OVERDOSE & "DETOX"

Maryland Psychiatric Society
Addictions Update
November 7, 2015

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OPIOID OVERDOSE

Drowsiness, Small pupils, Apathy

↓

Slurred Speech, Inattention to environment

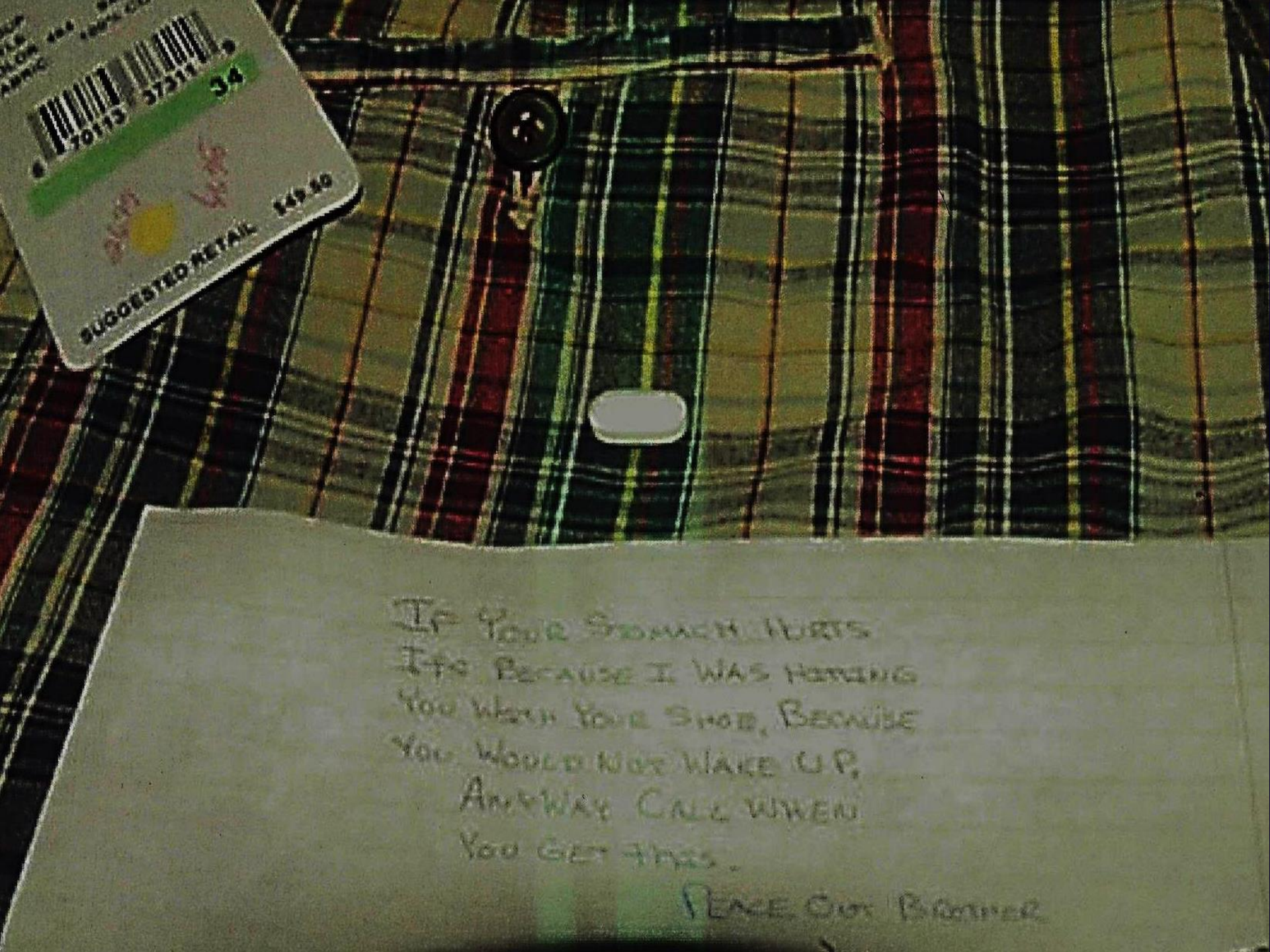
↓

Unconscious, Blue skin, Pinpoint Pupils, Slow(less than 4-6 times/min) or labored breathing,

"Death rattle"

↓

Death


34
SUGGESTED RETAIL
If Your Stomach Hurts
It's Because I Was Hitting
You With Your Shoe, Because
You Would Not Wake U.P.
Anyway Call When
You Get This.
Peace Out Brother

RISK FACTORS FOR OD

- Recent period of abstinence
  - Incarceration
  - Hospitalization (medical, psychiatric)
  - Residential Addiction program
  - Out-patient “Detox”
- Respiratory compromise (sleep apnea, etc)
- Mental health/Substance Use Disorder
- Using alone
- Using in unfamiliar surroundings
- Changes in the “cut”
- Mixing drugs
  - Especially benzodiazepines or alcohol

Figure 5. Nonmedical Use of Pain Relievers and Other Psychotherapeutic Drugs among Current Nonmedical Users of Any Psychotherapeutic Drug Aged 12 or Older: 2014

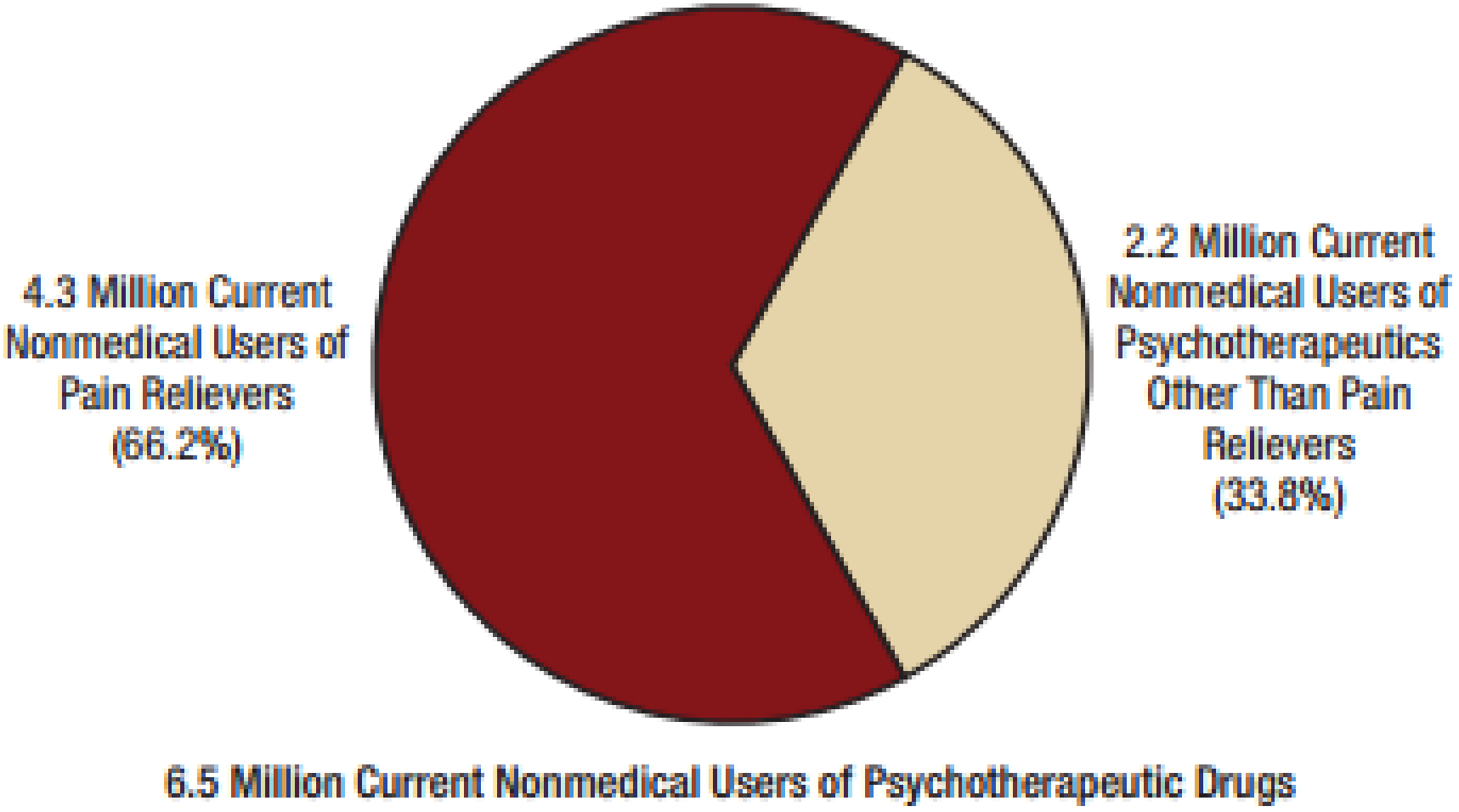


Figure 6. Past Month Nonmedical Use of Pain Relievers among People Aged 12 or Older, by Age Group: Percentages, 2002-2014

