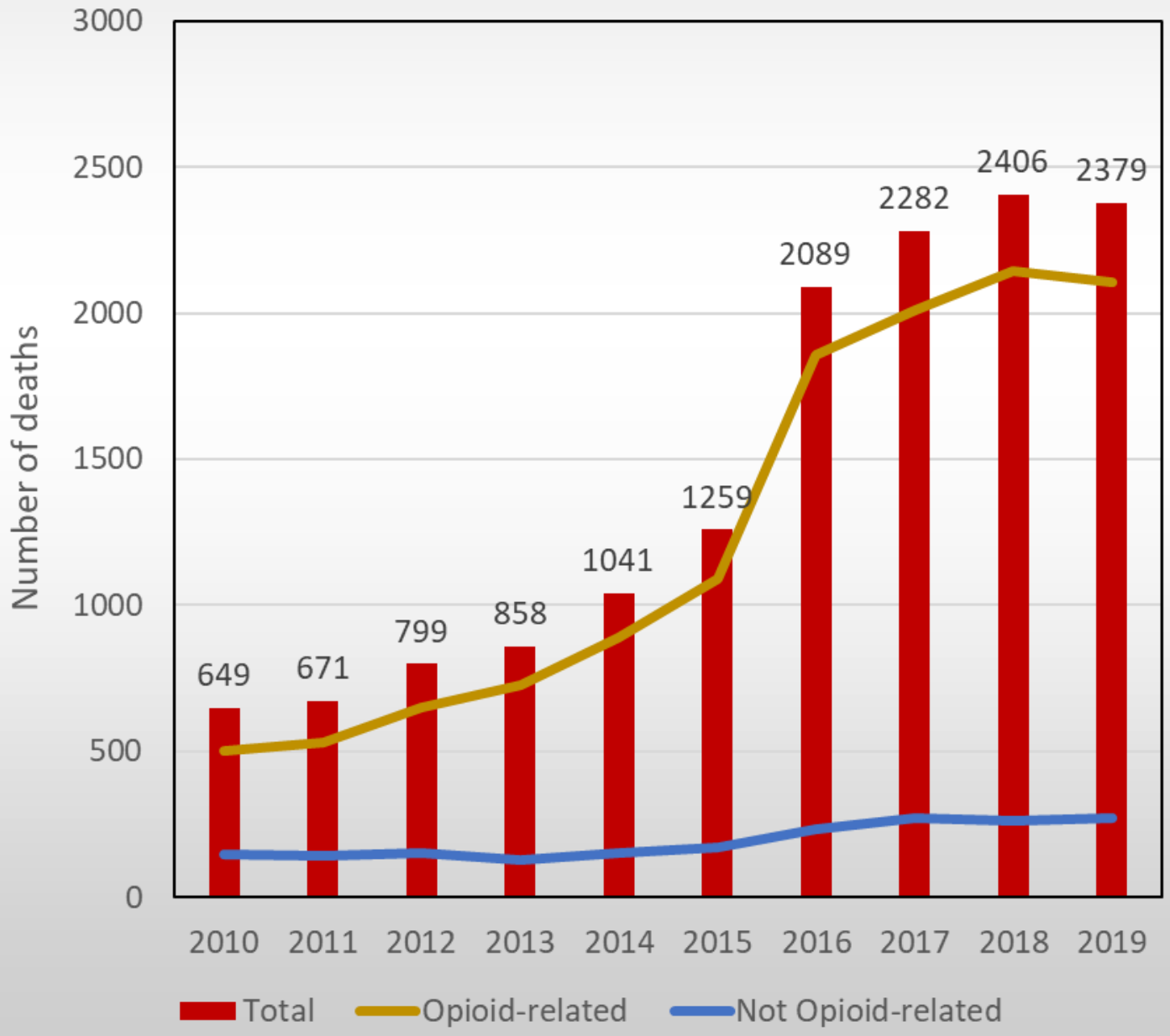
Maryland Department of Health
Larry Hogan, Governor – Boyd Rutherford, Lt. Governor – Robert R. Neall, Secretary

CHANGING Maryland for the Better

June 2020

Unintentional Drug- and Alcohol-Related Intoxication Deaths in Maryland, 2019



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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 2010-2019. 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 deaths occurring in the State that result from violence, suicide, casualty, or take place in a suspicious, unexpected or unusual manner. 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.

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. This 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 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.

[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.

Identification of drug-related intoxication deaths

For the purpose of this report, an intoxication death was defined as a death that was the result of recent ingestion or exposure to alcohol or another type of drug, including heroin, fentanyl, cocaine, prescription opioids, benzodiazepines, phencyclidine (PCP), methamphetamines, and other prescribed and unprescribed drugs. OCME provided all records to VSA for which the 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.

Analyses

Trends in the number of unintentional drug- and alcohol-related intoxication deaths occurring in Maryland during the years 2010-2019 were analyzed by age group, race/ethnicity, gender, place of occurrence of death, and substances related to the death. Changes over time were examined for deaths related to the following substances:

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

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.

Trends in deaths for the period 2010-2019 are shown in Figures 1 through 42. Data on intoxication deaths related to a combination of substances are shown in Figures 43 through 49. Counts of the number of total deaths and deaths related to classes of substances or specific substances by place of occurrence are shown in Tables 1 through 12.

Age-adjusted death rates

Age-adjusted death rates by place of residence are shown in Figure 50. Age-adjusted death rates were calculated in order to allow for the comparison of drug death rates among Maryland jurisdictions. 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. Since out-of-state data are generally not available until approximately six months after the close of a calendar year, only data through 2018 were available at the time this report was prepared. Therefore, age-adjusted rates cover the period 2016 through 2018. Since the number of drug deaths is relatively small in many Maryland jurisdictions, it was necessary to calculate rates for a three year period in order to obtain counts that were large enough to be used to calculate stable rates.

Drug death information received from other states is far less detailed than the data available from OCME and often does not include information on the substances involved in a death. For that reason, rates could only be calculated for total deaths and not deaths related to individual substances.

*****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 considered to be associated with a death if a specific opioid drug 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 considered to be 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 nonpharmaceutical 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 occurring in recent years have involved the use of nonpharmaceutical fentanyl. Fentanyl is many times more potent than heroin, and greatly increases the risk of an overdose death. Carfentanil, an extremely potent analog of fentanyl, was first detected in Maryland drug intoxication death cases in 2017, and is reported separately in Figures 21 and 22.

Cocaine-related deaths

Cocaine is a highly addictive stimulant drug derived from coca leaves. It is frequently mixed with other non-psychoactive substances, such as cornstarch or talcum powder, to dilute its potency, however in the last few years, it has been mixed with fentanyl.

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 it has been mixed with fentanyl.

Methamphetamine-related deaths

Methamphetamine is another highly addictive stimulant drug. Illicit forms of methamphetamine have also been found to be mixed with fentanyl or other opioids.

SUMMARY OF TRENDS IN DRUG INTOXICATION DEATHS — 2010 TO 2019

Total drug and alcohol intoxication deaths

- The number of drug- and alcohol-related intoxication deaths occurring in Maryland decreased slightly in 2019, the first decline in intoxication deaths in 10 years. The total number of deaths in 2019 was 2,379, which represented a 1% decrease from the number of deaths (2,406) in 2018.
- Between the years 2011 through 2016, intoxication deaths increased among all age groups, and were highest among those aged 45-54 years old. In 2017, deaths in this age group were surpassed by those aged 25-34 years old. The number of deaths among those aged <25 years started to decline in 2017 and this decrease has continued in 2018 and 2019. Deaths among those 25-34 years started to decline in 2018 and continued to decrease in 2019. Deaths increased in the older age groups in 2018. Deaths among those 45-54 years decreased in 2019, while deaths among those 55 and older increased again in 2019 and this group had the highest number of deaths
- The number of deaths among non-Hispanic Whites began to decrease in 2018 and decreased again in 2019 by 9%. Deaths have increased steadily among non-Hispanic Blacks since 2012, and increased 13% between 2018 and 2019. Among Hispanics deaths increased slightly to 75 in 2019.
- Deaths decreased by 2% among men between 2018 and 2019, the first decrease in 10 years. Deaths among women have plateaued since 2018. Intoxication deaths were 2.6 times higher among men than women in 2019.
- Although there were decreases in the number of deaths occurring in nine jurisdictions of the state between 2018 and 2019: Allegany, Washington, Frederick, Baltimore County, Anne Arundel, Carroll, Howard, Harford, and Queen Anne's, the remainder saw increases: Garrett, Baltimore City, Montgomery, Prince George's, Calvert, Charles, St. Mary's, Cecil, Kent, Caroline, Talbot, Dorchester, Wicomico, Somerset, and Worcester.

Opioid-related deaths

- Eighty-nine percent of all intoxication deaths that occurred in Maryland in 2019 were **opioid**-related. **Opioid**-related deaths include deaths related to **heroin**, **prescription opioids**, and nonpharmaceutical **fentanyl**.
- The number of **opioid**-related deaths decreased by 2% between 2018 and 2019, the first decline in 10 years. Non opioid-related drug deaths increased slightly in 2019.
- **Fentanyl**-related deaths continued to drive opioid-related deaths. Between 2018 and 2019 the number of **fentanyl**-related deaths increased by 2% (from 1888 to 1927). The number of **heroin**-related deaths declined for the third straight year, decreasing by 40% between 2016 and 2019 to 726 deaths. The number of **prescription opioid**-related deaths decreased by 12% between 2016 and 2019 (from 418 to 369).

- **<u>Fentanyl</u>**
- **Fentanyl**-related deaths have increased rapidly since 2013, with a 229% increase between 2015 and 2016. Deaths related to **fentanyl** slowed substantially between 2018 and 2019, rising just 2%, but reached a 10 year high of 1,927 deaths.
- In 2019, **Fentanyl**-related deaths declined among most age groups, but continued to rise among those 35-44 years (9%) and among those 55 and older (11%).
- **Fentanyl**-related deaths increased among non-Hispanic Blacks (18%), and Hispanics (12%) between 2018 and 2019. Deaths decreased 6% among non-Hispanic Whites, for the first time since 2012.
- **Fentanyl**-related deaths increased by 1% among men and by 4% among women in 2019.
- In 2019, **fentanyl** deaths increased in 14 jurisdictions, declined in 8 counties, and remained the same in 2 counties.
- Thirty-nine percent of **fentanyl**-related deaths in 2019 occurred in combination with cocaine, 34% in combination with **heroin**, 16% in combination with **alcohol,** and 13% in combination with **prescription opioids**.
- Deaths related to **carfentanil** (a **fentanyl** analog) were first identified in 2017 (testing began in 2016). There were 60 **carfentanil**-related deaths in 2017, however this number dropped to 2 in 2018 and there were 2 deaths in 2019.

- **<u>Heroin</u>**
- **Heroin**-related deaths continued to decrease in 2019, declining by 13% since 2018.
- There was a decrease in **Heroin**-related deaths in 2019 among all age groups except those 55 years and older.
- Deaths among both sexes continued to decline for the third consecutive year, falling 12% among men and 15% among women.
- **Heroin**-related deaths declined among non-Hispanic Whites (21%), but increased among Non-Hispanic Blacks (1%) and Hispanics (11%) in 2019.
- In 2019, **heroin** deaths declined in 16 jurisdictions, remained the same in 2 counties, and increased in 6 jurisdictions.
- Ninety-one percent of **heroin**-related deaths in 2019 occurred in combination with **fentanyl,** 38% in combination with **cocaine**, 16% in combination with **prescription opioids**, and 14% in combination with **alcohol**.

- **<u>Prescription Opioids</u>**
- The number of **prescription opioid**-related deaths had been rising since 2013, but started to decline 2017. Deaths declined again in 2019 by 3% compared with 2018.
- In 2019 the number of **prescription opioid**-related deaths declined among those under 25 years and those 45 years and older. Deaths rose among those 25 to 44 years.
- Deaths decreased among non-Hispanic Whites and Hispanics, but increased by 9% among non-Hispanic Blacks.
- Deaths related to **prescription opioids** were stable among men, but decreased by 7% among women in 2019.

Cocaine-related deaths

- The number of **cocaine**-related deaths declined in 2019 by 2% following a rapid increase in deaths of 303% between 2015 through 2018.
- **Cocaine**-related deaths increased in 2019 among those 35-44 years (13%), but decreased among those 25-34 years (10%) and those 45-54 years (11%). Deaths were stable in the youngest and oldest age groups.
- **Cocaine**-related deaths increased by 13% among non-Hispanic Blacks in 2019, while decreasing by 13% among non-Hispanic Whites. There was a slight increase among Hispanics.
- Deaths among women decreased by 9% in 2019, while the number of deaths among men was similar to 2018.
- The overall increase in **cocaine**-related deaths is largely the result of deaths occurring in combination with opioids. Eighty-five percent of **cocaine**-related deaths in 2019 occurred in combination with **fentanyl**, and 32% in combination with **heroin**.

Benzodiazepine-related deaths

- The number of **benzodiazepine**-related deaths continued a decline that started in 2018. Deaths decreased by 16% between 2018 and 2019.
- **Benzodiazepine**-related deaths declined in 2019 among all age groups except those 35-44 years.
- Deaths decreased among non-Hispanic Whites by 21% in 2019, but remained stable among non-Hispanic Blacks and Hispanics.
- Decreases were seen among both men and women in 2019.
- Ninety-three percent of **benzodiazepine**-related deaths in 2019 were in combination with **opioids**. Seventy-two percent of all **benzodiazepine**-related deaths occurred in combination with **fentanyl,** 46% in combination with **prescription opioids,** and 34% in combination with **heroin**.

Phencyclidine-related deaths (PCP)

- The number of **phencyclidine**-related deaths has been rising since 2018. These deaths increased by 57% between 2018 and 2019.
- **Phencyclidine**-related deaths increased among all age groups between 2018 and 2019.
- Deaths increased among non-Hispanic Whites and non-Hispanic Blacks. There were no deaths among Hispanics in 2019.
- Deaths increased by 38% among men in 2019, and increased by 180% among women.
- Sixty-seven percent of **phencyclidine**-related deaths in 2019 were in combination with **opioids**.

Methamphetamine-related deaths

- The number of **methamphetamine**-related deaths has been rising since 2015. These deaths increased by 28% between 2018 and 2019.

- **Methamphetamine**-related deaths increased among those 35 year and older, but were steady or decreased among younger age groups.
- Deaths increased among non-Hispanic Whites and non-Hispanic Blacks. There were no deaths among Hispanics.
- Deaths increased among both sexes.
- Seventy-eight percent of **methamphetamine**-related deaths in 2019 were in combination with **opioids**. Seventy-three percent of all **methamphetamine**-related deaths occurred in combination with **fentanyl,** 24% in combination with **heroin,** and 15% in combination with **prescription opioids**. Twenty-seven percent of **methamphetamine**-related deaths occurred in combination with **cocaine**.

Alcohol-related deaths

- The number of **alcohol**-related deaths has declined steadily since 2017. Deaths decreased by 10% in 2019.
- **Alcohol**-related deaths in 2019 remained stable among those less than 25 years, declined among those 25-34 years, increased slightly among those 35-44 years, decreased among those 45 years and older.
- Deaths decreased by 10% among non-Hispanic Whites and by 14% among non-Hispanic Blacks. There was a small increase among Hispanics.
- Deaths decreased in 2019 among both men and women.
- Seventy-nine percent of acute **alcohol**-related deaths in 2019 occurred in combination with opioids. Seventy-two percent occurred in combination with **fentanyl**, 29% occurred in combination with **cocaine**, and 23% occurred in combination with **heroin**.

Age-adjusted death rates

- Age-adjusted death rates for the period 2016-2018 ranged from lows of 8.9 and 11.1 per 100,000 population in Montgomery and Prince George's Counties, respectively, to a high of 84.8 per 100,000 population in Baltimore City. The Maryland state age-adjusted mortality rate for deaths related to unintentional drug and alcohol-related intoxication was 32.0 deaths per 100,000 population over the three year period.

TOTAL INTOXICATION DEATHS

Figure 1. Total Number of Drug- and Alcohol-Related Intoxication Deaths Occurring in Maryland, 2010-2019.

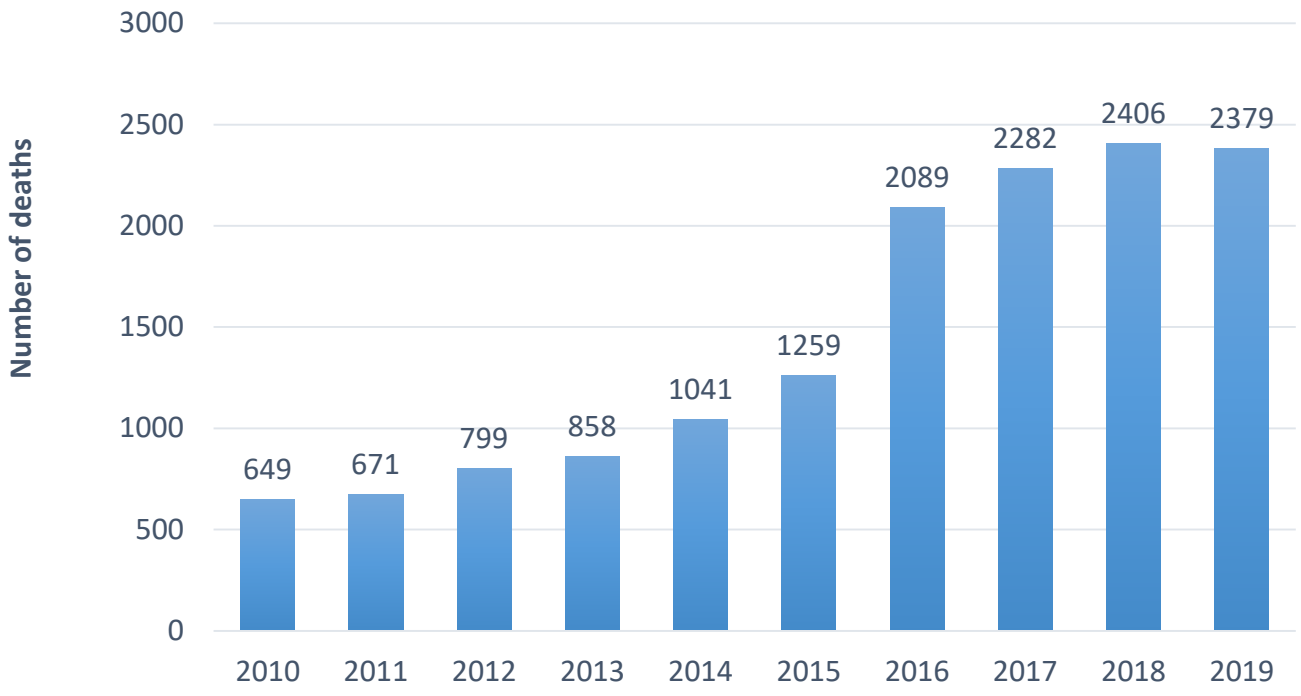


Figure 2. Total Number of Intoxication Deaths Occurring in Maryland by Place of Occurrence, 2019.

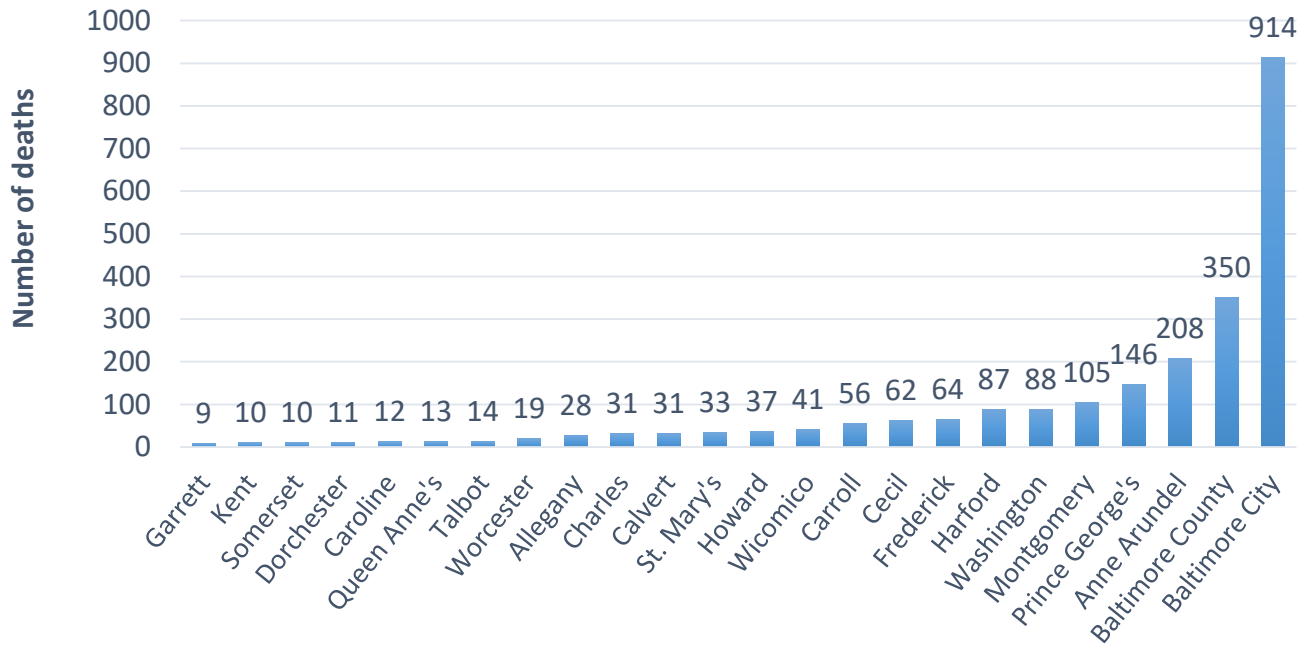
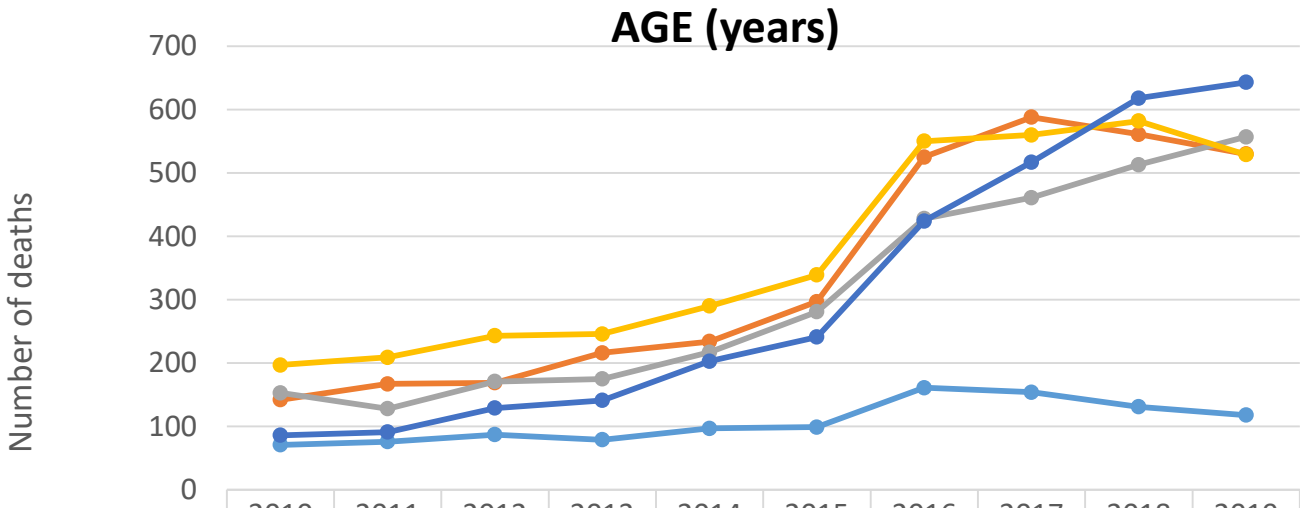
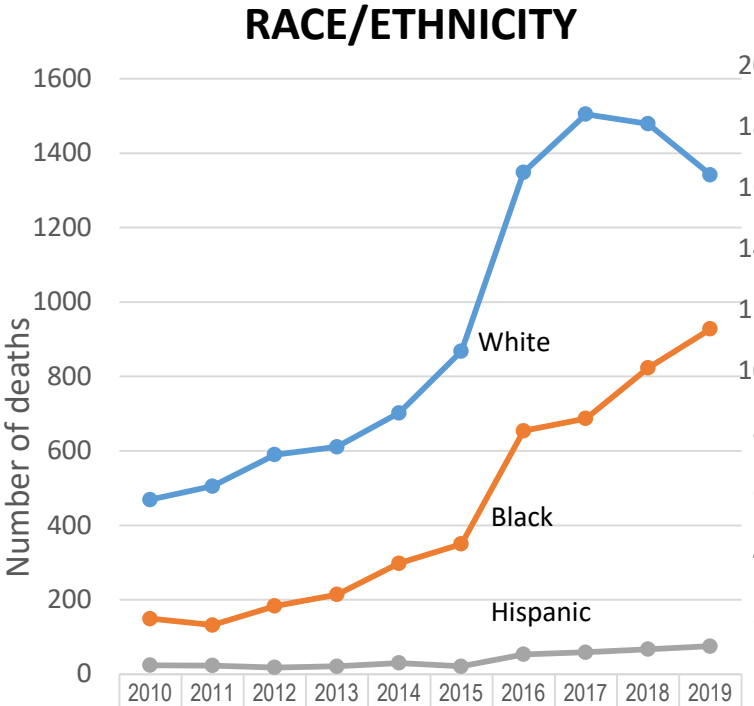


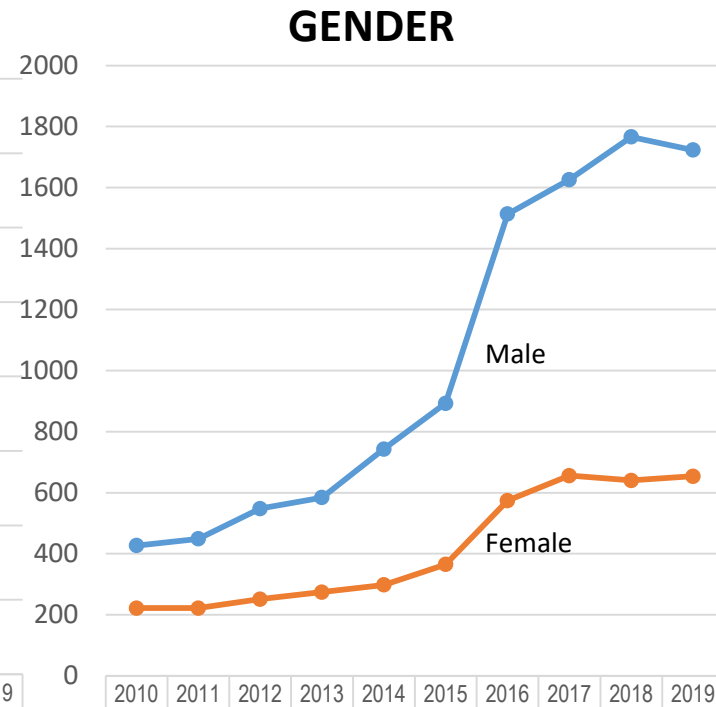
Figure 3. Total Number of Drug- and Alcohol-Related Intoxication Deaths Occurring in Maryland by Age Group, Race/Ethnicity and Gender, 2010-2019.



