021 [Figure 12].

Figure 12. Number of Unintentional Cocaine-Related Deaths Occurring in Maryland, 2012-2021



	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021
Not in combination with opioids	39	33	32	41	73	97	99	94	67	96
In combination with opioids	114	121	166	180	391	594	792	775	854	925

Figure 13. Number of Unintentional Cocaine-Related Deaths by Place of Occurrence in Maryland, 2021[1]



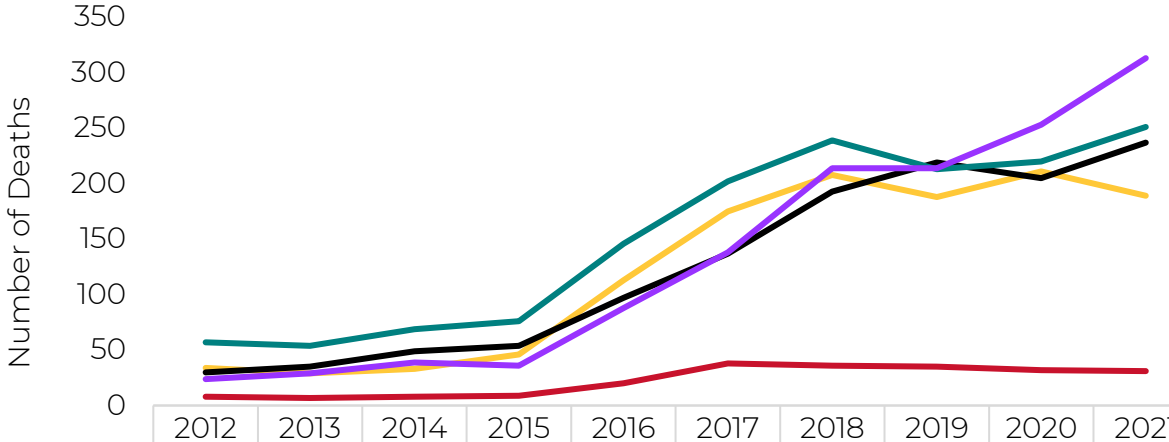
[1] Counts provided in Table 8.

Population Characteristics: Cocaine-Related Deaths

Those 55 years and over experienced the most cocaine-related deaths in 2021, a nearly 24% increase from 2020. Forty-eight percent of cocaine-related deaths were among non-Hispanic white individuals and 46% were among non-Hispanic black individuals. The cocaine-related death rate among non-Hispanic black individuals was 1.5 times the rate among non-Hispanic white individuals [Table 15]. In 2021, 7 out of 10 cocaine-related deaths were among males (759) compared to 262 deaths among females. The number of deaths among males increased by nearly 15% from 2020 to 2021. [Figure 14]

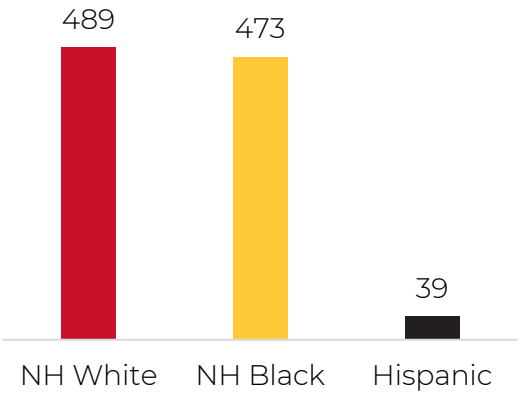
Figure 14. Number of Unintentional Cocaine-Related Intoxication Deaths Occurring in Maryland by:

Age Group, 2012-2021

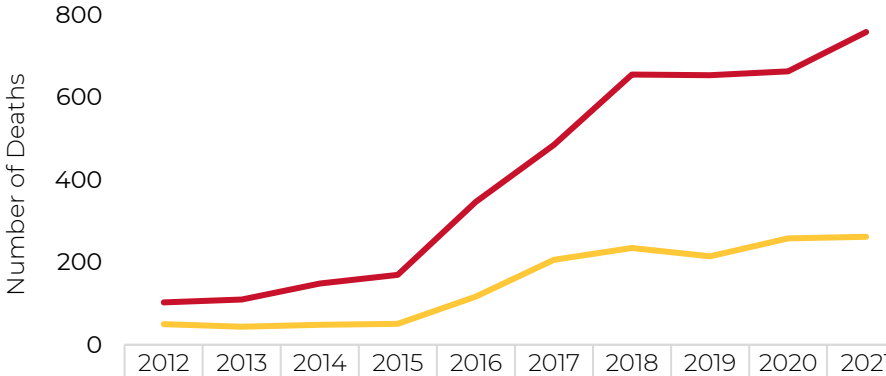


	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021
<25 years	8	7	8	9	20	38	36	35	32	31
25-34 years	34	29	33	46	113	175	208	188	211	189
35-44 years	30	35	49	54	97	137	193	219	205	237
45-54 years	57	54	69	76	146	202	239	213	220	251
55+ years	24	29	39	36	88	138	214	214	253	313

Race/Ethnicity, 2021



Sex, 2012-2021

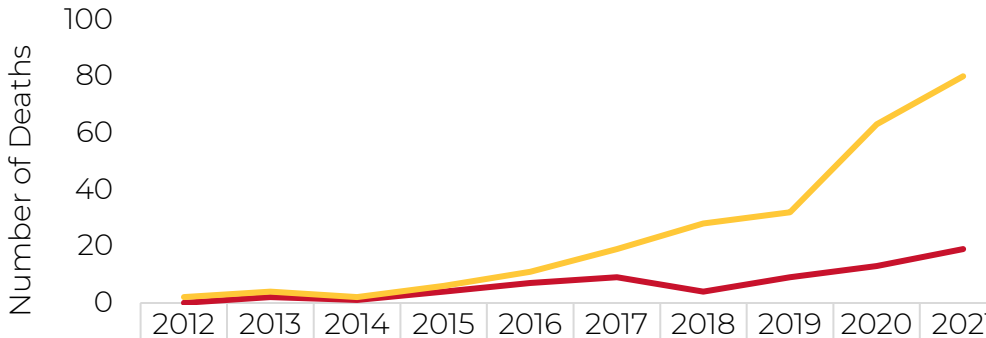


	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021
Male	103	110	149	170	347	485	656	654	663	759
Female	50	44	49	51	117	206	235	215	258	262

METHAMPHETAMINE-RELATED DEATHS

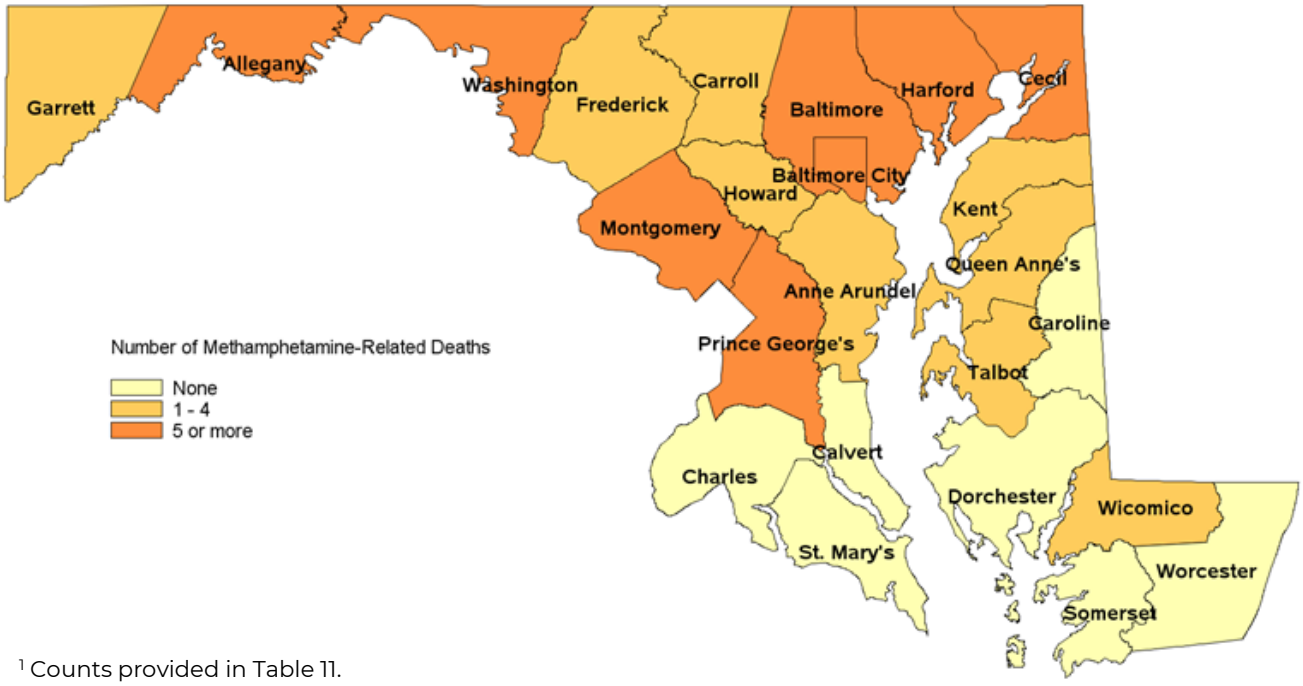
The number of methamphetamine-related deaths increased nearly 30% in 2021 to 99 deaths, an all-time high. The number of methamphetamine-related deaths has been increasing since 2015, particularly in combination with opioids. Methamphetamine-related deaths occurred about 80% of the time in combination with opioids in 2021 [Figure 15]. Though the number of deaths per county from this substance is sparse, Cecil County had 28 deaths in 2021, which was nearly twice as high as the next highest jurisdiction [Figure 16].

Figure 15. Number of Unintentional Methamphetamine-Related Deaths Occurring in Maryland, 2012-2021



	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021
Not in combination with opioids	0	2	1	4	7	9	4	9	13	19
In combination with opioids	2	4	2	6	11	19	28	32	63	80

Figure 16. Number of Unintentional Methamphetamine-Related Deaths by Place of Occurrence in Maryland, 2021[1]



[1] Counts provided in Table 11.

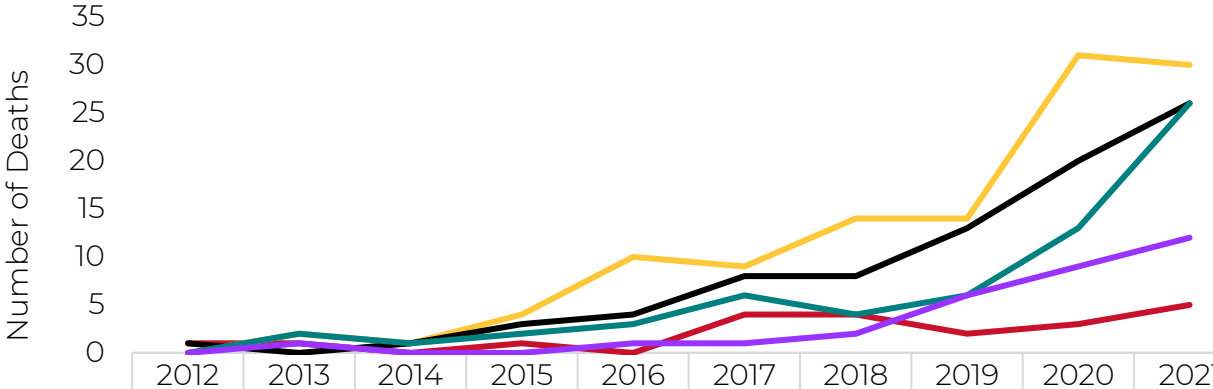
Population Characteristics: Methamphetamine-Related Deaths

Those aged 25-34 years experienced the most methamphetamine-related deaths in 2021, after more than doubling between 2019 and 2020. The number of deaths among those aged 45-54 years doubled between 2020 and 2021.