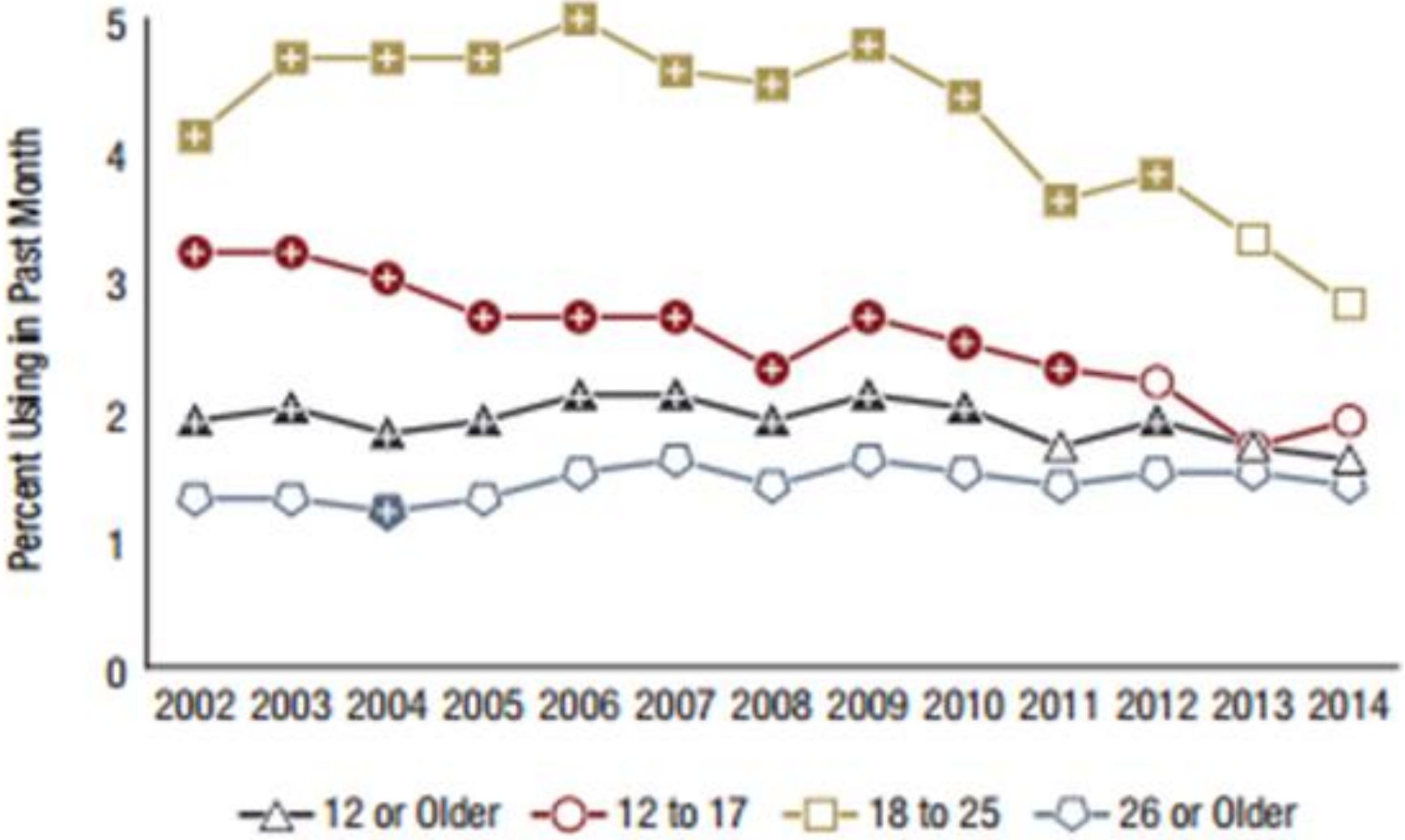
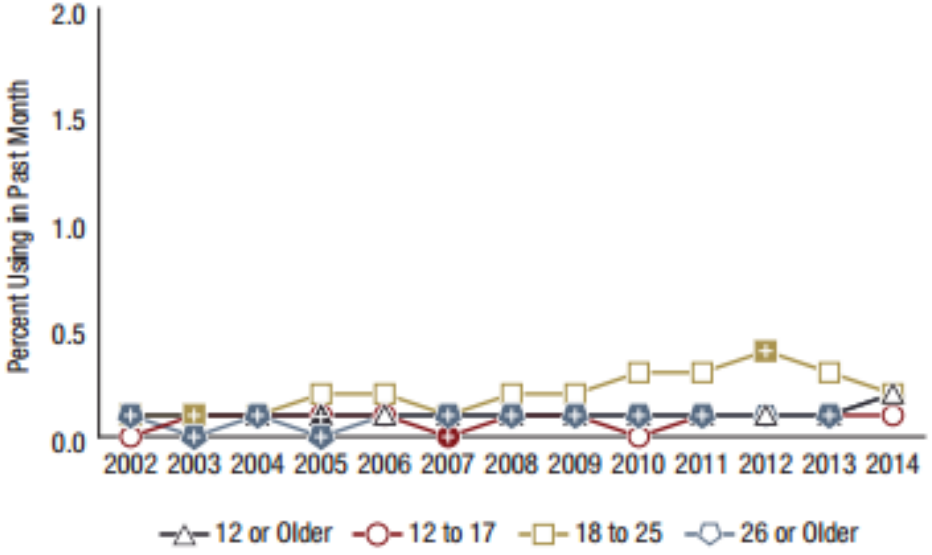


Figure 12. Past Month Heroin Use among People Aged 12 or Older, by Age Group: Percentages, 2002-2014



+ Difference between this estimate and the 2014 estimate is statistically significant at the .05 level.

Figure 13. Past Year Heroin Use among People Aged 12 or Older, by Age Group: Percentages, 2002-2014

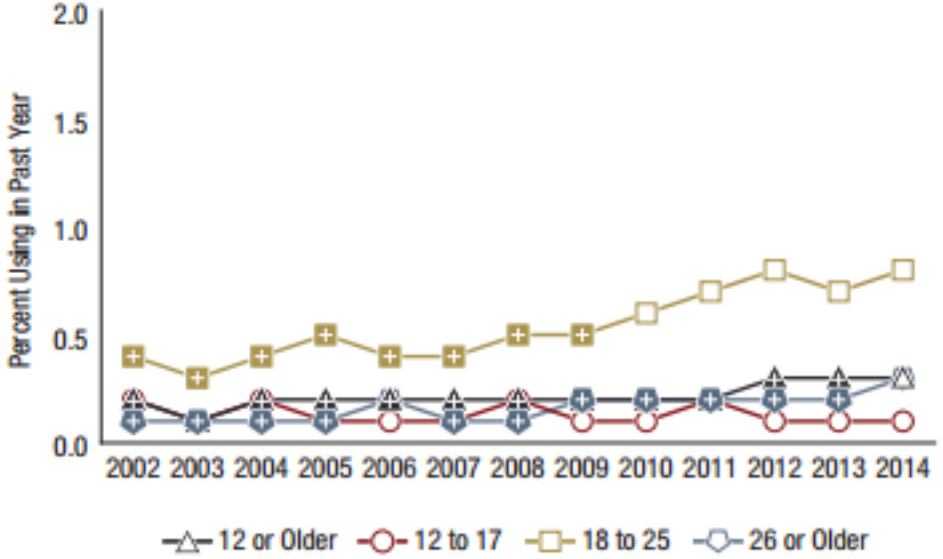
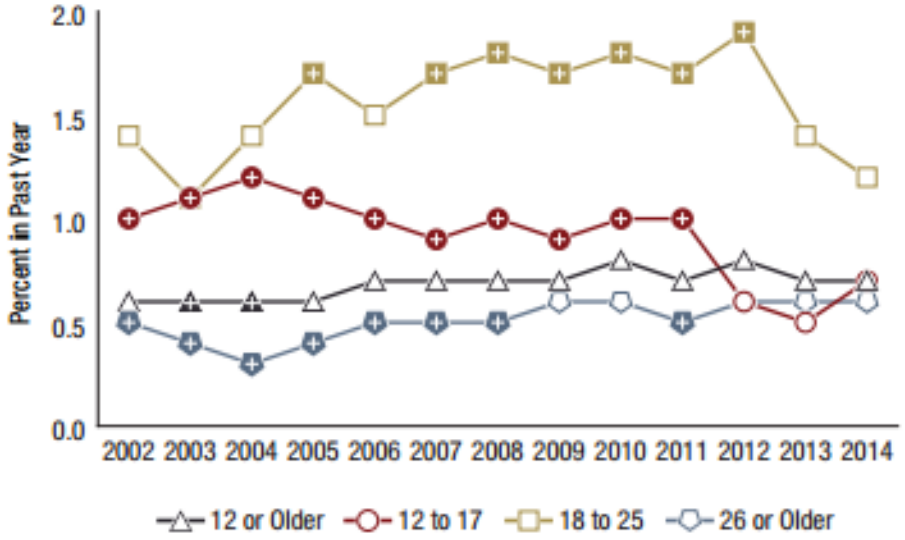
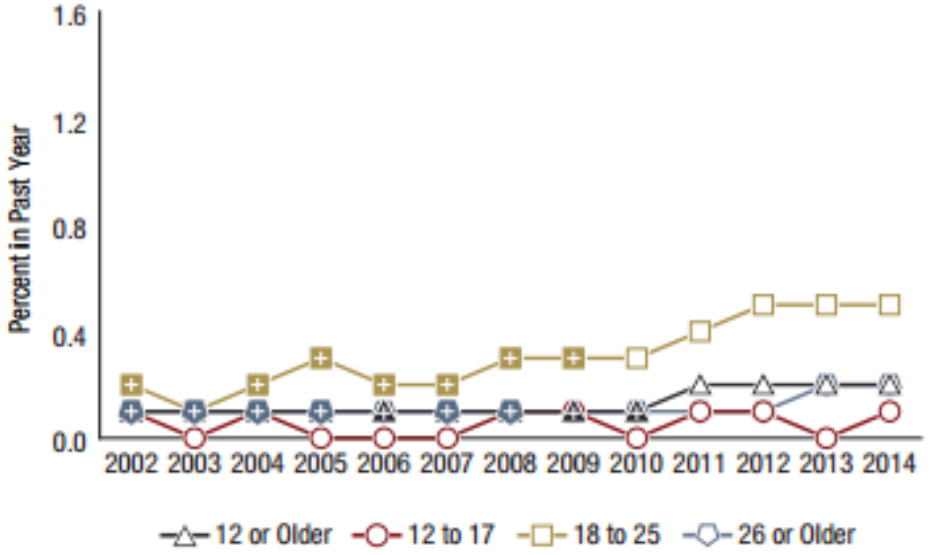


Figure 36. Pain Reliever Use Disorder in the Past Year among People Aged 12 or Older, by Age Group: Percentages, 2002-2014