	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019
<25 years	71	76	87	79	97	99	161	154	131	118
25-34 years	142	167	169	216	234	297	525	588	561	530
35-44 years	153	128	171	175	217	281	428	461	513	557
45-54 years	197	209	243	246	290	339	550	560	582	529
55+ years	86	91	129	141	203	241	424	517	618	643

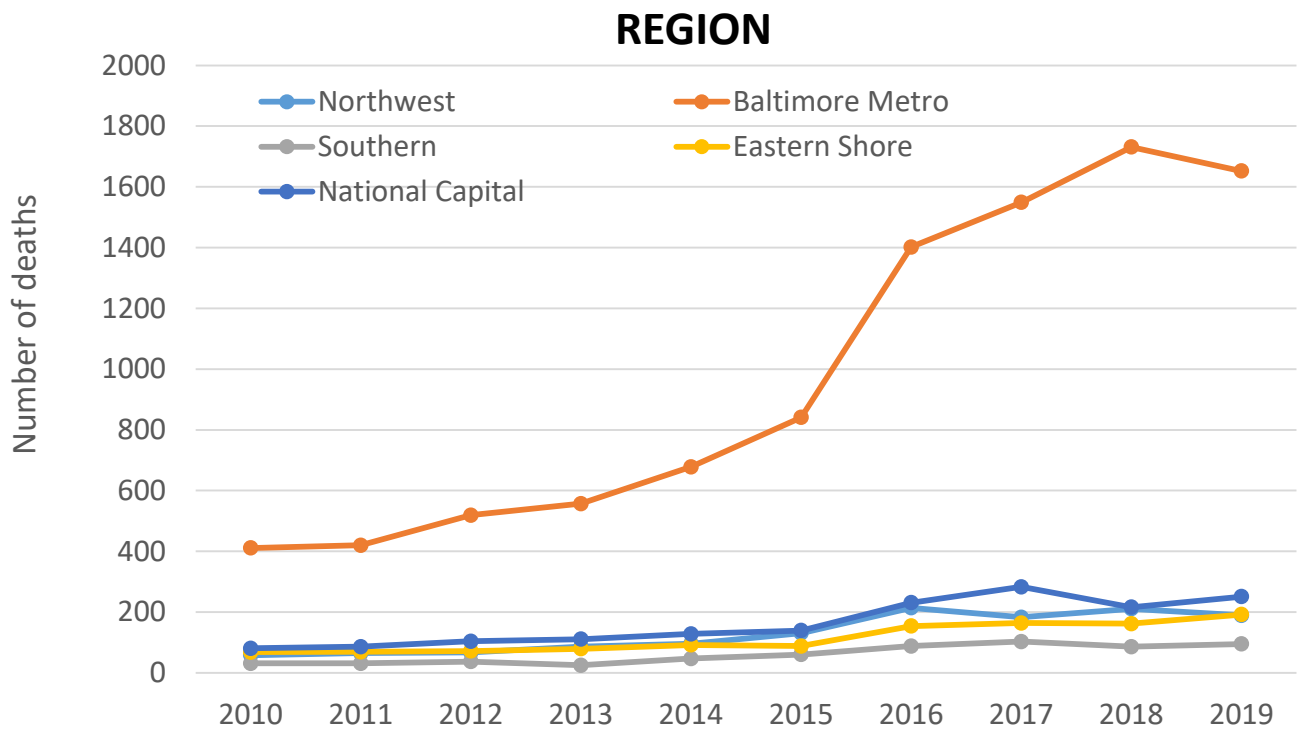


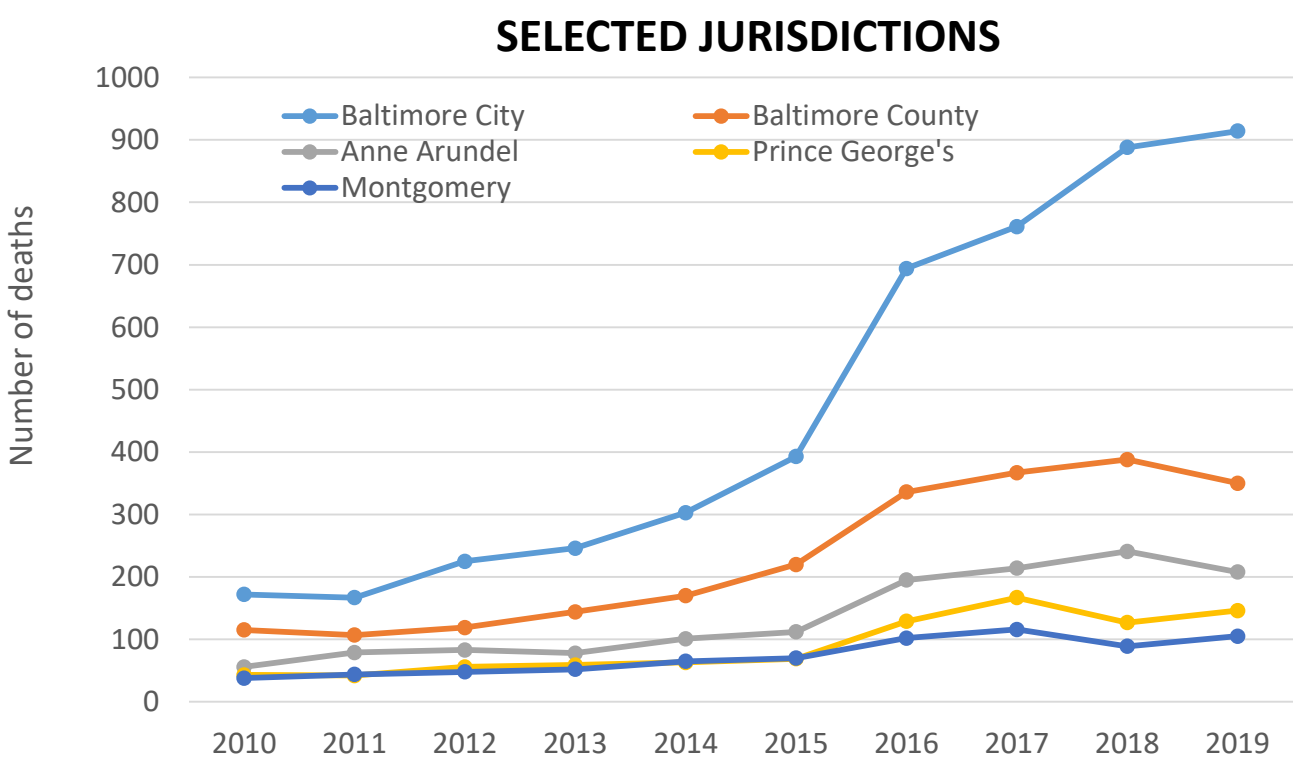
	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019
NH White	469	505	590	611	702	868	1349	1505	1479	1342
NH Black	149	132	183	214	298	350	654	687	823	928
Hispanic	24	23	18	21	30	21	53	59	67	75



	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019
Male	427	449	548	584	743	893	1513	1626	1766	1723
Female	222	222	251	274	298	365	574	656	640	654

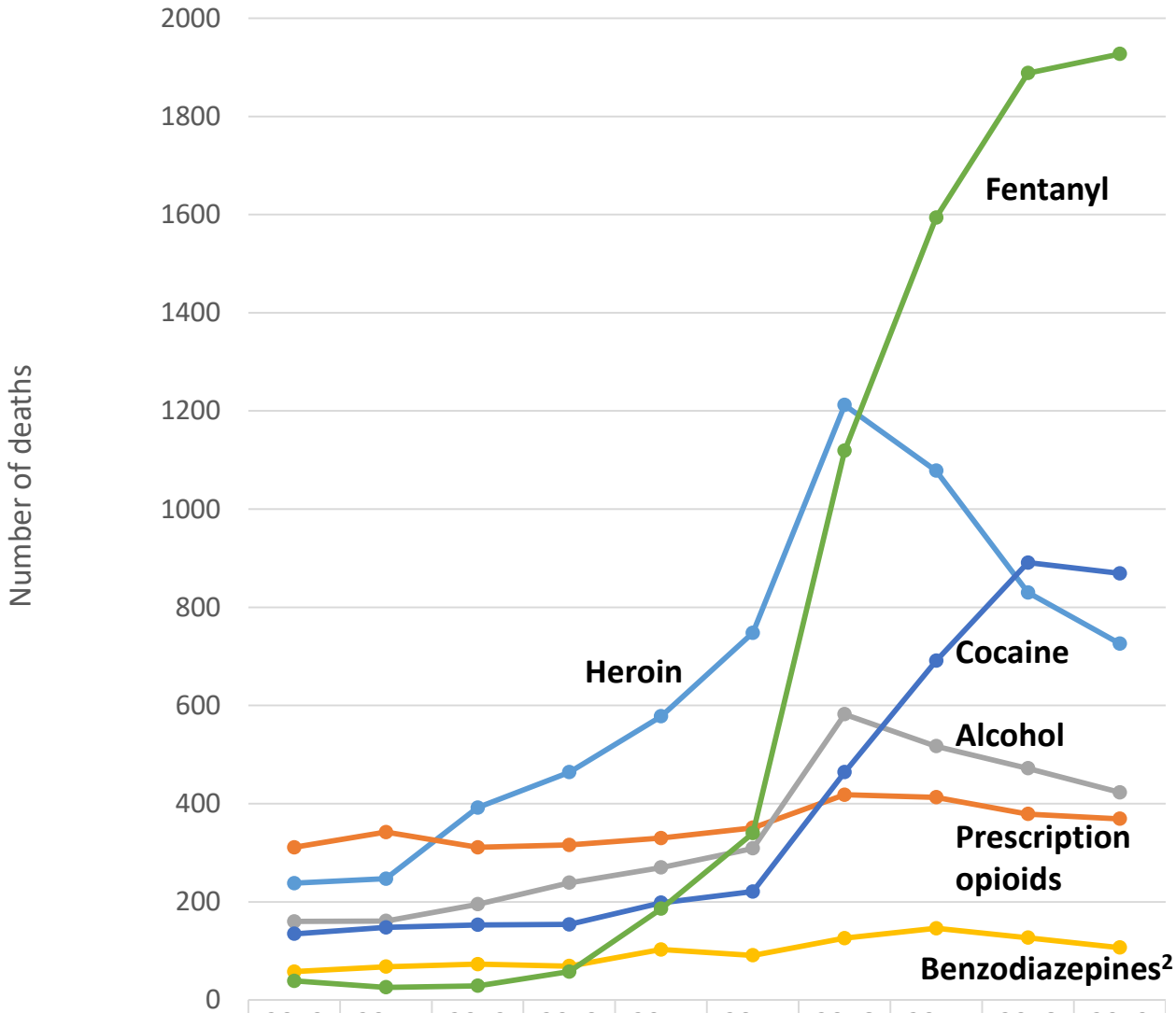
Figure 4. Total Number of Drug- and Alcohol-Related Intoxication Deaths by Place of Occurrence, Maryland, 2010-2019.





DRUG- AND ALCOHOL-RELATED INTOXICATION DEATHS BY SUBSTANCE

Figure 5. Total Number of Drug- and Alcohol-Related Intoxication Deaths by Selected Substances[1], Maryland, 2010-2019.



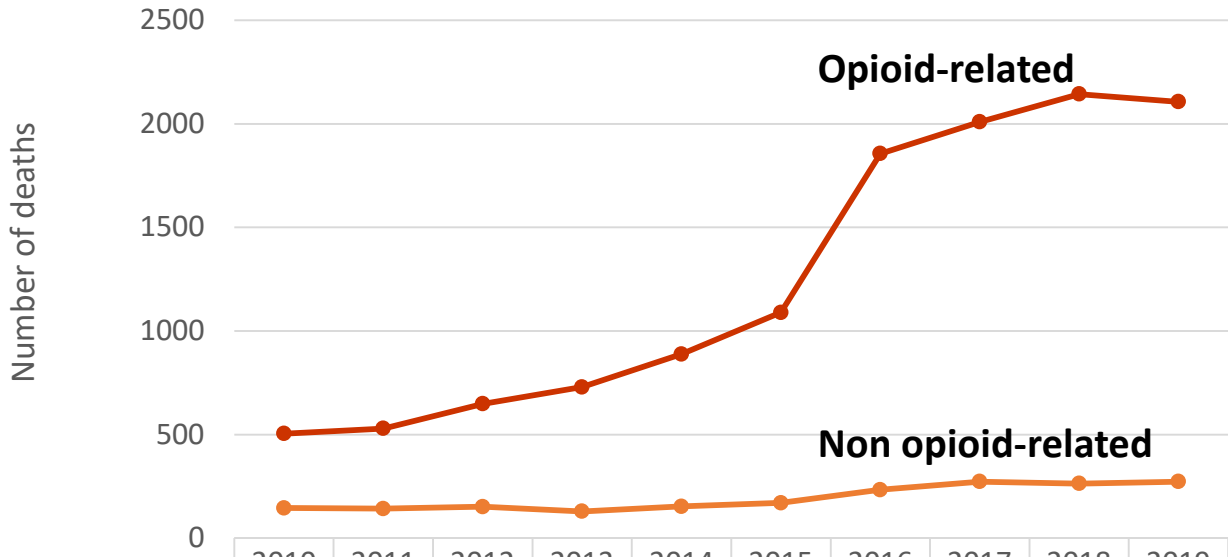
	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019
Heroin	238	247	392	464	578	748	1212	1078	830	726
Prescription opioids	311	342	311	316	330	351	418	413	379	369
Alcohol	160	161	195	239	270	309	582	517	472	423
Benzodiazepines	58	68	73	69	103	91	126	146	127	107
Cocaine	135	148	153	154	198	221	464	691	891	869
Fentanyl	39	26	29	58	186	340	1119	1594	1888	1927

[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.

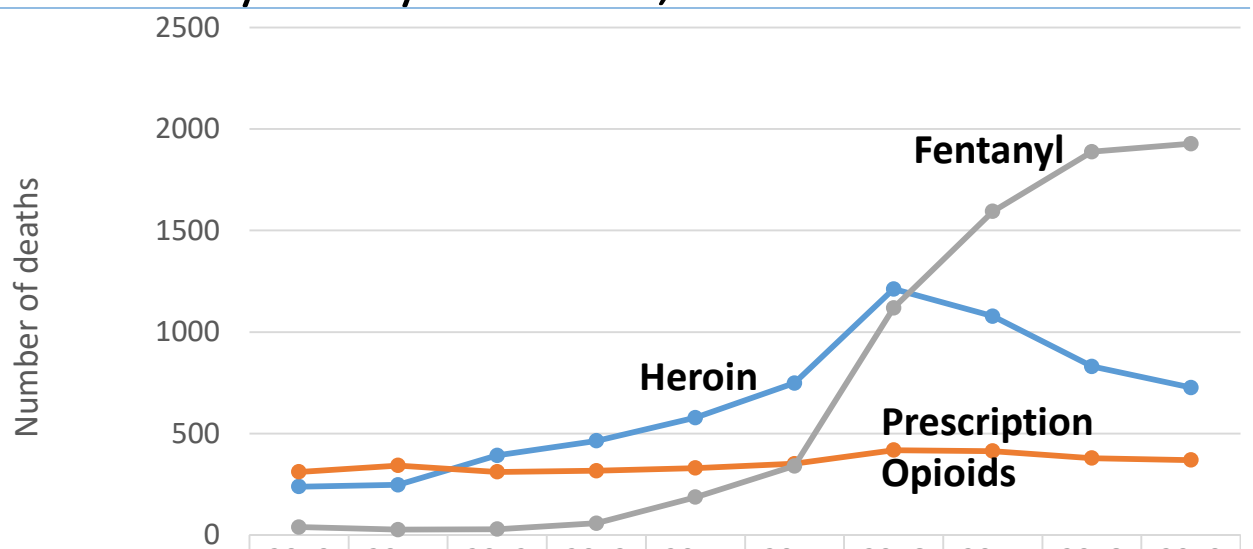
OPIOID-RELATED DEATHS

Figure 6. Total Number of Opioid* and Non-Opioid-Related Deaths Occurring in Maryland, 2010-2019.



	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019
Opioid-related	504	529	648	729	888	1089	1856	2009	2143	2106
Non opioid-related	145	142	151	129	153	170	233	273	263	273

Figure 7. Number of Opioid-Related Deaths Occurring in Maryland by Substance, 2010-2019.



	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019
Heroin	238	247	392	464	578	748	1212	1078	830	726
Prescription opioids	311	342	311	316	330	351	418	413	379	369
Fentanyl	39	26	29	58	186	340	1119	1594	1888	1927

*Total opioids include heroin, prescription opioids, and illicit forms of fentanyl.

Figure 8. Number of Fentanyl-Related Deaths Occurring in Maryland, 2010-2019.

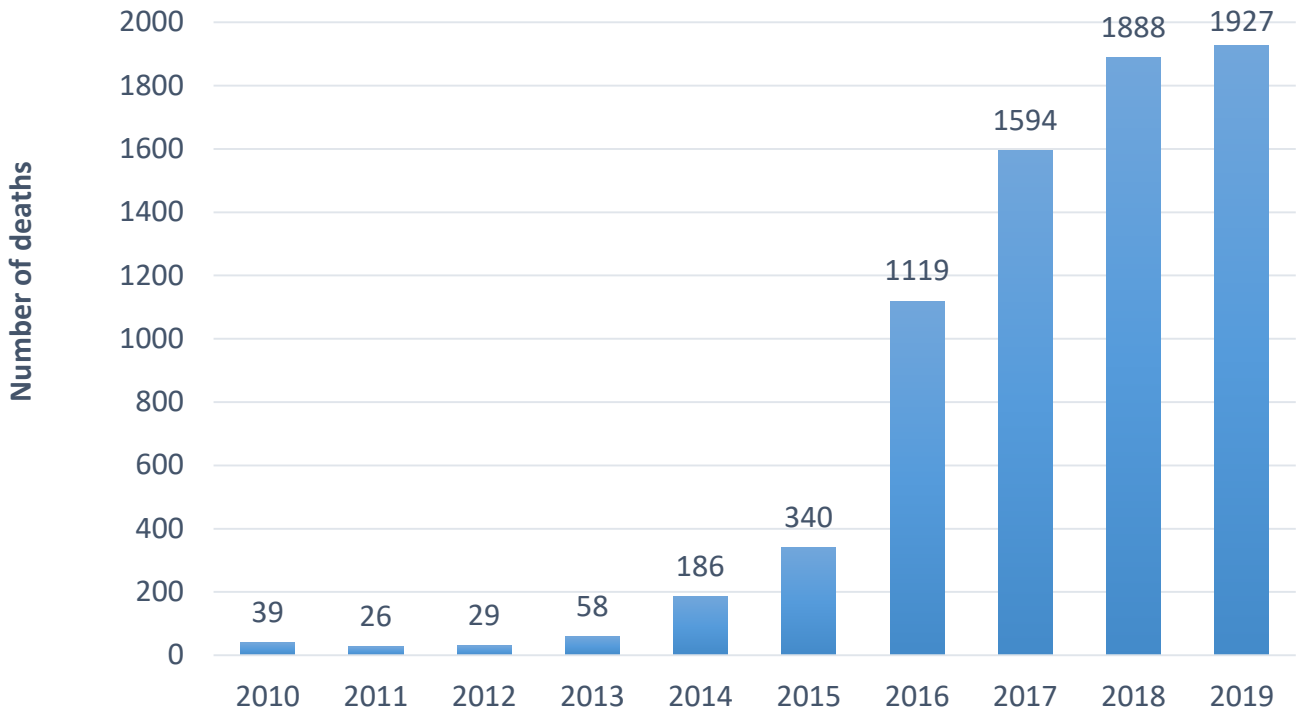


Figure 9. Number of Fentanyl-Related Deaths Occurring in Maryland by Place of Occurrence, 2019.

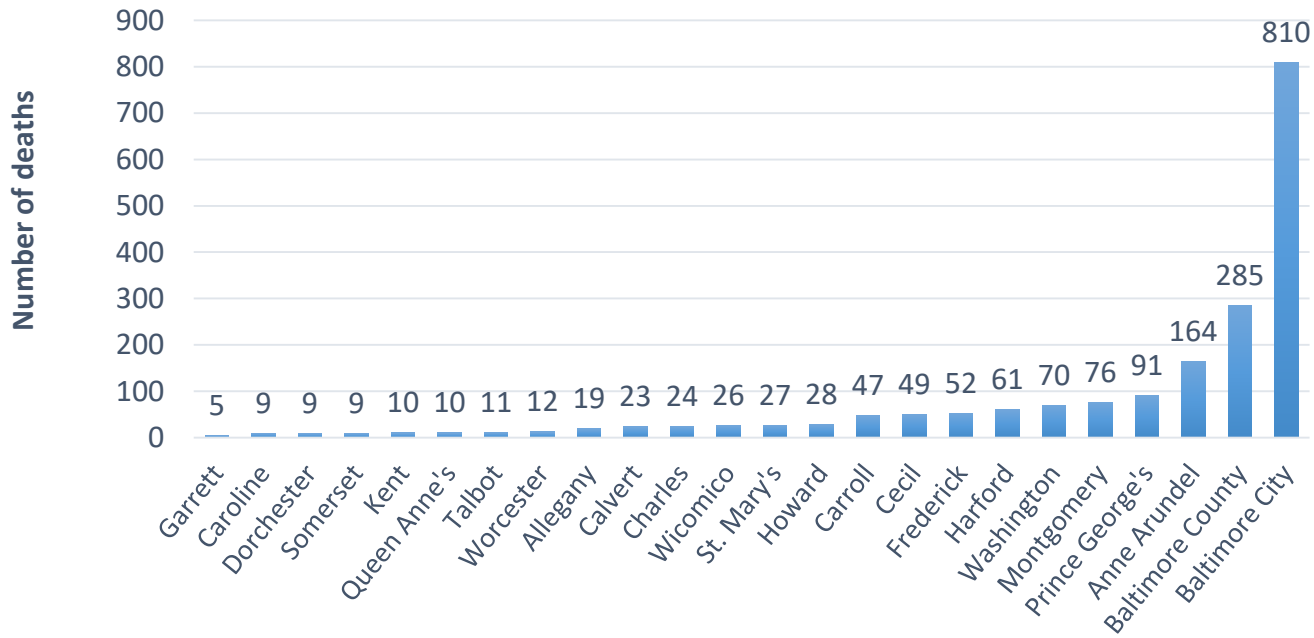
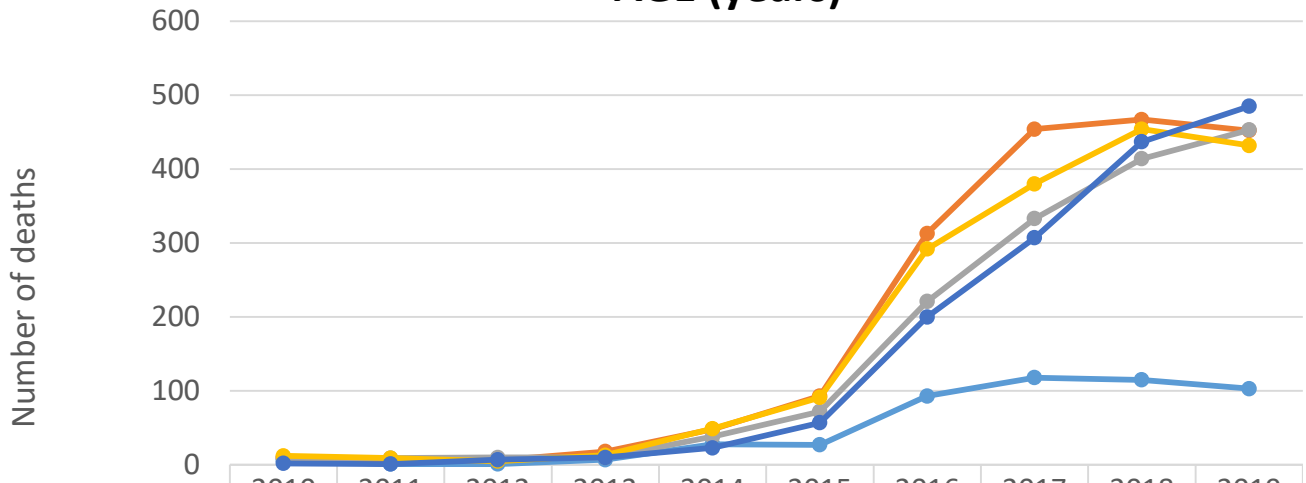


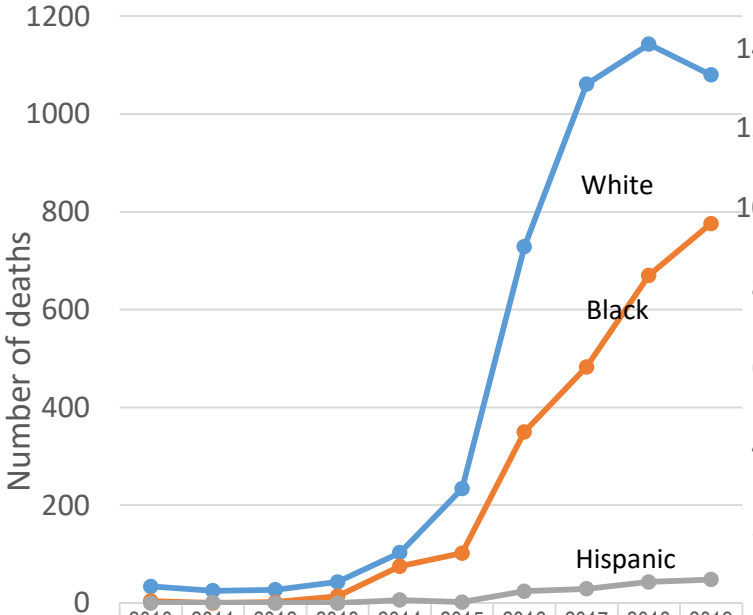
Figure 10. Number of Fentanyl-Related Deaths Occurring in Maryland by Age Group, Race/Ethnicity and Gender, 2010-2019.

AGE (years)



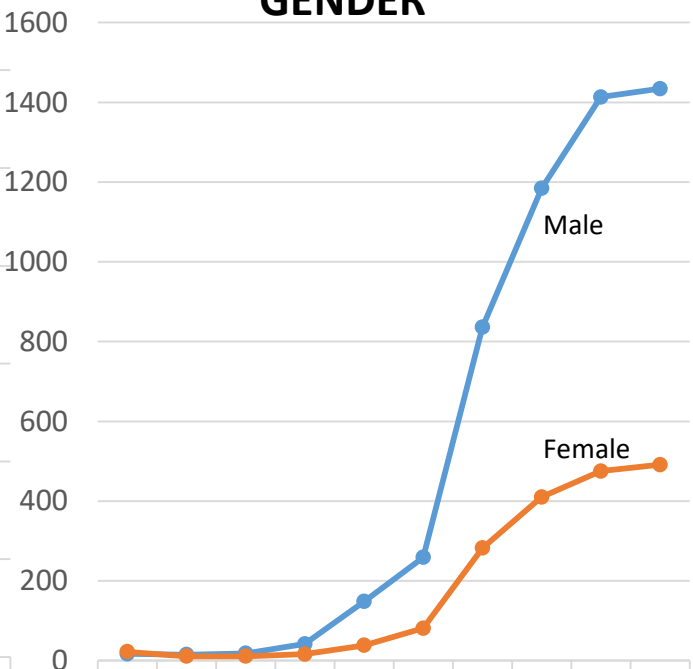
	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019
<25 years	6	1	1	7	28	27	93	118	115	103
25-34 years	10	6	6	18	48	93	313	454	467	452
35-44 years	9	9	10	10	38	72	221	333	414	453
45-54 years	12	9	5	13	49	91	292	380	454	432
55+ years	2	1	7	10	23	57	200	307	437	485

RACE/ETHNICITY



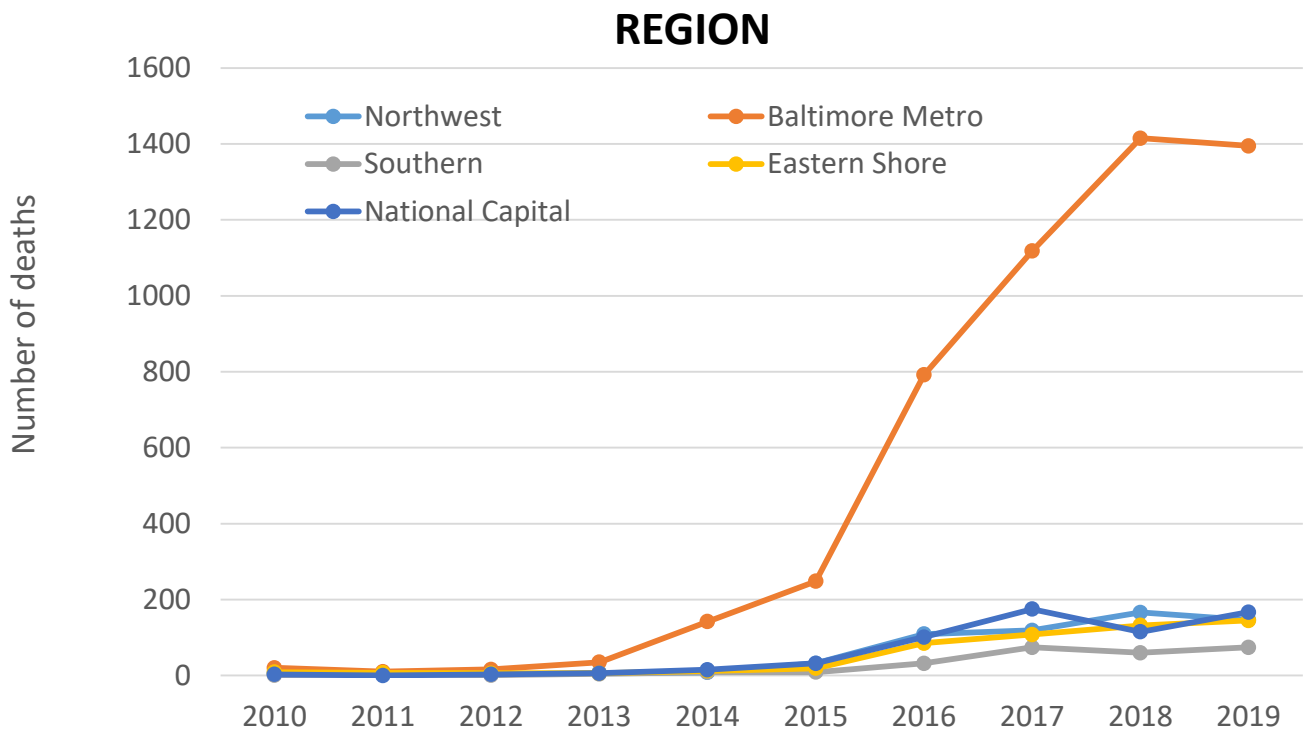
	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019
White	34	25	27	43	103	234	729	1061	1143	1080
Black	4	0	2	14	75	102	350	483	670	776
Hispanic	0	1	0	0	6	2	24	29	43	48

GENDER



	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019
Male	17	15	18	42	148	259	836	1184	1413	1434
Female	22	11	11	16	38	81	282	410	475	491

Figure 11. Number of Fentanyl-Related Deaths by Place of Occurrence, Maryland, 2010-2019.



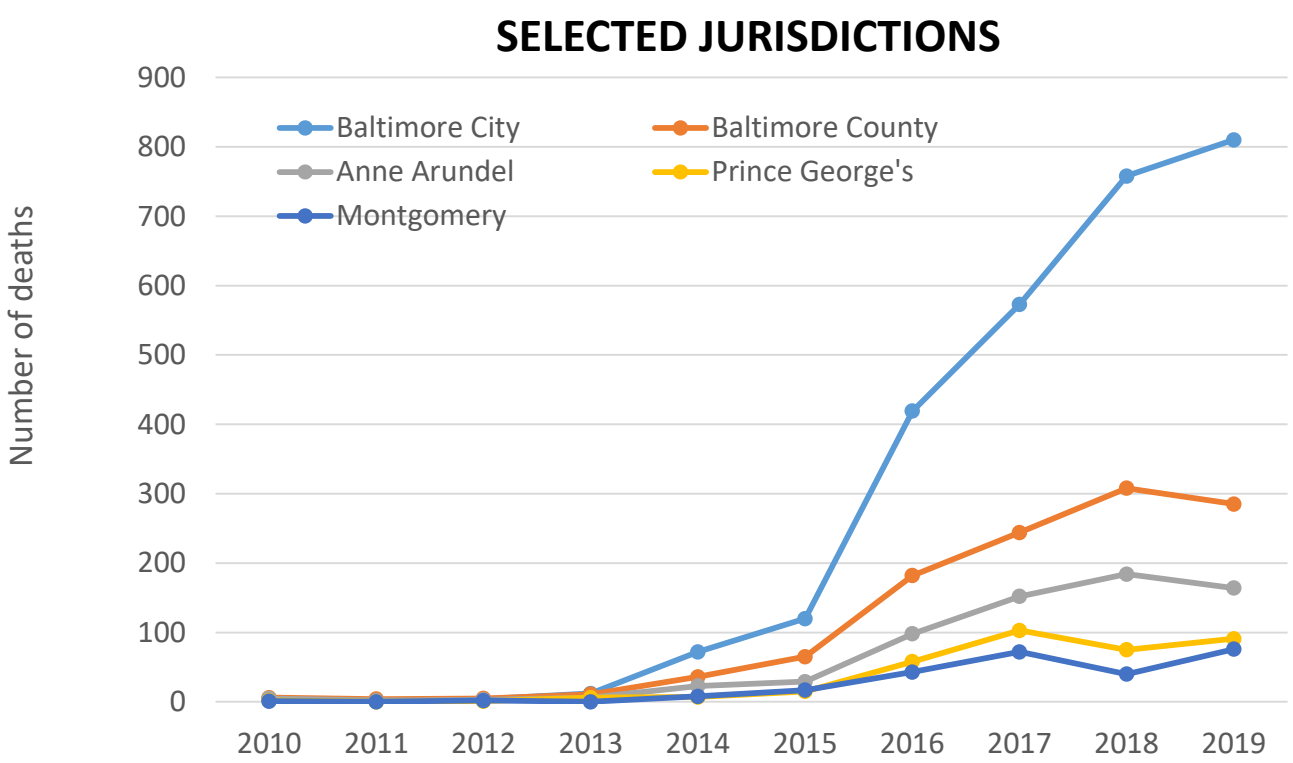


Figure 12. Number of Heroin-Related Deaths Occurring in Maryland, 2010-2019.