Nearly 72% 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 2.2 times the rate among non-Hispanic black individuals [Table 15]. Almost 8 out of 10 methamphetamine-related deaths were among males, 78 compared to 21 deaths among females in 2021. [Figure 17]

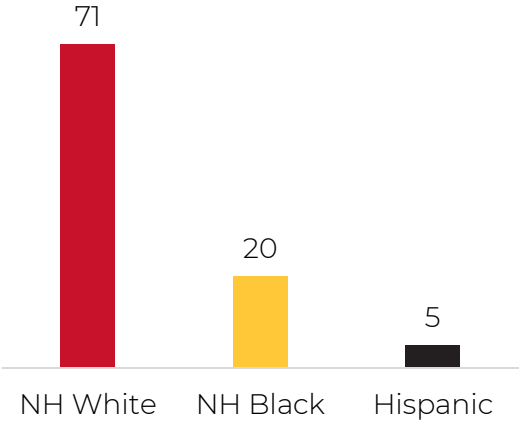
Figure 17. Number of Unintentional Methamphetamine-Related Intoxication Deaths Occurring in Maryland by:

Age Group, 2012-2021

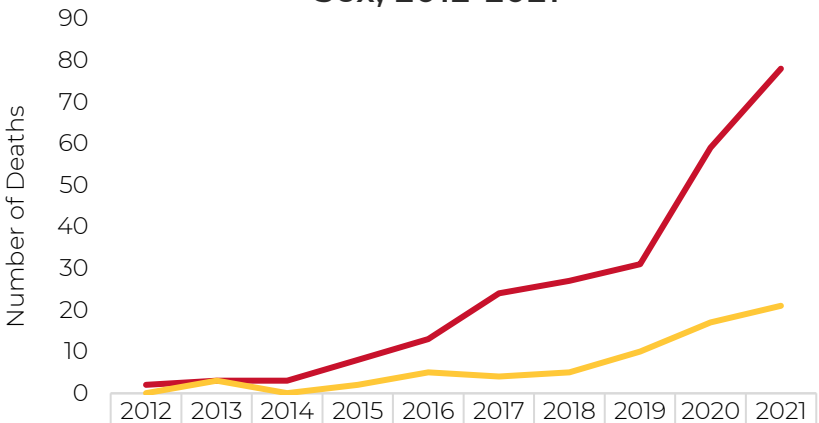


	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021
<25 years	1	1	0	1	0	4	4	2	3	5
25-34 years	0	2	1	4	10	9	14	14	31	30
35-44 years	1	0	1	3	4	8	8	13	20	26
45-54 years	0	2	1	2	3	6	4	6	13	26
55+ years	0	1	0	0	1	1	2	6	9	12

Race/Ethnicity, 2021



Sex, 2012-2021

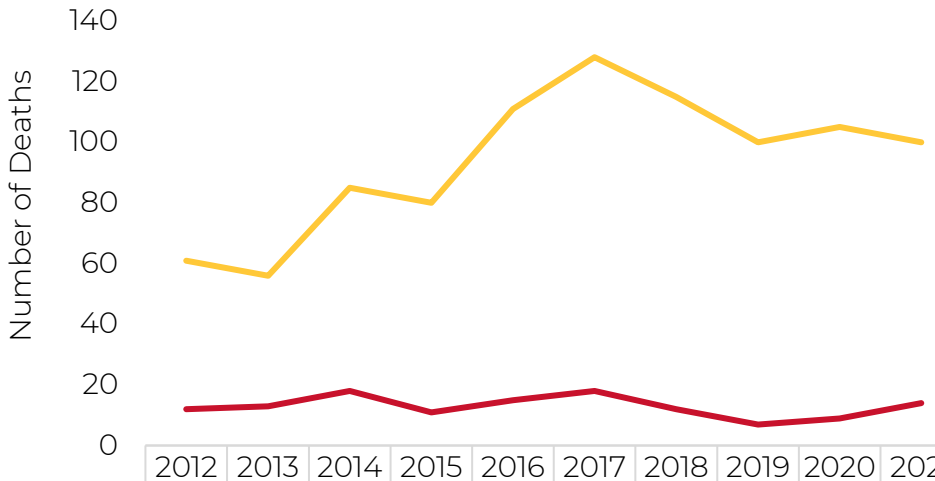


	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021
Male	2	3	3	8	13	24	27	31	59	78
Female	0	3	0	2	5	4	5	10	17	21

BENZODIAZEPINE-RELATED DEATHS

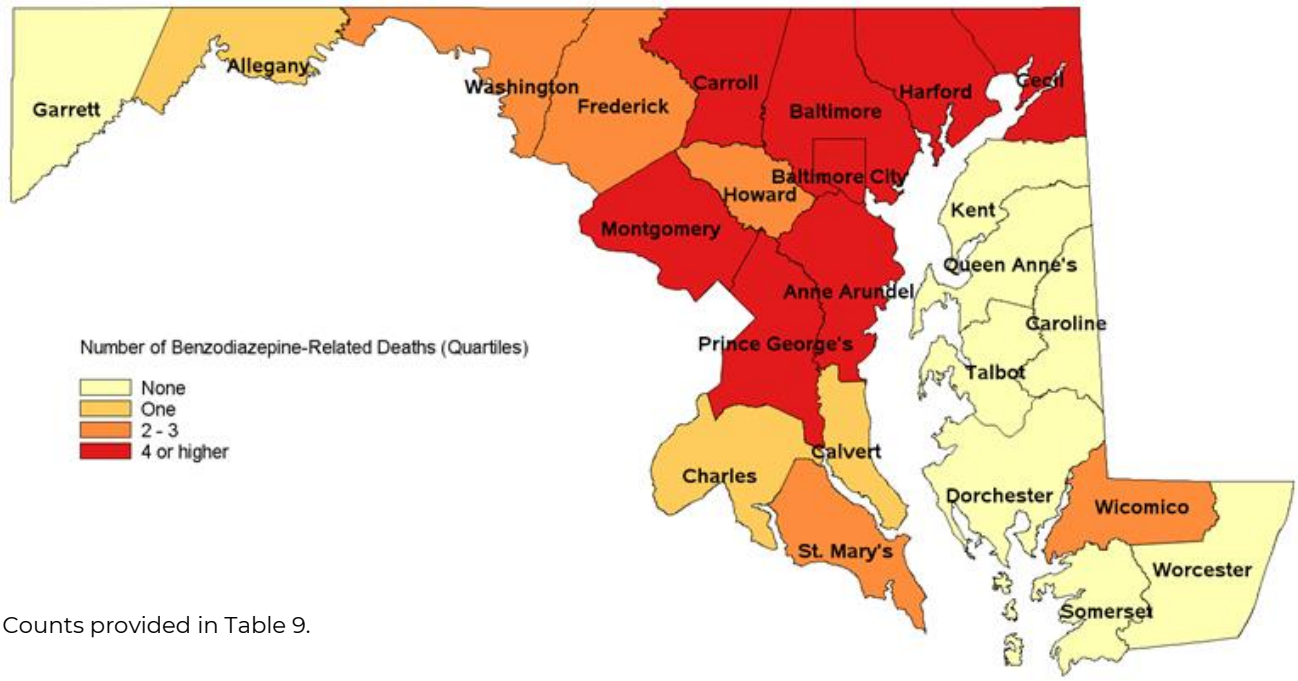
The number of benzodiazepine-related deaths remained the same between 2020 and 2021 (114 deaths) and remains below the all-time high of 146 deaths in 2017. The number of benzodiazepine-related deaths increased from 2015 to 2017, particularly in combination with opioids and began to decline since 2018. [Figure 18]

Figure 18. Number of Unintentional Benzodiazepine-Related Deaths Occurring in Maryland, 2012-2021



	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021
Not in combination with opioids	12	13	18	11	15	18	12	7	9	14
In combination with opioids	61	56	85	80	111	128	115	100	105	100

Figure 19. Number of Unintentional Benzodiazepine-Related Deaths by Place of Occurrence in Maryland, 2021[1]



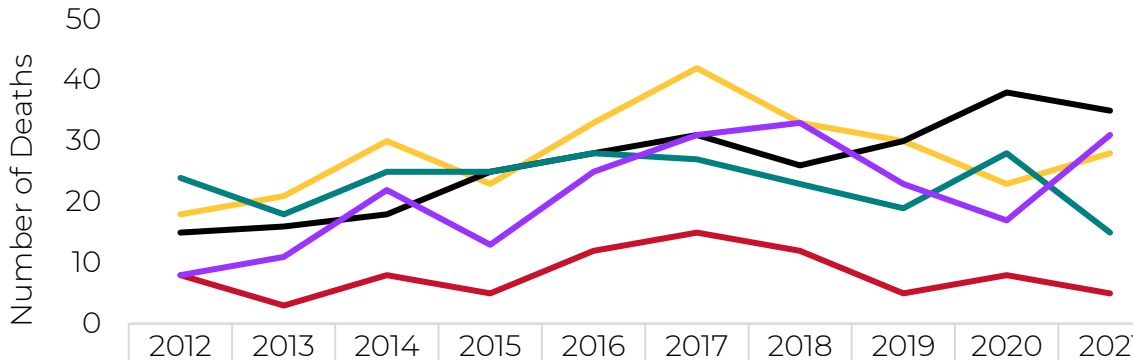
[1] Counts provided in Table 9.

Population Characteristics: Benzodiazepine-Related Deaths

Those aged 35-44 years experienced the most benzodiazepine-related deaths in 2021. Benzodiazepine-related deaths decreased from 2020 to 2021 among those aged 45-54 years (46%) and increased among those 55 years and over (82%). Nearly 72% of benzodiazepine-related deaths in 2021 were among non-Hispanic white individuals and 24% occurred among non-Hispanic black individuals. The benzodiazepine-related death rate among non-Hispanic white individuals was nearly 2 times the rate among non-Hispanic black individuals [Table 15]. Men experienced the most benzodiazepine-related deaths in 2021 – 60 – a 15% decrease from 2020. Among women, there was a 25% increase in the number of deaths. The benzodiazepine-related death rate was similar for men (2.0) and women (1.7)

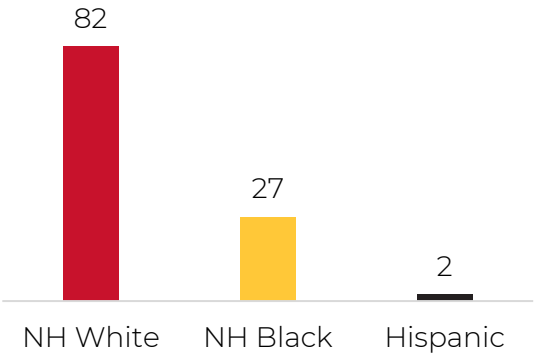
Figure 20. Number of Unintentional Benzodiazepine-Related Intoxication Deaths Occurring in Maryland by:

Age Group, 2012-2021

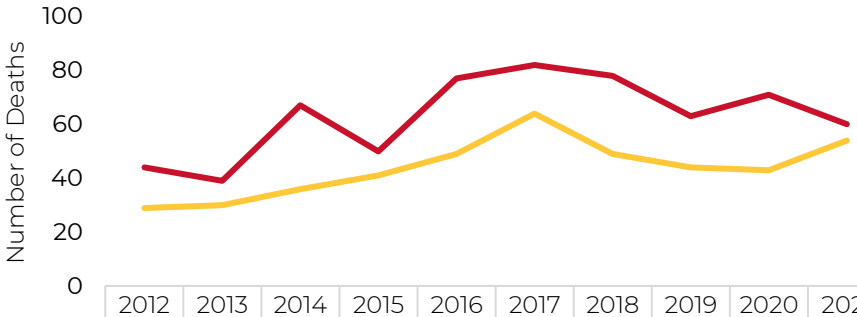


	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021
<25 years	8	3	8	5	12	15	12	5	8	5
25-34 years	18	21	30	23	33	42	33	30	23	28
35-44 years	15	16	18	25	28	31	26	30	38	35
45-54 years	24	18	25	25	28	27	23	19	28	15
55+ years	8	11	22	13	25	31	33	23	17	31