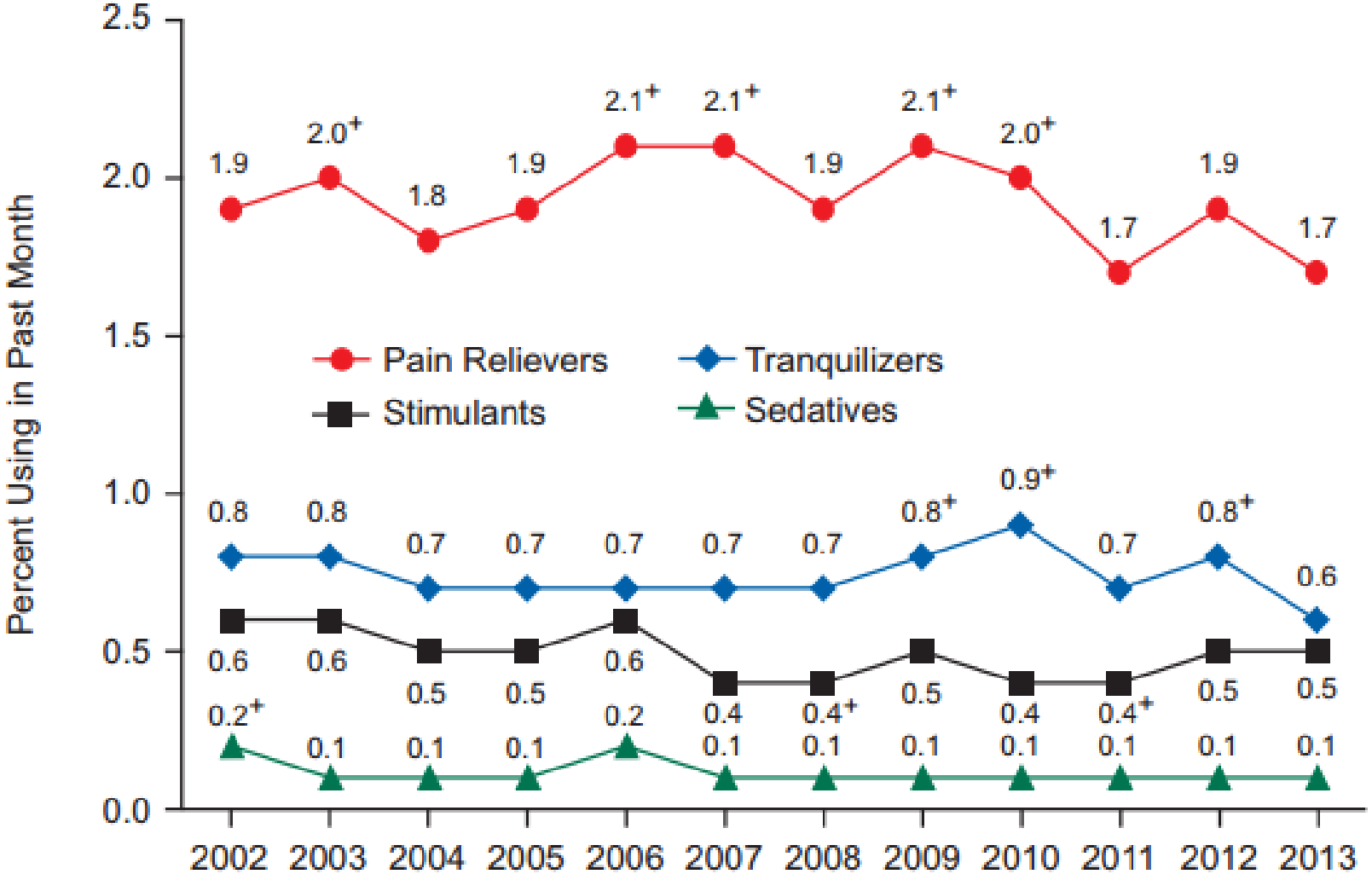
+ Difference between this estimate and the 2014 estimate is statistically significant at the .05 level.

Figure 38. Heroin Use Disorder in the Past Year among People Aged 12 or Older, by Age Group: Percentages, 2002-2014



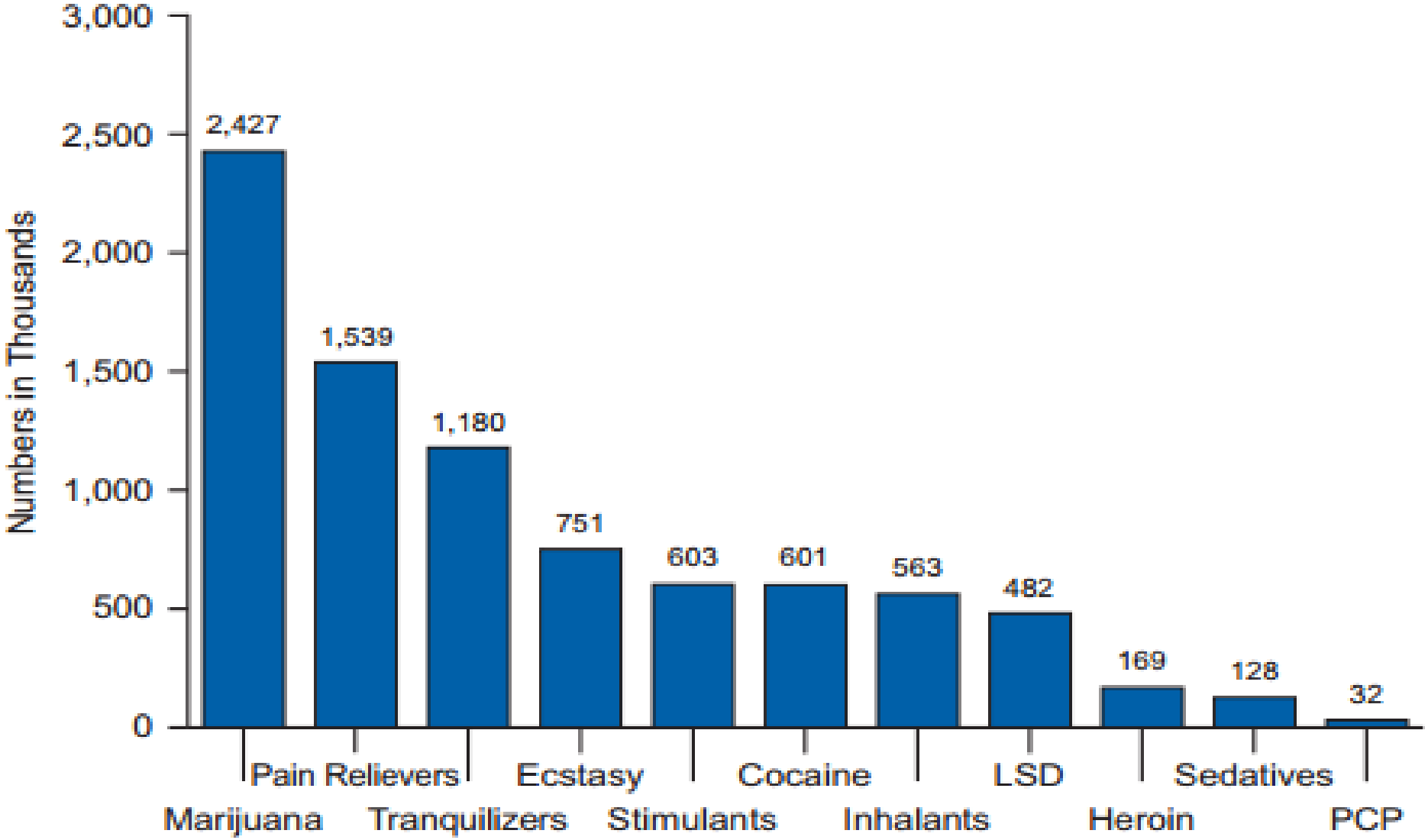
+ Difference between this estimate and the 2014 estimate is statistically significant at the .05 level.

Figure 2.3 Past Month Nonmedical Use of Types of Psychotherapeutic Drugs among Persons Aged 12 or Older: 2002-2013