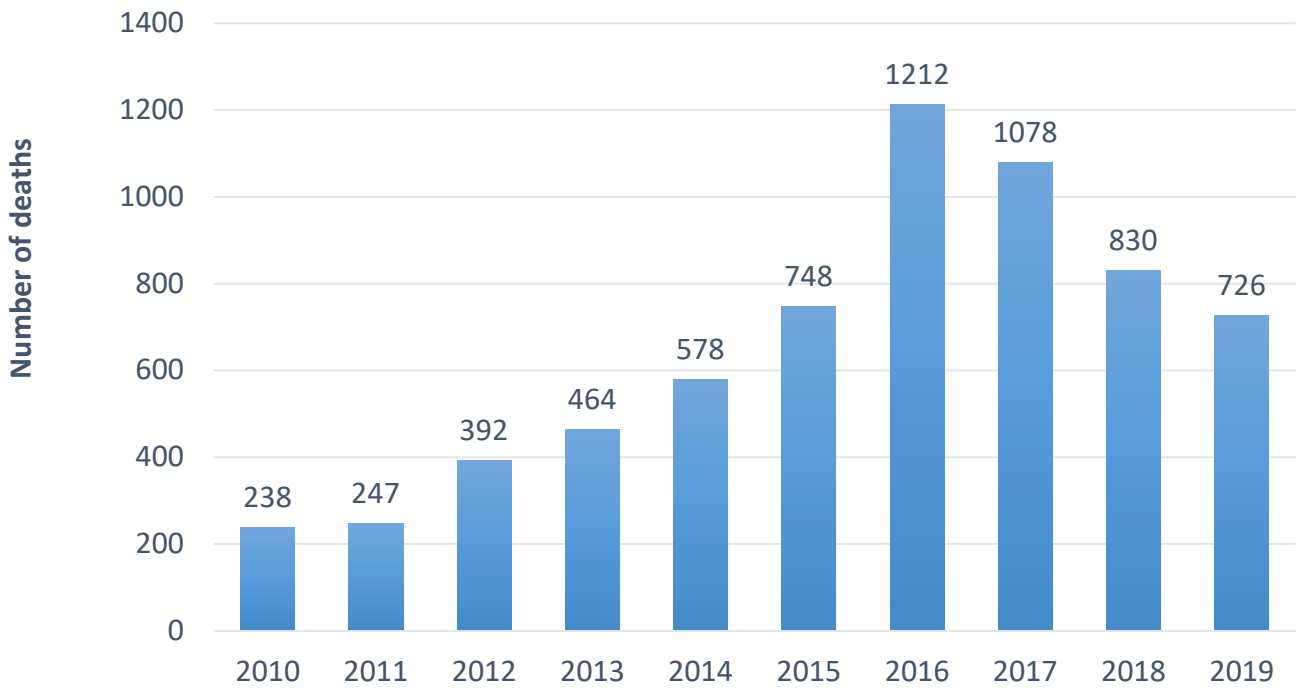


Figure 13. Number of Heroin-Related Deaths Occurring in Maryland by Place of Occurrence, 2019.

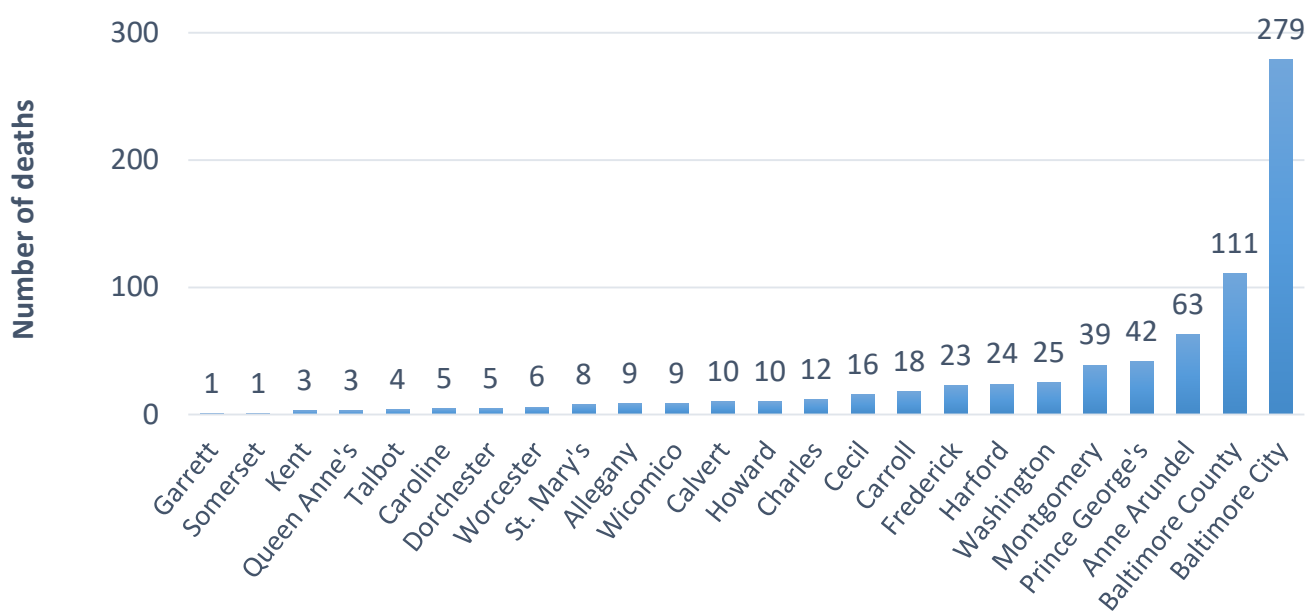
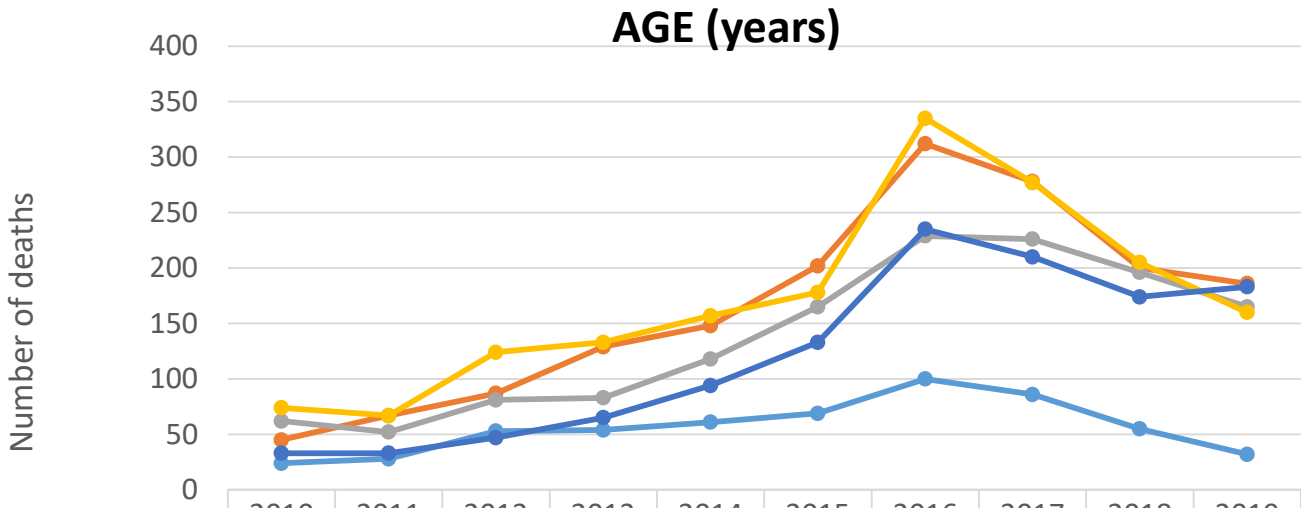
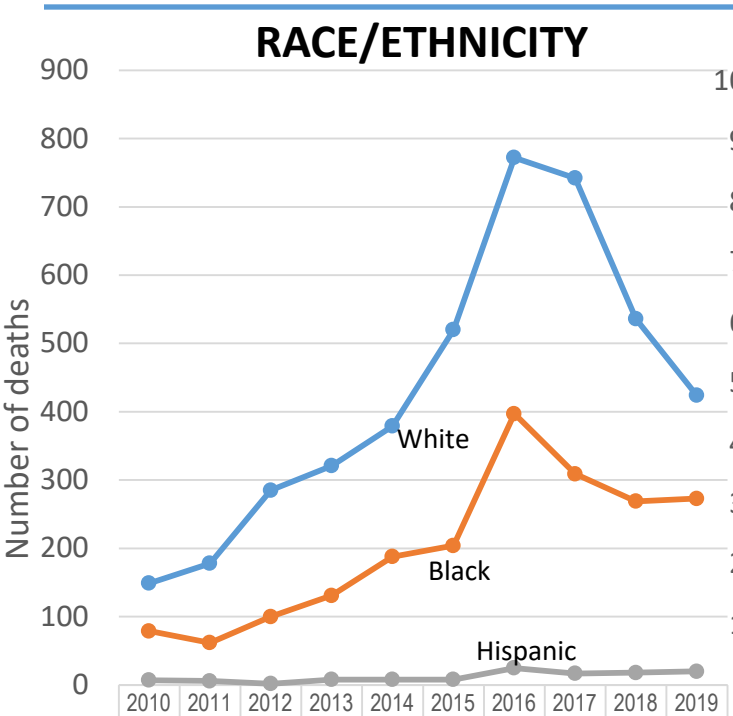


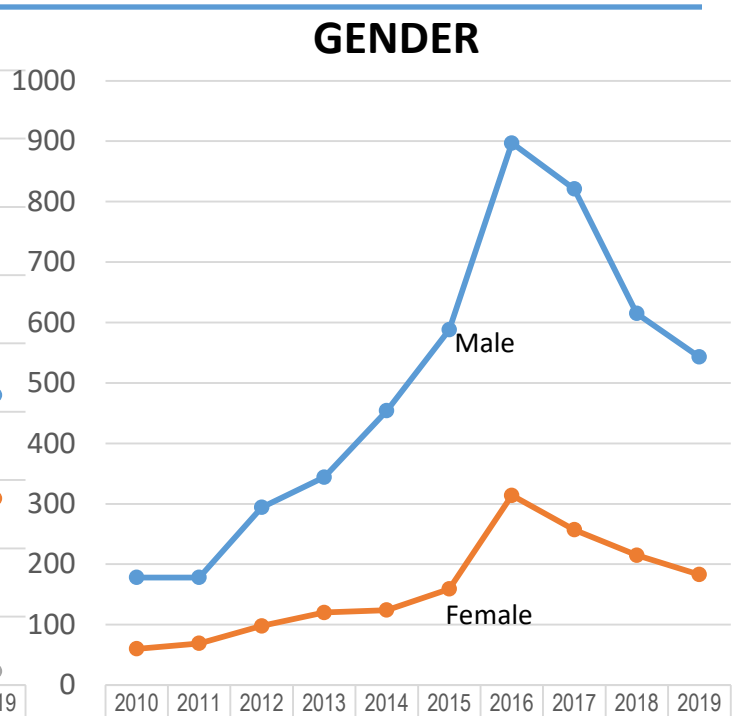
Figure 14. Number of Heroin-Related Deaths Occurring in Maryland by Age Group, Race/Ethnicity and Gender, 2010-2019.



	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019
<25 years	24	28	53	54	61	69	100	86	55	32
25-34 years	45	67	87	129	148	202	312	278	200	186
35-44 years	62	52	81	83	118	165	229	226	196	165
45-54 years	74	67	124	133	157	178	335	277	205	160
55+ years	33	33	47	65	94	133	235	210	174	183

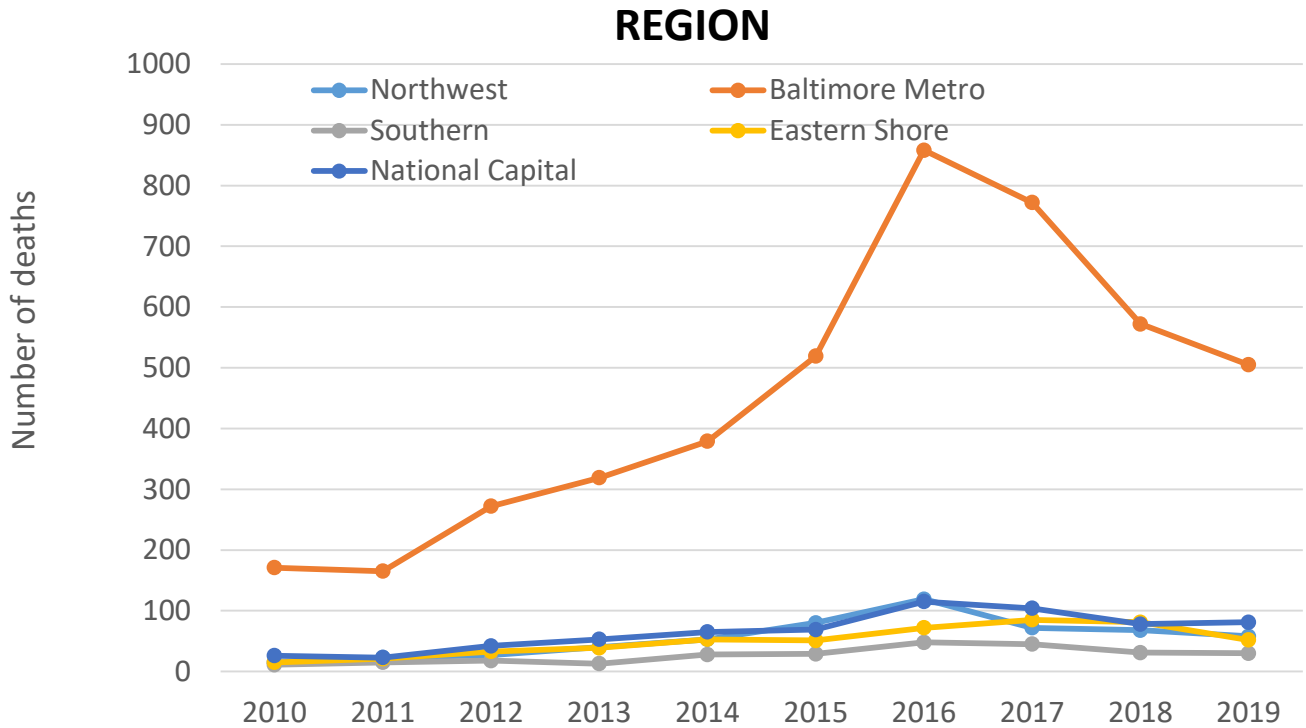


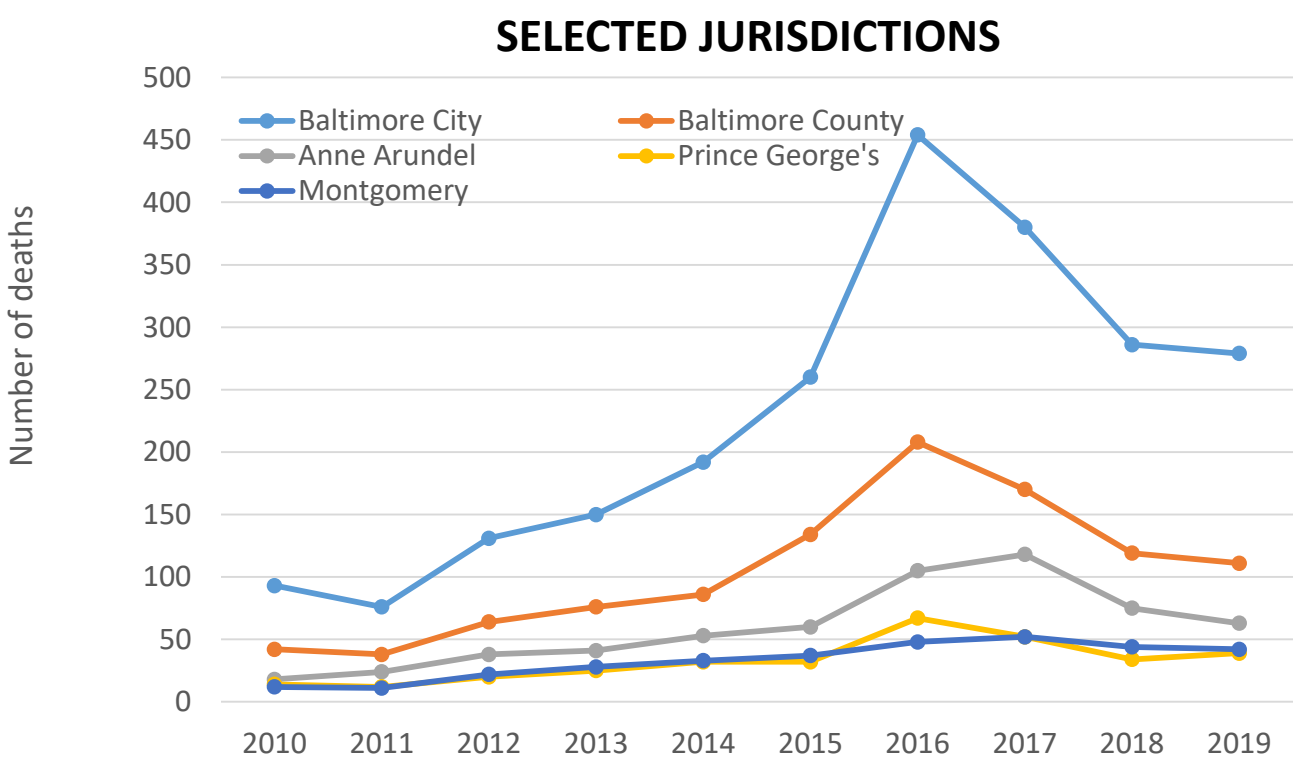
	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019
NH White	149	178	285	321	379	520	772	742	536	424
NH Black	79	62	100	131	188	204	397	309	269	273
Hispanic	7	6	2	8	8	8	25	17	18	20



	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019
Male	178	178	294	344	454	588	897	821	615	543
Female	60	69	98	120	124	159	314	257	215	183

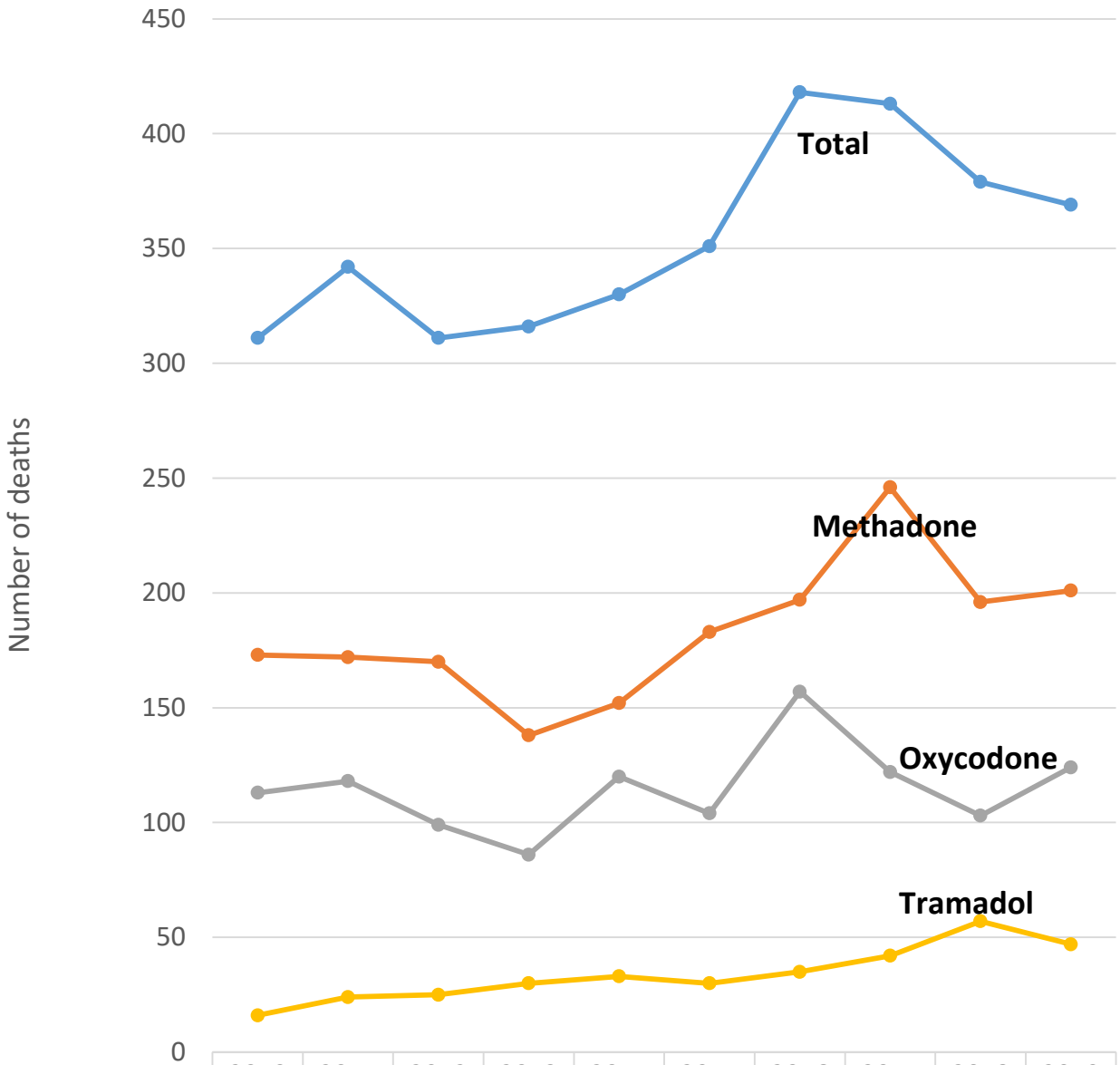
Figure 15. Number of Heroin-Related Deaths by Place of Occurrence, Maryland, 2010-2019.





PRESCRIPTION OPIOID-RELATED DEATHS

Figure 16. Number of Deaths Occurring in Maryland by Selected Prescription Opioids, 2010-2019.



	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019
Total	311	342	311	316	330	351	418	413	379	369
Methadone	173	172	170	138	152	183	197	246	196	201
Oxycodone	113	118	99	86	120	104	157	122	103	124
Tramadol	16	24	25	30	33	30	35	42	57	47

Figure 17. Number of Prescription Opioid-Related Deaths Occurring in Maryland, 2010-2019.

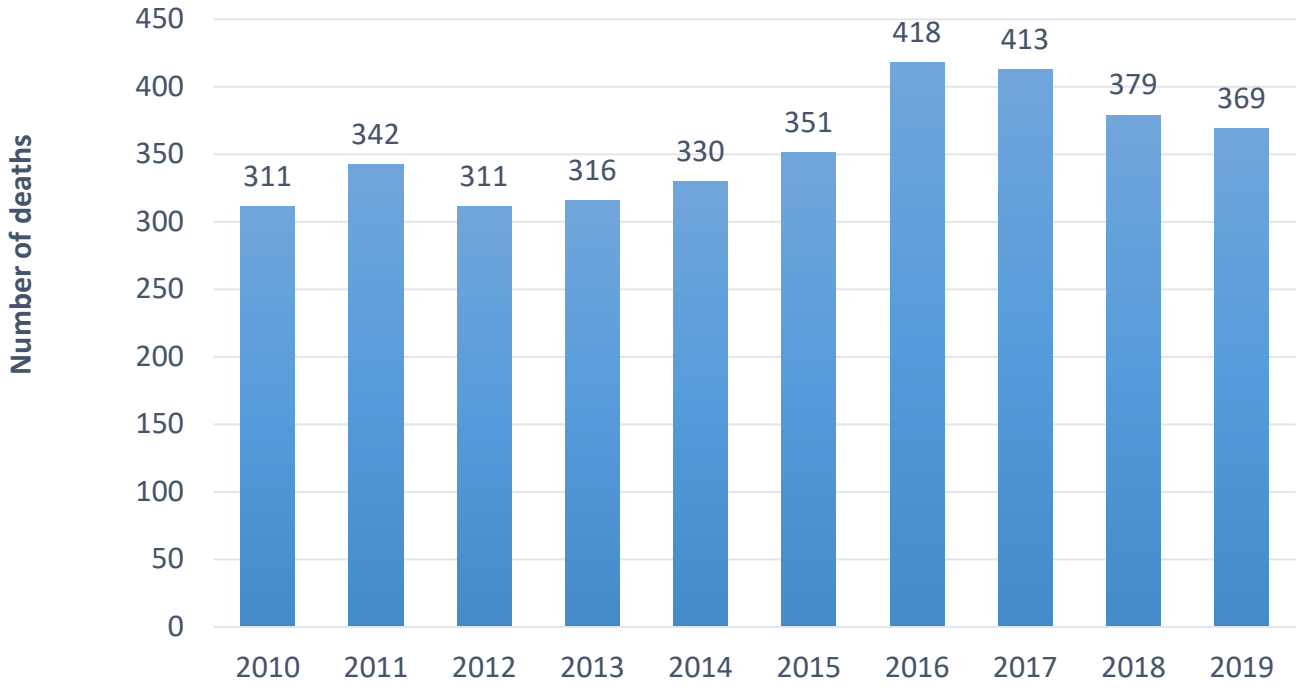


Figure 18. Number of Prescription Opioid-Related Deaths Occurring in Maryland by Place of Occurrence, 2019.

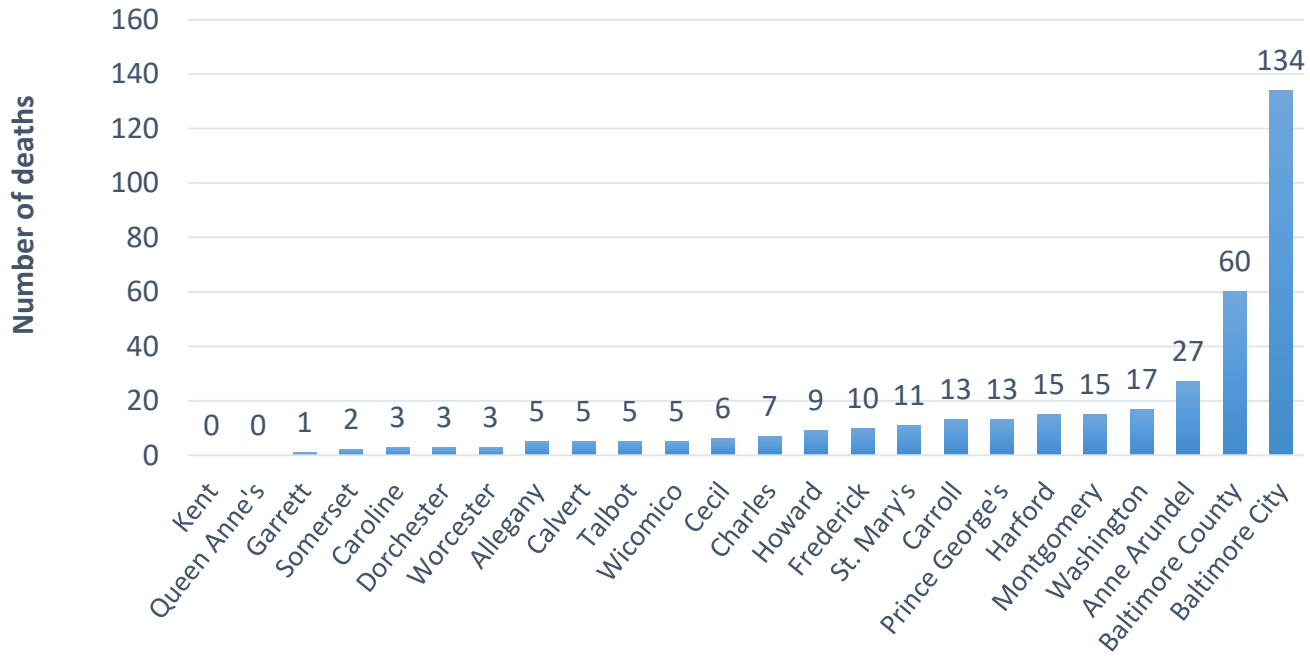
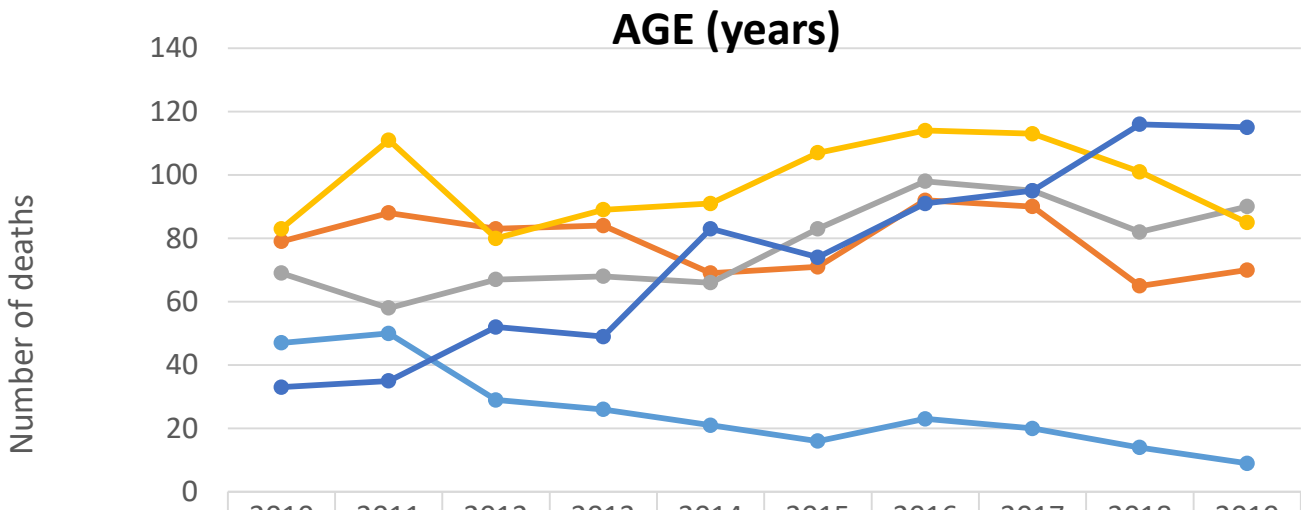
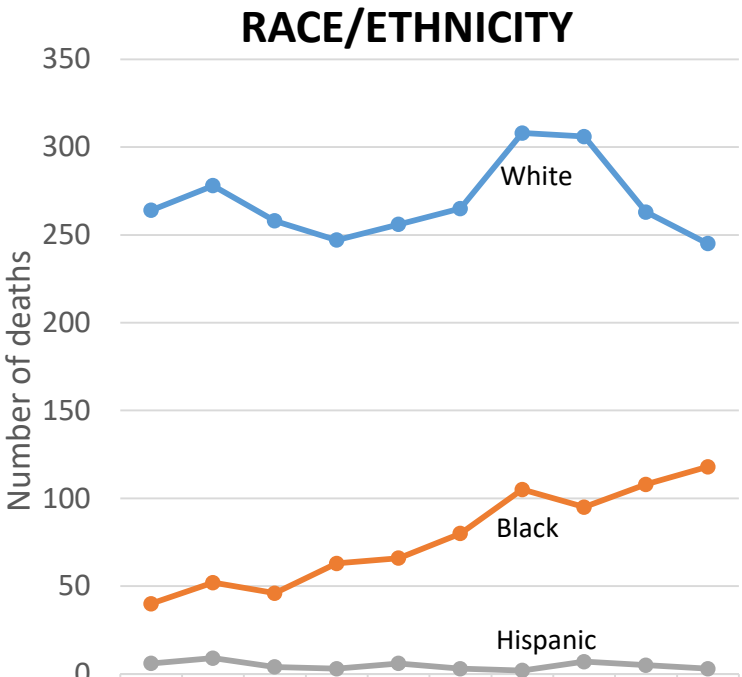


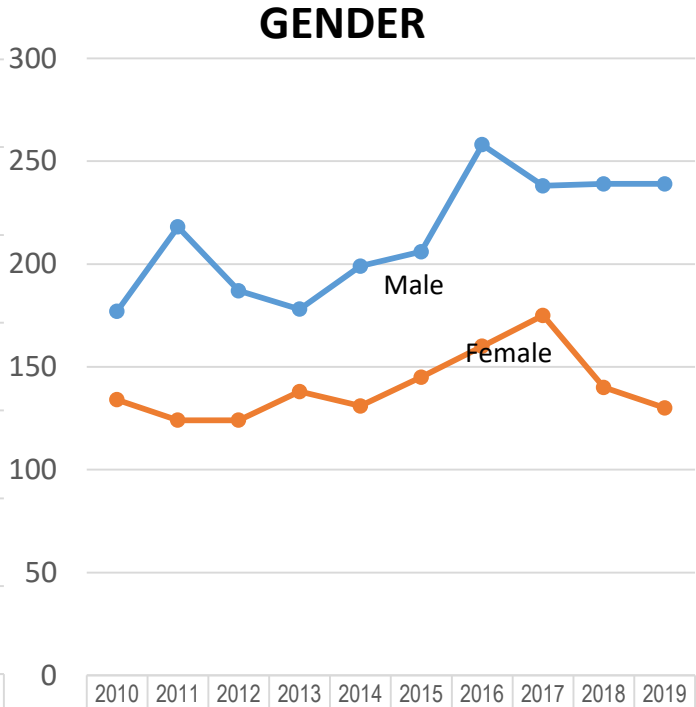
Figure 19. Number of Prescription Opioid-Related Deaths Occurring in Maryland by Age Group, Race/Ethnicity and Gender, 2010-2019.