Race/Ethnicity, 2021



Sex, 2012-2021

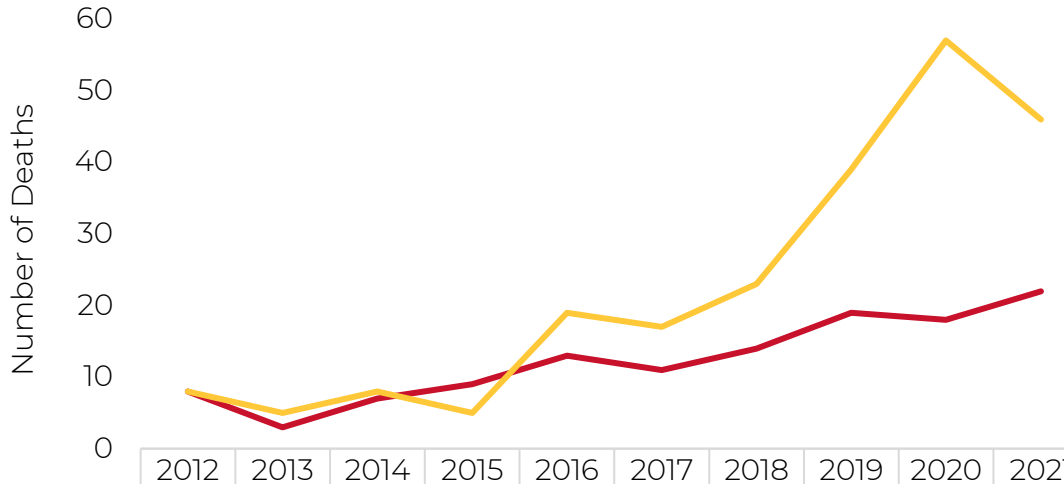


	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021
Male	44	39	67	50	77	82	78	63	71	60
Female	29	30	36	41	49	64	49	44	43	54

PHENCYCLIDINE-RELATED DEATHS

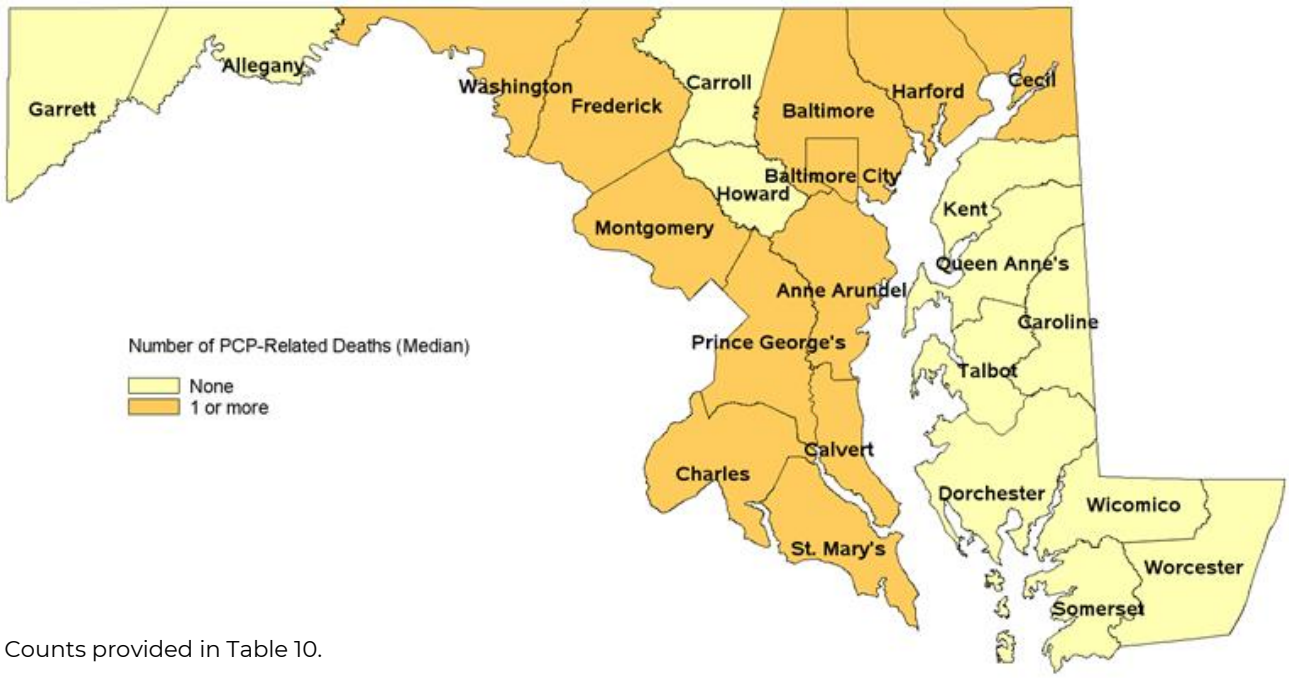
The number of phencyclidine-related deaths decreased to 68 deaths in 2021, slightly down from the all-time high of 75 deaths in 2020. The number of phencyclidine-related deaths has increased over the last decade, particularly in combination with opioids. [Figure 21]

Figure 21. Number of Unintentional Phencyclidine-Related Deaths Occurring in Maryland, 2012-2021



	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021
Not in combination with opioids	8	3	7	9	13	11	14	19	18	22
In combination with opioids	8	5	8	5	19	17	23	39	57	46

Figure 22. Number of Unintentional Phencyclidine-Related Deaths by Place of Occurrence in Maryland, 2021[1]



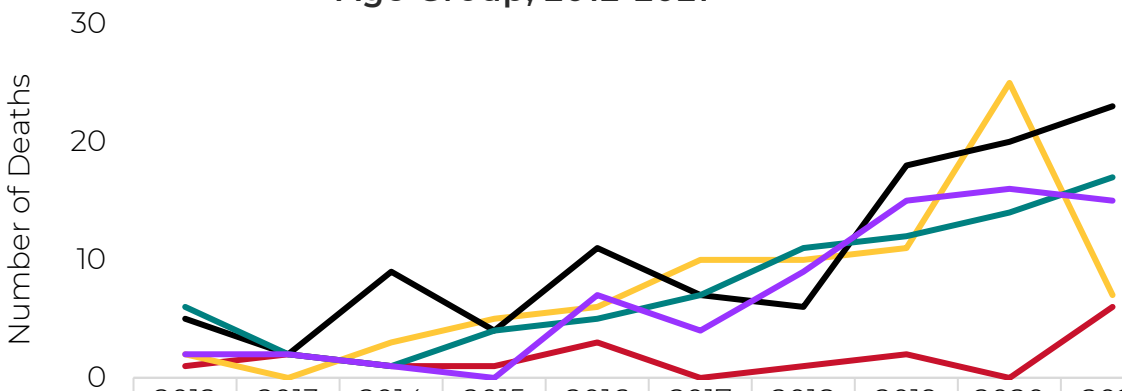
[1] Counts provided in Table 10.

Population Characteristics: Phencyclidine-Related Deaths

Those aged 35-44 years experienced the most phencyclidine-related deaths in 2021. Phencyclidine-related deaths decreased between 2020 and 2021 among those aged 25-34 years and increased among those under 25 years. Nearly two-thirds of phencyclidine-related deaths in 2021 were among non-Hispanic black individuals and 30% occurred among non-Hispanic white individuals. The phencyclidine-related death rate among non-Hispanic black individuals was nearly 3.5 times the rate among non-Hispanic white individuals [Table 15]. Males continue to experience the highest numbers of phencyclidine-related deaths. [Figure 23]

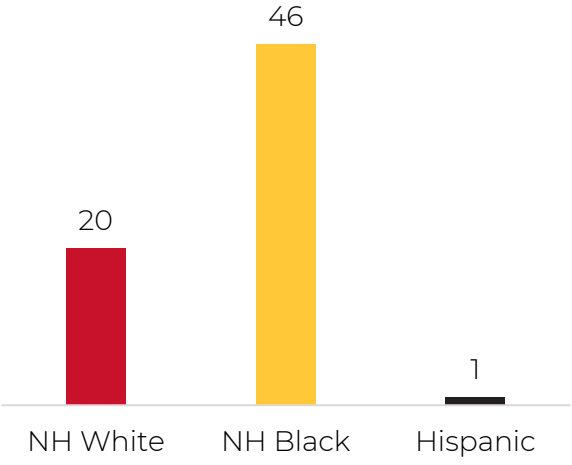
Figure 23. Number of Unintentional Phencyclidine-Related Intoxication Deaths Occurring in Maryland by:

Age Group, 2012-2021

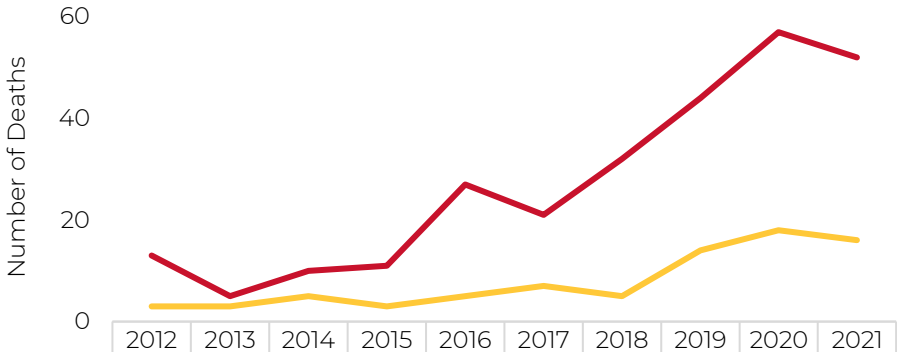


	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021
<25 years	1	2	1	1	3	0	1	2	0	6
25-34 years	2	0	3	5	6	10	10	11	25	7
35-44 years	5	2	9	4	11	7	6	18	20	23
45-54 years	6	2	1	4	5	7	11	12	14	17
55+ years	2	2	1	0	7	4	9	15	16	15

Race/Ethnicity, 2021



Sex, 2012-2021

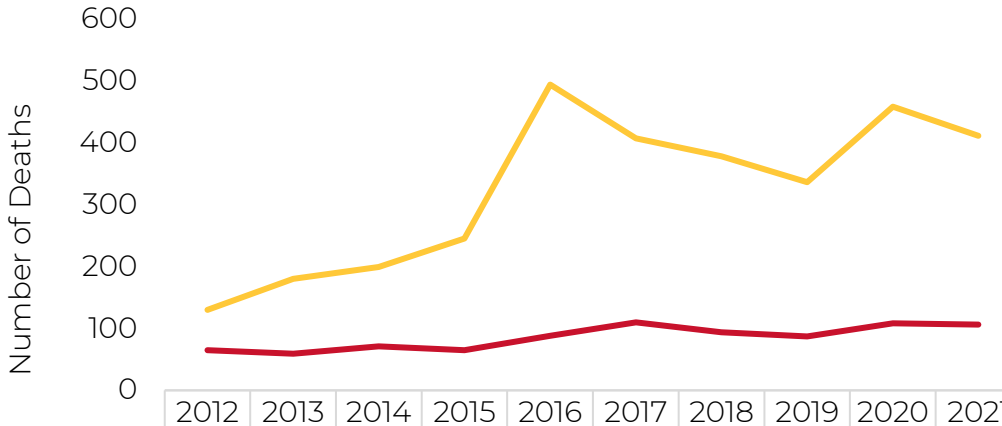


	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021
Male	13	5	10	11	27	21	32	44	57	52
Female	3	3	5	3	5	7	5	14	18	16