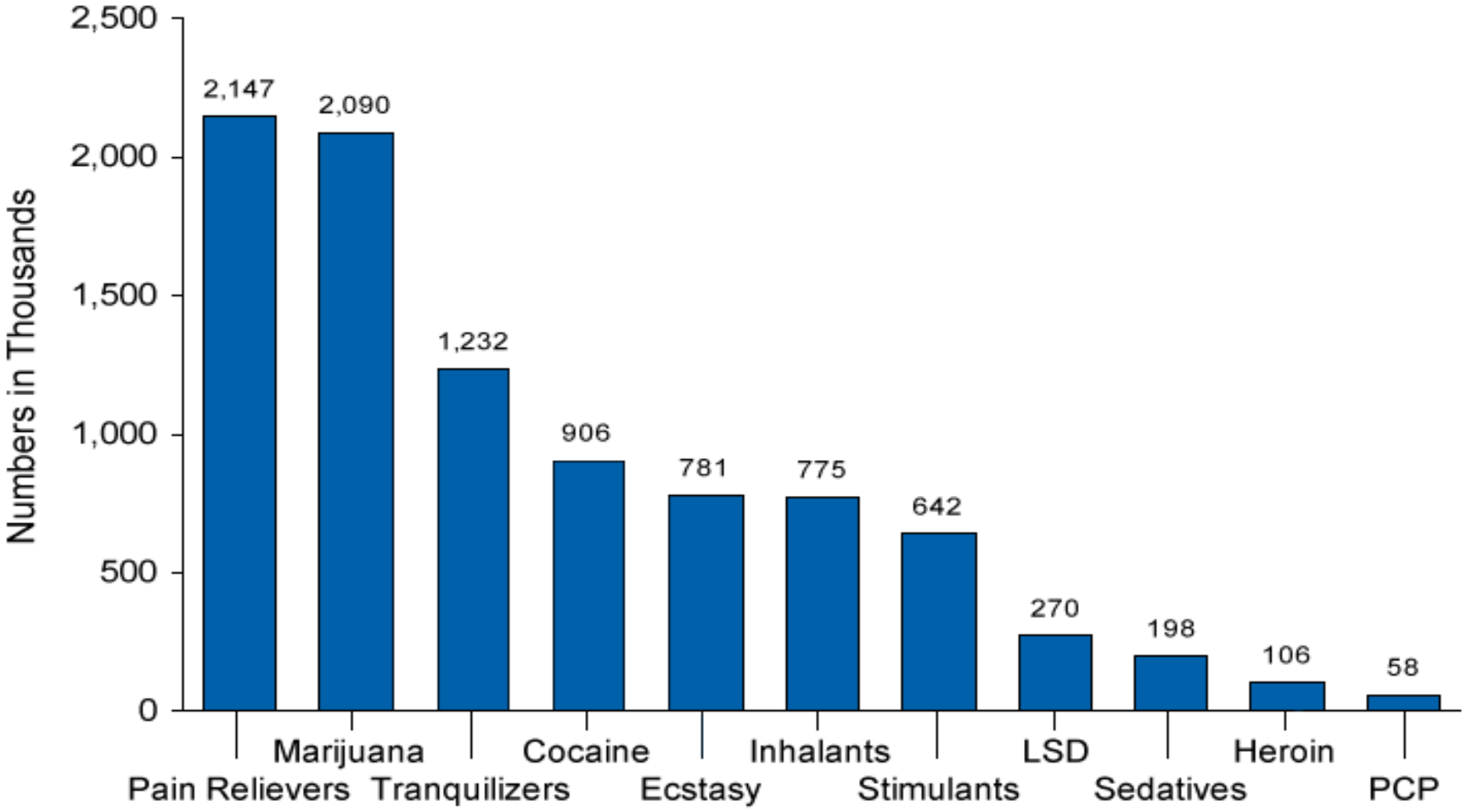


+ Difference between this estimate and the 2013 estimate is statistically significant at the .05 level.

INITIATION OF DRUG USE >12 Y.O.(2013; NHSDU)

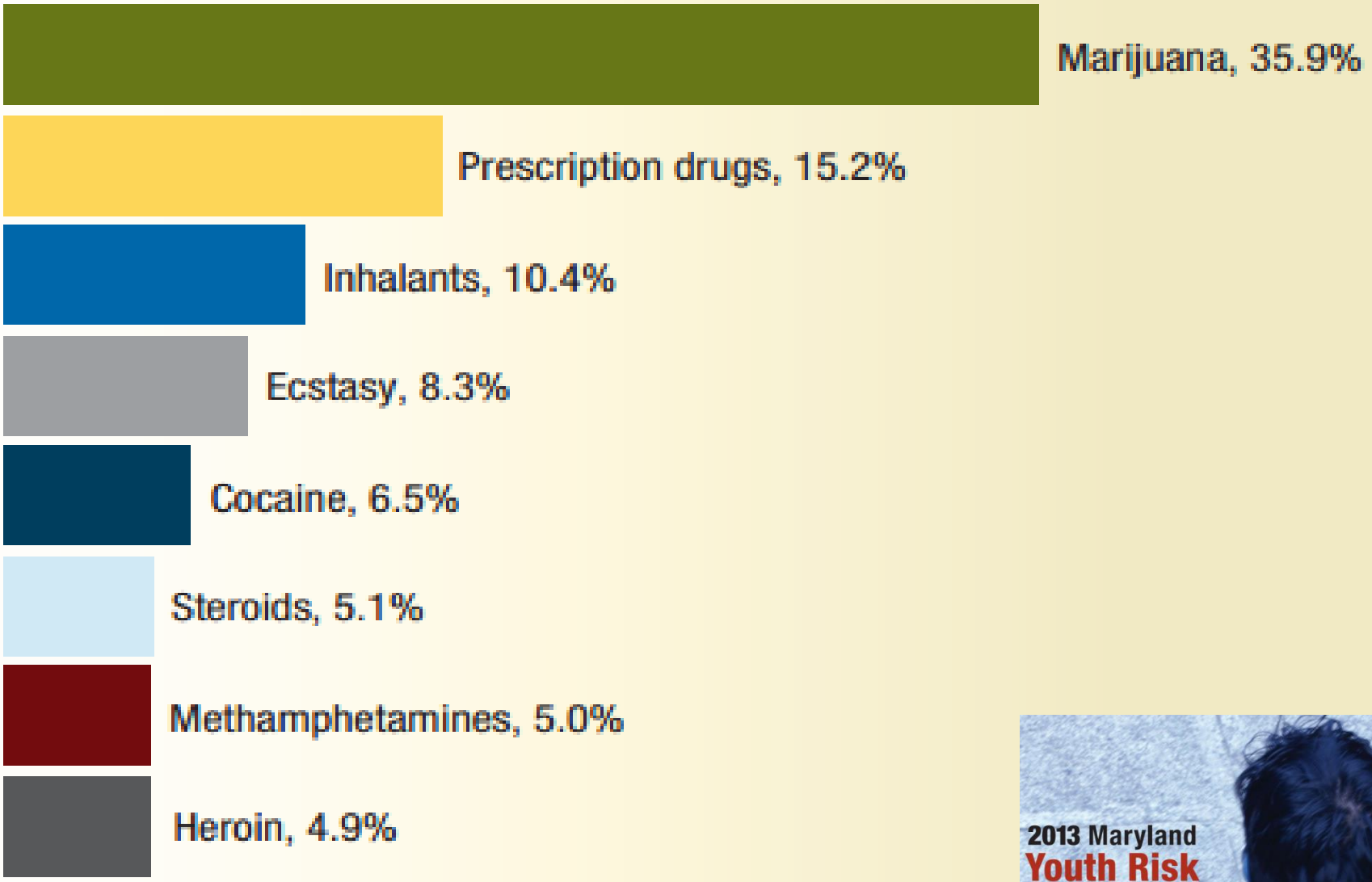


INITIATION OF DRUG USE >12 Y.O.(2008; NHSDU)

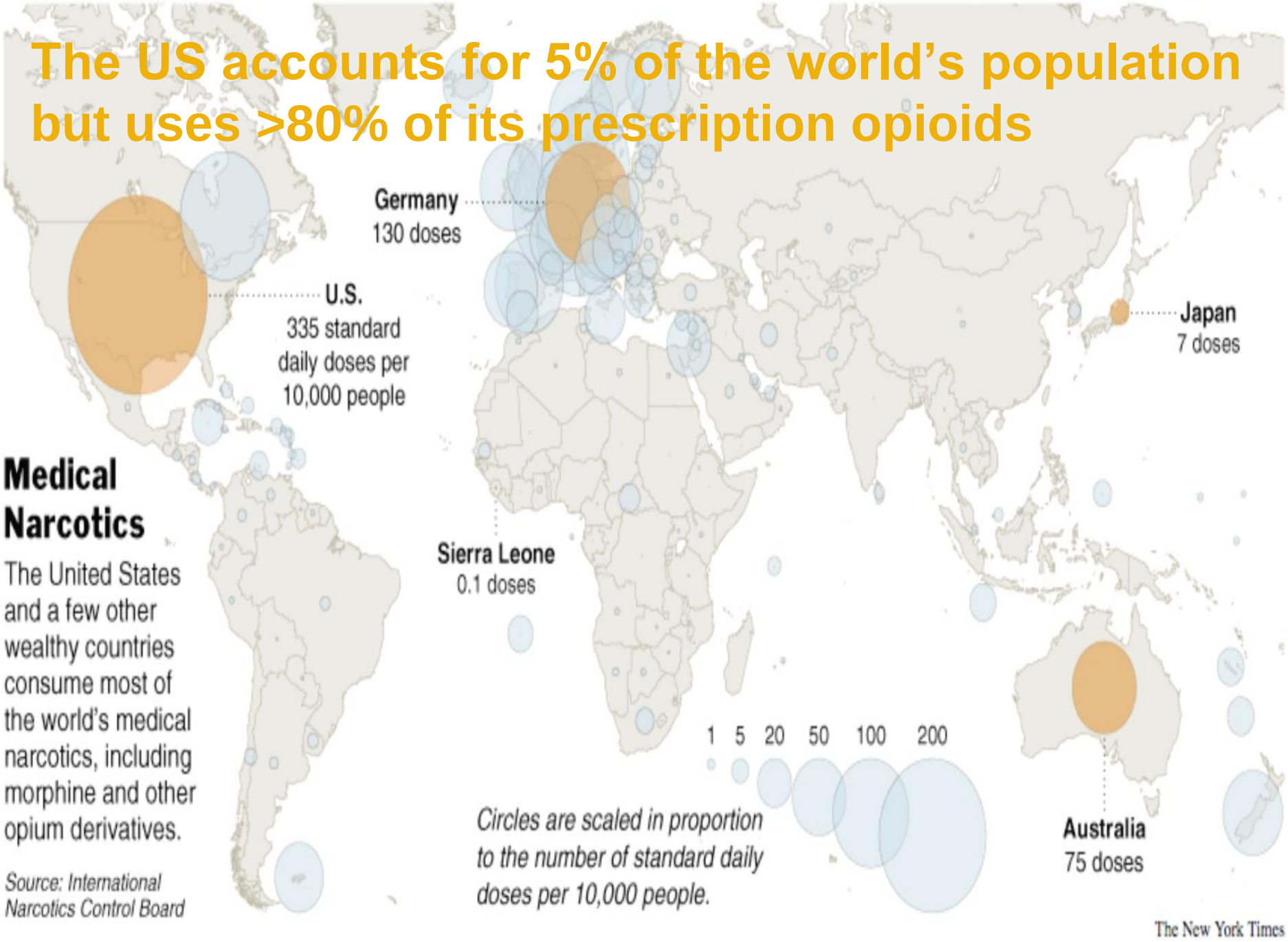


Rates of Use in Maryland

Percentage of Maryland youth who have tried the following drugs at least once



The US accounts for 5% of the world's population but uses >80% of its prescription opioids



International Narcotics Control Board for the UN; 2010

UNINTENTIONAL "POISONING"

- Leading cause of unintentional injury death in U.S.
- Leading cause in 35-54 year olds
- Leading cause in many states
- Leading cause of death in celebrities???