	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019
<25 years	47	50	29	26	21	16	23	20	14	9
25-34 years	79	88	83	84	69	71	92	90	65	70
35-44 years	69	58	67	68	66	83	98	95	82	90
45-54 years	83	111	80	89	91	107	114	113	101	85
55+ years	33	35	52	49	83	74	91	95	116	115

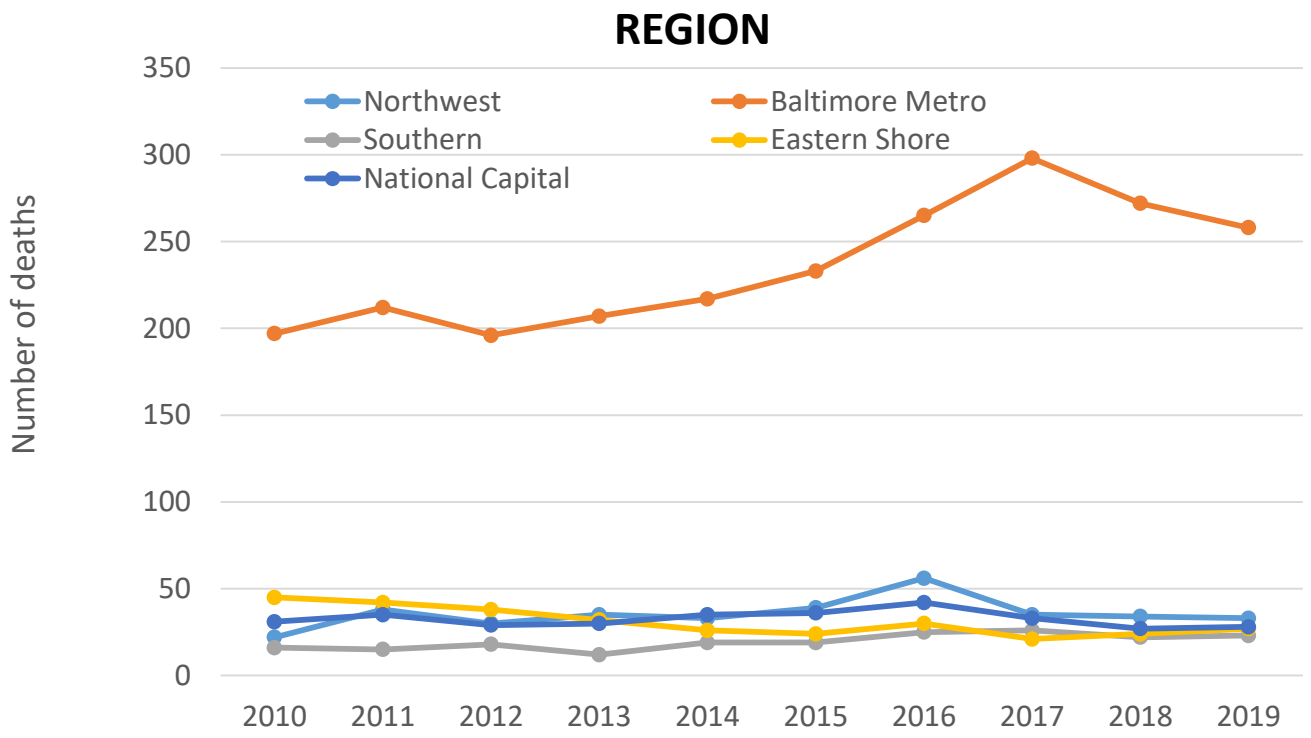


	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019
NH White	264	278	258	247	256	265	308	306	263	245
NH Black	40	52	46	63	66	80	105	95	108	118
Hispanic	6	9	4	3	6	3	2	7	5	3



	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019
Male	177	218	187	178	199	206	258	238	239	239
Female	134	124	124	138	131	145	160	175	140	130

Figure 20. Number of Prescription Opioid-Related Deaths by Place of Occurrence, Maryland, 2010-2019.



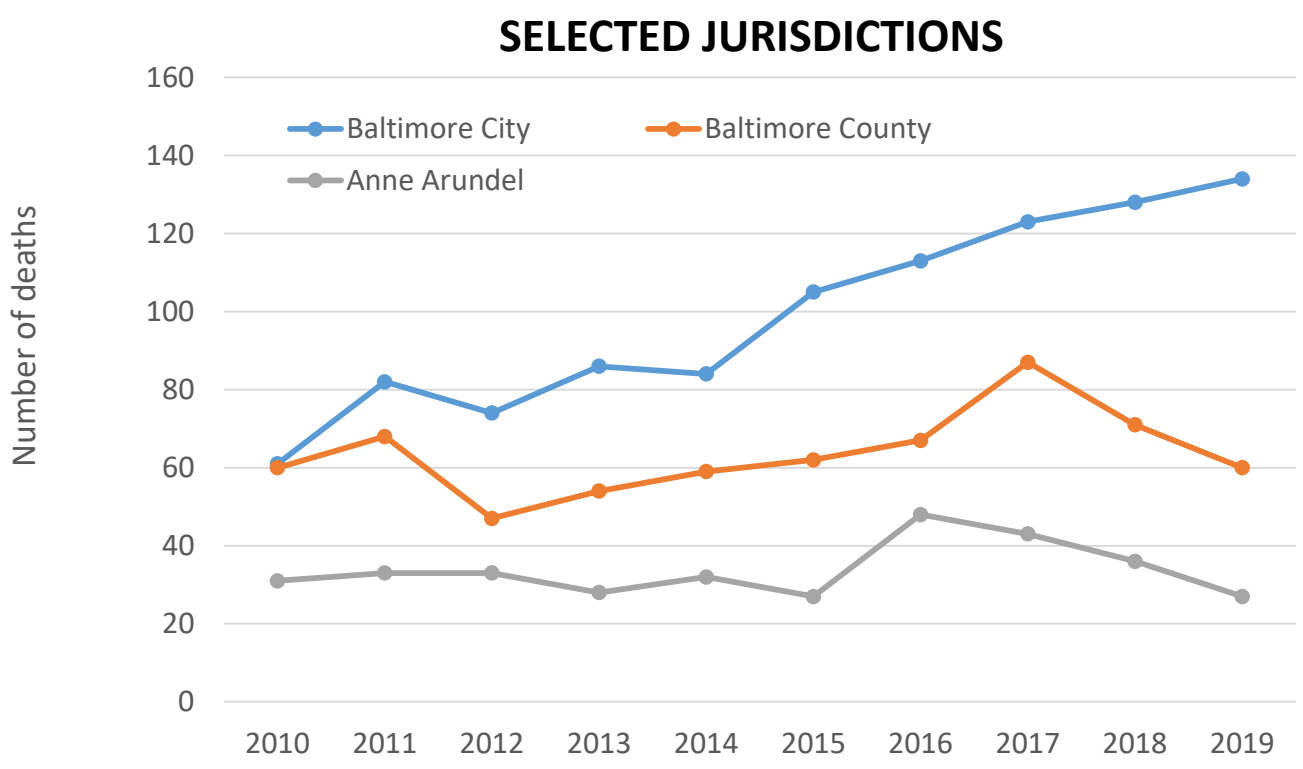


Figure 21. Number of Carfentanil-Related Deaths Occurring in Maryland by Place of Occurrence, 2019.

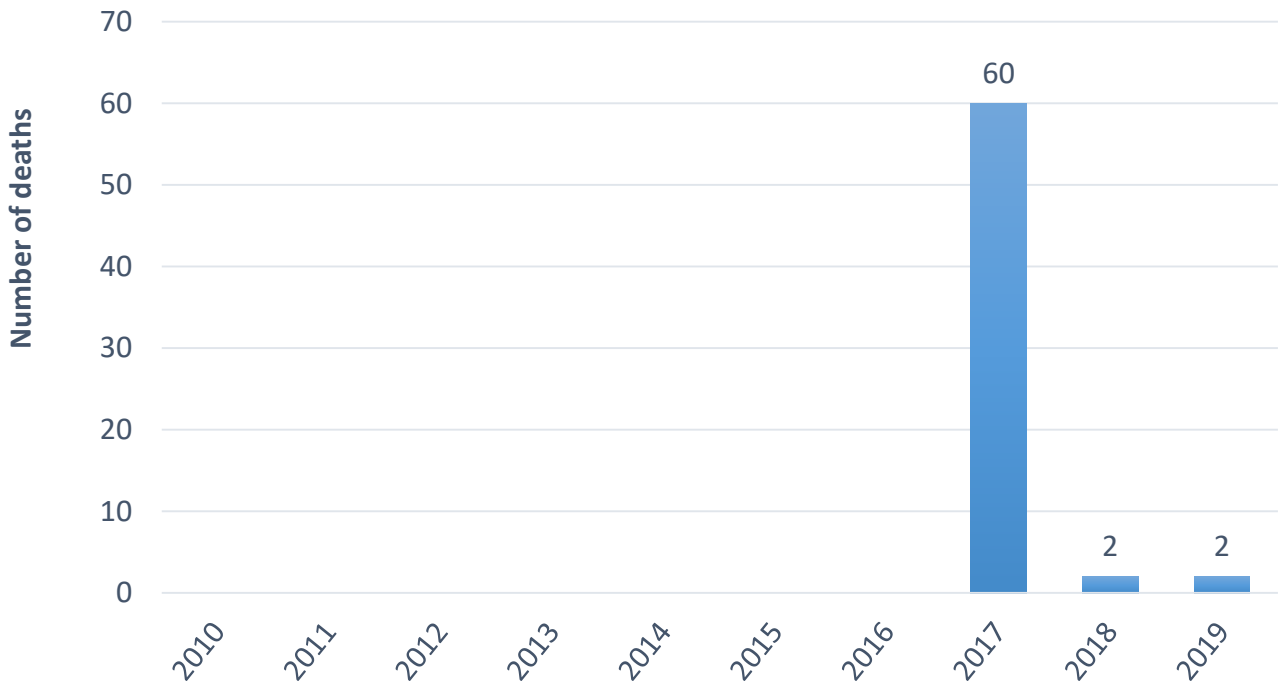
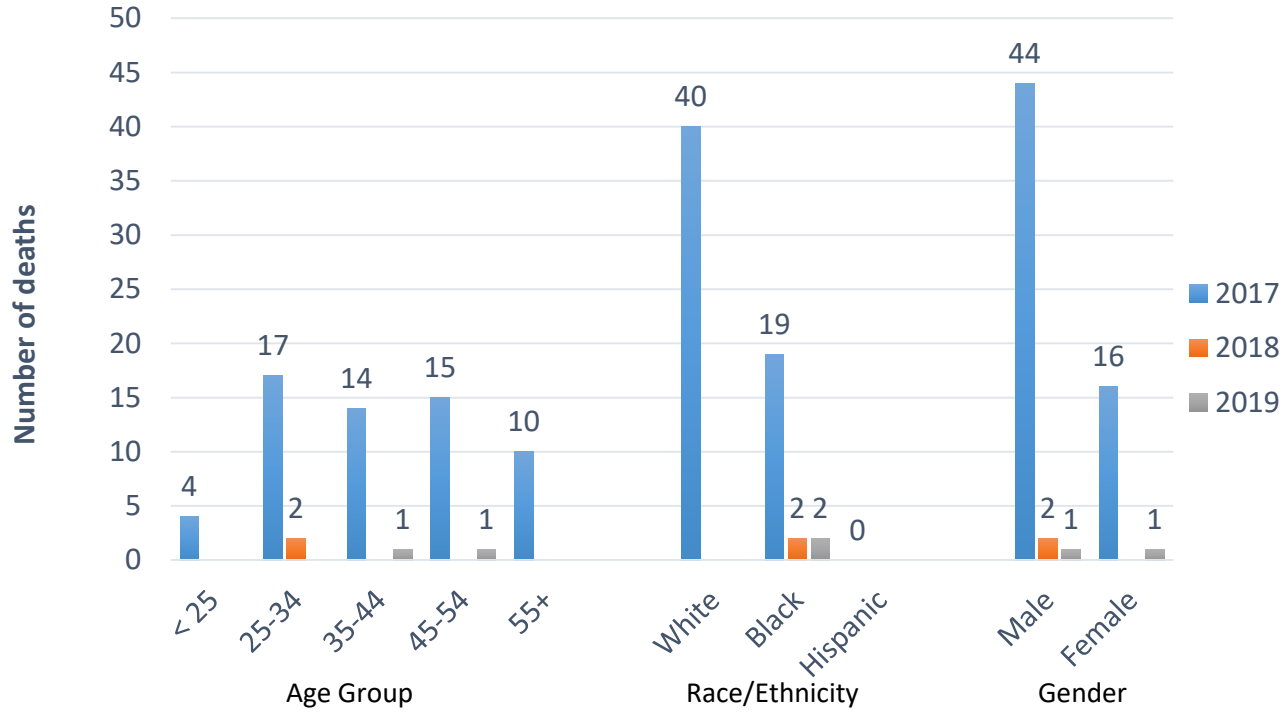


Figure 22. Number of Carfentanil-Related Deaths Occurring in Maryland by Age Group, Race/Ethnicity, and Gender, 2017-2019.



COCAINE-RELATED DEATHS

Figure 23. Number of Cocaine-Related Deaths Occurring in Maryland, 2010-2019.

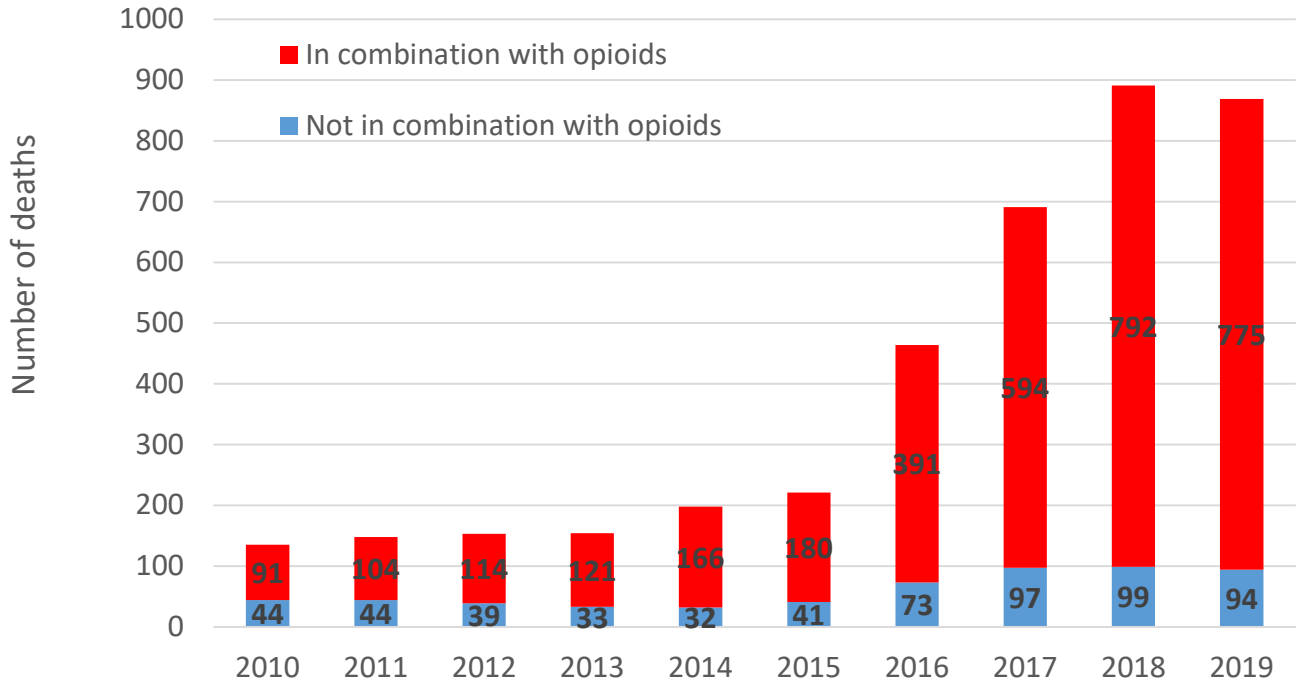


Figure 24. Number of Cocaine-Related Deaths Occurring in Maryland by Place of Occurrence, 2019.

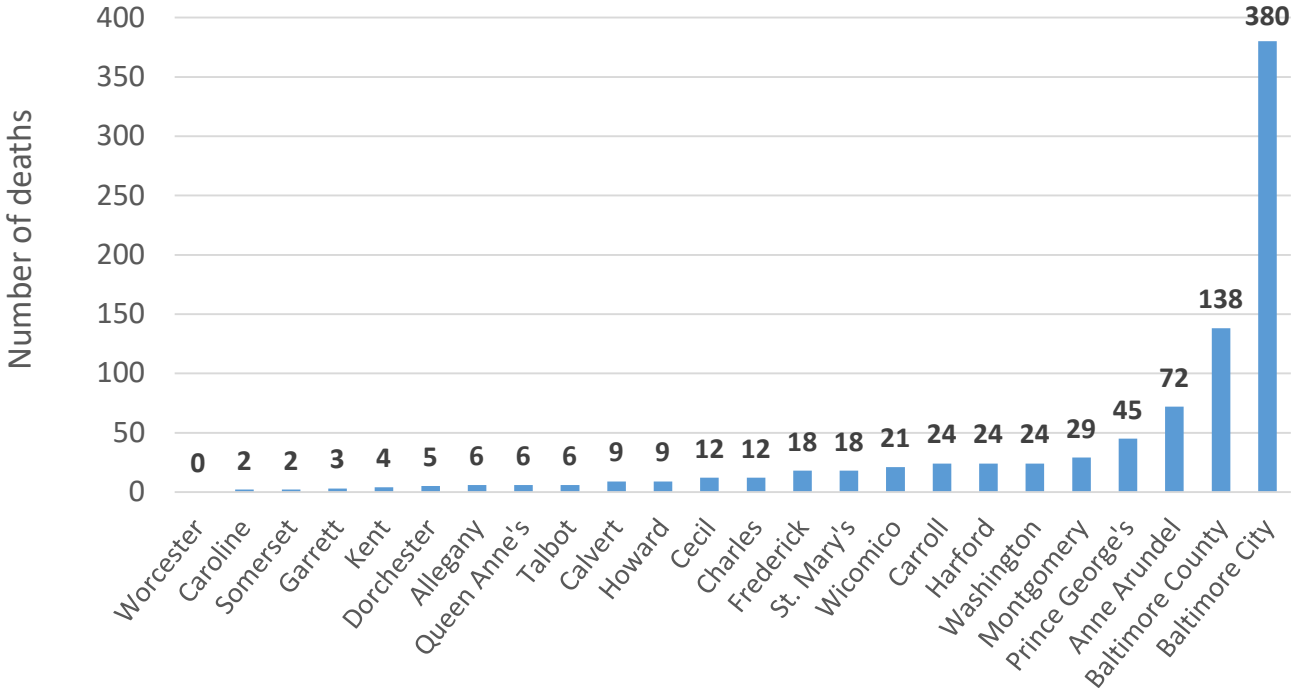
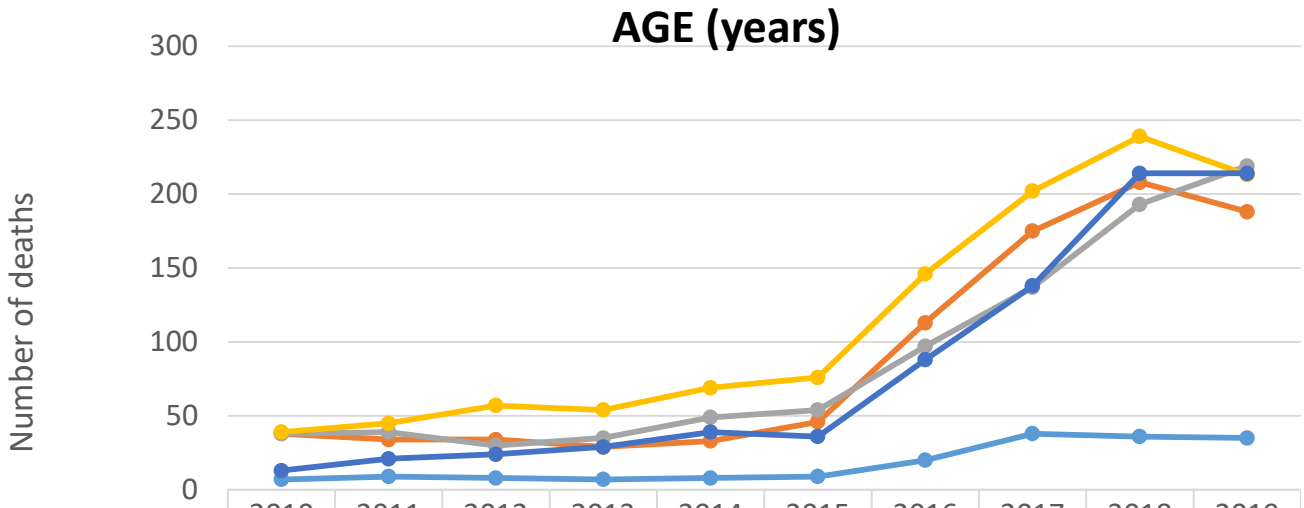
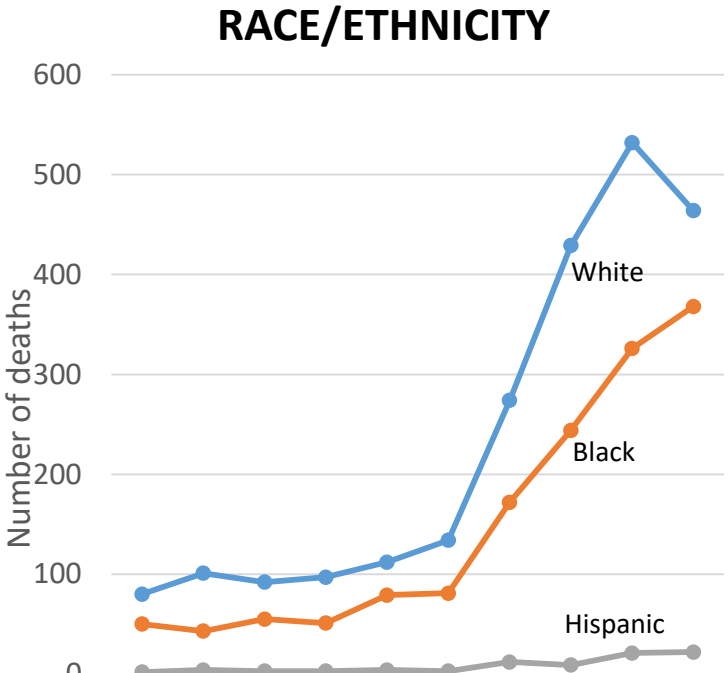


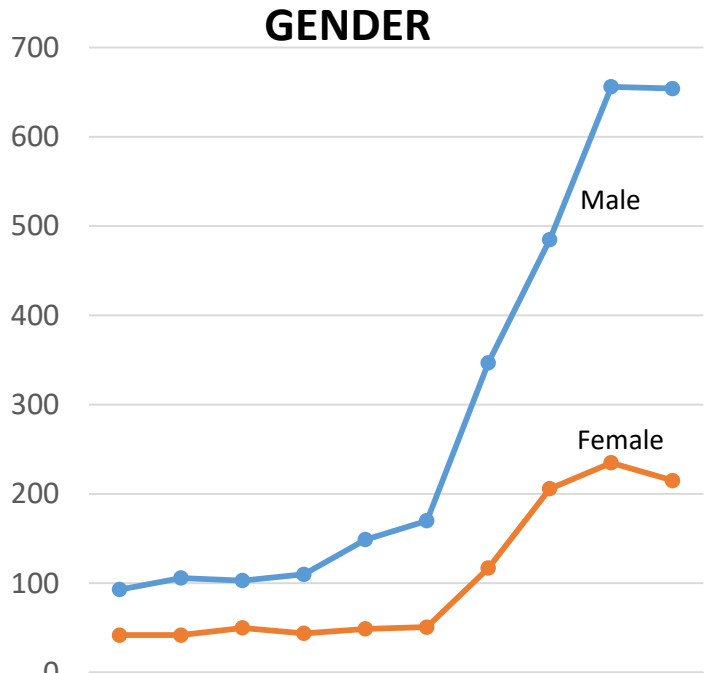
Figure 25. Number of Cocaine-Related Deaths Occurring in Maryland by Age Group, Race/Ethnicity and Gender, 2010-2019.



	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019
<25 years	7	9	8	7	8	9	20	38	36	35
25-34 years	38	34	34	29	33	46	113	175	208	188
35-44 years	38	39	30	35	49	54	97	137	193	219
45-54 years	39	45	57	54	69	76	146	202	239	213
55+ years	13	21	24	29	39	36	88	138	214	214

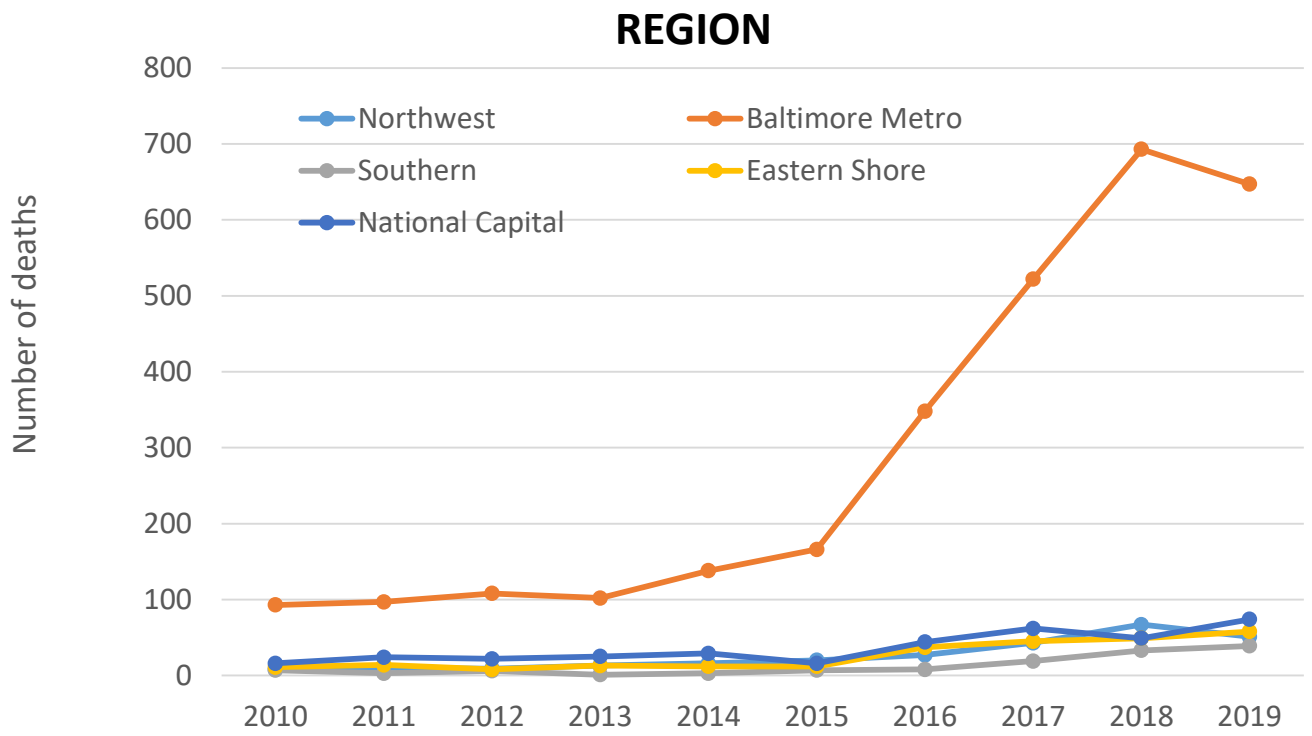


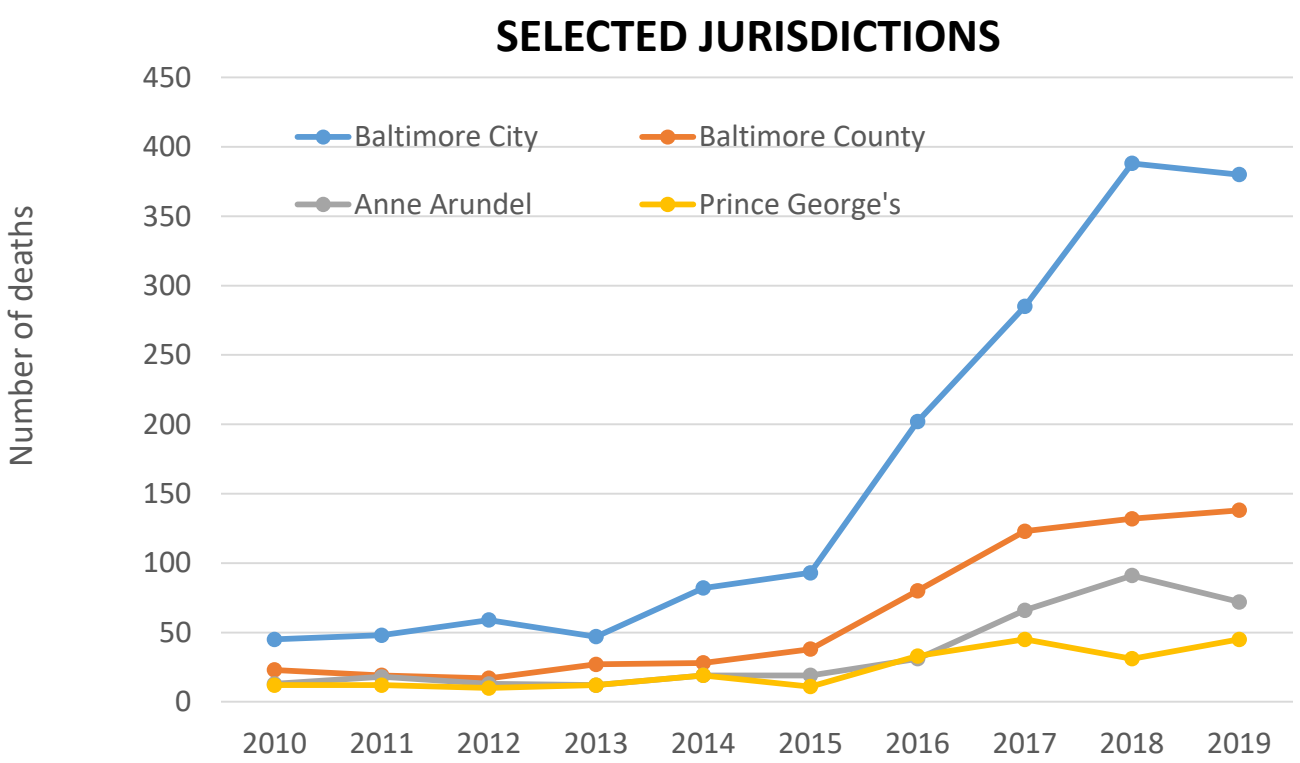
	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019
White	80	101	92	97	112	134	274	429	532	464
Black	50	43	55	51	79	81	172	244	326	368
Hispanic	2	4	3	3	4	3	12	9	21	22



	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019
Male	93	106	103	110	149	170	347	485	656	654
Female	42	42	50	44	49	51	117	206	235	215

Figure 26. Number of Cocaine-Related Deaths by Place of Occurrence, Maryland, 2010-2019.