ALCOHOL-RELATED DEATHS

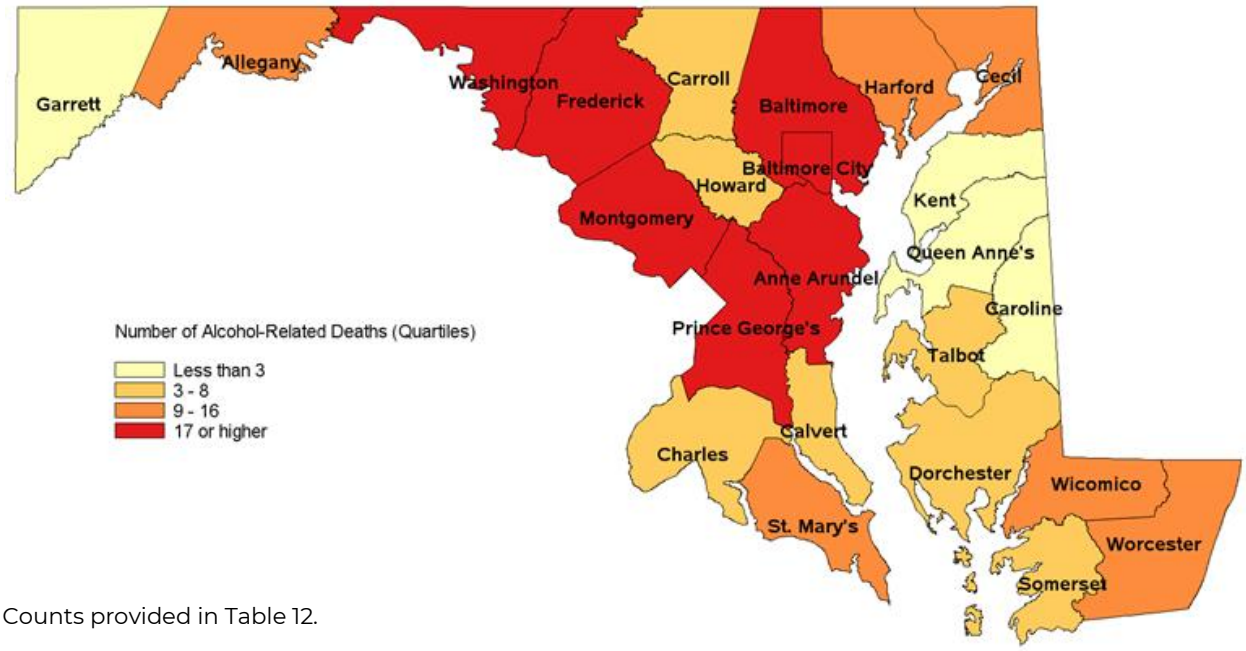
The number of alcohol-related deaths decreased about 9% in 2021 to 517 deaths and remains below the all-time high of 582 deaths in 2017. Particularly in combination with opioids, the number of alcohol-related deaths increased sharply from 2015 to 2016, then began to decline until another 24% increase from 2019 to 2020. Eighty percent of alcohol-related deaths in 2021 occurred in combination with any opioid. [Figure 24]

Figure 24. Number of Unintentional Alcohol-Related Deaths Occurring in Maryland, 2012-2021



	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021
Not in combination with opioids	65	59	71	65	88	110	94	87	108	106
In combination with opioids	130	180	199	245	494	407	378	336	458	411

Figure 25. Number of Unintentional Alcohol-Related Deaths by Place of Occurrence in Maryland, 2021[1]



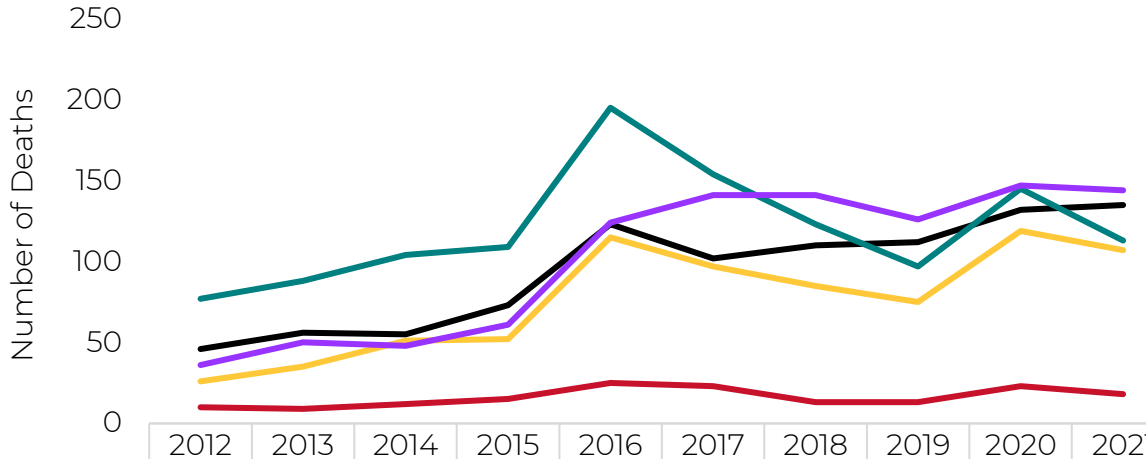
[1] Counts provided in Table 12.

Population Characteristics: Alcohol-Related Deaths

Those aged 55 years and over experienced the most alcohol-related deaths in 2021, followed by the 35–44-year age group. Alcohol-related deaths decreased between 2020 and 2021 among those aged 45-54 years. Forty-eight percent of alcohol-related deaths in 2021 were among non-Hispanic white individuals, 38% occurred among non-Hispanic black individuals, and 11% among Hispanic individuals. In 2021, 8 out of 10 alcohol-related deaths were among males (424) compared to 93 deaths among females. [Figure 26]

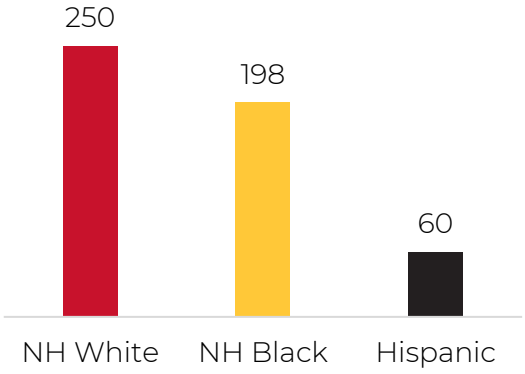
Figure 26. Number of Unintentional Alcohol-Related Intoxication Deaths Occurring in Maryland by:

Age Group, 2012-2021

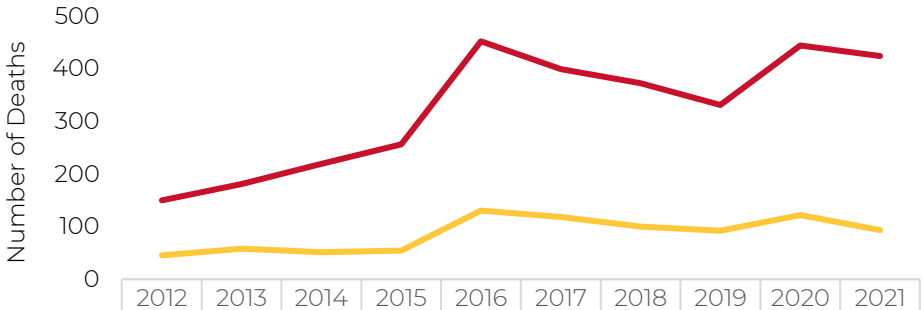


	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021
<25 years	10	9	12	15	25	23	13	13	23	18
25-34 years	26	35	51	52	115	97	85	75	119	107
35-44 years	46	56	55	73	123	102	110	112	132	135
45-54 years	77	88	104	109	195	154	123	97	145	113
55+ years	36	50	48	61	124	141	141	126	147	144

Race/Ethnicity, 2021



Sex, 2012-2021



	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021
Male	150	181	219	256	452	399	372	331	444	424
Female	45	58	51	54	130	118	100	92	122	93

Intoxication Deaths - Alcohol, 2021

Figure 27. Combinations of Substances Related to Unintentional Drug- and Alcohol-Related Intoxications Deaths, Maryland, 2021

		Number	Percent
Fentanyl			
	Total	2,344	
	In combination		
	With cocaine	896	38.2
	With xylazine	572	24.4
	With heroin	331	14.1
	With alcohol	384	16.4
	With prescription opioids	308	13.1
	With methamphetamine	77	3.3
	With benzodiazepines	73	3.1
	With phencyclidine	45	1.9
Cocaine			
	Total	1,021	
	In combination		
	With fentanyl	896	87.8
	With xylazine	225	22.0
	With alcohol	167	16.4
	With heroin	124	12.1
	With prescription opioids	115	11.3
	With benzodiazepines	27	2.6
	With phencyclidine	27	2.6
	With methamphetamine	21	2.1
Heroin			
	Total	354	
	In combination		
	With fentanyl	331	93.5
	With cocaine	124	35.0
	With xylazine	123	34.7
	With prescription opioids	65	18.4
	With alcohol	45	12.7
	With methamphetamine	12	3.4
	With benzodiazepines	8	2.3
	With phencyclidine	6	1.7
Prescription opioids			
	Total	447	
	In combination		
	With fentanyl	308	68.9
	With cocaine	115	25.7
	With xylazine	91	20.3
	With heroin	65	14.5
	With alcohol	46	10.3
	With benzodiazepines	39	8.7
	With methamphetamine	12	2.7
	With phencyclidine	5	1.1

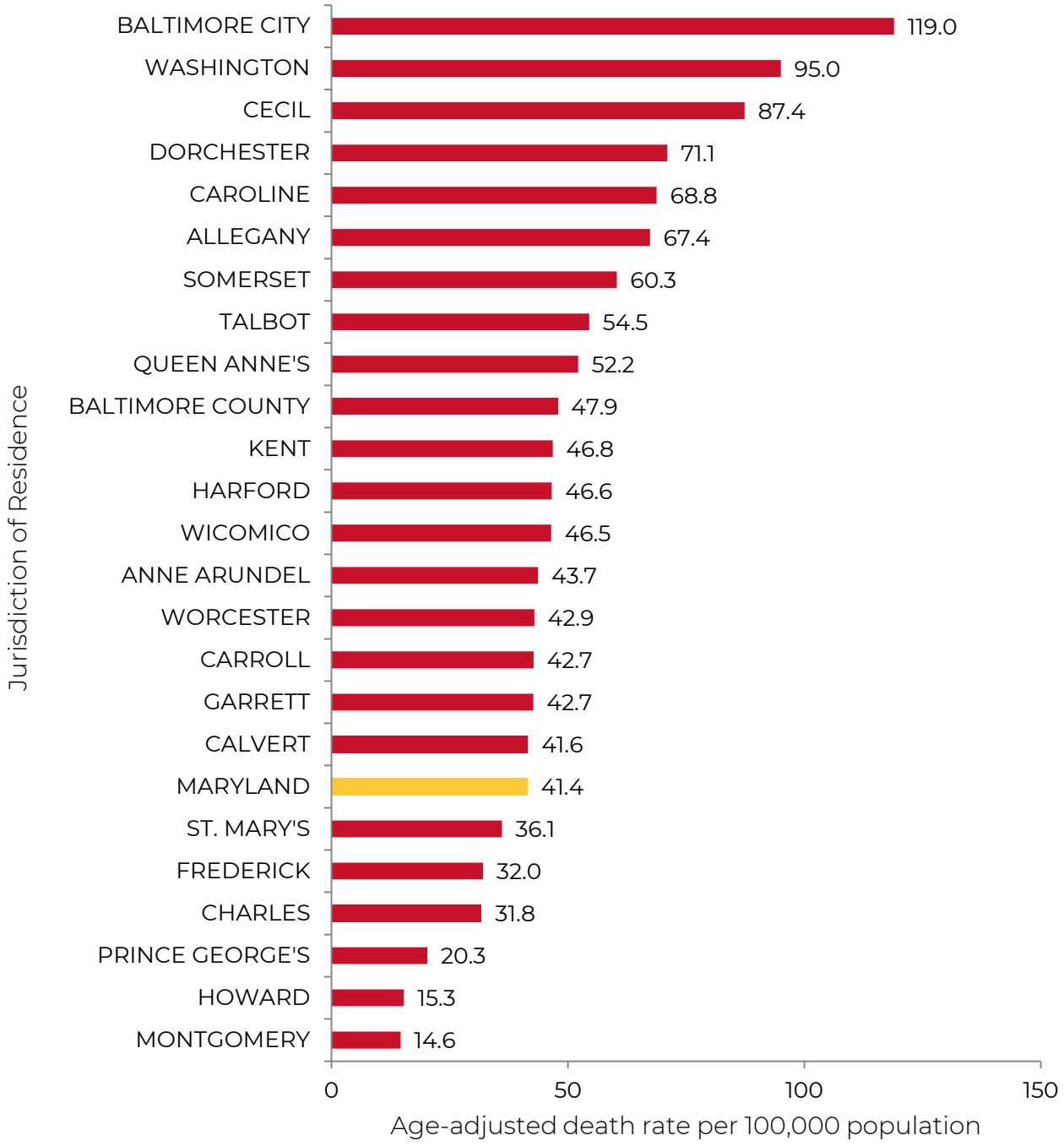
Figure 27. Combinations of Substances Related to Unintentional Drug- and Alcohol-Related Intoxications Deaths, Maryland, 2021 (Continued)