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Prescriptions now biggest cause of fatal drug overdoses

Updated 10/2/2009 8:11 PM | Comments 84 | Recommend 21 E-mail | Save | Print | Reprints & Permissions | RSS

By Liz Szabo, USA TODAY

Debra Jones didn't begin taking painkillers to get high.

Jones, 50, was trying to relieve chronic pain caused by rheumatoid arthritis.

Yet after taking the painkiller Percocet safely for 10 years, the stay-at-home mother of three became addicted after a friend suggested that crushing her pills could bring faster relief. It worked. The rush of

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16 Drug Celebrity Drug Overdoses We Should Have Seen Coming

By **Joanne** | Los Angeles

In light of Corey Haim's recent (apparent) drug overdose, here's a list of 16 drug-induced celebrity overdose deaths that, given the star's lifestyle and behavior, we should have seen coming. Celebrities overdose more often that we'd like them to, but this list should at least warn us of what we should've seen coming. Video news reports and family/friend stories included next to each celebrity when available.

1 Anna Nicole Smith

A Playboy model, actress, television personality and sex symbol, Anna Nicole Smith was found dead on February 8, 2007 with a lethal combination of chloral hydrate and various benzodiasepines in her system.

Her death strangely mirrored her idol Marilyn Monroe's, but with the addition of her son's tragic death and a media-swarmed child custody battle before her demise.

Most of these people are their own worst enemy, her dramatic weight gain/weight loss and drunken behavior at awards shows (to the right) should have been a marker that she wasn't going to be with us for much longer.

2 Sid Vicious

EXCLUSIVE

10 Leading Causes of Injury Deaths by Age Group Highlighting Unintentional Injury Deaths, United States – 2013

	Age Groups										
Rank	<1	1-4	5-9	10-14	15-24	25-34	35-44	45-54	55-64	65+	Total
1	Unintentional Suffocation 979	Unintentional Drowning 393	Unintentional MV Traffic 342	Unintentional MV Traffic 414	Unintentional MV Traffic 6,510	Unintentional Poisoning 8,251	Unintentional Poisoning 8,374	Unintentional Poisoning 10,651	Unintentional Poisoning 6,388	Unintentional Fall 25,464	Unintentional Poisoning 38,851
2	Homicide Unspecified 139	Unintentional MV Traffic 327	Unintentional Drowning 116	Suicide Suffocation 231	Homicide Firearm 3,704	Unintentional MV Traffic 5,776	Unintentional MV Traffic 4,448	Unintentional MV Traffic 5,082	Unintentional MV Traffic 4,502	Unintentional MV Traffic 6,333	Unintentional MV Traffic 33,804
3	Homicide Other Spec., classifiable 74	Unintentional Suffocation 161	Unintentional Fire/Burn 87	Suicide Firearm 137	Unintentional Poisoning 3,293	Homicide Firearm 3,372	Suicide Firearm 2,948	Suicide Firearm 4,057	Suicide Firearm 3,809	Suicide Firearm 5,113	Unintentional Fall 30,208
4	Unintentional MV Traffic 66	Homicide Unspecified 153	Homicide Firearm 48	Homicide Firearm 94	Suicide Firearm 2,210	Suicide Firearm 2,897	Suicide Suffocation 1,868	Suicide Suffocation 2,007	Unintentional Fall 2,283	Unintentional Unspecified 4,316	Suicide Firearm 21,175
5	Undetermined Suffocation 43	Unintentional Fire/Burn 129	Unintentional Suffocation 44	Unintentional Drowning 93	Suicide Suffocation 1,839	Suicide Suffocation 2,154	Homicide Firearm 1,843	Suicide Poisoning 1,867	Suicide Poisoning 1,528	Unintentional Suffocation 3,616	Homicide Firearm 11,208
6	Undetermined Unspecified 28	Unintentional Pedestrian, Other 90	Unintentional Other Land Transport 29	Unintentional Other Land Transport 49	Unintentional Drowning 501	Suicide Poisoning 716	Suicide Poisoning 1,193	Unintentional Fall 1,366	Suicide Suffocation 1,182	Unintentional Poisoning 1,824	Suicide Suffocation 10,062
7	Unintentional Drowning 23	Homicide Other Spec., classifiable 71	Unintentional Natural/ Environment 22	Unintentional Fire/Burn 48	Suicide Poisoning 418	Undetermined Poisoning 565	Undetermined Poisoning 633	Homicide Firearm 1,158	Unintentional Suffocation 723	Adverse Effects 1,755	Suicide Poisoning 6,637
8	Homicide Suffocation 22	Unintentional Natural/ Environment 43	Unintentional Pedestrian, Other 18	Unintentional Suffocation 37	Homicide Cut/Pierce 331	Unintentional Drowning 424	Unintentional Fall 522	Undetermined Poisoning 801	Homicide Firearm 573	Unintentional Fire/Burn 1,103	Unintentional Suffocation 6,601
9	Unintentional Natural/ Environment 19	Homicide Firearm 39	Homicide, Other Specified., NEC[N] 15	Unintentional Firearm 24	Undetermined Poisoning 219	Homicide Cut/Pierce 409	Unintentonal Drowning 367	Unintentional Suffocation 478	Unintentional Fire/Burn 564	Suicide Poisoning 905	Unintentional Unspecified 5,407
10	Unintentional Fire/Burn 17	Unintentional Struck by or Against 33	Unintentional Firearm 15	Unintentional Poisoning 21	Unintentional Fall 205	Unintentional Fall 305	Homicide Cut/Pierce 267	Unintentional Drowning 464	Undetermined Poisoning 547	Suicide Suffocation 770	Unintentional Drowning 3,391

[N] Not elsewhere classifiable

Data Source: National Center for Health Statistics (NCHS), National Vital Statistics System.
Produced by: National Center for Injury Prevention and Control, CDC using WISQARS™.

Centers for Disease Control and Prevention
National Center for Injury Prevention and Control

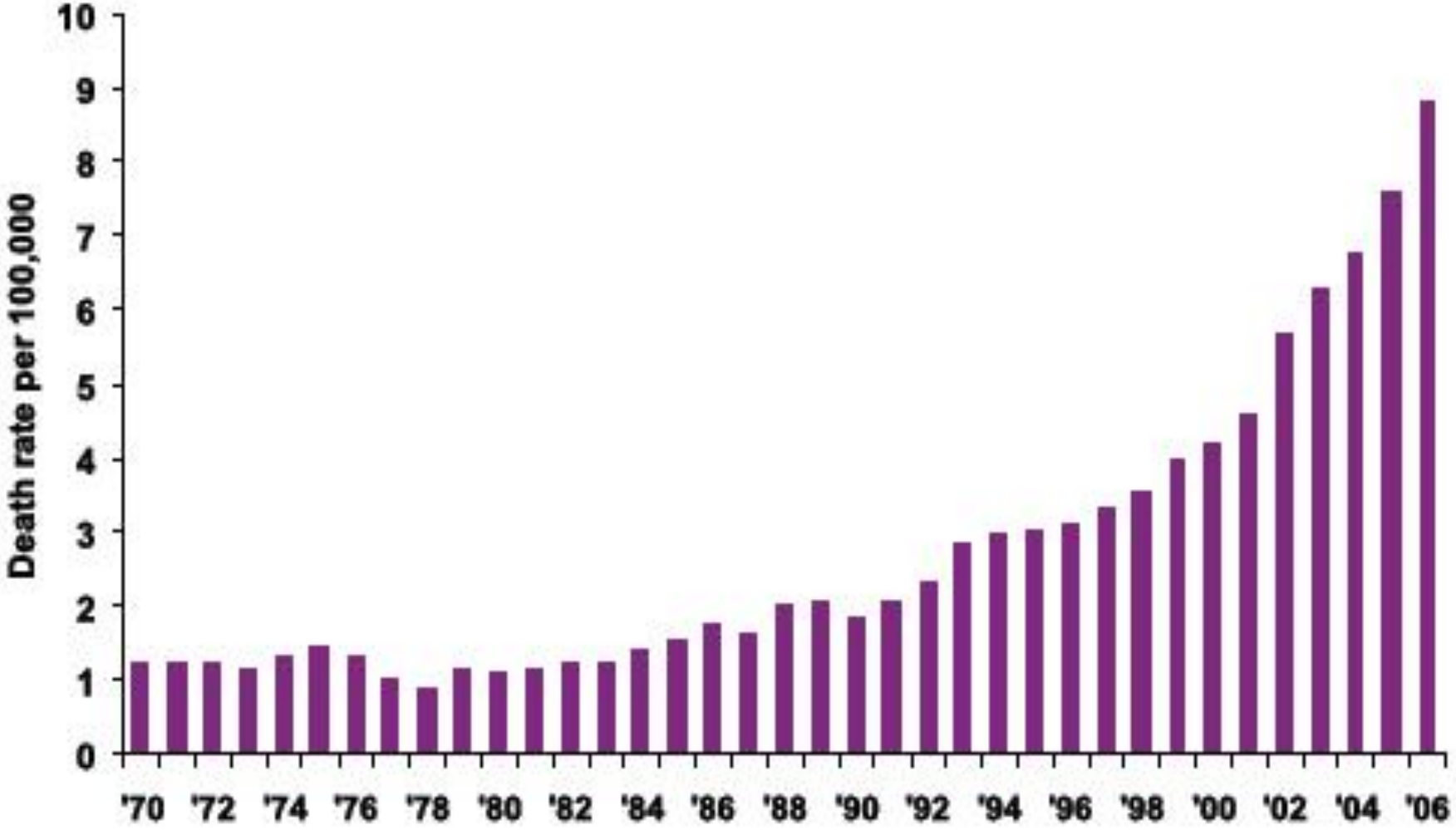
National Estimates of the 10 Leading Causes of Nonfatal Injuries Treated in Hospital Emergency Departments, United States – 2013