BENZODIAZEPINE-RELATED DEATHS

Figure 27. Number of Benzodiazepine-Related Deaths Occurring in Maryland, 2010-2019.

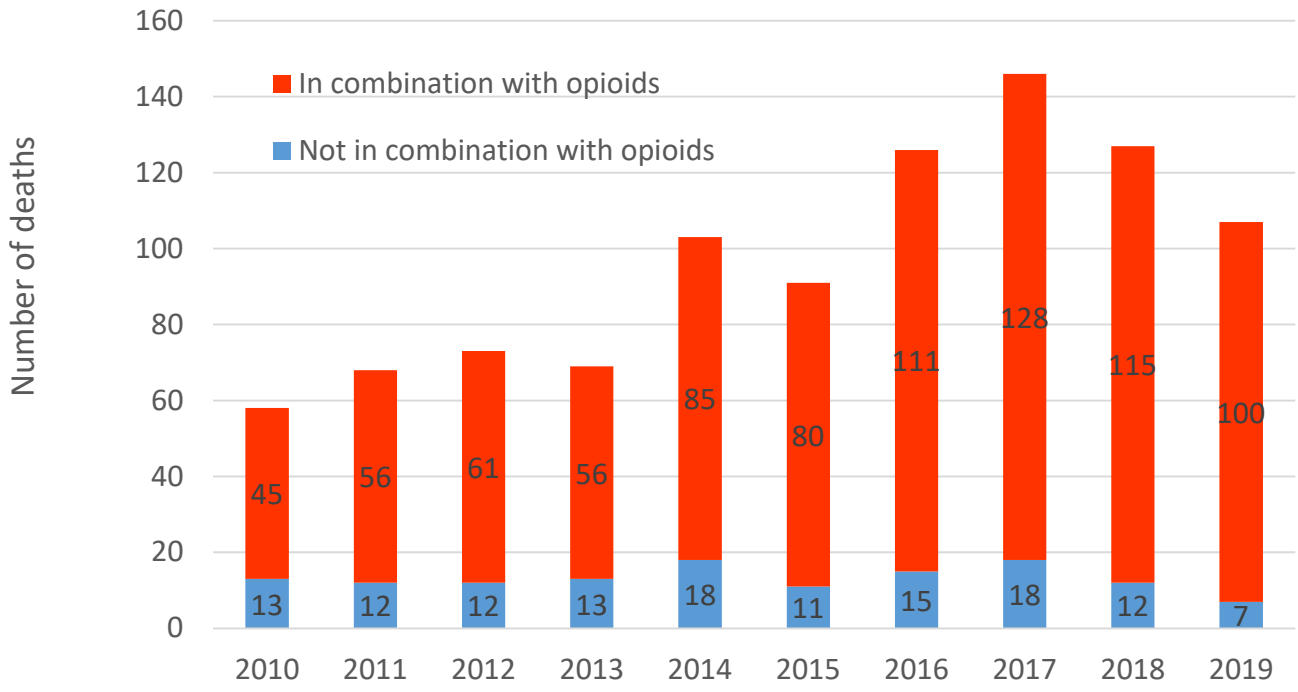


Figure 28. Number of Benzodiazepine-Related Deaths Occurring in Maryland by Place of Occurrence, 2019.

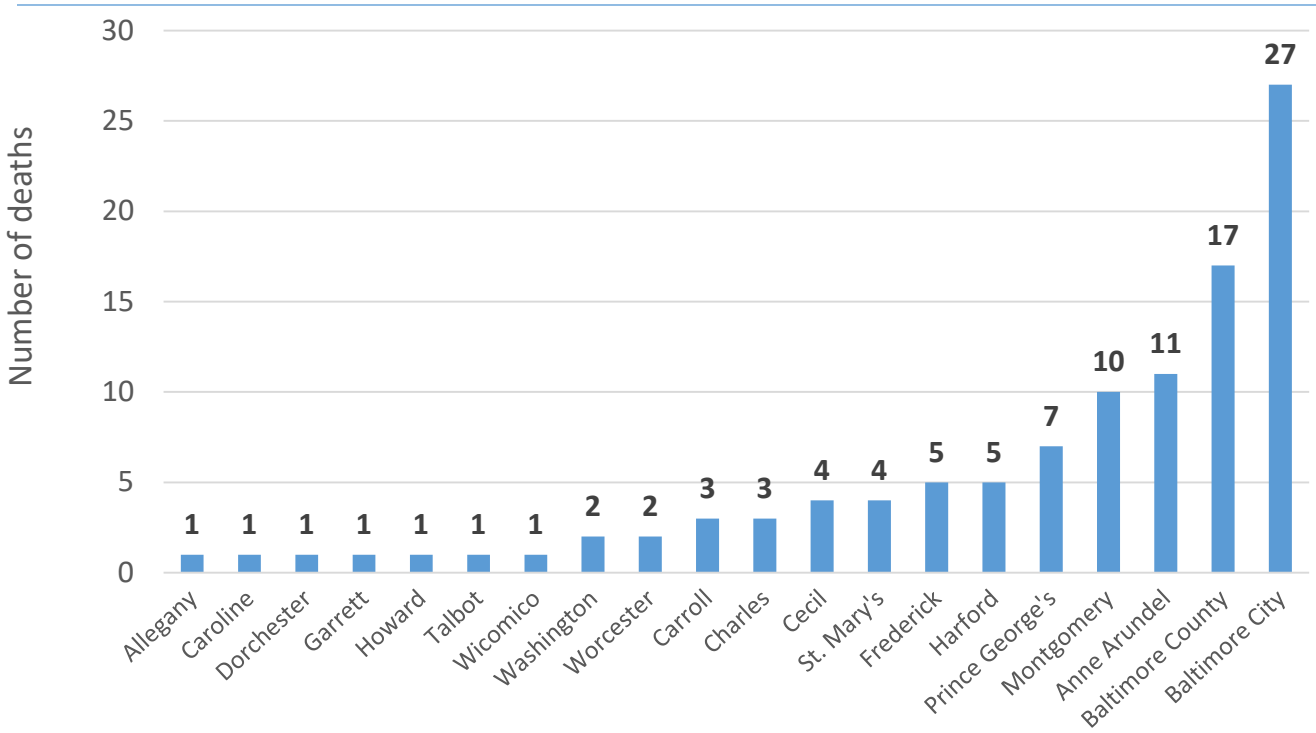
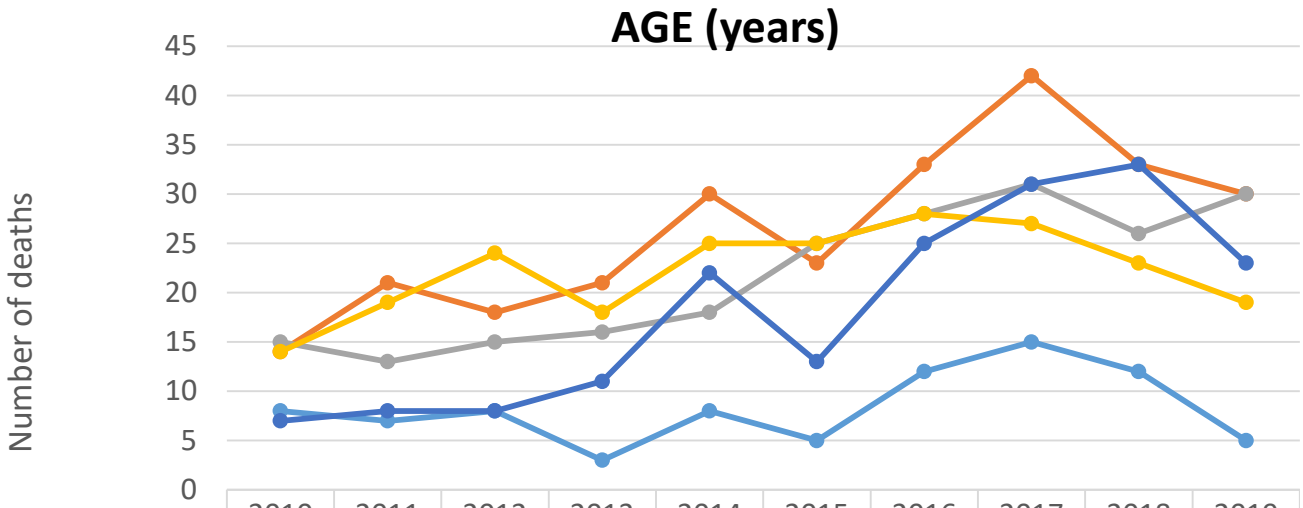
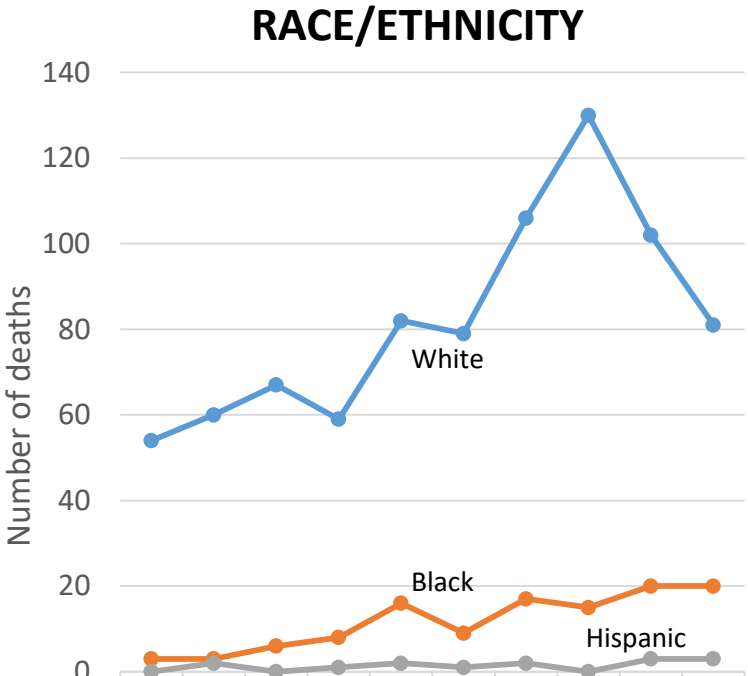


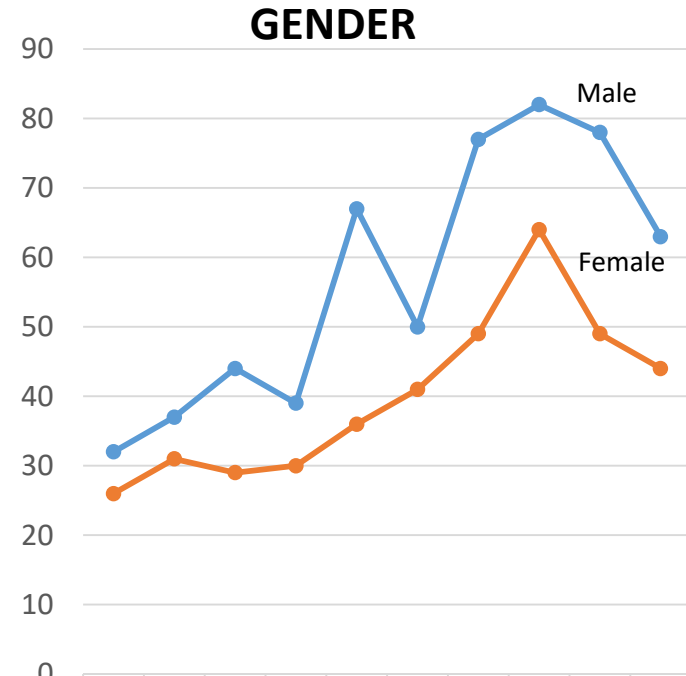
Figure 29. Number of Benzodiazepine-Related Deaths Occurring in Maryland by Age Group, Race/Ethnicity and Gender, 2010-2019.



	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019
<25 years	8	7	8	3	8	5	12	15	12	5
25-34 years	14	21	18	21	30	23	33	42	33	30
35-44 years	15	13	15	16	18	25	28	31	26	30
45-54 years	14	19	24	18	25	25	28	27	23	19
55+ years	7	8	8	11	22	13	25	31	33	23

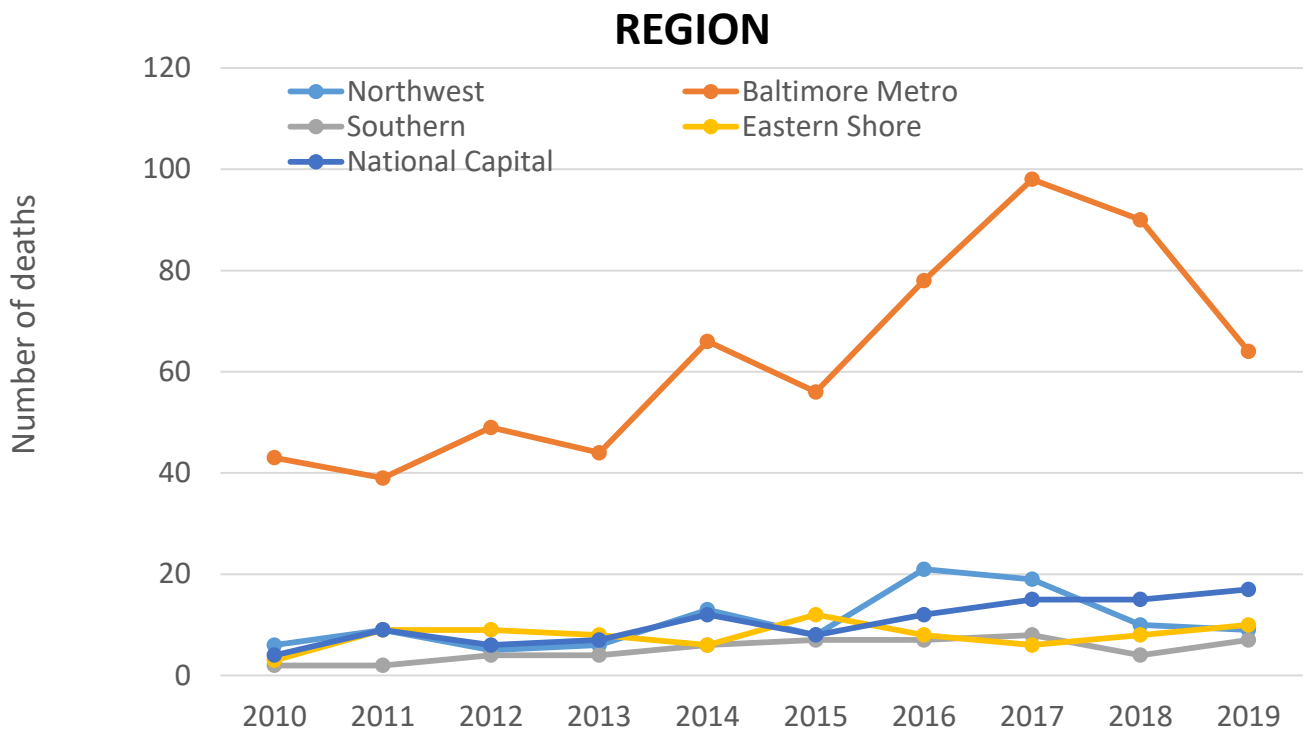


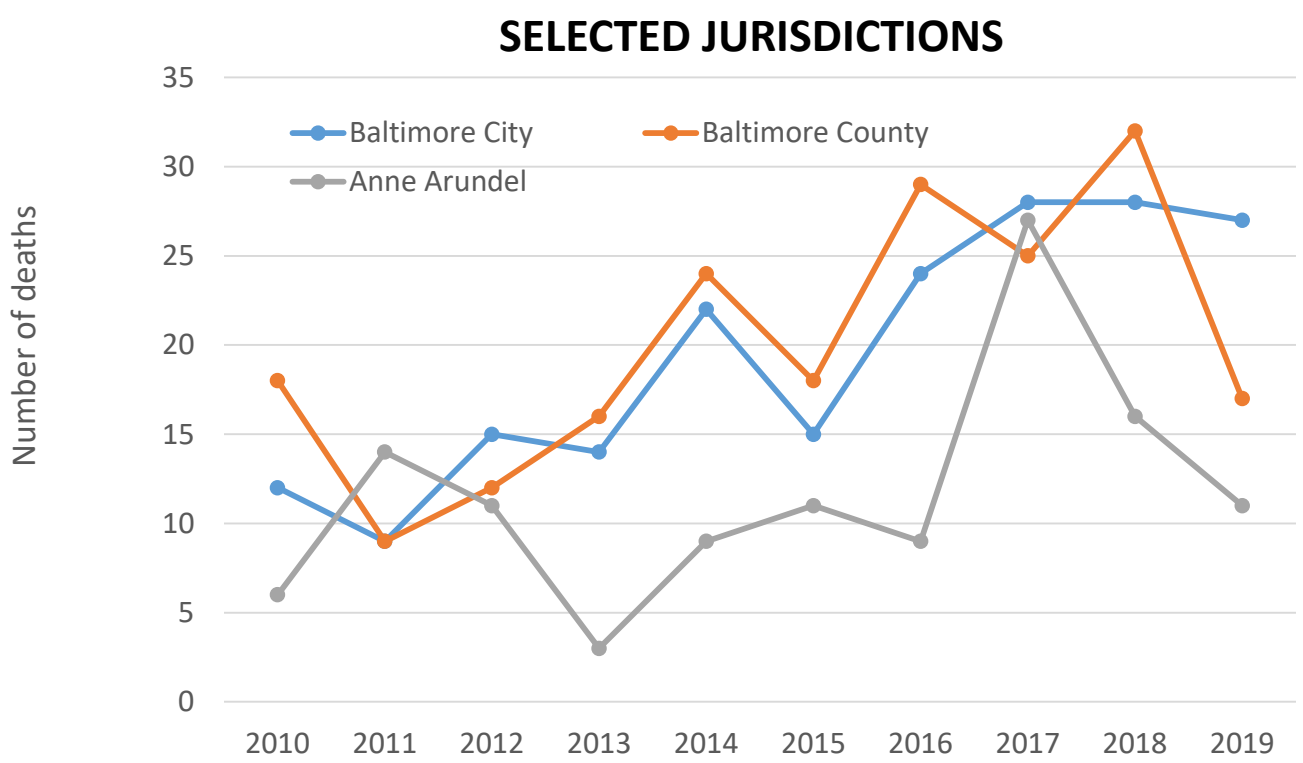
	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019
NH White	54	60	67	59	82	79	106	130	102	81
NH Black	3	3	6	8	16	9	17	15	20	20
Hispanic	0	2	0	1	2	1	2	0	3	3



	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019
Male	32	37	44	39	67	50	77	82	78	63
Female	26	31	29	30	36	41	49	64	49	44

Figure 30. Number of Benzodiazepine-Related Deaths by Place of Occurrence, Maryland, 2010-2019.





PHENCYCLIDINE-RELATED DEATHS

Figure 31. Number of Phencyclidine-Related Deaths Occurring in Maryland, 2010-2019.

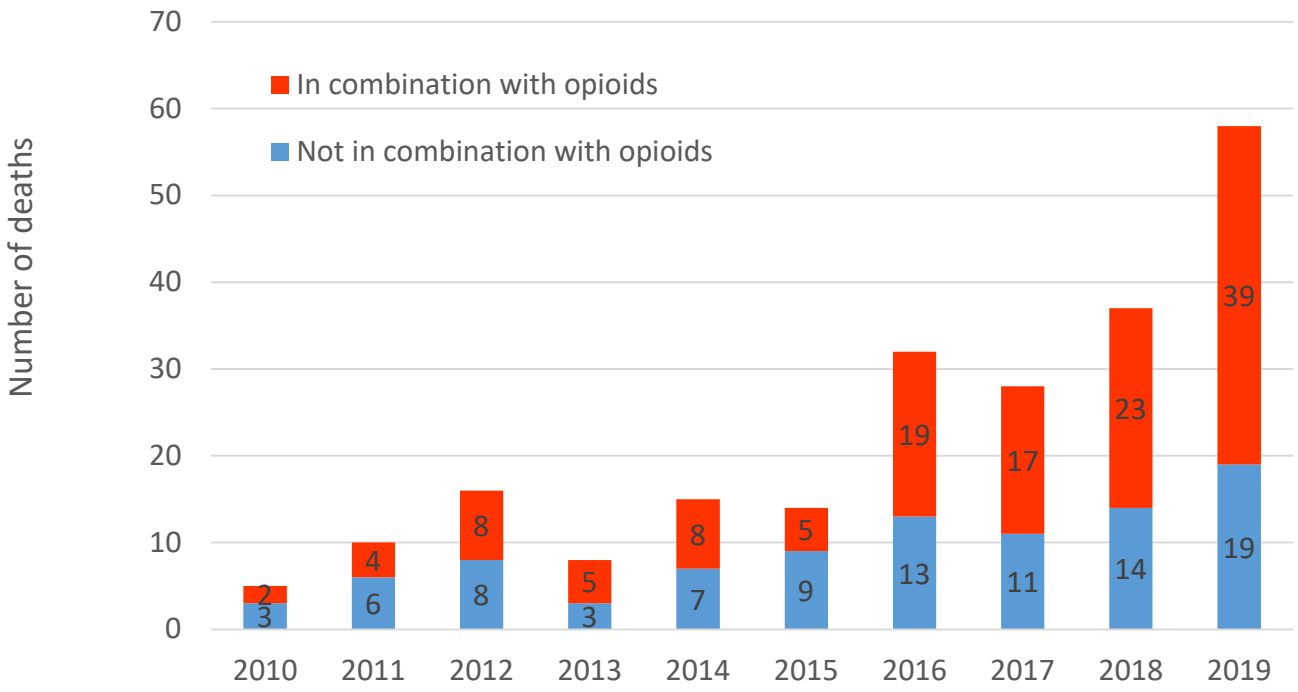


Figure 32. Number of Phencyclidine-Related Deaths Occurring in Maryland by Place of Occurrence, 2019.

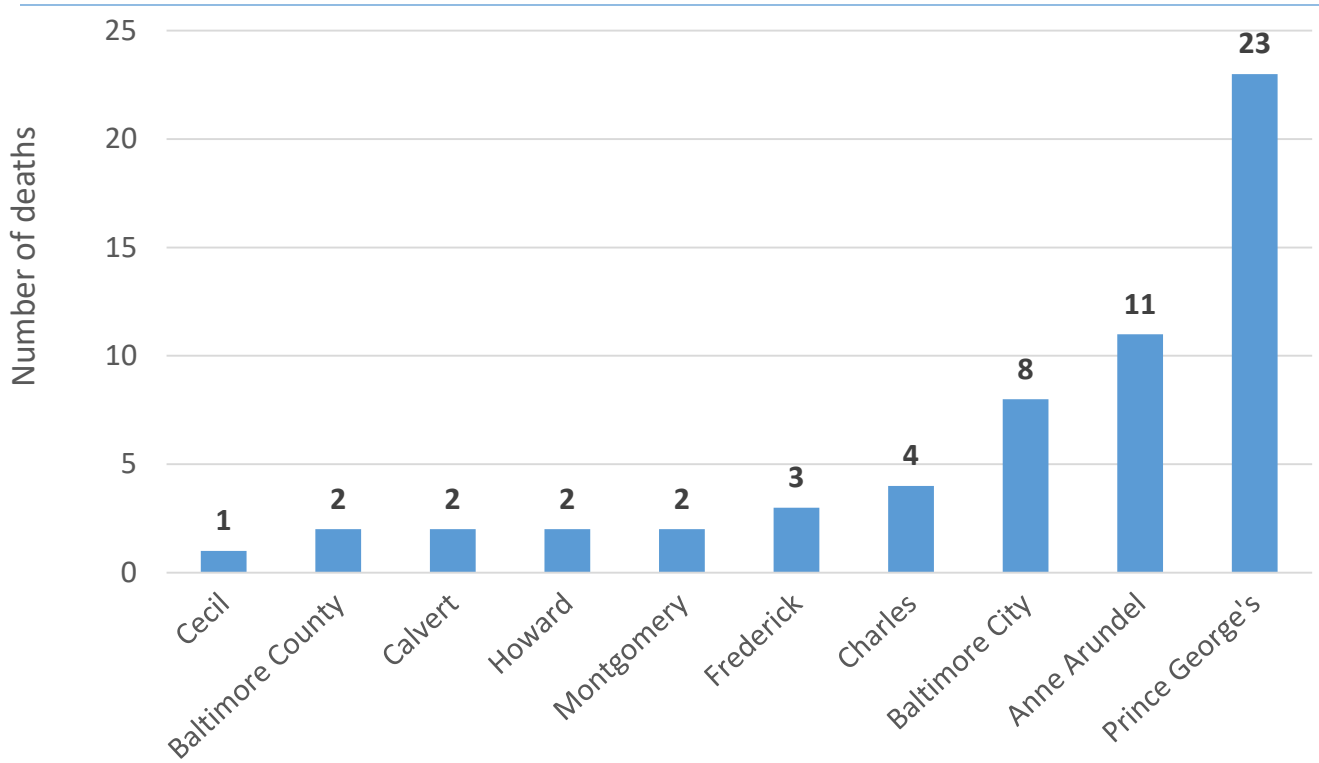
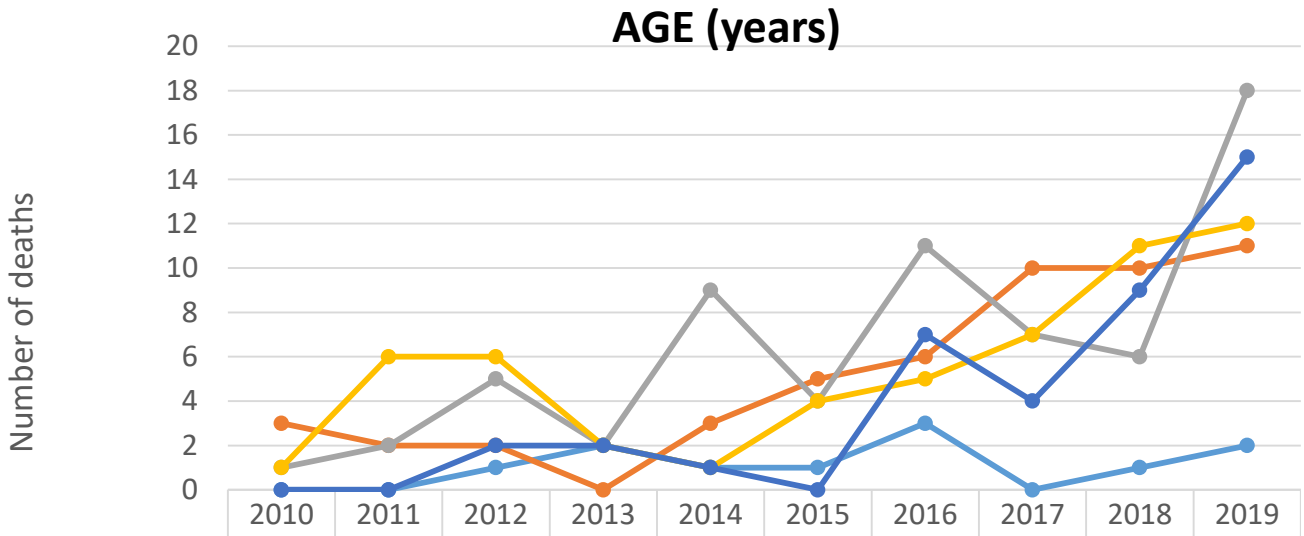
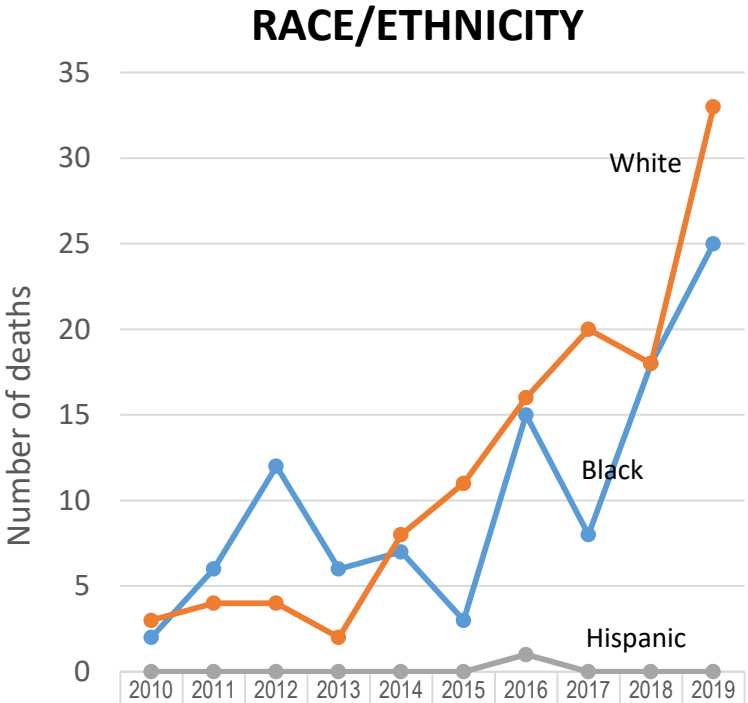


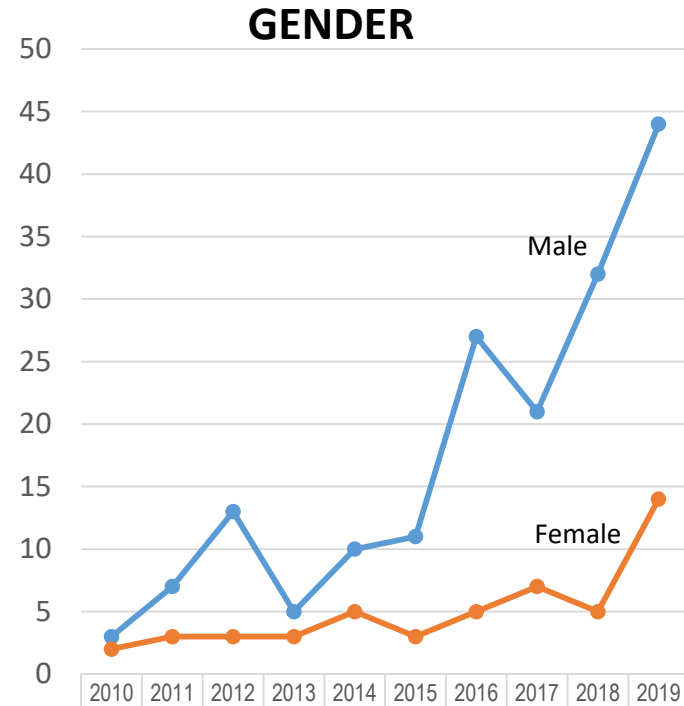
Figure 33. Number of Phencyclidine-Related Deaths Occurring in Maryland by Age Group, Race/Ethnicity and Gender, 2010-2019.