		Number	Percent
Alcohol			
	Total	517	
	In combination		
	With fentanyl	384	74.3
	With cocaine	167	32.3
	With xylazine	63	12.1
	With prescription opioids	46	8.9
	With heroin	45	8.7
	With benzodiazepines	25	4.8
	With phencyclidine	12	2.3
	With methamphetamine	8	1.5
Benzodiazepines			
	Total	114	
	In combination		
	With fentanyl	73	64.0
	With prescription opioids	39	34.2
	With cocaine	27	23.7
	With alcohol	25	21.9
	With xylazine	15	13.2
	With heroin	8	7.0
	With methamphetamine	1	0.9
	With phencyclidine	1	0.9
Phencyclidine			
	Total	68	
	In combination		
	With fentanyl	45	66.2
	With cocaine	27	39.7
	With alcohol	12	17.6
	With heroin	6	8.8
	With prescription opioids	5	7.4
	With xylazine	5	7.4
	With benzodiazepines	1	1.5
	With methamphetamine	0	0.0
Methamphetamine			
	Total	99	
	In combination		
	With fentanyl	77	77.8
	With xylazine	29	29.3
	With cocaine	21	21.2
	With heroin	12	12.1
	With prescription opioids	12	12.1
	With alcohol	8	8.1
	With benzodiazepines	1	1.0
	With phencyclidine	0	0.0
Xylazine			
	Total	575	
	In combination		
	With fentanyl	572	99.5
	With cocaine	225	39.1
	With heroin	123	21.4
	With prescription opioids	91	15.8
	With alcohol	63	11.0
	With methamphetamine	29	5.0
	With benzodiazepines	15	2.6
	With phencyclidine	5	0.9

XYLAZINE

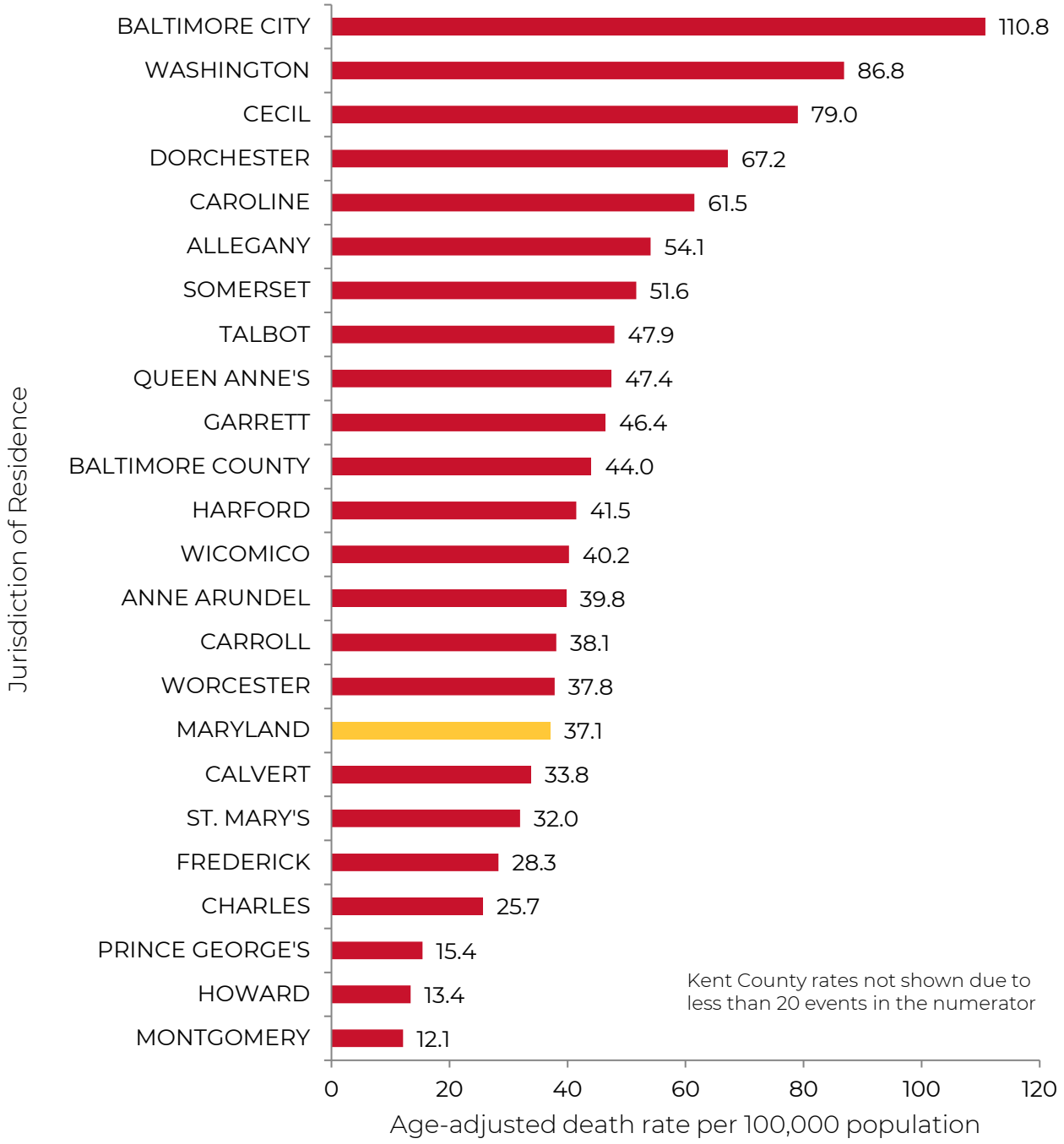
Xylazine, a non-opioid veterinary tranquilizer, was involved in 575 drug intoxication deaths in Maryland in 2021. In more than 99% of xylazine-related deaths, xylazine was in combination with fentanyl. This is the first Annual Report in which this substance was included.

Figure 28. Age-adjusted Mortality Rates[1] for Unintentional Drug- and Alcohol-Related Deaths by Place of Residence[2,3], Maryland, 2019-2021



[1]Age-adjusted to the 2000 U.S. standard population by the direct method.
[2]Rates are based on place of residence, not place of occurrence.
[3]Deaths identified by underlying cause of death ICD-10: X40-X45 and Y10-Y15

Figure 29. Age-Adjusted Mortality Rates[1,2] for Opioid-Related Deaths by Place of Residence[3,4], Maryland, 2019-2021



[1]Age-adjusted to the 2000 U.S. standard population by the direct method.
[2]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.
[3]Rates are based on place of residence, not place of occurrence.
[4]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, 2012-2021.[1,2]

REGION AND POLITICAL SUBDIVISION	TOTAL INTOXICATION DEATHS										
	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	TOTAL
MARYLAND	799	858	1,041	1,259	2,089	2,282	2,406	2,379	2,799	2,800	18,712
NORTHWEST AREA	67	86	96	131	214	183	211	189	234	207	1,618
GARRETT	0	6	2	5	1	8	3	9	8	6	48
ALLEGANY	14	15	12	22	59	38	39	28	52	45	324
WASHINGTON	27	28	40	64	66	59	91	88	110	103	676
FREDERICK	26	37	42	40	88	78	78	64	64	53	570
BALTIMORE METRO AREA	519	557	678	841	1,402	1,549	1,731	1,652	1,860	1,892	12,681
BALTIMORE CITY	225	246	305	393	694	761	888	914	1,028	1,079	6,533
BALTIMORE COUNTY	119	144	170	220	336	367	388	350	394	390	2,878
ANNE ARUNDEL	83	78	101	112	195	214	241	208	251	230	1,713
CARROLL	29	24	38	40	47	55	72	56	46	59	466
HOWARD	24	29	21	26	46	51	41	37	57	38	370
HARFORD	39	36	43	50	84	101	101	87	84	96	721
NATIONAL CAPITAL AREA	104	111	128	140	231	283	216	251	342	367	2,173
MONTGOMERY	48	52	65	70	102	116	89	105	139	142	928
PRINCE GEORGE'S	56	59	63	70	129	167	127	146	203	225	1,245
SOUTHERN AREA	37	25	47	59	88	103	86	95	111	101	752
CALVERT	12	6	17	20	28	32	28	31	25	25	224
CHARLES	13	9	21	22	45	37	27	31	53	35	293
ST MARY'S	12	10	9	17	15	34	31	33	33	41	235
EASTERN SHORE AREA	72	79	92	88	154	164	162	192	252	233	1,488
CECIL	25	26	29	32	30	59	59	62	92	87	501
KENT	0	4	6	3	6	5	2	10	6	10	52
QUEEN ANNE'S	2	8	10	4	8	8	17	13	14	15	99
CAROLINE	4	2	7	3	10	11	7	12	17	10	83
TALBOT	5	7	4	5	10	11	10	14	17	13	96
DORCHESTER	5	5	0	1	6	12	7	11	17	22	86
WICOMICO	21	17	20	18	48	35	36	41	47	47	330
SOMERSET	3	4	3	6	8	4	8	10	16	10	72
WORCESTER	7	6	13	16	28	19	16	19	26	19	169

[1] 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.
[2] 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, 2012-2021.[1,2]

REGION AND POLITICAL SUBDIVISION	OPIOID-RELATED DEATHS										
	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	TOTAL
MARYLAND	648	729	888	1,089	1,856	2,009	2,143	2,106	2,518	2,507	16,493
NORTHWEST AREA	53	74	81	118	198	157	189	168	219	184	1,441
GARRETT	0	4	2	4	0	4	3	6	5	6	34
ALLEGANY	10	11	11	20	55	36	33	23	48	40	287
WASHINGTON	20	26	34	57	63	51	83	80	105	94	613
FREDERICK	23	33	34	37	80	66	70	59	61	44	507
BALTIMORE METRO AREA	437	485	591	742	1,262	1,404	1,578	1,508	1,715	1,747	11,469
BALTIMORE CITY	189	212	275	354	628	692	814	851	964	1,008	5,987
BALTIMORE COUNTY	104	125	146	195	305	323	352	316	356	361	2,583
ANNE ARUNDEL	68	67	85	89	169	198	218	183	226	209	1,512
CARROLL	27	21	29	34	44	51	68	51	43	52	420
HOWARD	17	26	18	25	40	47	36	34	52	32	327
HARFORD	32	34	38	45	76	93	90	73	74	85	640
NATIONAL CAPITAL AREA	66	78	101	104	190	215	158	188	268	289	1,657
MONTGOMERY	36	40	53	59	84	91	64	86	109	121	743
PRINCE GEORGE'S	30	38	48	45	106	124	94	102	159	168	914
SOUTHERN AREA	32	24	40	48	74	94	71	82	93	85	643
CALVERT	11	5	16	19	25	27	25	25	19	17	189
CHARLES	12	9	16	17	36	34	19	26	42	31	242
ST MARY'S	9	10	8	12	13	33	27	31	32	37	212
EASTERN SHORE AREA	60	68	75	77	132	139	147	160	223	202	1,283
CECIL	22	22	25	26	28	57	58	53	85	76	452
KENT	0	4	3	3	4	4	2	10	6	7	43
QUEEN ANNE'S	2	7	9	4	6	6	16	11	13	14	88
CAROLINE	4	2	7	3	9	8	7	11	15	8	74
TALBOT	3	6	4	5	10	8	10	13	13	12	84
DORCHESTER	5	5	0	1	5	10	6	10	15	20	77
WICOMICO	17	14	15	17	44	28	30	29	39	40	273
SOMERSET	2	4	2	4	6	3	8	9	13	9	60
WORCESTER	5	4	10	14	20	15	10	14	24	16	132

[1] Includes deaths confirmed or suspected to be related to recent ingestion of opioids.
[2] 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, 2012-2021.[1,2]