	Age Groups										
Rank	<1	1-4	5-9	10-14	15-24	25-34	35-44	45-54	55-64	65+	Total
1	**Unintentional Fall 134,229**	**Unintentional Fall 852,884**	**Unintentional Fall 624,890**	Unintentional Struck By/Against 561,690	Unintentional Struck By/Against 905,659	**Unintentional Fall 742,177**	**Unintentional Fall 704,264**	**Unintentional Fall 913,871**	**Unintentional Fall 930,521**	**Unintentional Fall 2,495,397**	**Unintentional Fall 8,771,656**
2	Unintentional Struck By/Against 28,786	Unintentional Struck By/Against 336,917	Unintentional Struck By/Against 403,522	**Unintentional Fall 558,177**	**Unintentional Fall 814,829**	Unintentional Overexertion 638,745	Unintentional Overexertion 530,422	Unintentional Overexertion 461,114	Unintentional Overexertion 266,126	Unintentional Struck By/Against 281,279	Unintentional Struck By/Against 4,214,125
3	Unintentional Other Bite/Sting 12,186	Unintentional Other Bite/Sting 158,587	Unintentional Cut/Pierce 112,633	Unintentional Overexertion 294,669	Unintentional Overexertion 672,946	Unintentional Struck By/Against 599,340	Unintentional Struck By/Against 444,089	Unintentional Struck By/Against 390,931	Unintentional Struck By/Against 261,840	Unintentional Overexertion 212,293	Unintentional Overexertion 3,256,567
4	Unintentional Foreign Body 10,650	Unintentional Foreign Body 139,597	Unintentional Other Bite/Sting 107,975	Unintentional Cut/Pierce 114,285	**Unintentional MV-Occupant 627,565**	**Unintentional MV-Occupant 526,303**	**Unintentional MV-Occupant 374,231**	Unintentional Other Specified 385,221	**Unintentional MV-Occupant 227,620**	**Unintentional MV-Occupant 197,646**	**Unintentional MV-Occupant 2,462,684**
5	Unintentional Other Specified 10,511	Unintentional Cut/Pierce 83,575	Unintentional Overexertion 93,612	Unintentional Pedal Cyclist 84,732	Unintentional Cut/Pierce 431,691	Unintentional Cut/Pierce 402,197	Unintentional Other Specified 300,154	**Unintentional MV-Occupant 343,470**	Unintentional Other Specified 212,168	Unintentional Cut/Pierce 156,693	Unintentional Cut/Pierce 2,077,775
6	Unintentional Fire/Burn 9,816	Unintentional Overexertion 81,588	Unintentional Pedal Cyclist 74,831	Unintentional Unknown/ Unspecified 84,668	Other Assault* Struck By/Against 381,522	Other Assault* Struck By/Against 342,514	Unintentional Cut/Pierce 297,769	Unintentional Cut/Pierce 282,353	Unintentional Cut/Pierce 189,440	**Unintentional Poisoning 100,988**	Unintentional Other Specified 1,767,630
7	Unintentional** Inhalation/ Suffocation 8,294	Unintentional Other Specified 65,120	Unintentional Foreign Body 63,450	**Unintentional MV-Occupant 73,692**	Unintentional Other Specified 321,914	Unintentional Other Specified 336,990	Other Assault* Struck By/Against 207,287	**Unintentional Poisoning 237,328**	**Unintentional Poisoning 153,767**	Unintentional Other Bite/Sting 90,850	Other Assault* Struck By/Against 1,291,100
8	Unintentional Cut/Pierce 7,139	Unintentional Fire/Burn 52,884	**Unintentional MV-Occupant 58,114**	Unintentional Other Bite/Sting 64,848	Unintentional Other Bite/Sting 177,665	Unintentional Other Bite/Sting 180,922	**Unintentional Poisoning 175,870**	Other Assault* Struck By/Against 169,688	Unintentional Other Bite/Sting 97,474	Unintentional Other Specified 86,729	Unintentional Other Bite/Sting 1,174,267
9	Unintentional Unknown/ Unspecified 5,735	Unintentional Unknown/ Unspecified 41,297	Unintentional Dog Bite 43,499	Other Assault* Struck By/Against 62,829	Unintentional Unknown/ Unspecified 163,923	**Unintentional Poisoning 180,448**	Unintentional Other Bite/Sting 138,410	Unintentional Other Bite/Sting 145,349	Other Assault* Struck By/Against 73,674	Unintentional Unknown/ Unspecified 74,864	**Unintentional Poisoning 1,055,960**
10	Unintentional Overexertion 4,985	**Unintentional Poisoning 32,443**	Unintentional Unknown/ Unspecified 35,303	Unintentional Other Transport 35,609	**Unintentional Poisoning 152,962**	Unintentional Unknown/ Unspecified 129,308	Unintentional Unknown/ Unspecified 106,498	Unintentional Unknown/ Unspecified 110,102	Unintentional Unknown/ Unspecified 67,974	Unintentional Other Transport 68,022	Unintentional Unknown/ Unspecified 819,878

*The "Other Assault" category includes all assaults that are **not** classified as sexual assault. It represents the majority of assaults.
**Injury estimate is unstable because of small sample size.
Data Source: NEISS All Injury Program operated by the Consumer Product Safety Commission (CPSC).
Produced by: National Center for Injury Prevention and Control, CDC using WISQARS™.

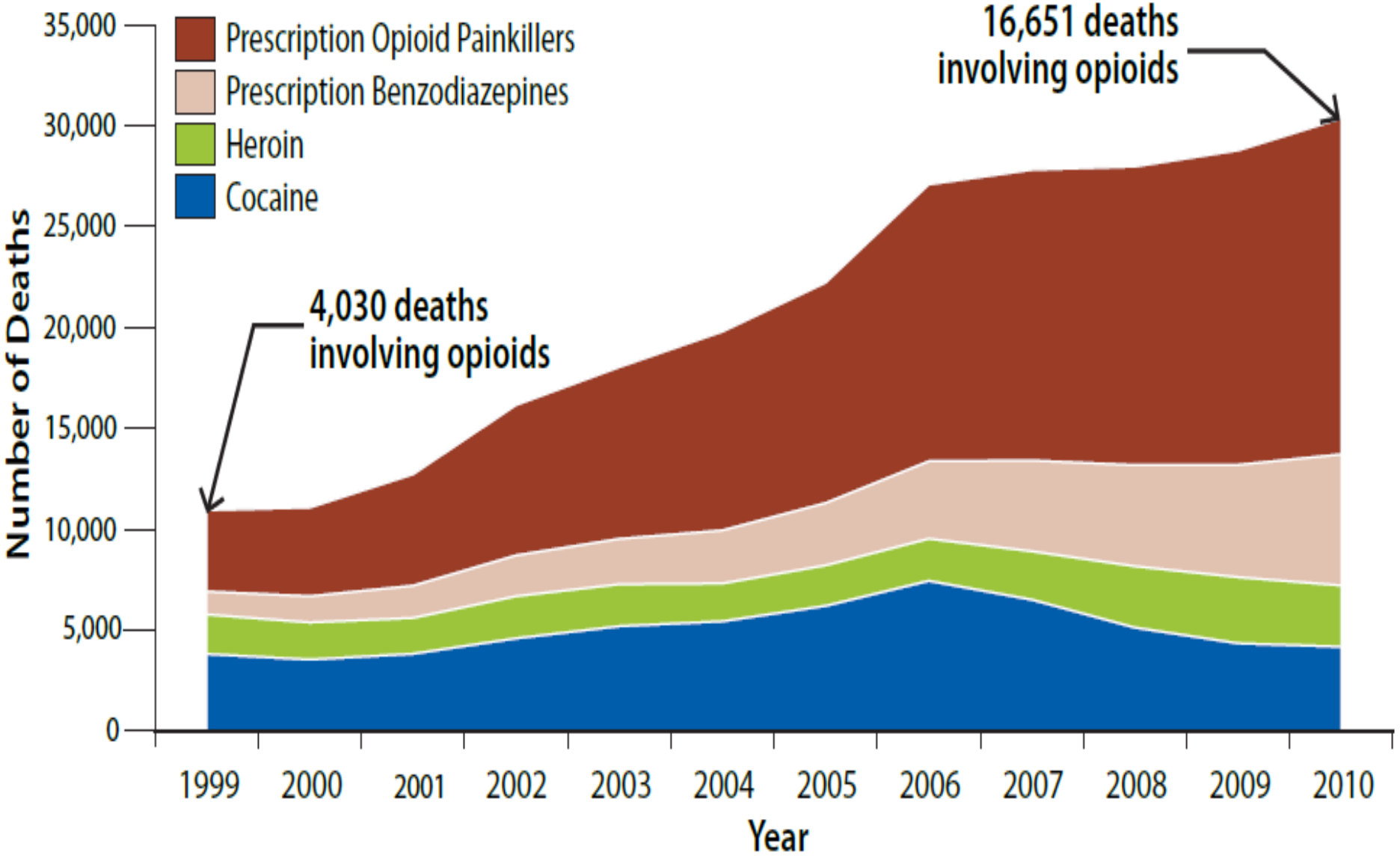
Centers for Disease Control and Prevention
National Center for Injury Prevention and Control

Figure 1: Rate of unintentional drug overdose death in the United States, 1970-2006