	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019
<25 years	0	0	1	2	1	1	3	0	1	2
25-34 years	3	2	2	0	3	5	6	10	10	11
35-44 years	1	2	5	2	9	4	11	7	6	18
45-54 years	1	6	6	2	1	4	5	7	11	12
55+ years	0	0	2	2	1	0	7	4	9	15

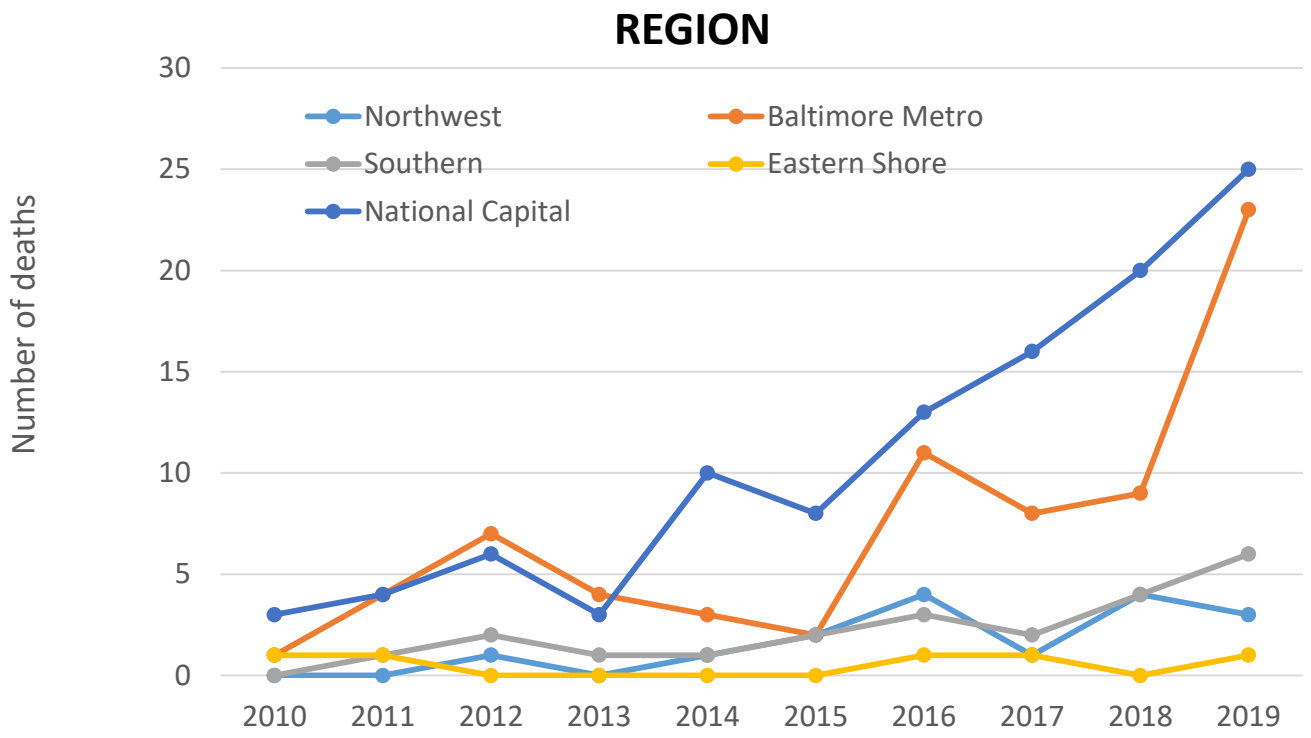


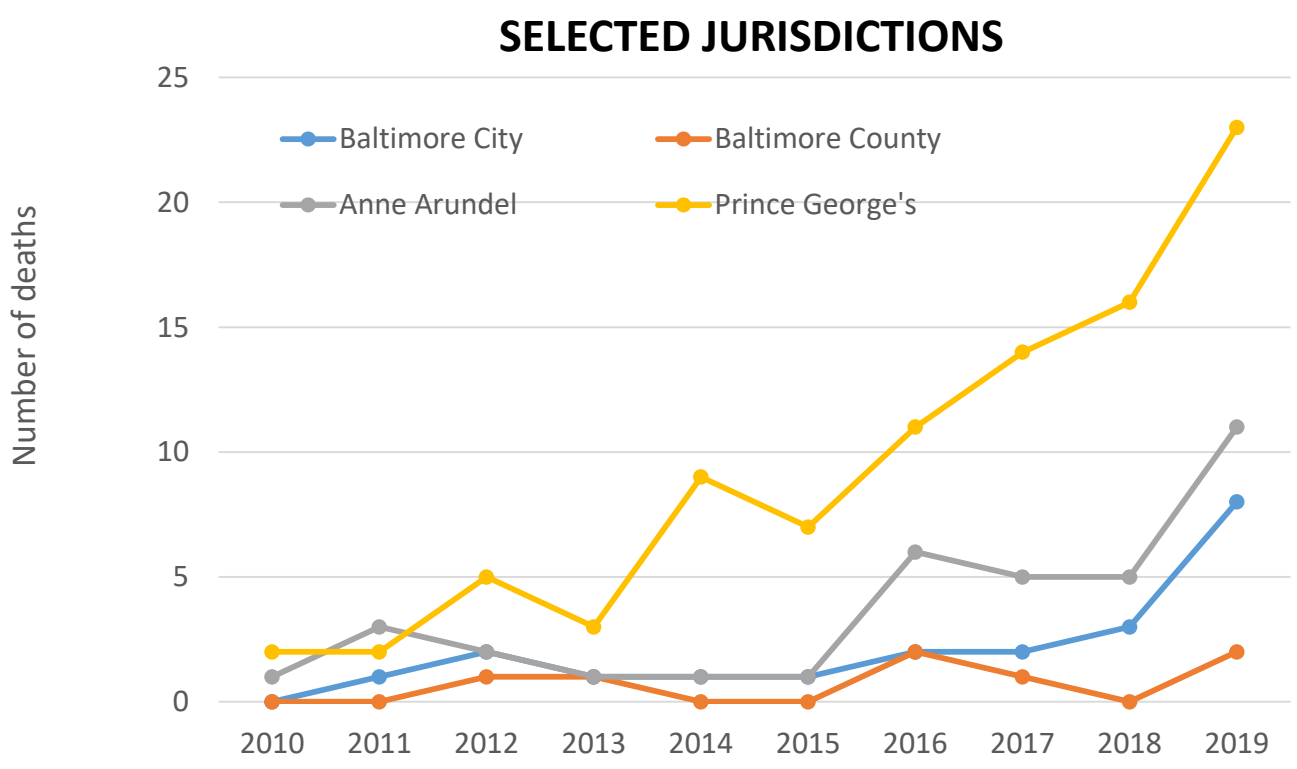
	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019
NH White	2	6	12	6	7	3	15	8	18	25
NH Black	3	4	4	2	8	11	16	20	18	33
Hispanic	0	0	0	0	0	0	1	0	0	0



	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019
Male	3	7	13	5	10	11	27	21	32	44
Female	2	3	3	3	5	3	5	7	5	14

Figure 34. Number of Phencyclidine-Related Deaths by Place of Occurrence, Maryland, 2010-2019.





METHAMPHETAMINE-RELATED DEATHS

Figure 35. Number of Methamphetamine-Related Deaths Occurring in Maryland, 2010-2019.

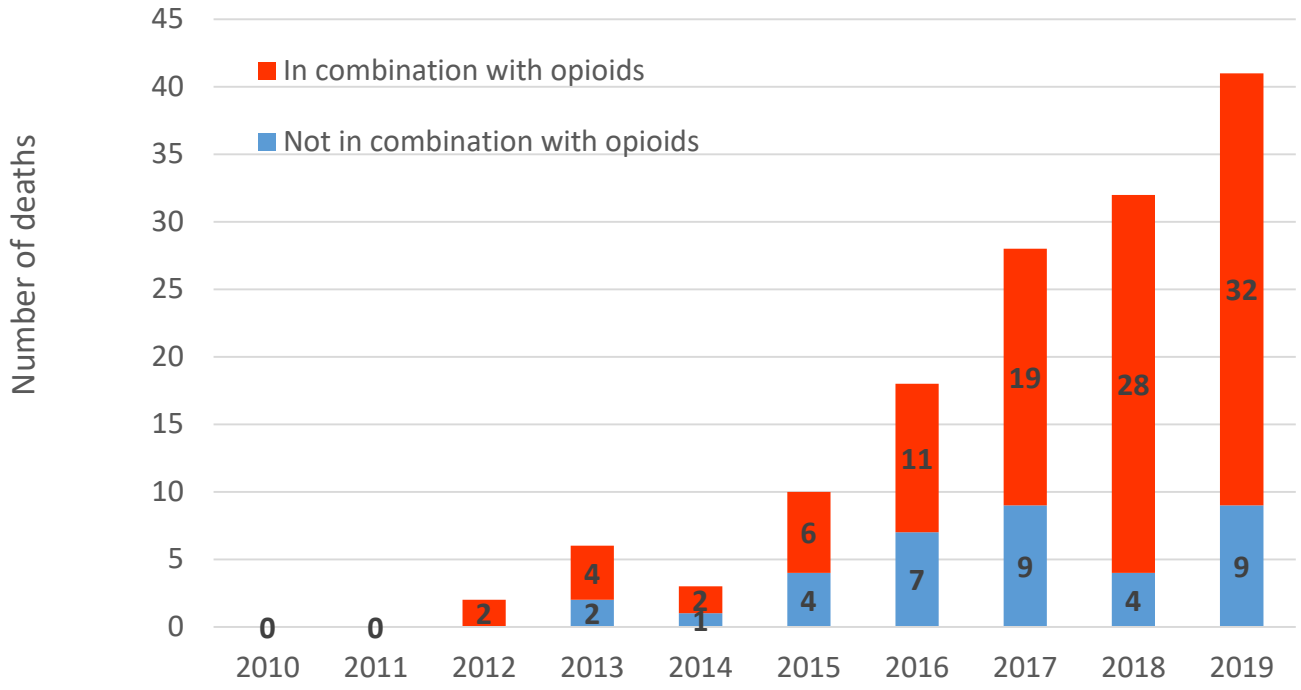


Figure 36. Number of Methamphetamine-Related Deaths Occurring in Maryland by Place of Occurrence, 2019.

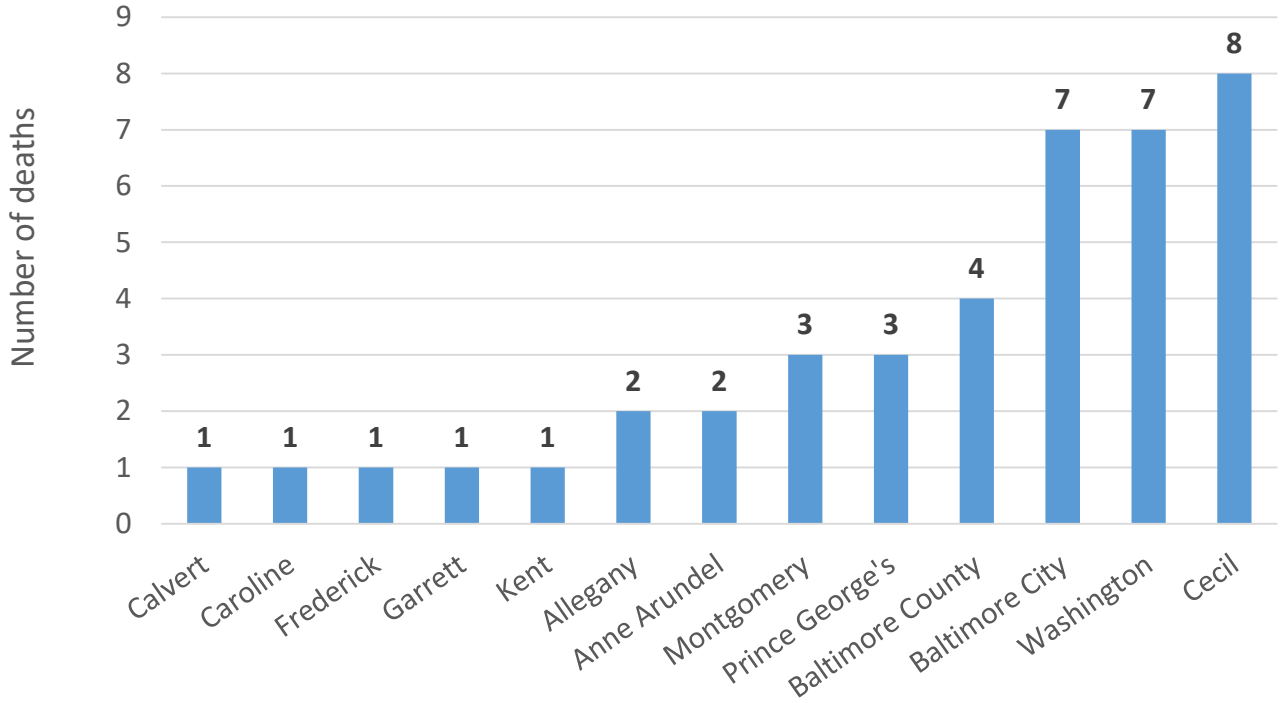
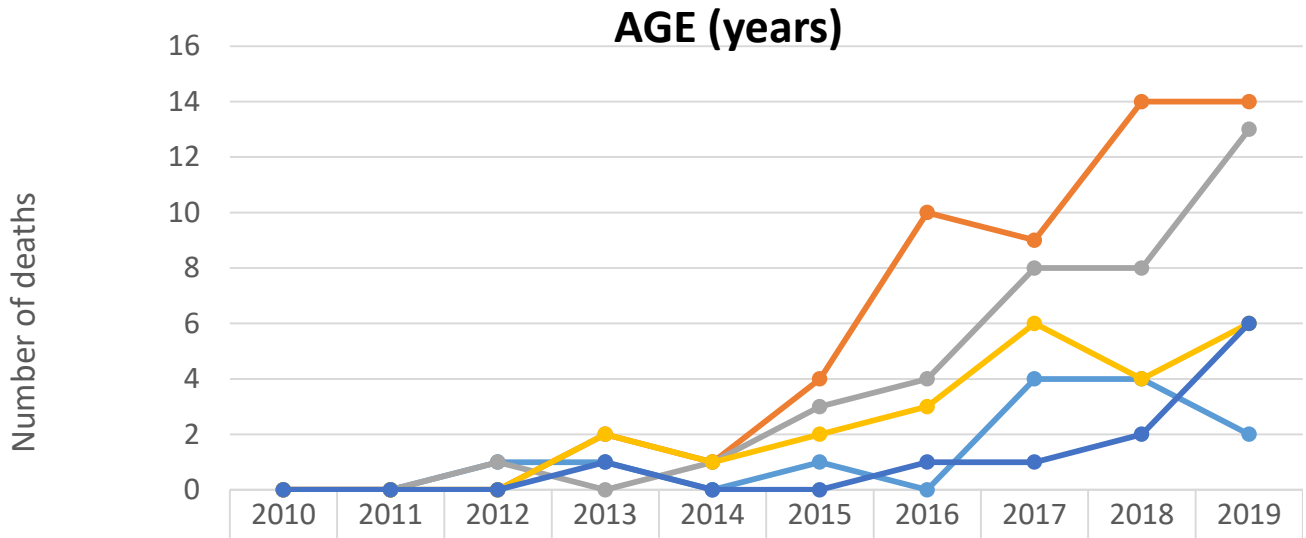
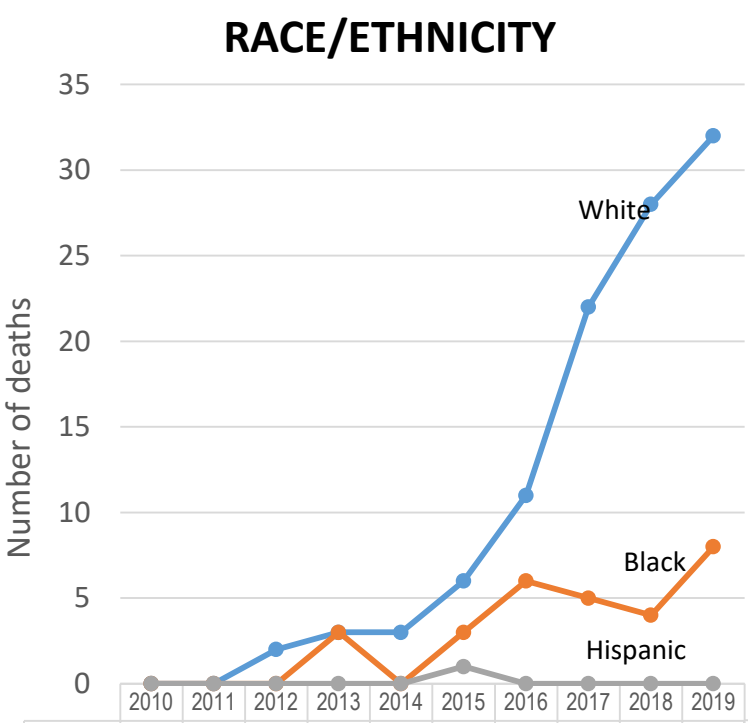


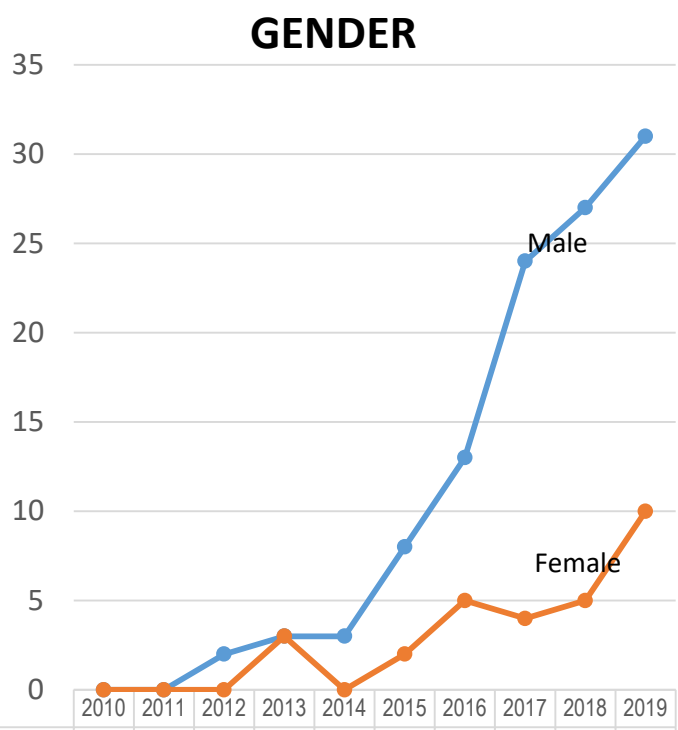
Figure 37. Number of Methamphetamine-Related Deaths Occurring in Maryland by Age Group, Race/Ethnicity and Gender, 2010-2019.



	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019
<25 years	0	0	1	1	0	1	0	4	4	2
25-34 years	0	0	0	2	1	4	10	9	14	14
35-44 years	0	0	1	0	1	3	4	8	8	13
45-54 years	0	0	0	2	1	2	3	6	4	6
55+ years	0	0	0	1	0	0	1	1	2	6

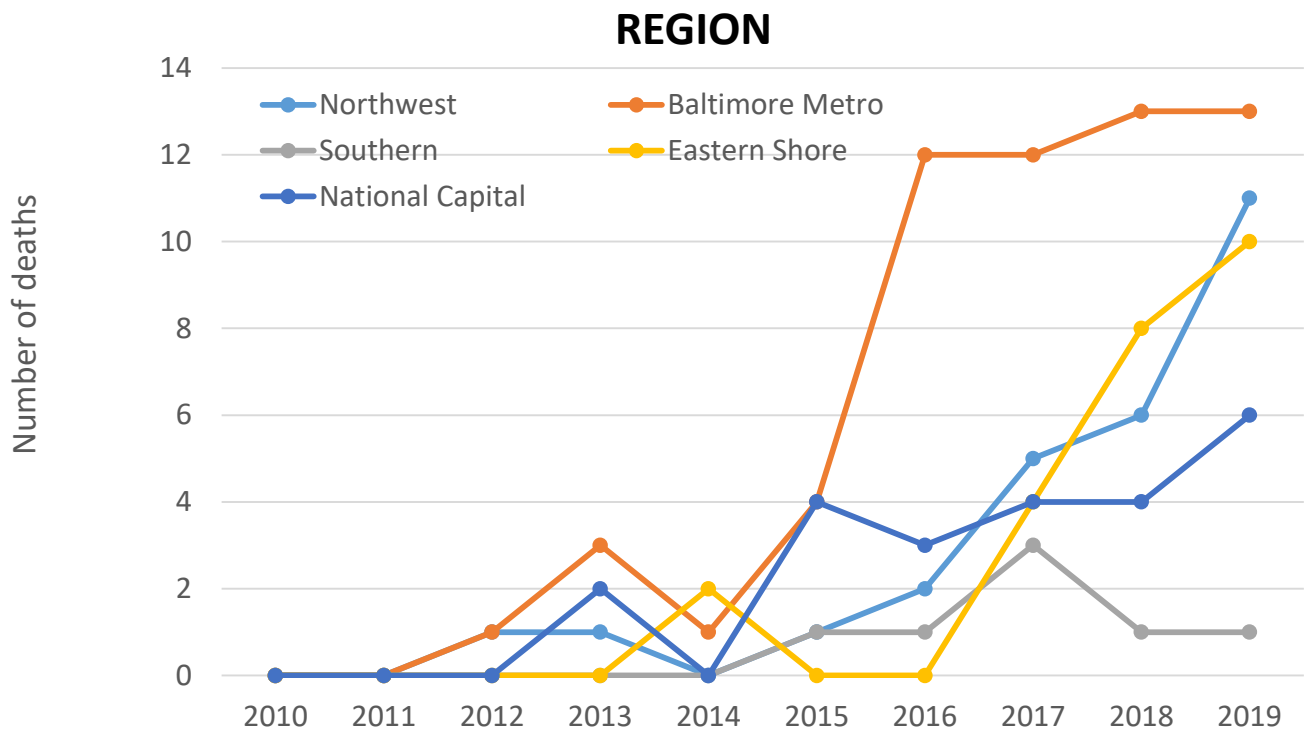


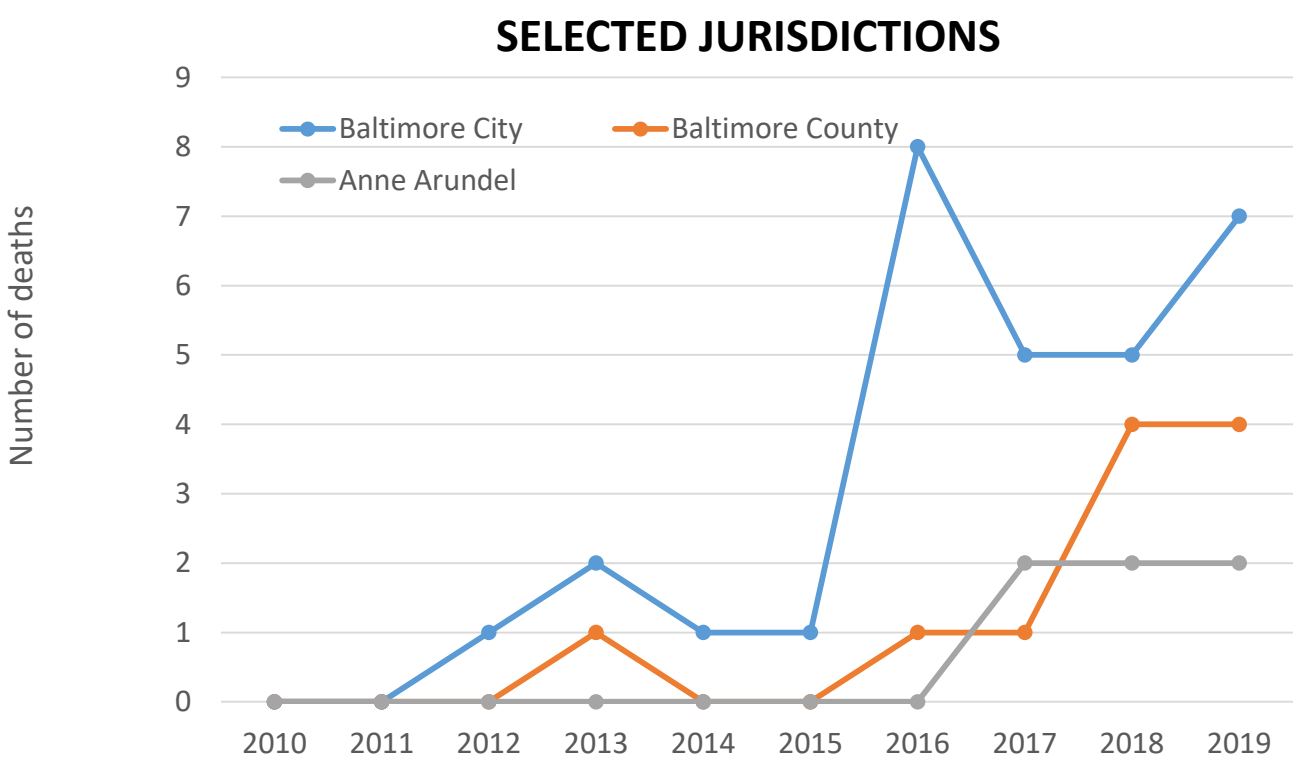
	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019
NH White	0	0	2	3	3	6	11	22	28	32
NH Black	0	0	0	3	0	3	6	5	4	8
Hispanic	0	0	0	0	0	1	0	0	0	0



	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019
Male	0	0	2	3	3	8	13	24	27	31
Female	0	0	0	3	0	2	5	4	5	10

Figure 38. Number of Methamphetamine-Related Deaths by Place of Occurrence, Maryland, 2010-2019.





ALCOHOL-RELATED DEATHS

Figure 39. Number of Alcohol-Related Deaths Occurring in Maryland, 2010-2019.

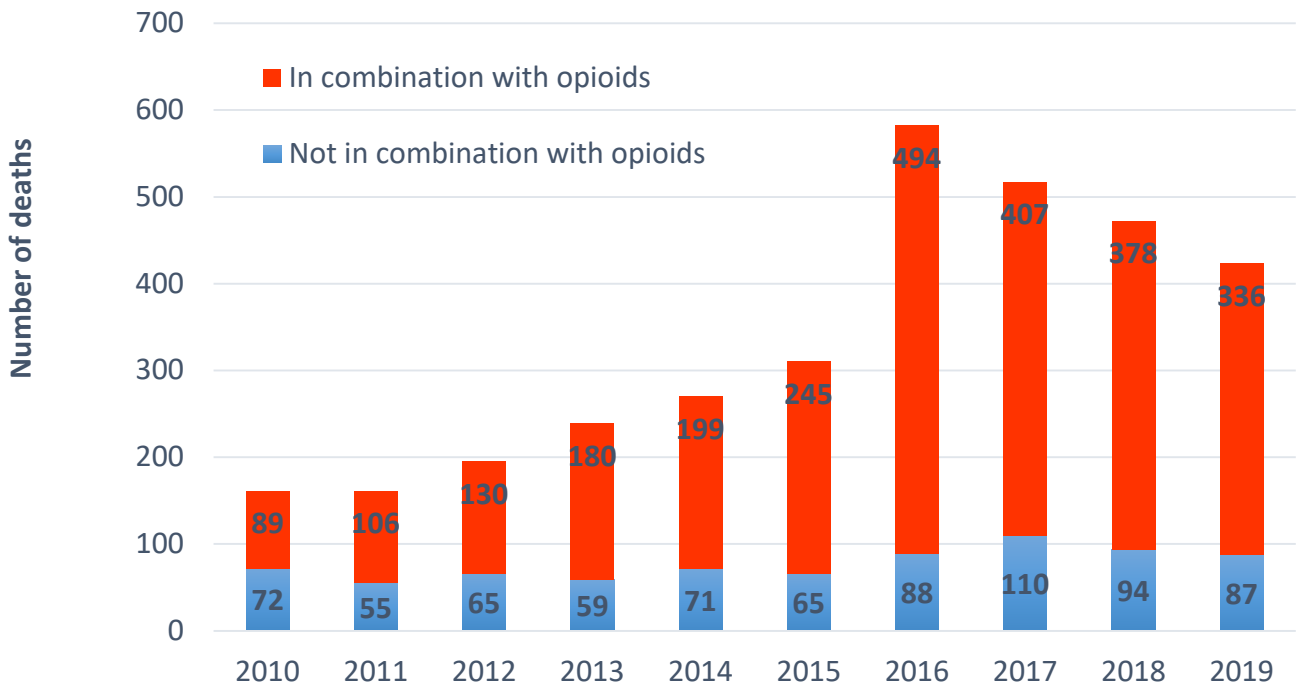


Figure 40. Number of Alcohol-Related Deaths Occurring in Maryland by Place of Occurrence, 2019.