REGION AND POLITICAL SUBDIVISION	HEROIN-RELATED DEATHS										
	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	TOTAL
MARYLAND	392	464	578	748	1,212	1,078	830	726	548	354	6,930
NORTHWEST AREA	27	40	53	80	119	72	68	58	44	18	579
GARRETT	0	2	1	3	0	1	1	1	1	1	11
ALLEGANY	6	3	5	13	34	14	15	9	14	4	117
WASHINGTON	11	14	21	38	39	22	29	25	20	9	228
FREDERICK	10	21	26	26	46	35	23	23	9	4	223
BALTIMORE METRO AREA	272	319	379	519	858	772	572	505	364	240	4,800
BALTIMORE CITY	131	150	192	260	454	380	286	279	205	128	2,465
BALTIMORE COUNTY	64	76	86	134	208	170	119	111	74	54	1,096
ANNE ARUNDEL	38	41	53	60	105	118	75	63	45	29	627
CARROLL	13	14	16	22	25	28	34	18	13	6	189
HOWARD	12	16	9	16	24	23	15	10	15	4	144
HARFORD	14	22	23	27	42	53	43	24	12	19	279
NATIONAL CAPITAL AREA	42	53	65	69	115	104	78	81	76	49	732
MONTGOMERY	22	28	33	37	48	52	34	39	32	15	340
PRINCE GEORGE'S	20	25	32	32	67	52	44	42	44	34	392
SOUTHERN AREA	18	13	28	29	48	45	31	30	24	8	274
CALVERT	6	2	13	15	17	17	8	10	3	2	93
CHARLES	5	5	10	8	22	16	11	12	15	5	109
ST MARY'S	7	6	5	6	9	12	12	8	6	1	72
EASTERN SHORE AREA	33	39	53	51	72	85	81	52	40	39	545
CECIL	11	11	15	16	19	37	40	16	12	10	187
KENT	0	0	2	1	1	1	0	3	2	1	11
QUEEN ANNE'S	2	5	7	1	4	5	8	3	4	0	39
CAROLINE	3	2	6	2	6	4	3	5	4	2	37
TALBOT	2	2	4	3	4	3	4	4	1	0	27
DORCHESTER	3	3	0	1	3	4	3	5	2	10	34
WICOMICO	9	11	12	13	21	20	12	9	8	11	126
SOMERSET	2	1	1	3	3	2	5	1	1	3	22
WORCESTER	1	4	6	11	11	9	6	6	6	2	62

[1] Includes deaths confirmed or suspected to be related to recent heroin use.
[2] Includes only deaths for which the manner of death was classified as accidental or undetermined.

TABLE 4. TOTAL NUMBER OF PRESCRIPTION UNINTENTIONAL OPIOID-RELATED INTOXICATION DEATHS BY PLACE OF OCCURRENCE, MARYLAND, 2012-2021.[1,2]

REGION AND POLITICAL SUBDIVISION	PRESCRIPTION OPIOID-RELATED DEATHS										
	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	TOTAL
MARYLAND	311	316	330	351	418	413	379	369	453	447	3,787
NORTHWEST AREA	30	35	33	39	56	35	34	33	38	32	365
GARRETT	0	2	2	1	0	1	1	1	1	0	9
ALLEGANY	5	8	6	6	15	9	5	5	8	4	71
WASHINGTON	9	11	16	20	23	8	19	17	18	20	161
FREDERICK	16	14	9	12	18	17	9	10	11	8	124
BALTIMORE METRO AREA	196	207	217	233	265	298	272	258	325	323	2,594
BALTIMORE CITY	74	86	84	105	113	123	128	134	168	164	1,179
BALTIMORE COUNTY	47	54	59	62	67	87	71	60	71	69	647
ANNE ARUNDEL	33	28	32	27	48	43	36	27	40	45	359
CARROLL	17	12	15	14	15	13	16	13	16	18	149
HOWARD	5	13	7	9	6	13	2	9	11	7	82
HARFORD	20	14	20	16	16	19	19	15	19	20	178
NATIONAL CAPITAL AREA	29	30	35	36	42	33	27	28	37	30	327
MONTGOMERY	18	16	19	23	26	19	16	15	16	20	188
PRINCE GEORGE'S	11	14	16	13	16	14	11	13	21	10	139
SOUTHERN AREA	18	12	19	19	25	26	22	23	24	20	208
CALVERT	6	3	7	6	11	5	6	5	5	3	57
CHARLES	7	5	9	8	10	11	8	7	8	5	78
ST MARY'S	5	4	3	5	4	10	8	11	11	12	73
EASTERN SHORE AREA	38	32	26	24	30	21	24	27	29	42	293
CECIL	18	12	12	10	8	8	5	6	10	18	107
KENT	0	4	2	2	0	2	0	0	0	2	12
QUEEN ANNE'S	0	3	3	3	2	2	4	0	3	5	25
CAROLINE	1	0	1	0	4	1	1	3	3	1	15
TALBOT	1	4	0	2	3	4	2	5	2	2	25
DORCHESTER	3	3	0	0	2	2	2	3	0	3	18
WICOMICO	9	4	3	5	7	0	5	5	7	5	50
SOMERSET	2	2	1	1	0	1	2	2	1	2	14
WORCESTER	4	0	4	1	4	1	3	3	3	4	27

[1] Includes deaths confirmed or suspected to be related to recent ingestion of one or more prescription opioids.
[2] 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, 2012-2021.[1,2]

REGION AND POLITICAL SUBDIVISION	OXYCODONE-RELATED DEATHS										
	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	TOTAL
MARYLAND	99	86	120	104	157	122	103	124	108	104	1,127
NORTHWEST AREA	13	12	10	11	25	16	13	18	15	14	147
GARRETT	0	1	0	0	0	0	0	1	1	0	3
ALLEGANY	2	3	3	2	7	3	2	2	5	3	32
WASHINGTON	2	5	5	6	11	2	7	9	2	7	56
FREDERICK	9	3	2	3	7	11	4	6	7	4	56
BALTIMORE METRO AREA	51	44	69	56	77	73	67	64	59	53	613
BALTIMORE CITY	15	11	20	18	22	23	21	22	21	13	186
BALTIMORE COUNTY	12	14	22	16	22	21	20	18	14	15	174
ANNE ARUNDEL	11	9	10	12	23	15	15	11	14	16	136
CARROLL	6	3	4	3	3	4	7	4	5	4	43
HOWARD	2	4	4	4	2	5	0	3	3	3	30
HARFORD	5	3	9	3	5	5	4	6	2	2	44
NATIONAL CAPITAL AREA	11	13	17	16	25	13	7	15	14	18	149
MONTGOMERY	8	7	11	8	16	8	4	6	7	12	87
PRINCE GEORGE'S	3	6	6	8	9	5	3	9	7	6	62
SOUTHERN AREA	10	6	11	13	13	14	10	16	13	9	115
CALVERT	5	3	3	3	7	3	1	4	4	2	35
CHARLES	3	1	5	8	4	7	5	4	3	1	41
ST MARY'S	2	2	3	2	2	4	4	8	6	6	39
EASTERN SHORE AREA	14	11	13	8	17	6	6	11	7	10	103
CECIL	4	6	6	3	2	2	0	2	2	4	31
KENT	0	1	0	1	0	0	0	0	0	1	3
QUEEN ANNE'S	0	1	1	2	1	0	1	0	1	0	7
CAROLINE	0	0	0	0	3	0	1	2	2	0	8
TALBOT	1	1	0	0	2	2	0	2	0	0	8
DORCHESTER	1	0	0	0	2	1	1	1	0	2	8
WICOMICO	5	1	2	1	5	0	2	3	0	2	21
SOMERSET	1	1	1	0	0	0	1	1	1	0	6
WORCESTER	2	0	3	1	2	1	0	0	1	1	11

[1] Includes deaths confirmed or suspected to be related to recent ingestion of oxycodone.
[2] 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, 2012-2021.[1,2]

REGION AND POLITICAL SUBDIVISION	METHADONE-RELATED DEATHS										
	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	TOTAL
MARYLAND	170	138	152	183	197	246	196	201	279	284	2,046
NORTHWEST AREA	14	8	20	14	12	11	14	10	17	10	130
GARRETT	0	1	1	0	0	0	0	0	0	0	2
ALLEGANY	1	1	3	2	4	3	2	2	1	0	19
WASHINGTON	4	3	10	6	5	4	10	6	14	8	70
FREDERICK	9	3	6	6	3	4	2	2	2	2	39
BALTIMORE METRO AREA	122	110	112	145	158	198	155	166	226	235	1,627
BALTIMORE CITY	54	57	54	78	82	87	85	98	131	136	862
BALTIMORE COUNTY	28	29	31	34	36	63	37	36	46	49	389
ANNE ARUNDEL	15	6	14	9	21	23	12	12	21	23	156
CARROLL	12	7	5	9	9	6	6	8	9	12	83
HOWARD	1	5	2	5	2	8	1	6	3	2	35
HARFORD	12	6	6	10	8	11	14	6	16	13	102
NATIONAL CAPITAL AREA	13	7	6	9	13	14	7	6	13	8	96
MONTGOMERY	7	3	5	6	7	6	4	4	5	5	52
PRINCE GEORGE'S	6	4	1	3	6	8	3	2	8	3	44
SOUTHERN AREA	5	2	7	6	6	9	7	6	11	7	66
CALVERT	2	0	2	3	2	3	4	0	1	0	17
CHARLES	1	1	4	2	2	3	2	2	4	1	22
ST MARY'S	2	1	1	1	2	3	1	4	6	6	27
EASTERN SHORE AREA	16	11	7	9	8	14	13	13	12	24	127
CECIL	10	4	4	3	3	4	5	4	6	11	54
KENT	0	2	1	1	0	2	0	0	0	1	7
QUEEN ANNE'S	0	1	0	1	1	2	3	0	0	4	12
CAROLINE	1	0	1	0	2	1	0	1	0	1	7
TALBOT	1	2	0	1	1	2	1	2	1	1	12
DORCHESTER	1	0	0	0	0	2	1	2	0	0	6
WICOMICO	1	2	0	2	0	0	1	2	3	2	13
SOMERSET	0	0	0	1	0	1	0	1	0	2	5
WORCESTER	2	0	1	0	1	0	2	1	2	2	11

[1] Includes deaths confirmed or suspected to be related to recent ingestion of methadone.
[2] 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, 2012-2021.[1,2]

REGION AND POLITICAL SUBDIVISION	FENTANYL-RELATED DEATHS										
	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	TOTAL
MARYLAND	29	58	186	340	1,119	1,594	1,888	1,927	2,342	2,344	11,827
NORTHWEST AREA	3	7	8	32	109	119	166	146	200	172	962
GARRETT	0	0	0	2	0	2	2	5	5	6	22
ALLEGANY	1	1	1	5	29	29	29	19	44	38	196
WASHINGTON	1	4	1	14	31	39	70	70	95	87	412
FREDERICK	1	2	6	11	49	49	65	52	56	41	332
BALTIMORE METRO AREA	16	35	142	248	792	1,118	1,415	1,395	1,605	1,639	8,405
BALTIMORE CITY	4	12	72	120	419	573	758	810	920	973	4,661
BALTIMORE COUNTY	5	11	36	65	182	244	308	285	328	330	1,794
ANNE ARUNDEL	3	6	23	29	98	152	184	164	209	193	1,061
CARROLL	1	2	4	11	20	40	55	47	37	39	256
HOWARD	2	3	5	7	27	36	34	28	44	28	214
HARFORD	1	1	2	16	46	73	76	61	67	76	419
NATIONAL CAPITAL AREA	3	6	15	32	101	175	115	167	251	274	1,139
MONTGOMERY	2	0	8	17	43	72	40	76	102	112	472
PRINCE GEORGE'S	1	6	7	15	58	103	75	91	149	162	667
SOUTHERN AREA	1	4	9	9	32	74	60	74	79	76	418
CALVERT	0	0	5	2	11	22	23	23	16	16	118
CHARLES	1	3	1	4	17	26	14	24	37	29	156
ST MARY'S	0	1	3	3	4	26	23	27	26	31	144
EASTERN SHORE AREA	6	6	12	19	85	108	132	145	207	183	903
CECIL	0	0	1	7	9	44	52	49	81	71	314
KENT	0	0	1	0	3	3	2	10	6	5	30
QUEEN ANNE'S	0	1	1	0	4	5	16	10	12	11	60
CAROLINE	0	0	0	1	3	7	6	9	14	7	47
TALBOT	1	0	2	2	7	3	10	11	11	11	58
DORCHESTER	0	2	0	1	3	7	4	9	15	18	59
WICOMICO	4	1	7	1	34	24	24	26	34	37	192
SOMERSET	0	2	0	1	6	3	8	9	12	9	50
WORCESTER	1	0	0	6	16	12	10	12	22	14	93