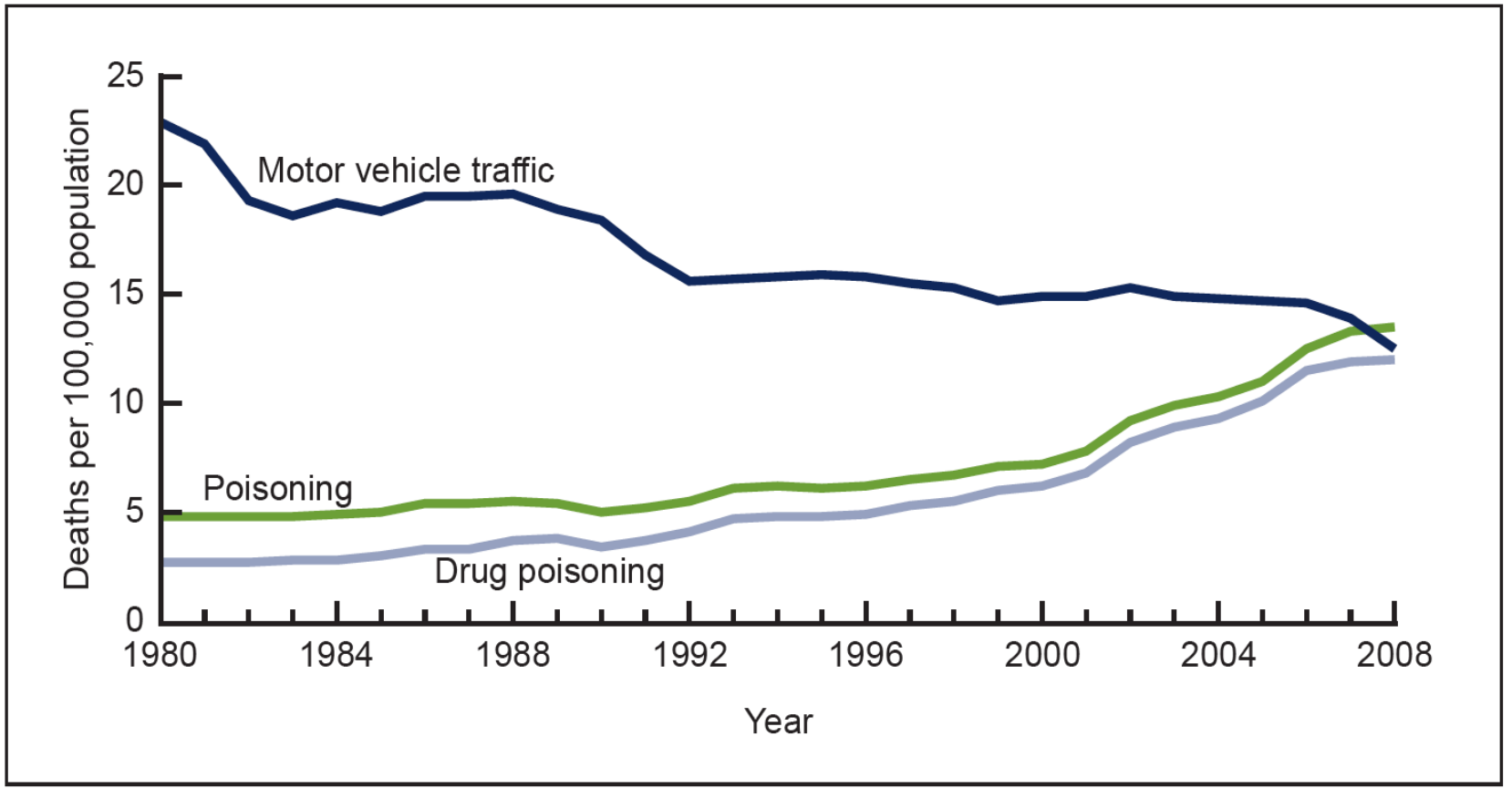


Source: National Vital Statistics System

Overdose deaths involving opioid painkillers have quadrupled since 1999



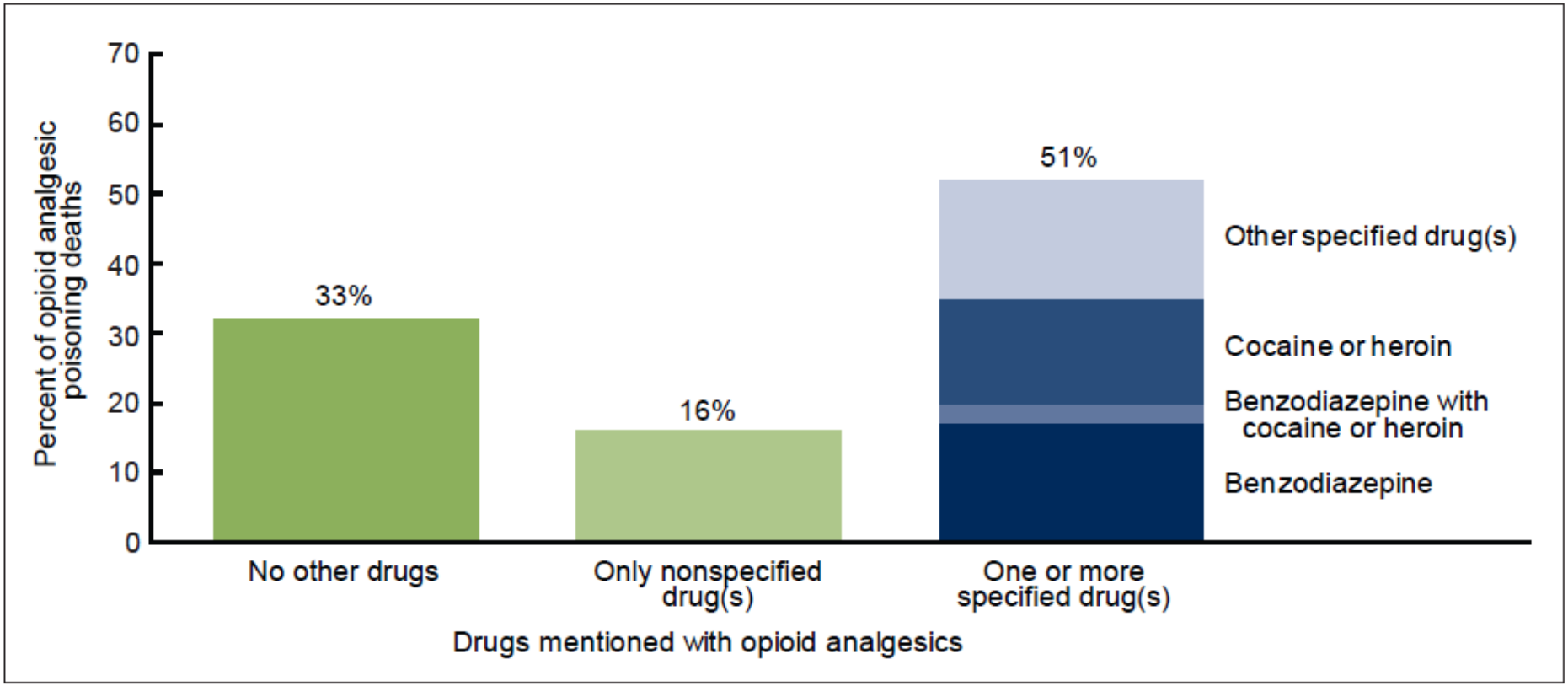
Unintentional Death: MVC vs "Poisoning"



NOTE: In 1999, the *International Classification of Diseases, Tenth Revision (ICD–10)* replaced the previous revision of the ICD (ICD–9). This resulted in approximately 5% fewer deaths being classified as motor-vehicle traffic–related deaths and 2% more deaths being classified as poisoning-related deaths. Therefore, death rates for 1998 and earlier are not directly comparable with those computed after 1998. Access data table for Figure 1 at http://www.cdc.gov/nchs/data/databriefs/db81_tables.pdf#1.
SOURCE: CDC/NCHS, National Vital Statistics System.

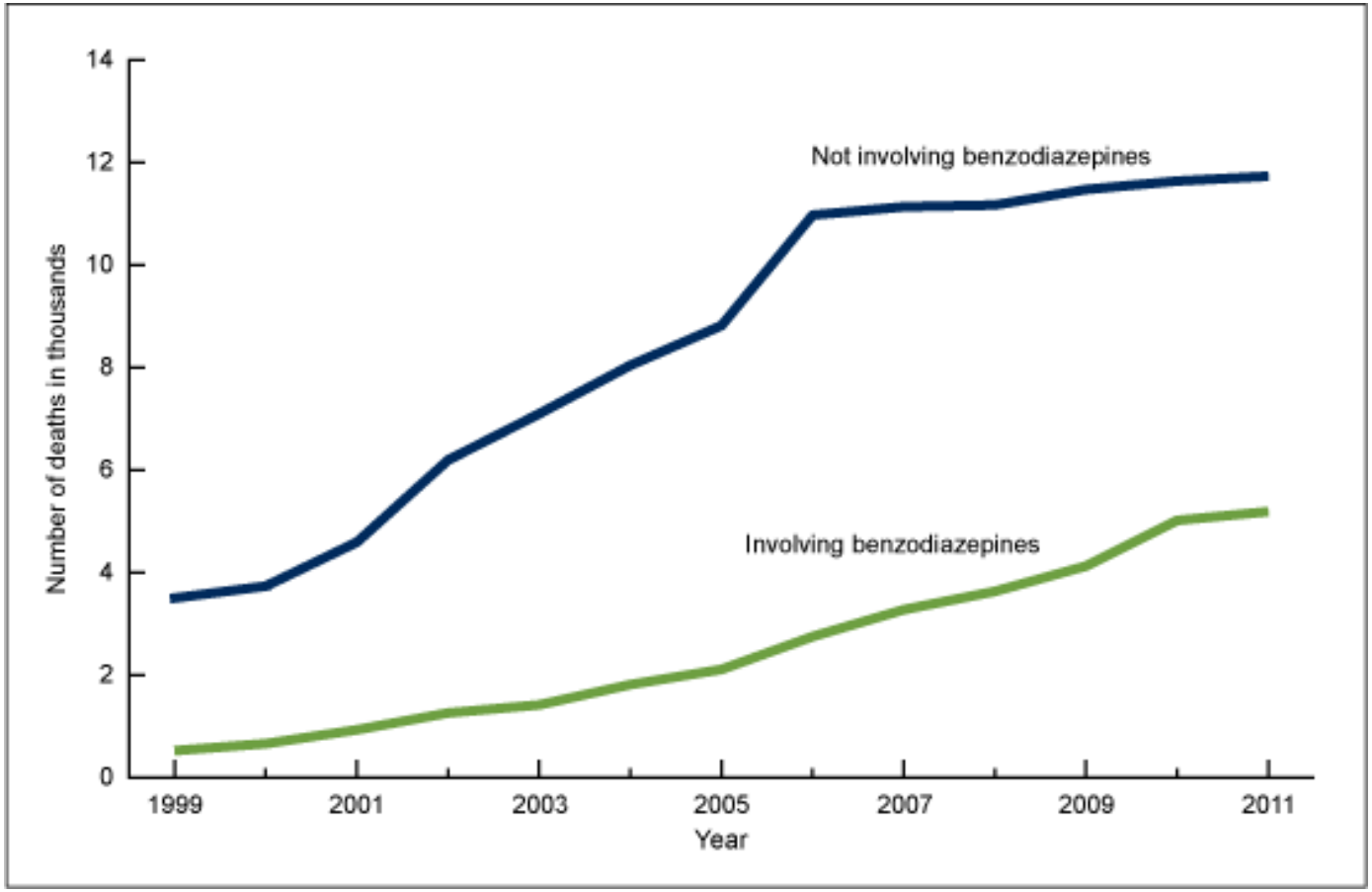
More than one type of drug was mentioned in the majority of poisoning deaths that involved opioid analgesics in 2006.