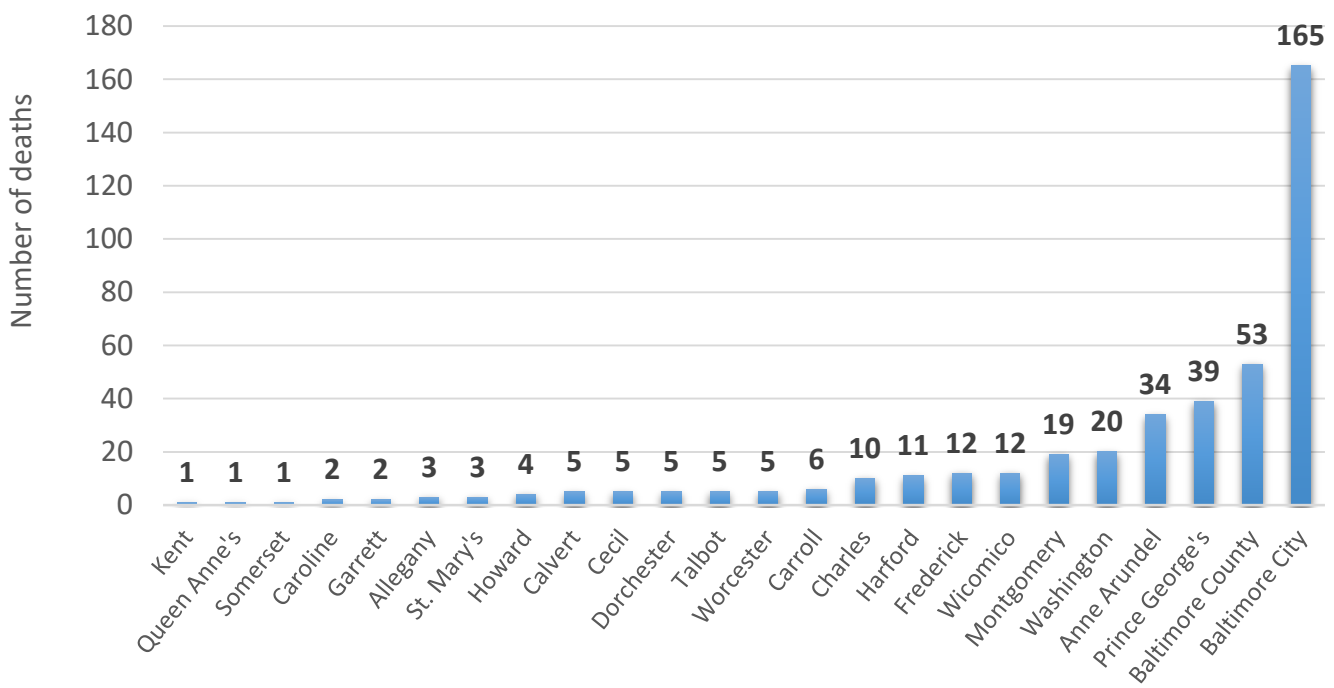
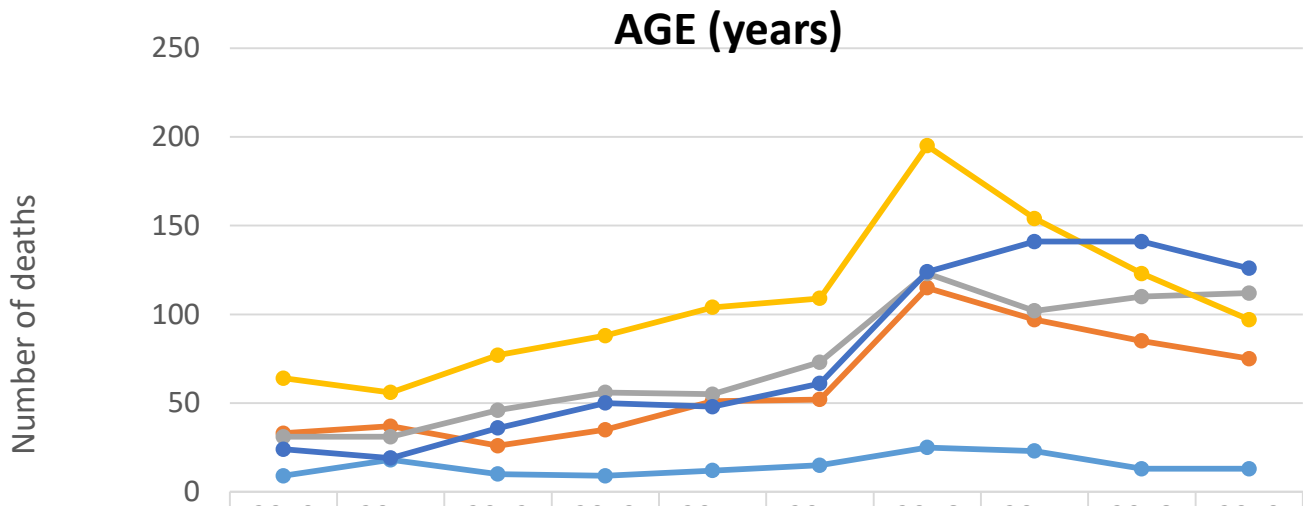
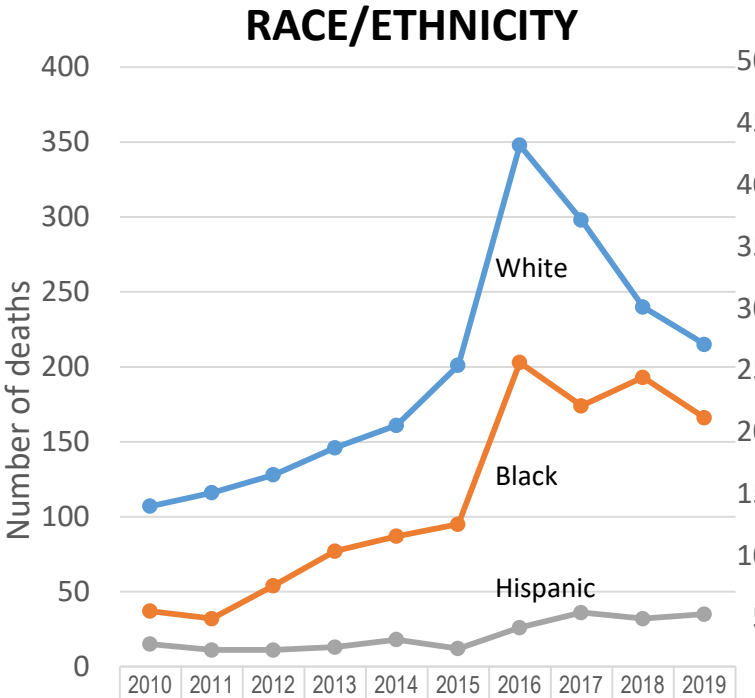


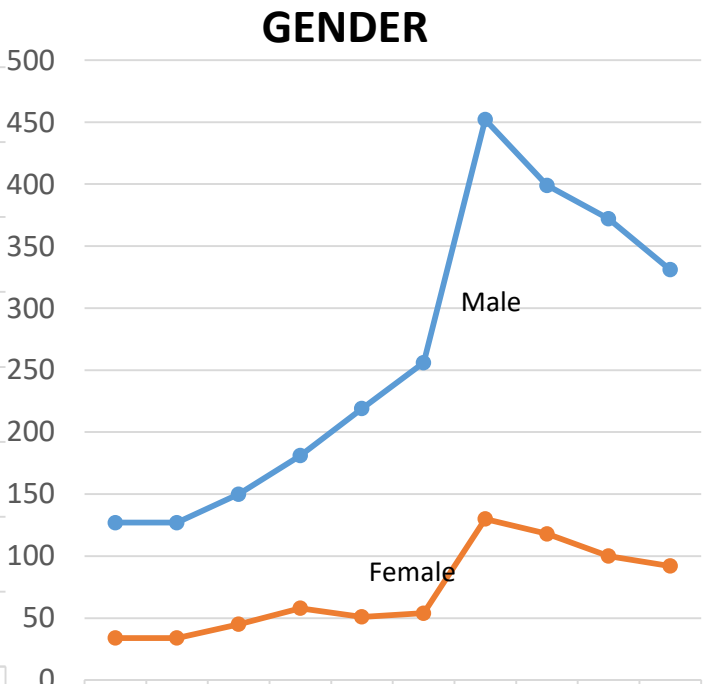
Figure 41. Number of Alcohol-Related Deaths Occurring in Maryland by Age Group, Race/Ethnicity and Gender, 2010-2019.



	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019
<25 years	9	18	10	9	12	15	25	23	13	13
25-34 years	33	37	26	35	51	52	115	97	85	75
35-44 years	31	31	46	56	55	73	123	102	110	112
45-54 years	64	56	77	88	104	109	195	154	123	97
55+ years	24	19	36	50	48	61	124	141	141	126

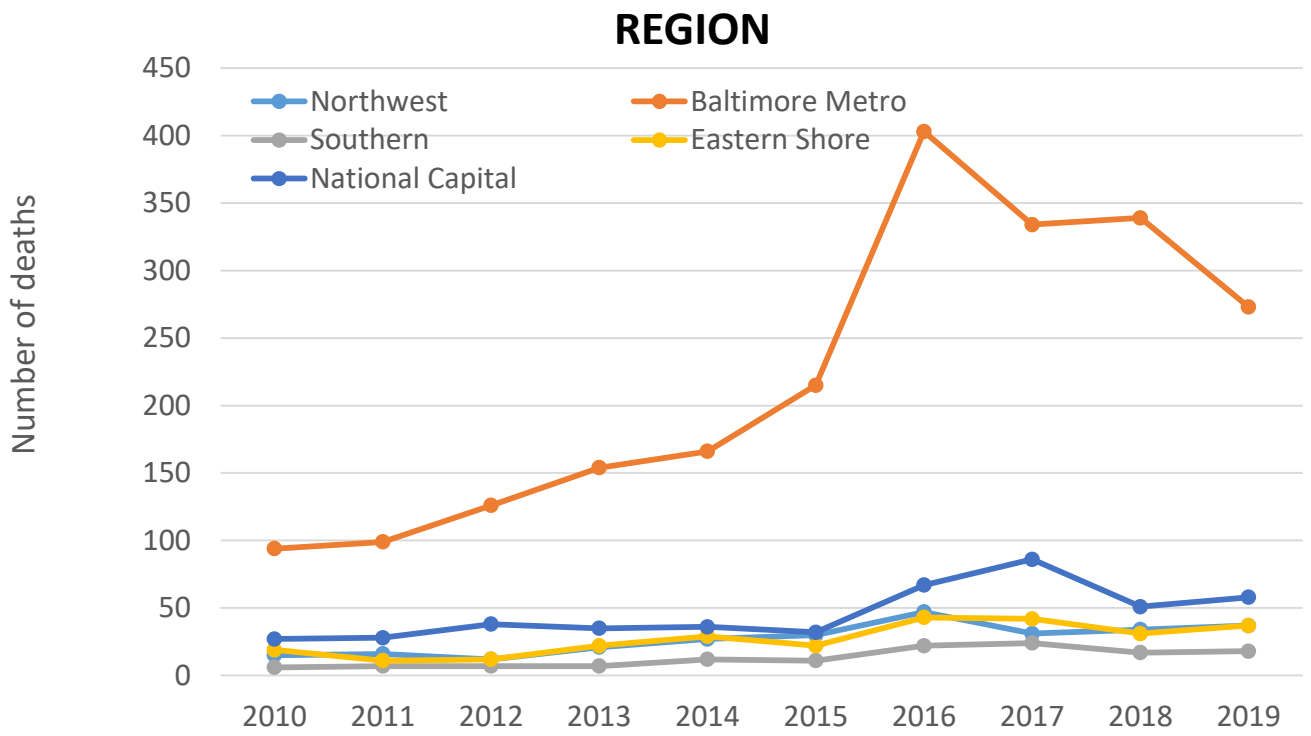


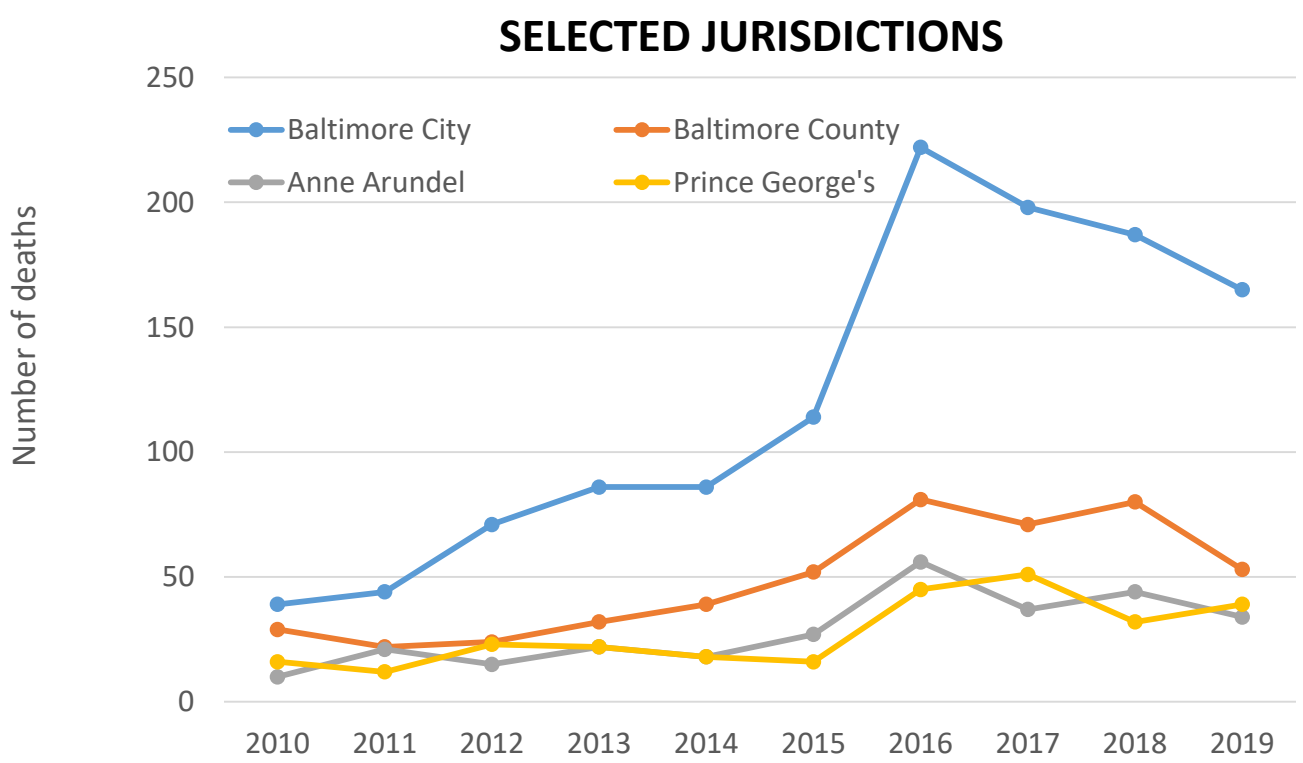
	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019
NH White	107	116	128	146	161	201	348	298	240	215
NH Black	37	32	54	77	87	95	203	174	193	166
Hispanic	15	11	11	13	18	12	26	36	32	35



	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019
Male	127	127	150	181	219	256	452	399	372	331
Female	34	34	45	58	51	54	130	118	100	92

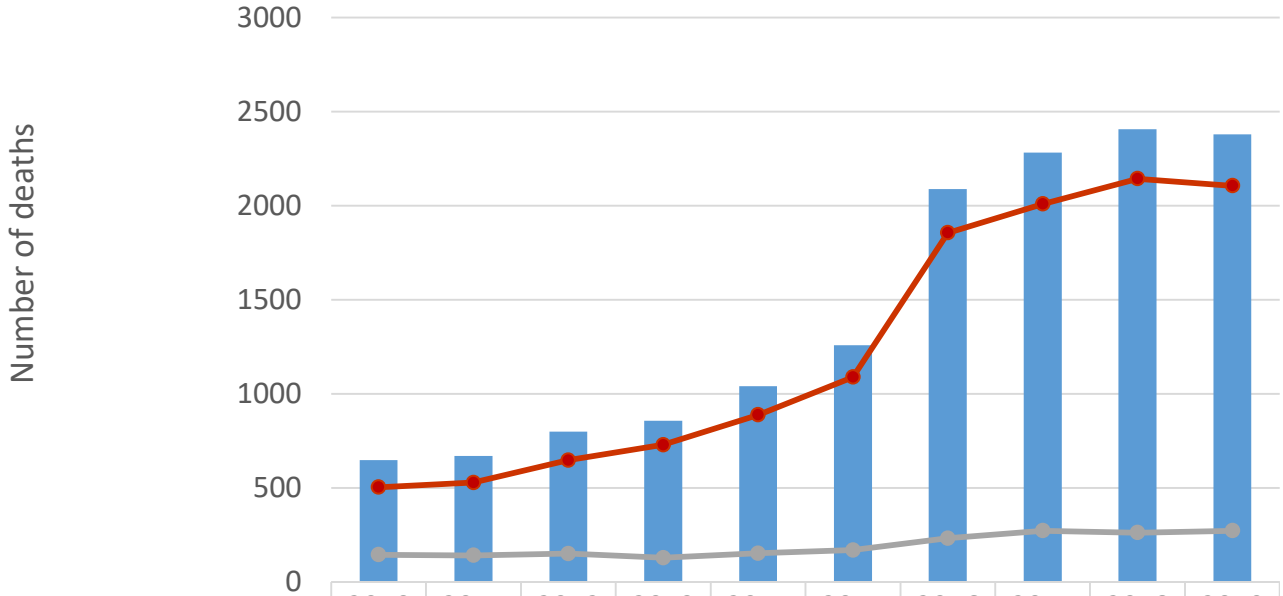
Figure 42. Number of Alcohol-Related Deaths by Place of Occurrence, Maryland, 2010-2019.





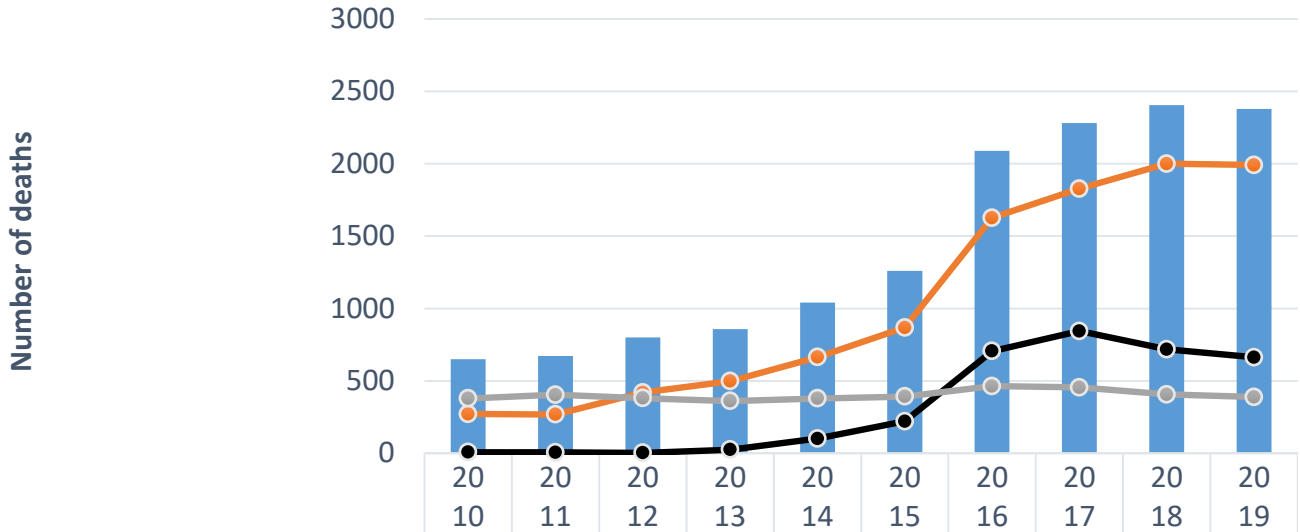
DRUG COMBINATIONS

Figure 43. Number of Drug- and Alcohol-Related Intoxication Deaths Involving Opioids, 2010-2019.



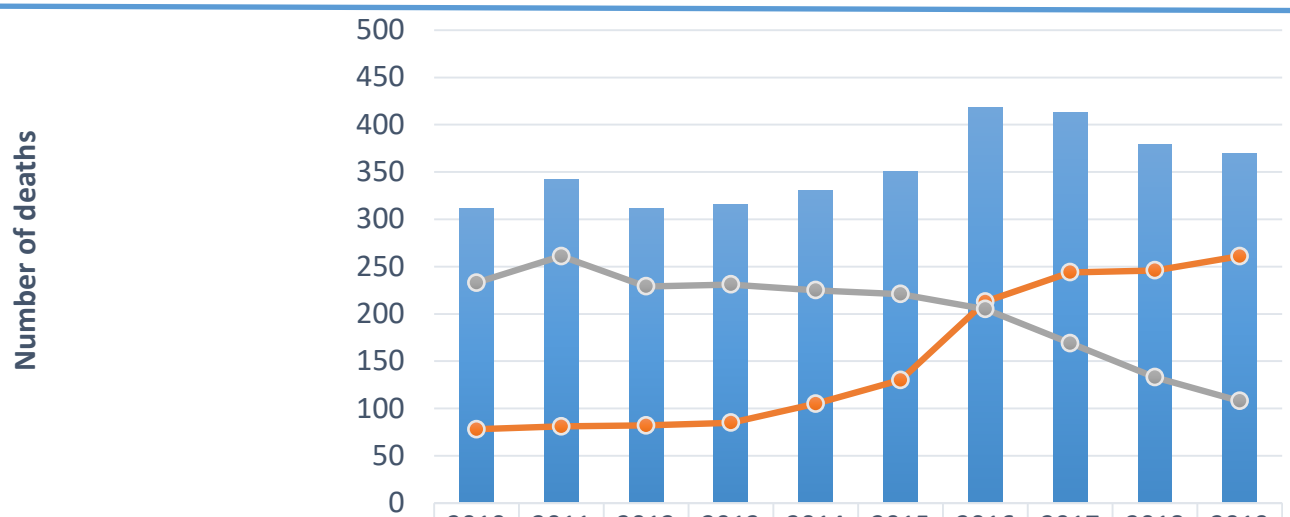
	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019
Total deaths	649	671	799	858	1041	1259	2089	2282	2406	2379
Opioid-related	504	529	648	729	888	1089	1856	2009	2143	2106
Not opioid-related	145	142	151	129	153	170	233	273	263	273

Figure 44. Number of Intoxication Deaths by Presence of Heroin and/or Fentanyl, 2010-2019.



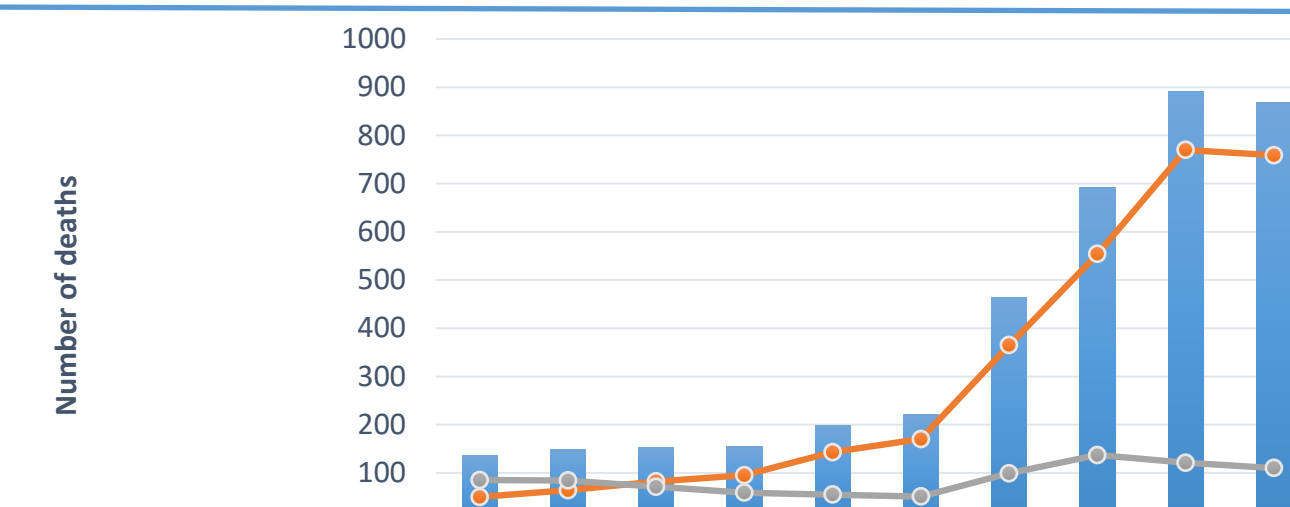
	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019
Total deaths	649	671	799	858	1041	1259	2089	2282	2406	2379
Both Heroin and fentanyl	6	5	2	24	101	220	705	844	718	662
Either Heroin or Fentanyl	271	268	419	498	663	868	1626	1828	2000	1991
Neither Heroin or Fentanyl	378	403	380	360	378	391	463	454	406	388

Figure 45. Number of Prescription Opioid-Related Intoxication Deaths Involving Heroin or Fentanyl, 2010-2019.



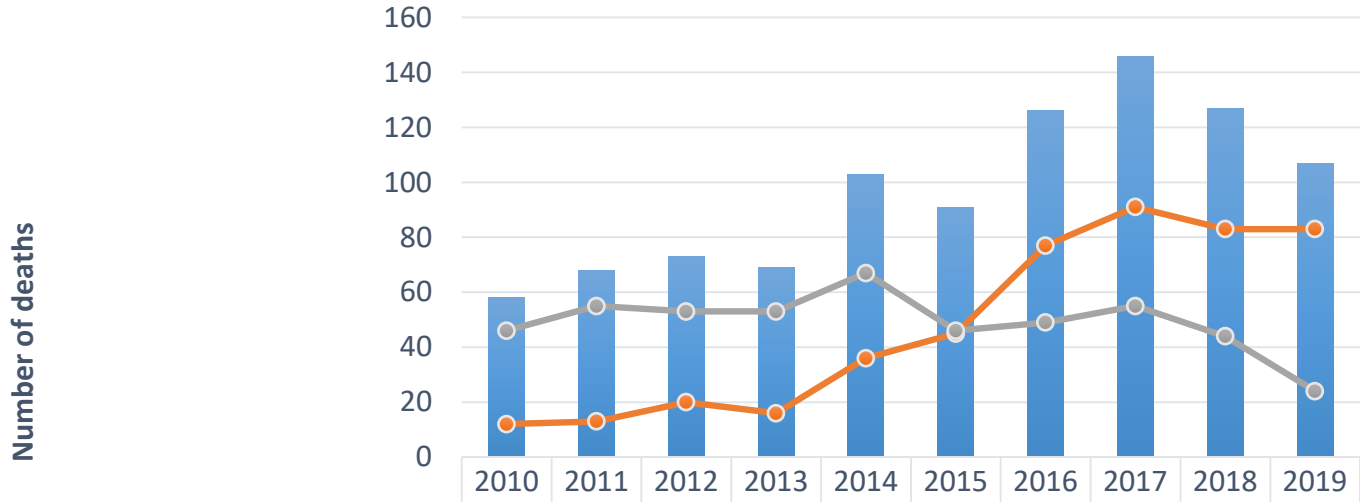
	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019
Total deaths	311	342	311	316	330	351	418	413	379	369
In combination with heroin or fentanyl	78	81	82	85	105	130	213	244	246	261
Not in combination with heroin or fentanyl	233	261	229	231	225	221	205	169	133	108

Figure 46. Number of Cocaine-Related Intoxication Deaths Involving Heroin or Fentanyl, 2010-2019.



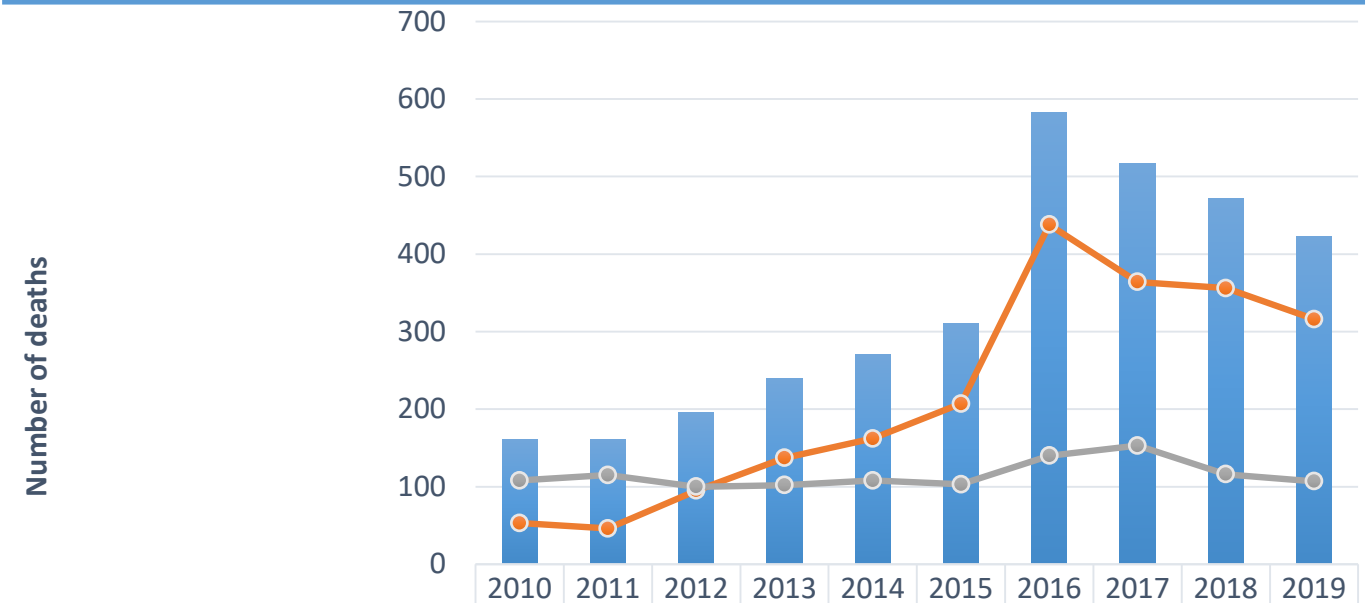
	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019
Total deaths	135	148	153	154	198	221	464	691	891	869
In combination w/heroin or fentanyl	50	64	82	95	143	170	365	554	770	759
Not in combination w/heroin or fentanyl	85	84	71	59	55	51	99	137	121	110

Figure 47. Number of Benzodiazepine-Related Intoxication Deaths Involving Heroin or Fentanyl, 2010-2019.



	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019
Total deaths	58	68	73	69	103	91	126	146	127	107
In combination with heroin or fentanyl	12	13	20	16	36	45	77	91	83	83
Not in combination with heroin or fentanyl	46	55	53	53	67	46	49	55	44	24

Figure 48. Number of Alcohol-Related Intoxication Deaths Involving Heroin or Fentanyl, 2010-2019.

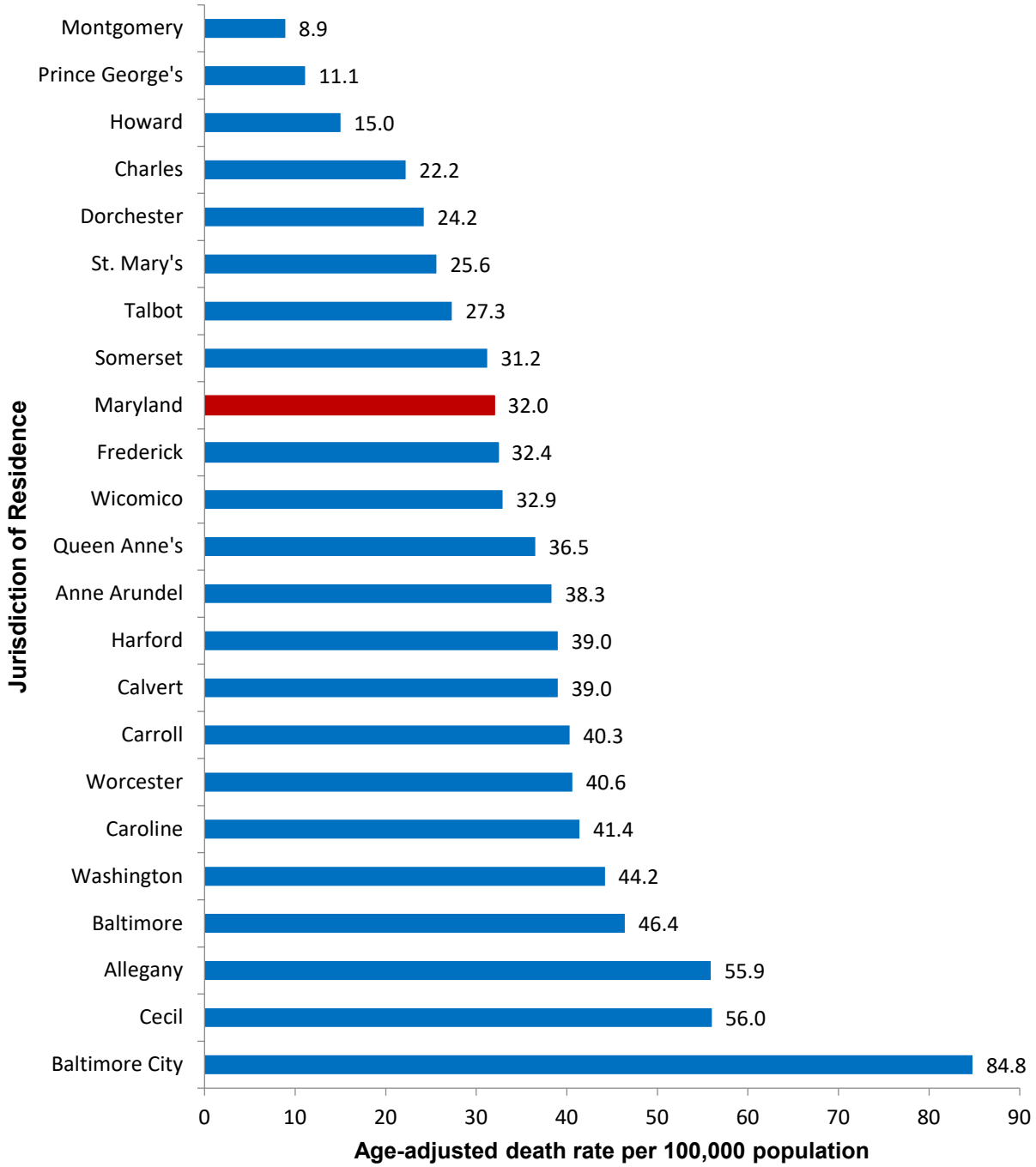


	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019
Total deaths	161	161	195	239	270	310	582	517	472	423
In combination with heroin or fentanyl	53	46	95	137	162	207	438	364	356	316
Not in combination with heroin or fentanyl	108	115	100	102	108	103	140	153	116	107

Figure 49. Combinations of Substances Related to Unintentional Drug- and Alcohol-Related Intoxication Deaths, Maryland, 2019.