[1] Includes deaths confirmed or suspected to be related to recent ingestion or exposure to pharmaceutical or nonpharmaceutical fentanyl.
[2] 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, 2012-2021.[1,2]

REGION AND POLITICAL SUBDIVISION	COCAINE-RELATED DEATHS										
	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	TOTAL
MARYLAND	153	154	198	221	464	691	891	869	921	1,021	5,583
NORTHWEST AREA	9	13	16	20	27	43	67	51	65	68	379
GARRETT	0	0	0	1	0	1	0	3	1	1	7
ALLEGANY	2	2	2	5	9	13	12	6	10	12	73
WASHINGTON	5	6	6	10	9	10	31	24	31	40	172
FREDERICK	2	5	8	4	9	19	24	18	23	15	127
BALTIMORE METRO AREA	108	102	138	167	348	522	693	647	666	749	4,140
BALTIMORE CITY	59	47	82	93	202	285	388	380	393	453	2,382
BALTIMORE COUNTY	17	27	28	38	80	123	132	138	135	150	868
ANNE ARUNDEL	13	12	19	19	31	66	91	72	89	82	494
CARROLL	7	7	2	6	8	14	23	24	8	19	118
HOWARD	7	5	3	6	7	16	19	9	16	8	96
HARFORD	5	4	4	5	20	18	40	24	25	37	182
NATIONAL CAPITAL AREA	22	25	29	16	44	62	49	74	86	117	524
MONTGOMERY	12	13	10	5	11	17	18	29	26	36	177
PRINCE GEORGE'S	10	12	19	11	33	45	31	45	60	81	347
SOUTHERN AREA	6	1	3	6	8	19	33	39	33	28	176
CALVERT	3	0	2	0	2	3	3	9	8	6	36
CHARLES	1	0	0	2	4	10	13	12	16	8	66
ST MARY'S	2	1	1	4	2	6	17	18	9	14	74
EASTERN SHORE AREA	8	13	12	12	37	45	49	58	71	59	364
CECIL	2	5	4	3	3	15	14	12	13	12	83
KENT	0	0	1	1	0	1	1	4	2	3	13
QUEEN ANNE'S	0	0	0	0	1	2	5	6	4	4	22
CAROLINE	1	0	1	0	5	2	1	2	2	0	14
TALBOT	0	3	0	1	2	2	3	6	5	2	24
DORCHESTER	1	1	0	0	1	7	2	5	6	5	28
WICOMICO	4	3	4	7	13	7	13	21	21	22	115
SOMERSET	0	0	0	0	4	2	6	2	7	5	26
WORCESTER	0	1	2	0	8	7	4	0	11	6	39

[1] Includes deaths confirmed or suspected to be related to recent use of cocaine.
[2] 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, 2012-2021.[1,2]

REGION AND POLITICAL SUBDIVISION	BENZODIAZEPINE-RELATED DEATHS										
	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	TOTAL
MARYLAND	73	69	103	91	126	146	127	107	114	114	1,070
NORTHWEST AREA	5	6	13	8	21	19	10	9	15	6	112
GARRETT	0	1	0	1	0	2	0	1	2	0	7
ALLEGANY	0	1	3	1	6	5	1	1	3	1	22
WASHINGTON	3	2	5	3	6	2	4	2	4	3	34
FREDERICK	2	2	5	3	9	10	5	5	6	2	49
BALTIMORE METRO AREA	49	44	66	56	78	98	90	64	69	80	694
BALTIMORE CITY	15	14	22	15	24	28	28	27	26	33	232
BALTIMORE COUNTY	12	16	24	18	29	25	32	17	21	21	215
ANNE ARUNDEL	11	3	9	11	9	27	16	11	10	10	117
CARROLL	1	3	3	4	1	4	4	3	2	10	35
HOWARD	2	5	0	6	8	5	1	1	4	2	34
HARFORD	8	3	8	2	7	9	9	5	6	4	61
NATIONAL CAPITAL AREA	6	7	12	8	12	15	15	17	17	18	127
MONTGOMERY	4	4	10	7	7	8	9	10	8	12	79
PRINCE GEORGE'S	2	3	2	1	5	7	6	7	9	6	48
SOUTHERN AREA	4	4	6	7	7	8	4	7	6	4	57
CALVERT	1	1	3	1	1	2	2	0	0	1	12
CHARLES	2	1	2	4	4	4	1	3	3	1	25
ST MARY'S	1	2	1	2	2	2	1	4	3	2	20
EASTERN SHORE AREA	9	8	6	12	8	6	8	10	7	6	80
CECIL	7	3	3	5	2	1	2	4	2	4	33
KENT	0	0	0	0	1	2	0	0	0	0	3
QUEEN ANNE'S	0	0	0	1	1	0	3	0	1	0	6
CAROLINE	0	0	0	0	0	1	0	1	2	0	4
TALBOT	0	3	0	1	1	1	0	1	0	0	7
DORCHESTER	1	1	0	0	1	0	0	1	0	0	4
WICOMICO	0	0	1	2	1	0	1	1	2	2	10
SOMERSET	1	1	0	0	0	0	0	0	0	0	2
WORCESTER	0	0	2	3	1	1	2	2	0	0	11

[1] Includes deaths confirmed or suspected to be related to recent ingestion of a benzodiazepine or related drug with sedative effects.
[2] 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, 2012-2021.[1,2]

REGION AND POLITICAL SUBDIVISION	PHENCYCLIDINE-RELATED DEATHS										
	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	TOTAL
MARYLAND	16	8	15	14	32	28	37	58	75	68	351
NORTHWEST AREA	1	0	1	2	4	1	4	3	5	6	27
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	0	1	0	1	0	0	2	3	7
FREDERICK	1	0	1	1	4	0	4	3	3	3	20
BALTIMORE METRO AREA	7	4	3	2	11	8	9	23	19	11	97
BALTIMORE CITY	2	1	1	1	2	2	3	8	5	2	27
BALTIMORE COUNTY	1	1	0	0	2	1	0	2	2	2	11
ANNE ARUNDEL	2	1	1	1	6	5	5	11	10	6	48
CARROLL	1	0	0	0	0	0	0	0	0	0	1
HOWARD	1	1	1	0	1	0	1	2	1	0	8
HARFORD	0	0	0	0	0	0	0	0	1	1	2
NATIONAL CAPITAL AREA	6	3	10	8	13	16	20	25	41	38	180
MONTGOMERY	1	0	1	1	2	2	4	2	10	6	29
PRINCE GEORGE'S	5	3	9	7	11	14	16	23	31	32	151
SOUTHERN AREA	2	1	1	2	3	2	4	6	8	12	41
CALVERT	0	0	0	1	0	2	1	2	3	3	12
CHARLES	2	1	1	0	3	0	3	4	4	8	26
ST MARY'S	0	0	0	1	0	0	0	0	1	1	3
EASTERN SHORE AREA	0	0	0	0	1	1	0	1	2	1	6
CECIL	0	0	0	0	0	0	0	1	0	1	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	0	1	0	1
DORCHESTER	0	0	0	0	0	0	0	0	0	0	0
WICOMICO	0	0	0	0	1	1	0	0	1	0	3
SOMERSET	0	0	0	0	0	0	0	0	0	0	0
WORCESTER	0	0	0	0	0	0	0	0	0	0	0

[1] Includes deaths confirmed or suspected to be related to recent ingestion of phencyclidine.
[2] 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, 2012-2021.[1,2]

REGION AND POLITICAL SUBDIVISION	METHAMPHETAMINE-RELATED DEATHS										
	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	TOTAL
MARYLAND	2	6	3	10	18	28	32	41	76	99	315
NORTHWEST AREA	1	1	0	1	2	5	6	11	7	20	54
GARRETT	0	0	0	0	0	2	1	1	3	3	10
ALLEGANY	0	1	0	0	1	0	2	2	1	5	12
WASHINGTON	0	0	0	1	1	1	3	7	2	10	25
FREDERICK	1	0	0	0	0	2	0	1	1	2	7
BALTIMORE METRO AREA	1	3	1	4	12	12	13	13	28	33	120
BALTIMORE CITY	1	2	1	1	8	5	5	7	13	16	59
BALTIMORE COUNTY	0	1	0	0	1	1	4	4	7	7	25
ANNE ARUNDEL	0	0	0	0	0	2	2	2	1	3	10
CARROLL	0	0	0	1	0	1	1	0	2	1	6
HOWARD	0	0	0	2	2	1	1	0	1	1	8
HARFORD	0	0	0	0	1	2	0	0	4	5	12
NATIONAL CAPITAL AREA	0	2	0	4	3	4	4	6	9	12	44
MONTGOMERY	0	0	0	0	1	2	1	3	2	7	16
PRINCE GEORGE'S	0	2	0	4	2	2	3	3	7	5	28
SOUTHERN AREA	0	0	0	1	1	3	1	1	2	0	9
CALVERT	0	0	0	0	0	1	1	1	0	0	3
CHARLES	0	0	0	1	1	2	0	0	2	0	6
ST MARY'S	0	0	0	0	0	0	0	0	0	0	0
EASTERN SHORE AREA	0	0	2	0	0	4	8	10	30	34	88
CECIL	0	0	0	0	0	4	6	8	26	28	72
KENT	0	0	0	0	0	0	0	1	0	1	2
QUEEN ANNE'S	0	0	0	0	0	0	0	0	1	1	2
CAROLINE	0	0	1	0	0	0	0	1	1	0	3
TALBOT	0	0	0	0	0	0	0	0	0	1	1
DORCHESTER	0	0	0	0	0	0	0	0	0	0	0
WICOMICO	0	0	1	0	0	0	1	0	0	3	5
SOMERSET	0	0	0	0	0	0	0	0	0	0	0
WORCESTER	0	0	0	0	0	0	1	0	2	0	3

[1] Includes deaths confirmed or suspected to be related to recent ingestion of methamphetamine.
[2] 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, 2012-2021.[1,2]

REGION AND POLITICAL SUBDIVISION	ALCOHOL-RELATED DEATHS										
	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	TOTAL
MARYLAND	195	239	270	310	582	517	472	423	566	517	4,091
NORTHWEST AREA	12	21	27	30	47	31	34	37	37	56	332
GARRETT	0	2	1	1	1	2	1	2	1	0	11
ALLEGANY	4	2	3	6	14	4	7	3	7	15	65
WASHINGTON	3	6	11	10	17	14	15	20	17	24	137
FREDERICK	5	11	12	13	15	11	11	12	12	17	119
BALTIMORE METRO AREA	126	154	166	215	403	334	339	273	343	286	2,639
BALTIMORE CITY	71	86	86	114	222	198	187	165	169	158	1,456
BALTIMORE COUNTY	24	32	39	52	81	71	80	53	91	56	579
ANNE ARUNDEL	15	22	18	27	56	37	44	34	49	45	347
CARROLL	4	4	9	6	12	9	10	6	7	8	75
HOWARD	6	6	6	5	14	7	5	4	11	7	71
HARFORD	6	4	8	11	18	12	13	11	16	12	111
NATIONAL CAPITAL AREA	38	35	36	32	67	86	51	58	102	101	606
MONTGOMERY	15	13	18	15	22	35	19	19	43	37	236
PRINCE GEORGE'S	23	22	18	17	45	51	32	39	59	64	370
SOUTHERN AREA	7	7	12	11	22	24	17	18	28	22	168
CALVERT	2	1	4	3	7	4	9	5	10	6	51
CHARLES	2	4	5	4	12	9	3	10	14	7	70
ST MARY'S	3	2	3	4	3	11	5	3	4	9	47
EASTERN SHORE AREA	12	22	29	22	43	42	31	37	56	52	346
CECIL	6	9	5	8	8	12	10	5	16	13	92
KENT	0	1	1	0	1	1	0	1	2	2	9
QUEEN ANNE'S	0	1	7	0	2	4	3	1	1	2	21
CAROLINE	0	1	2	0	5	4	1	2	3	2	20
TALBOT	2	2	0	0	0	5	4	5	6	3	27
DORCHESTER	1	0	0	1	1	2	1	5	5	3	19
WICOMICO	2	6	7	3	12	9	8	12	8	12	79
SOMERSET	1	1	2	2	3	1	0	1	4	5	20
WORCESTER	0	1	5	8	11	4	4	5	11	10	59

[1] Includes deaths confirmed or suspected to be related to recent ingestion of alcohol.
[2] 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, 2021.[1,2]

REGION AND POLITICAL SUBDIVISION	TOTAL INTOXICATION DEATH COUNTS					
	TOTAL	NON-HISPANIC WHITE	NON-HISPANIC BLACK	HISPANIC*	MALE	FEMALE
MARYLAND	2,800	1,427	1,198	124	2,031	769
NORTHWEST AREA	207	154	45	6	150	57
GARRETT	6	6	0	0	6	0
ALLEGANY	45	36	7	2	33	12
WASHINGTON	103	70	29	4	73	30
FREDERICK	53	42	9	0	38	15
BALTIMORE METRO AREA	1,892	906	892	60	1,365	527
BALTIMORE CITY	1,079	305	728	33	781	298
BALTIMORE COUNTY	390	275	90	10	278	112
ANNE ARUNDEL	230	171	44	13	165	65
CARROLL	59	55	3	1	39	20
HOWARD	38	26	8	2	31	7
HARFORD	96	74	19	1	71	25
NATIONAL CAPITAL AREA	367	107	199	50	286	81
MONTGOMERY	142	74	38	21	104	38
PRINCE GEORGE'S	225	33	161	29	182	43
SOUTHERN AREA	101	73	24	3	62	39
CALVERT	25	22	2	0	13	12
CHARLES	35	23	12	0	24	11
ST MARY'S	41	28	10	3	25	16
EASTERN SHORE AREA	233	187	38	5	168	65
CECIL	87	79	6	1	62	25
KENT	10	8	2	0	6	4
QUEEN ANNE'S	15	12	3	0	12	3
CAROLINE	10	8	0	1	10	0
TALBOT	13	10	3	0	11	2
DORCHESTER	22	14	8	0	14	8
WICOMICO	47	31	14	1	32	15
SOMERSET	10	8	2	0	6	4
WORCESTER	19	17	0	2	15	4

[1] 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.
[2] 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, 2021.[1,2,3]

REGION AND POLITICAL SUBDIVISION	TOTAL INTOXICATION DEATH RATES					
	TOTAL	NON-HISPANIC WHITE	NON-HISPANIC BLACK	HISPANIC*	MALE	FEMALE
MARYLAND	45.4	47.2	64.3	18.1	67.6	24.3
NORTHWEST AREA	39.0	38.8	81.2	**	56.0	21.6
GARRETT	**	**	**	**	**	**
ALLEGANY	66.4	61.8	**	**	92.7	**
WASHINGTON	66.5	59.6	149.7	**	92.0	39.7
FREDERICK	18.9	21.7	**	**	27.4	**
BALTIMORE METRO AREA	67.9	59.9	107.2	32.1	101.2	36.6
BALTIMORE CITY	187.2	192.0	205.9	94.8	288.6	97.4
BALTIMORE COUNTY	45.9	59.8	34.8	**	68.8	25.1
ANNE ARUNDEL	39.0	44.5	40.9	**	56.2	21.9
CARROLL	33.9	36.2	**	**	45.0	22.9
HOWARD	11.4	16.0	**	**	18.8	**
HARFORD	36.5	38.0	**	**	54.8	18.7
NATIONAL CAPITAL AREA	18.3	19.2	25.4	12.3	29.3	7.8
MONTGOMERY	13.5	16.6	19.1	9.9	20.3	7.0
PRINCE GEORGE'S	23.6	29.1	27.5	14.9	39.5	8.7
SOUTHERN AREA	26.8	34.1	20.9	**	33.3	20.4
CALVERT	26.6	30.7	**	**	**	**
CHARLES	20.7	39.3	**	**	29.4	**
ST MARY'S	35.8	33.5	**	**	43.5	**
EASTERN SHORE AREA	50.7	55.2	50.3	**	74.7	27.8
CECIL	83.7	90.8	**	**	119.6	48.0
KENT	**	**	**	**	**	**
QUEEN ANNE'S	**	**	**	**	**	**
CAROLINE	**	**	**	**	**	**
TALBOT	**	**	**	**	**	**
DORCHESTER	67.7	**	**	**	**	**
WICOMICO	45.2	48.7	**	**	64.8	**
SOMERSET	**	**	**	**	**	**
WORCESTER	**	**	**	**	**	**

[1] 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.
[2] Includes only deaths that occurred in Maryland for which the manner of death was classified as accidental or undetermined.
[3] Crude rate per 100,000 population. Calculation of crude rates includes resident and non-resident data in the numerator and 2021 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, 2021.[1,2]

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	131	555	620	632	861
NORTHWEST AREA	17	46	58	48	38
GARRETT	2	1	2	1	0
ALLEGANY	3	10	11	11	10
WASHINGTON	8	22	27	27	19
FREDERICK	4	13	18	9	9
BALTIMORE METRO AREA	69	334	390	437	661
BALTIMORE CITY	28	161	188	233	468
BALTIMORE COUNTY	11	78	91	104	106
ANNE ARUNDEL	13	50	65	53	49
CARROLL	2	14	14	16	13
HOWARD	7	5	13	7	6
HARFORD	8	26	19	24	19
NATIONAL CAPITAL AREA	32	91	94	63	87
MONTGOMERY	17	43	42	20	20
PRINCE GEORGE'S	15	48	52	43	67
SOUTHERN AREA	6	30	19	29	17
CALVERT	4	8	3	5	5
CHARLES	2	8	5	14	6
ST MARY'S	0	14	11	10	6
EASTERN SHORE AREA	7	54	59	55	58
CECIL	2	20	18	23	24
KENT	2	2	2	2	2
QUEEN ANNE'S	1	3	3	3	5
CAROLINE	0	6	2	2	0
TALBOT	0	1	3	5	4
DORCHESTER	0	5	9	3	5
WICOMICO	0	13	12	12	10
SOMERSET	1	2	4	2	1
WORCESTER	1	2	6	3	7

[1] 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.
[2] 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, 2021.[1,2,3]

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	6.9	67.5	74.9	80.7	46.8
NORTHWEST AREA	**	68.5	81.6	69.5	23.4
GARRETT	**	**	**	**	**
ALLEGANY	**	**	**	**	**
WASHINGTON	**	109.6	136.6	132.9	**
FREDERICK	**	**	**	**	**
BALTIMORE METRO AREA	8.1	85.4	103.3	128.1	79.8
BALTIMORE CITY	16.4	152.4	237.0	375.7	294.3
BALTIMORE COUNTY	**	69.8	83.7	101.5	39.7
ANNE ARUNDEL	**	61.2	77.9	71.7	28.8
CARROLL	**	**	**	**	**
HOWARD	**	**	**	**	**
HARFORD	**	79.8	**	71.2	**
NATIONAL CAPITAL AREA	5.2	34.8	33.9	23.5	15.0
MONTGOMERY	**	33.7	28.5	14.0	6.4
PRINCE GEORGE'S	**	35.8	40.0	34.2	25.1
SOUTHERN AREA	**	61.8	**	57.4	**
CALVERT	**	**	**	**	**
CHARLES	**	**	**	**	**
ST MARY'S	**	**	**	**	**
EASTERN SHORE AREA	**	101.0	114.5	101.3	36.0
CECIL	**	151.3	**	169.0	72.3
KENT	**	**	**	**	**
QUEEN ANNE'S	**	**	**	**	**
CAROLINE	**	**	**	**	**
TALBOT	**	**	**	**	**
DORCHESTER	**	**	**	**	**
WICOMICO	**	**	**	**	**
SOMERSET	**	**	**	**	**
WORCESTER	**	**	**	**	**

[1] 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.
[2] Includes only deaths that occurred in Maryland for which the manner of death was classified as accidental or undetermined.
[3] Crude rate per 100,000 population. Calculation of crude rates includes resident and non-resident data in the numerator and 2021 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 UNINTENTIONAL DRUG- AND ALCOHOL-RELATED INTOXICATION DEATHS BY RACE/ETHNICITY AND SEX, MARYLAND, 2021 [1,2]

SUBSTANCE	ALL AGES	< 25 YEARS	25-34 YEARS	35-44 YEARS	45-54 YEARS	55+ YEARS
ALL DRUG- AND ALCOHOL-RELATED DEATHS						
TOTAL	45.4	6.9	67.5	74.9	80.7	46.8
MALE	67.6	9.8	100.4	111.4	120.5	72.8
FEMALE	24.3	4.0	35.1	39.7	43.0	24.8
NON-HISPANIC WHITE	47.2	7.9	92.2	96.9	85.4	30.0
NON-HISPANIC BLACK	64.3	7.5	58.4	75.1	117.1	102.1
HISPANIC	18.1	*	46.3	39.6	*	*
OPIOID-RELATED DEATHS						
TOTAL	40.7	6.4	63.2	67.1	70.1	41.4
MALE	60.5	8.9	94.5	98.6	105.3	64.3
FEMALE	21.8	3.8	32.2	36.6	36.8	22.0
NON-HISPANIC WHITE	42.6	7.1	86.6	92.2	74.8	25.1
NON-HISPANIC BLACK	58.0	7.2	53.6	63.2	103.2	94.4
HISPANIC	14.0	*	44.1	27.0	*	*
COCAINE-RELATED DEATHS						
TOTAL	16.6	1.6	23.0	28.6	32.0	17.0
MALE	25.3	2.2	35.3	43.3	50.1	26.9
FEMALE	8.3	*	10.9	14.5	14.9	8.6
NON-HISPANIC WHITE	16.2	*	30.0	37.9	31.3	9.4
NON-HISPANIC BLACK	25.4	*	22.8	26.9	51.8	40.8
HISPANIC	5.7	*	*	*	*	*
HEROIN-RELATED DEATHS						
TOTAL	5.7	*	8.2	8.8	9.8	6.6
MALE	8.8	*	11.8	13.8	16.0	10.2
FEMALE	2.8	*	*	*	*	3.5
NON-HISPANIC WHITE	6.1	*	12.1	12.2	10.3	4.2
NON-HISPANIC BLACK	7.9	*	*	7.9	14.7	14.2
HISPANIC	*	*	*	*	*	*
BENZODIAZAPINE-RELATED DEATHS						
TOTAL	1.8	*	3.4	4.2	*	1.7
MALE	2.0	*	*	4.9	*	*
FEMALE	1.7	*	*	*	*	*
NON-HISPANIC WHITE	2.7	*	*	6.9	*	2.2
NON-HISPANIC BLACK	1.4	*	*	*	*	*
HISPANIC	*	*	*	*	*	*
PHENCYCLIDINE-RELATED DEATHS						
TOTAL	1.1	*	*	2.8	*	*
MALE	1.7	*	*	*	*	*
FEMALE	*	*	*	*	*	*
NON-HISPANIC WHITE	0.7	*	*	*	*	*
NON-HISPANIC BLACK	2.5	*	*	*	*	*
HISPANIC	*	*	*	*	*	*
METHAMPHETAMINE-RELATED DEATHS						
TOTAL	1.6	*	3.7	3.1	3.3	*
MALE	2.6	*	5.4	5.4	*	*
FEMALE	0.7	*	*	*	*	*
NON-HISPANIC WHITE	2.4	*	5.6	*	5.3	*
NON-HISPANIC BLACK	1.1	*	*	*	*	*
HISPANIC	*	*	*	*	*	*

[1] Includes only deaths that occurred in Maryland for which the manner of death was classified as accidental or undetermined.

[2] Crude rate per 100,000 population. Calculation of crude rates includes resident and non-resident data in the numerator and 2021 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.