		Number	Percent
Fentanyl			
	Total	1927	
	In combination		
	With cocaine	742	38.5
	With heroin	662	34.4
	With alcohol	305	15.8
	With prescription opioids	245	12.7
	With benzodiazepines	77	4.0
Cocaine			
	Total	869	
	In combination		
	With fentanyl	742	85.4
	With heroin	277	31.9
	With alcohol	123	14.2
	With prescription opioids	101	11.6
	With benzodiazepines	35	4.0
Heroin			
	Total	726	
	In combination		
	With fentanyl	662	91.2
	With cocaine	277	38.2
	With prescription opioids	119	16.4
	With alcohol	98	13.5
	With benzodiazepines	36	5.0
Prescription opioids			
	Total	369	
	In combination		
	With fentanyl	245	66.4
	With heroin	119	32.2
	With cocaine	101	27.4
	With benzodiazepines	49	13.3
	With alcohol	51	13.8
Alcohol			
	Total	423	
	In combination		
	With fentanyl	305	72.1
	With cocaine	123	29.1
	With heroin	98	23.2
	With prescription opioids	51	12.1
	With benzodiazepines	9	2.1
Benzodiazepines			
	Total	107	
	In combination		
	With fentanyl	77	72.0
	With prescription opioids	49	45.8
	With heroin	36	33.6
	With cocaine	35	32.7
	With alcohol	9	8.4

Figure 50. Age-Adjusted Mortality Rates[1,2] for Total Unintentional Intoxication Deaths by Place of Residence,[3] Maryland, 2016-2018.



[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 show for jurisdictions with 20 or more intoxication deaths over the five-year period.
[3]Rates are based on place of residence, not place of occurrence.

TABLES

TABLE 1. TOTAL NUMBER OF DRUG AND ALCOHOL-RELATED INTOXICATION DEATHS BY PLACE OF OCCURRENCE, 2010-2019.[1,2]

REGION AND POLITICAL SUBDIVISION	TOTAL INTOXICATION DEATHS										
	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	TOTAL
MARYLAND	649	671	799	858	1,041	1,259	2,089	2,282	2,406	2,379	14,433
NORTHWEST AREA	58	65	67	86	96	131	214	183	211	189	1,300
GARRETT	3	2	0	6	2	5	1	8	3	9	39
ALLEGANY	15	12	14	15	12	22	59	38	39	28	254
WASHINGTON	20	21	27	28	40	64	66	59	91	88	504
FREDERICK	20	30	26	37	42	40	88	78	78	64	503
BALTIMORE METRO AREA	411	420	519	557	678	841	1,402	1,549	1,731	1,652	9,760
BALTIMORE CITY	172	167	225	246	305	393	694	761	888	914	4,765
BALTIMORE COUNTY	115	107	119	144	170	220	336	367	388	350	2,316
ANNE ARUNDEL	56	79	83	78	101	112	195	214	241	208	1,367
CARROLL	15	8	29	24	38	40	47	55	72	56	384
HOWARD	10	21	24	29	21	26	46	51	41	37	306
HARFORD	43	38	39	36	43	50	84	101	101	87	622
NATIONAL CAPITAL AREA	81	86	104	111	128	140	231	283	216	251	1,631
MONTGOMERY	38	44	48	52	65	70	102	116	89	105	729
PRINCE GEORGE'S	43	42	56	59	63	70	129	167	127	146	902
SOUTHERN AREA	31	31	37	25	47	59	88	103	86	95	602
CALVERT	6	12	12	6	17	20	28	32	28	31	192
CHARLES	13	11	13	9	21	22	45	37	27	31	229
ST MARY'S	12	8	12	10	9	17	15	34	31	33	181
EASTERN SHORE AREA	68	69	72	79	92	88	154	164	162	192	1,140
CECIL	24	28	25	26	29	32	30	59	59	62	374
KENT	5	2	0	4	6	3	6	5	2	10	43
QUEEN ANNE'S	4	5	2	8	10	4	8	8	17	13	79
CAROLINE	2	11	4	2	7	3	10	11	7	12	69
TALBOT	3	1	5	7	4	5	10	11	10	14	70
DORCHESTER	6	2	5	5	0	1	6	12	7	11	55
WICOMICO	13	11	21	17	20	18	48	35	36	41	260
SOMERSET	1	3	3	4	3	6	8	4	8	10	50
WORCESTER	10	6	7	6	13	16	28	19	16	19	140

[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 OPIOID-RELATED INTOXICATION DEATHS BY PLACE OF OCCURRENCE, 2010-2019.[1,2]

REGION AND POLITICAL SUBDIVISION	OPIOID-RELATED DEATHS										
	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	TOTAL
MARYLAND	504	529	648	729	888	1,089	1,856	2,009	2,143	2,106	12,501
NORTHWEST AREA	37	53	53	74	81	118	198	157	189	168	1,128
GARRETT	1	1	0	4	2	4	0	4	3	6	25
ALLEGANY	11	8	10	11	11	20	55	36	33	23	218
WASHINGTON	13	16	20	26	34	57	63	51	83	80	443
FREDERICK	12	28	23	33	34	37	80	66	70	59	442
BALTIMORE METRO AREA	337	341	437	485	591	742	1,262	1,404	1,578	1,508	8,685
BALTIMORE CITY	139	142	189	212	275	354	628	692	814	851	4,296
BALTIMORE COUNTY	95	93	104	125	146	195	305	323	352	316	2,054
ANNE ARUNDEL	44	53	68	67	85	89	169	198	218	183	1,174
CARROLL	12	7	27	21	29	34	44	51	68	51	344
HOWARD	9	18	17	26	18	25	40	47	36	34	270
HARFORD	38	28	32	34	38	45	76	93	90	73	547
NATIONAL CAPITAL AREA	52	52	66	78	101	104	190	215	158	188	1,204
MONTGOMERY	25	28	36	40	53	59	84	91	64	86	566
PRINCE GEORGE'S	27	24	30	38	48	45	106	124	94	102	638
SOUTHERN AREA	23	26	32	24	40	48	74	94	71	82	514
CALVERT	4	10	11	5	16	19	25	27	25	25	167
CHARLES	9	10	12	9	16	17	36	34	19	26	188
ST MARY'S	10	6	9	10	8	12	13	33	27	31	159
EASTERN SHORE AREA	55	57	60	68	75	77	132	139	147	160	970
CECIL	21	24	22	22	25	26	28	57	58	53	336
KENT	3	1	0	4	3	3	4	4	2	10	34
QUEEN ANNE'S	4	4	2	7	9	4	6	6	16	11	69
CAROLINE	2	8	4	2	7	3	9	8	7	11	61
TALBOT	2	1	3	6	4	5	10	8	10	13	62
DORCHESTER	6	2	5	5	0	1	5	10	6	10	50
WICOMICO	10	10	17	14	15	17	44	28	30	29	214
SOMERSET	1	3	2	4	2	4	6	3	8	9	42
WORCESTER	6	4	5	4	10	14	20	15	10	14	102

[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 HEROIN-RELATED INTOXICATION DEATHS BY PLACE OF OCCURRENCE, 2010-2019.[1,2]

REGION AND POLITICAL SUBDIVISION	HEROIN-RELATED DEATHS										
	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	TOTAL
MARYLAND	238	247	392	464	578	748	1,212	1,078	830	726	6,513
NORTHWEST AREA	15	23	27	40	53	80	119	72	68	58	555
GARRETT	0	1	0	2	1	3	0	1	1	1	10
ALLEGANY	3	3	6	3	5	13	34	14	15	9	105
WASHINGTON	6	8	11	14	21	38	39	22	29	25	213
FREDERICK	6	11	10	21	26	26	46	35	23	23	227
BALTIMORE METRO AREA	171	165	272	319	379	519	858	772	572	505	4,532
BALTIMORE CITY	93	76	131	150	192	260	454	380	286	279	2,301
BALTIMORE COUNTY	42	38	64	76	86	134	208	170	119	111	1,048
ANNE ARUNDEL	18	24	38	41	53	60	105	118	75	63	595
CARROLL	3	2	13	14	16	22	25	28	34	18	175
HOWARD	3	10	12	16	9	16	24	23	15	10	138
HARFORD	12	15	14	22	23	27	42	53	43	24	275
NATIONAL CAPITAL AREA	26	23	42	53	65	69	115	104	78	81	656
MONTGOMERY	12	11	22	28	33	37	48	52	34	39	316
PRINCE GEORGE'S	14	12	20	25	32	32	67	52	44	42	340
SOUTHERN AREA	11	15	18	13	28	29	48	45	31	30	268
CALVERT	1	5	6	2	13	15	17	17	8	10	94
CHARLES	6	6	5	5	10	8	22	16	11	12	101
ST MARY'S	4	4	7	6	5	6	9	12	12	8	73
EASTERN SHORE AREA	15	21	33	39	53	51	72	85	81	52	502
CECIL	4	8	11	11	15	16	19	37	40	16	177
KENT	0	1	0	0	2	1	1	1	0	3	9
QUEEN ANNE'S	2	2	2	5	7	1	4	5	8	3	39
CAROLINE	0	3	3	2	6	2	6	4	3	5	34
TALBOT	0	1	2	2	4	3	4	3	4	4	27
DORCHESTER	2	1	3	3	0	1	3	4	3	5	25
WICOMICO	5	3	9	11	12	13	21	20	12	9	115
SOMERSET	0	1	2	1	1	3	3	2	5	1	19
WORCESTER	2	1	1	4	6	11	11	9	6	6	57

[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 OPIOID-RELATED INTOXICATION DEATHS BY PLACE OF OCCURRENCE, 2010-2019.[1,2]

REGION AND POLITICAL SUBDIVISION	PRESCRIPTION OPIOID-RELATED DEATHS										
	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	TOTAL
MARYLAND	311	342	311	316	330	351	418	413	379	369	3,540
NORTHWEST AREA	22	38	30	35	33	39	56	35	34	33	355
GARRETT	1	1	0	2	2	1	0	1	1	1	10
ALLEGANY	8	5	5	8	6	6	15	9	5	5	72
WASHINGTON	7	11	9	11	16	20	23	8	19	17	141
FREDERICK	6	21	16	14	9	12	18	17	9	10	132
BALTIMORE METRO AREA	197	212	196	207	217	233	265	298	272	258	2,355
BALTIMORE CITY	61	82	74	86	84	105	113	123	128	134	990
BALTIMORE COUNTY	60	68	47	54	59	62	67	87	71	60	635
ANNE ARUNDEL	31	33	33	28	32	27	48	43	36	27	338
CARROLL	9	5	17	12	15	14	15	13	16	13	129
HOWARD	6	9	5	13	7	9	6	13	2	9	79
HARFORD	30	15	20	14	20	16	16	19	19	15	184
NATIONAL CAPITAL AREA	31	35	29	30	35	36	42	33	27	28	326
MONTGOMERY	14	20	18	16	19	23	26	19	16	15	186
PRINCE GEORGE'S	17	15	11	14	16	13	16	14	11	13	140
SOUTHERN AREA	16	15	18	12	19	19	25	26	22	23	195
CALVERT	3	7	6	3	7	6	11	5	6	5	59
CHARLES	4	5	7	5	9	8	10	11	8	7	74
ST MARY'S	9	3	5	4	3	5	4	10	8	11	62
EASTERN SHORE AREA	45	42	38	32	26	24	30	21	24	27	309
CECIL	20	20	18	12	12	10	8	8	5	6	119
KENT	3	1	0	4	2	2	0	2	0	0	14
QUEEN ANNE'S	2	2	0	3	3	3	2	2	4	0	21
CAROLINE	2	5	1	0	1	0	4	1	1	3	18
TALBOT	2	0	1	4	0	2	3	4	2	5	23
DORCHESTER	4	1	3	3	0	0	2	2	2	3	20
WICOMICO	7	7	9	4	3	5	7	0	5	5	52
SOMERSET	1	3	2	2	1	1	0	1	2	2	15
WORCESTER	4	3	4	0	4	1	4	1	3	3	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 OXYCODONE-RELATED INTOXICATION DEATHS BY PLACE OF OCCURRENCE, 2010-2019.[1,2]

REGION AND POLITICAL SUBDIVISION	OXYCODONE-RELATED DEATHS										
	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	TOTAL
MARYLAND	113	118	99	86	120	104	157	122	103	124	1,146
NORTHWEST AREA	7	11	13	12	10	11	25	16	13	18	136
GARRETT	0	0	0	1	0	0	0	0	0	1	2
ALLEGANY	2	0	2	3	3	2	7	3	2	2	26
WASHINGTON	2	5	2	5	5	6	11	2	7	9	54
FREDERICK	3	6	9	3	2	3	7	11	4	6	54
BALTIMORE METRO AREA	59	63	51	44	69	56	77	73	67	64	623
BALTIMORE CITY	5	15	15	11	20	18	22	23	21	22	172
BALTIMORE COUNTY	21	22	12	14	22	16	22	21	20	18	188
ANNE ARUNDEL	9	14	11	9	10	12	23	15	15	11	129
CARROLL	6	3	6	3	4	3	3	4	7	4	43
HOWARD	4	2	2	4	4	4	2	5	0	3	30
HARFORD	14	7	5	3	9	3	5	5	4	6	61
NATIONAL CAPITAL AREA	15	14	11	13	17	16	25	13	7	15	146
MONTGOMERY	7	9	8	7	11	8	16	8	4	6	84
PRINCE GEORGE'S	8	5	3	6	6	8	9	5	3	9	62
SOUTHERN AREA	7	10	10	6	11	13	13	14	10	16	110
CALVERT	2	4	5	3	3	3	7	3	1	4	35
CHARLES	2	4	3	1	5	8	4	7	5	4	43
ST MARY'S	3	2	2	2	3	2	2	4	4	8	32
EASTERN SHORE AREA	25	20	14	11	13	8	17	6	6	11	131
CECIL	13	9	4	6	6	3	2	2	0	2	47
KENT	2	0	0	1	0	1	0	0	0	0	4
QUEEN ANNE'S	1	1	0	1	1	2	1	0	1	0	8
CAROLINE	1	0	0	0	0	0	3	0	1	2	7
TALBOT	1	0	1	1	0	0	2	2	0	2	9
DORCHESTER	2	1	1	0	0	0	2	1	1	1	9
WICOMICO	2	5	5	1	2	1	5	0	2	3	26
SOMERSET	1	2	1	1	1	0	0	0	1	1	8
WORCESTER	2	2	2	0	3	1	2	1	0	0	13

[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 METHADONE-RELATED INTOXICATION DEATHS BY PLACE OF OCCURRENCE, 2010-2019.[1,2]

REGION AND POLITICAL SUBDIVISION	METHADONE-RELATED DEATHS										
	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	TOTAL
MARYLAND	173	172	170	138	152	183	197	246	196	201	1,828
NORTHWEST AREA	8	14	14	8	20	14	12	11	14	10	125
GARRETT	1	0	0	1	1	0	0	0	0	0	3
ALLEGANY	3	4	1	1	3	2	4	3	2	2	25
WASHINGTON	3	5	4	3	10	6	5	4	10	6	56
FREDERICK	1	5	9	3	6	6	3	4	2	2	41
BALTIMORE METRO AREA	128	128	122	110	112	145	158	198	155	166	1,422
BALTIMORE CITY	53	65	54	57	54	78	82	87	85	98	713
BALTIMORE COUNTY	37	32	28	29	31	34	36	63	37	36	363
ANNE ARUNDEL	17	17	15	6	14	9	21	23	12	12	146
CARROLL	2	2	12	7	5	9	9	6	6	8	66
HOWARD	2	5	1	5	2	5	2	8	1	6	37
HARFORD	17	7	12	6	6	10	8	11	14	6	97
NATIONAL CAPITAL AREA	12	13	13	7	6	9	13	14	7	6	100
MONTGOMERY	5	6	7	3	5	6	7	6	4	4	53
PRINCE GEORGE'S	7	7	6	4	1	3	6	8	3	2	47
SOUTHERN AREA	7	3	5	2	7	6	6	9	7	6	58
CALVERT	1	2	2	0	2	3	2	3	4	0	19
CHARLES	1	0	1	1	4	2	2	3	2	2	18
ST MARY'S	5	1	2	1	1	1	2	3	1	4	21
EASTERN SHORE AREA	18	14	16	11	7	9	8	14	13	13	123
CECIL	9	9	10	4	4	3	3	4	5	4	55
KENT	2	1	0	2	1	1	0	2	0	0	9
QUEEN ANNE'S	1	1	0	1	0	1	1	2	3	0	10
CAROLINE	1	1	1	0	1	0	2	1	0	1	8
TALBOT	1	0	1	2	0	1	1	2	1	2	11
DORCHESTER	0	0	1	0	0	0	0	2	1	2	6
WICOMICO	3	1	1	2	0	2	0	0	1	2	12
SOMERSET	0	1	0	0	0	1	0	1	0	1	4
WORCESTER	1	0	2	0	1	0	1	0	2	1	8

[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 FENTANYL-RELATED INTOXICATION DEATHS BY PLACE OF OCCURRENCE, 2010-2019.[1,2]

REGION AND POLITICAL SUBDIVISION	FENTANYL-RELATED DEATHS										
	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	TOTAL
MARYLAND	39	26	29	58	186	340	1,119	1,594	1,888	1,927	7,206
NORTHWEST AREA	6	6	3	7	8	32	109	119	166	146	602
GARRETT	0	1	0	0	0	2	0	2	2	5	12
ALLEGANY	2	1	1	1	1	5	29	29	29	19	117
WASHINGTON	2	1	1	4	1	14	31	39	70	70	233
FREDERICK	2	3	1	2	6	11	49	49	65	52	240
BALTIMORE METRO AREA	20	10	16	35	142	248	792	1,118	1,415	1,395	5,191
BALTIMORE CITY	4	2	4	12	72	120	419	573	758	810	2,774
BALTIMORE COUNTY	6	4	5	11	36	65	182	244	308	285	1,146
ANNE ARUNDEL	5	2	3	6	23	29	98	152	184	164	666
CARROLL	2	0	1	2	4	11	20	40	55	47	182
HOWARD	0	0	2	3	5	7	27	36	34	28	142
HARFORD	3	2	1	1	2	16	46	73	76	61	281
NATIONAL CAPITAL AREA	3	0	3	6	15	32	101	175	115	167	617
MONTGOMERY	1	0	2	0	8	17	43	72	40	76	259
PRINCE GEORGE'S	2	0	1	6	7	15	58	103	75	91	358
SOUTHERN AREA	1	3	1	4	9	9	32	74	60	74	267
CALVERT	0	1	0	0	5	2	11	22	23	23	87
CHARLES	0	1	1	3	1	4	17	26	14	24	91
ST MARY'S	1	1	0	1	3	3	4	26	23	27	89
EASTERN SHORE AREA	9	7	6	6	12	19	85	108	132	145	529
CECIL	2	2	0	0	1	7	9	44	52	49	166
KENT	0	0	0	0	1	0	3	3	2	10	19
QUEEN ANNE'S	0	0	0	1	1	0	4	5	16	10	37
CAROLINE	1	4	0	0	0	1	3	7	6	9	31
TALBOT	1	0	1	0	2	2	7	3	10	11	37
DORCHESTER	2	0	0	2	0	1	3	7	4	9	28
WICOMICO	1	1	4	1	7	1	34	24	24	26	123
SOMERSET	1	0	0	2	0	1	6	3	8	9	30
WORCESTER	1	0	1	0	0	6	16	12	10	12	58

[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 COCAINE-RELATED INTOXICATION DEATHS BY PLACE OF OCCURRENCE, 2010-2019.[1,2]

REGION AND POLITICAL SUBDIVISION	COCAINE-RELATED DEATHS										
	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	TOTAL
MARYLAND	135	148	153	154	198	221	464	691	891	869	3,924
NORTHWEST AREA	8	10	9	13	16	20	27	43	67	51	264
GARRETT	1	0	0	0	0	1	0	1	0	3	6
ALLEGANY	1	0	2	2	2	5	9	13	12	6	52
WASHINGTON	3	3	5	6	6	10	9	10	31	24	107
FREDERICK	3	7	2	5	8	4	9	19	24	18	99
BALTIMORE METRO AREA	93	97	108	102	138	167	348	522	693	647	2,915
BALTIMORE CITY	45	48	59	47	82	93	202	285	388	380	1,629
BALTIMORE COUNTY	23	19	17	27	28	38	80	123	132	138	625
ANNE ARUNDEL	13	18	13	12	19	19	31	66	91	72	354
CARROLL	6	3	7	7	2	6	8	14	23	24	100
HOWARD	1	5	7	5	3	6	7	16	19	9	78
HARFORD	5	4	5	4	4	5	20	18	40	24	129
NATIONAL CAPITAL AREA	16	24	22	25	29	16	44	62	49	74	361
MONTGOMERY	4	12	12	13	10	5	11	17	18	29	131
PRINCE GEORGE'S	12	12	10	12	19	11	33	45	31	45	230
SOUTHERN AREA	7	3	6	1	3	6	8	19	33	39	125
CALVERT	3	2	3	0	2	0	2	3	3	9	27
CHARLES	2	1	1	0	0	2	4	10	13	12	45
ST MARY'S	2	0	2	1	1	4	2	6	17	18	53
EASTERN SHORE AREA	11	14	8	13	12	12	37	45	49	58	259
CECIL	3	7	2	5	4	3	3	15	14	12	68
KENT	1	0	0	0	1	1	0	1	1	4	9
QUEEN ANNE'S	0	1	0	0	0	0	1	2	5	6	15
CAROLINE	0	1	1	0	1	0	5	2	1	2	13
TALBOT	0	0	0	3	0	1	2	2	3	6	17
DORCHESTER	1	1	1	1	0	0	1	7	2	5	19
WICOMICO	3	3	4	3	4	7	13	7	13	21	78
SOMERSET	1	0	0	0	0	0	4	2	6	2	15
WORCESTER	2	1	0	1	2	0	8	7	4	0	25

[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 BENZODIAZEPINE-RELATED INTOXICATION DEATHS BY PLACE OF OCCURRENCE, 2010-2019.[1,2]

REGION AND POLITICAL SUBDIVISION	BENZODIAZEPINE-RELATED DEATHS										
	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	TOTAL
MARYLAND	58	68	73	69	103	91	126	146	127	107	968
NORTHWEST AREA	6	9	5	6	13	8	21	19	10	9	106
GARRETT	0	0	0	1	0	1	0	2	0	1	5
ALLEGANY	3	1	0	1	3	1	6	5	1	1	22
WASHINGTON	2	4	3	2	5	3	6	2	4	2	33
FREDERICK	1	4	2	2	5	3	9	10	5	5	46
BALTIMORE METRO AREA	43	39	49	44	66	56	78	98	90	64	627
BALTIMORE CITY	12	9	15	14	22	15	24	28	28	27	194
BALTIMORE COUNTY	18	9	12	16	24	18	29	25	32	17	200
ANNE ARUNDEL	6	14	11	3	9	11	9	27	16	11	117
CARROLL	3	0	1	3	3	4	1	4	4	3	26
HOWARD	2	4	2	5	0	6	8	5	1	1	34
HARFORD	2	3	8	3	8	2	7	9	9	5	56
NATIONAL CAPITAL AREA	4	9	6	7	12	8	12	15	15	17	105
MONTGOMERY	4	6	4	4	10	7	7	8	9	10	69
PRINCE GEORGE'S	0	3	2	3	2	1	5	7	6	7	36
SOUTHERN AREA	2	2	4	4	6	7	7	8	4	7	51
CALVERT	1	1	1	1	3	1	1	2	2	0	13
CHARLES	0	0	2	1	2	4	4	4	1	3	21
ST MARY'S	1	1	1	2	1	2	2	2	1	4	17
EASTERN SHORE AREA	3	9	9	8	6	12	8	6	8	10	79
CECIL	2	6	7	3	3	5	2	1	2	4	35
KENT	0	0	0	0	0	0	1	2	0	0	3
QUEEN ANNE'S	1	1	0	0	0	1	1	0	3	0	7
CAROLINE	0	0	0	0	0	0	0	1	0	1	2
TALBOT	0	0	0	3	0	1	1	1	0	1	7
DORCHESTER	0	0	1	1	0	0	1	0	0	1	4
WICOMICO	0	1	0	0	1	2	1	0	1	1	7
SOMERSET	0	0	1	1	0	0	0	0	0	0	2
WORCESTER	0	1	0	0	2	3	1	1	2	2	12

[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 PHENCYCLIDINE-RELATED INTOXICATION DEATHS BY PLACE OF OCCURRENCE, 2010-2019.[1,2]

REGION AND POLITICAL SUBDIVISION	PHENCYCLIDINE-RELATED DEATHS										
	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	TOTAL
MARYLAND	5	10	16	8	15	14	32	28	37	58	223
NORTHWEST AREA	0	0	1	0	1	2	4	1	4	3	16
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	0	0	1	0	1	0	0	2
FREDERICK	0	0	1	0	1	1	4	0	4	3	14
BALTIMORE METRO AREA	1	4	7	4	3	2	11	8	9	23	72
BALTIMORE CITY	0	1	2	1	1	1	2	2	3	8	21
BALTIMORE COUNTY	0	0	1	1	0	0	2	1	0	2	7
ANNE ARUNDEL	1	3	2	1	1	1	6	5	5	11	36
CARROLL	0	0	1	0	0	0	0	0	0	0	1
HOWARD	0	0	1	1	1	0	1	0	1	2	7
HARFORD	0	0	0	0	0	0	0	0	0	0	0
NATIONAL CAPITAL AREA	3	4	6	3	10	8	13	16	20	25	108
MONTGOMERY	1	2	1	0	1	1	2	2	4	2	16
PRINCE GEORGE'S	2	2	5	3	9	7	11	14	16	23	92
SOUTHERN AREA	0	1	2	1	1	2	3	2	4	6	22
CALVERT	0	1	0	0	0	1	0	2	1	2	7
CHARLES	0	0	2	1	1	0	3	0	3	4	14
ST MARY'S	0	0	0	0	0	1	0	0	0	0	1
EASTERN SHORE AREA	1	1	0	0	0	0	1	1	0	1	5
CECIL	0	0	0	0	0	0	0	0	0	1	1
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	0	0	0
DORCHESTER	0	1	0	0	0	0	0	0	0	0	1
WICOMICO	0	0	0	0	0	0	1	1	0	0	2
SOMERSET	0	0	0	0	0	0	0	0	0	0	0
WORCESTER	1	0	0	0	0	0	0	0	0	0	1

[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 METHAMPHETAMINE-RELATED INTOXICATION DEATHS BY PLACE OF OCCURRENCE, 2010-2019.[1,2]

REGION AND POLITICAL SUBDIVISION	METHAMPHETAMINE-RELATED DEATHS										
	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	TOTAL
MARYLAND	0	0	2	6	3	10	18	28	32	41	140
NORTHWEST AREA	0	0	1	1	0	1	2	5	6	11	27
GARRETT	0	0	0	0	0	0	0	2	1	1	4
ALLEGANY	0	0	0	1	0	0	1	0	2	2	6
WASHINGTON	0	0	0	0	0	1	1	1	3	7	13
FREDERICK	0	0	1	0	0	0	0	2	0	1	4
BALTIMORE METRO AREA	0	0	1	3	1	4	12	12	13	13	59
BALTIMORE CITY	0	0	1	2	1	1	8	5	5	7	30
BALTIMORE COUNTY	0	0	0	1	0	0	1	1	4	4	11
ANNE ARUNDEL	0	0	0	0	0	0	0	2	2	2	6
CARROLL	0	0	0	0	0	1	0	1	1	0	3
HOWARD	0	0	0	0	0	2	2	1	1	0	6
HARFORD	0	0	0	0	0	0	1	2	0	0	3
NATIONAL CAPITAL AREA	0	0	0	2	0	4	3	4	4	6	23
MONTGOMERY	0	0	0	0	0	0	1	2	1	3	7
PRINCE GEORGE'S	0	0	0	2	0	4	2	2	3	3	16
SOUTHERN AREA	0	0	0	0	0	1	1	3	1	1	7
CALVERT	0	0	0	0	0	0	0	1	1	1	3
CHARLES	0	0	0	0	0	1	1	2	0	0	4
ST MARY'S	0	0	0	0	0	0	0	0	0	0	0
EASTERN SHORE AREA	0	0	0	0	2	0	0	4	8	10	24
CECIL	0	0	0	0	0	0	0	4	6	8	18
KENT	0	0	0	0	0	0	0	0	0	1	1
QUEEN ANNE'S	0	0	0	0	0	0	0	0	0	0	0
CAROLINE	0	0	0	0	1	0	0	0	0	1	2
TALBOT	0	0	0	0	0	0	0	0	0	0	0
DORCHESTER	0	0	0	0	0	0	0	0	0	0	0
WICOMICO	0	0	0	0	1	0	0	0	1	0	2
SOMERSET	0	0	0	0	0	0	0	0	0	0	0
WORCESTER	0	0	0	0	0	0	0	0	1	0	1

[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 ALCOHOL-RELATED INTOXICATION DEATHS BY PLACE OF OCCURRENCE, 2010-2019.[1,2]

REGION AND POLITICAL SUBDIVISION	ALCOHOL-RELATED DEATHS										
	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	TOTAL
MARYLAND	161	161	195	239	270	310	582	517	472	423	3,330
NORTHWEST AREA	15	16	12	21	27	30	47	31	34	37	270
GARRETT	1	1	0	2	1	1	1	2	1	2	12
ALLEGANY	4	2	4	2	3	6	14	4	7	3	49
WASHINGTON	5	4	3	6	11	10	17	14	15	20	105
FREDERICK	5	9	5	11	12	13	15	11	11	12	104
BALTIMORE METRO AREA	94	99	126	154	166	215	403	334	339	273	2,203
BALTIMORE CITY	39	44	71	86	86	114	222	198	187	165	1,212
BALTIMORE COUNTY	29	22	24	32	39	52	81	71	80	53	483
ANNE ARUNDEL	10	21	15	22	18	27	56	37	44	34	284
CARROLL	4	4	4	4	9	6	12	9	10	6	68
HOWARD	3	4	6	6	6	5	14	7	5	4	60
HARFORD	9	4	6	4	8	11	18	12	13	11	96
NATIONAL CAPITAL AREA	27	28	38	35	36	32	67	86	51	58	458
MONTGOMERY	10	16	15	13	18	15	22	35	19	19	182
PRINCE GEORGE'S	17	12	23	22	18	17	45	51	32	39	276
SOUTHERN AREA	6	7	7	7	12	11	22	24	17	18	131
CALVERT	0	2	2	1	4	3	7	4	9	5	37
CHARLES	4	3	2	4	5	4	12	9	3	10	56
ST MARY'S	2	2	3	2	3	4	3	11	5	3	38
EASTERN SHORE AREA	19	11	12	22	29	22	43	42	31	37	268
CECIL	6	3	6	9	5	8	8	12	10	5	72
KENT	1	0	0	1	1	0	1	1	0	1	6
QUEEN ANNE'S	1	3	0	1	7	0	2	4	3	1	22
CAROLINE	0	1	0	1	2	0	5	4	1	2	16
TALBOT	0	0	2	2	0	0	0	5	4	5	18
DORCHESTER	1	0	1	0	0	1	1	2	1	5	12
WICOMICO	4	2	2	6	7	3	12	9	8	12	65
SOMERSET	0	1	1	1	2	2	3	1	0	1	12
WORCESTER	6	1	0	1	5	8	11	4	4	5	45

[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.