Figure 4. Drugs mentioned in opioid analgesic-related poisoning deaths: United States, 2006



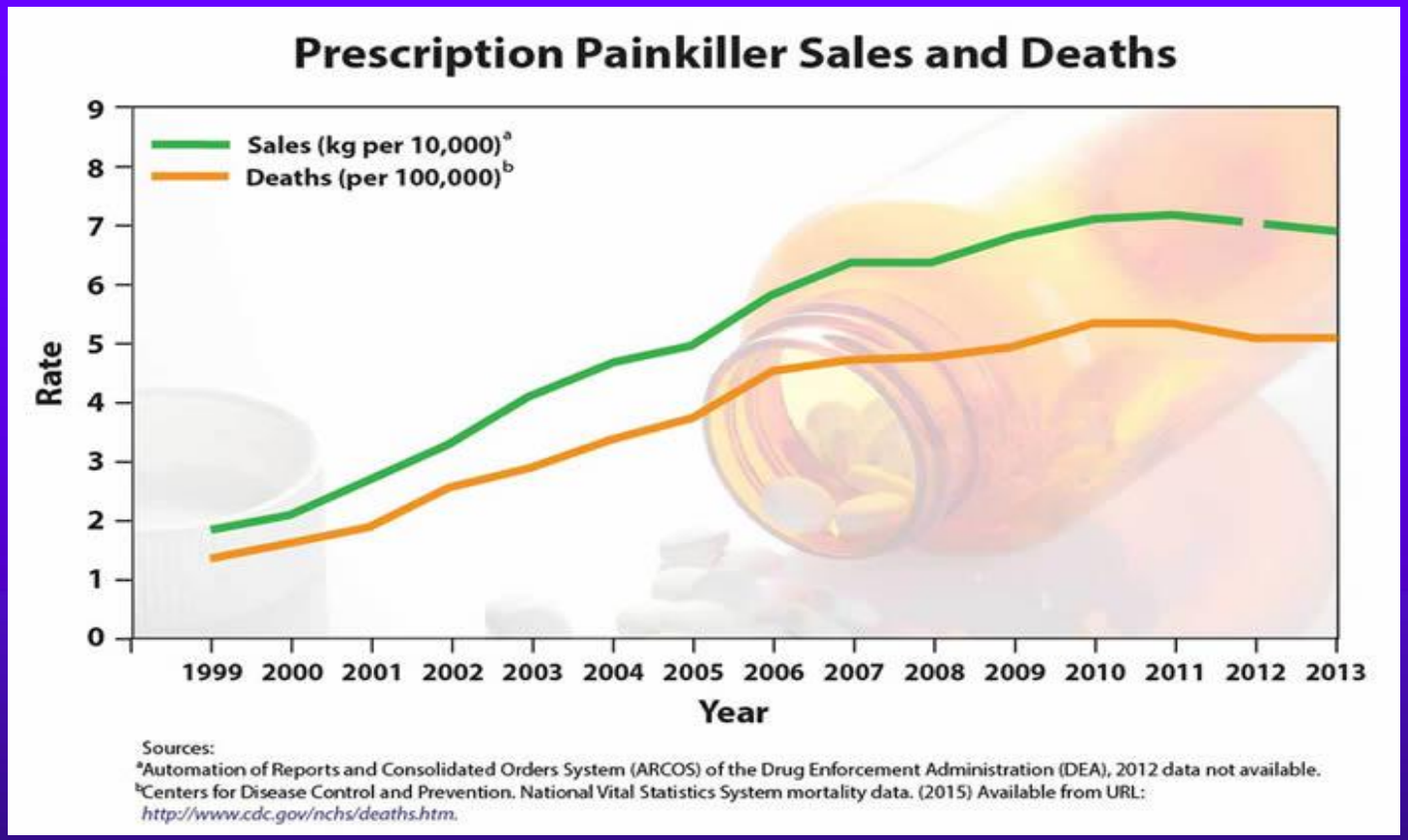
NOTE: Opioid analgesic deaths classified as involving cocaine, heroin, or benzodiazepine may also involve other drugs; deaths classified as involving other specified drug(s) do not involve cocaine, heroin, or benzodiazepine.

Number of opioid-analgesic poisoning deaths, by involvement of benzodiazepines: United States, 1999–2011



Benzodiazepines were involved in 31% of the opioid-analgesic poisoning deaths in 2011, up from 13% of such deaths in 1999.

UNINTENTIONAL OPIOID OVERDOSE DEATHS PARALLEL OPIOID SALES



Sales of OPR quadrupled between 1999 & 2010

-Enough for every American to take 5 mg Vicodin every 4 hrs for 4 weeks

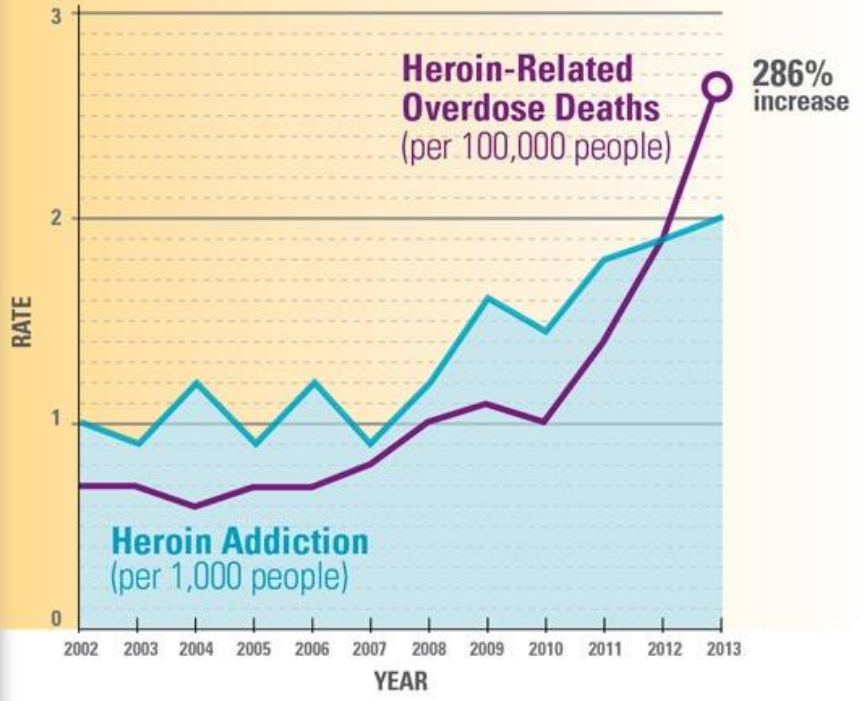
-5,500 new prescription opioid users per day

-5.1 million Americans currently abuse prescription opioids

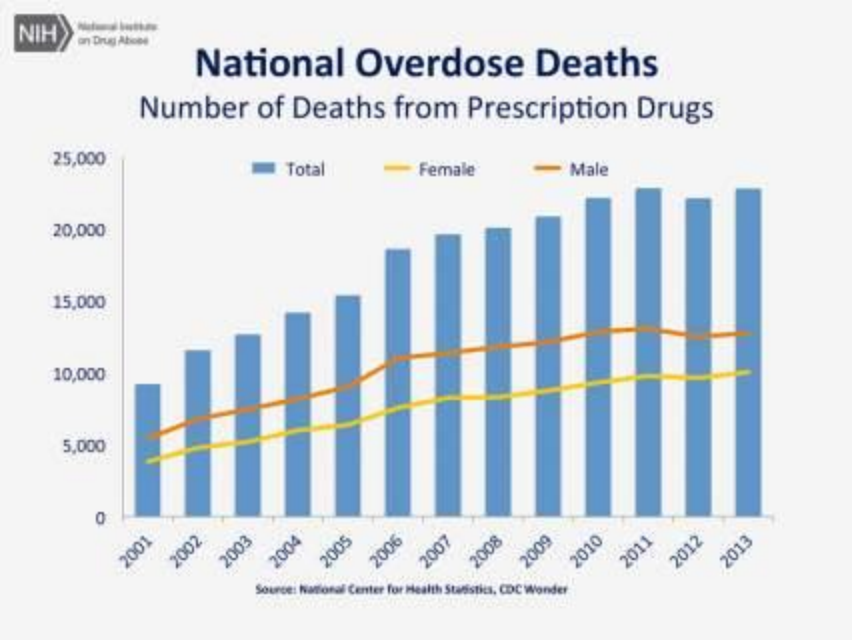
Heroin Use Has INCREASED Among Most Demographic Groups

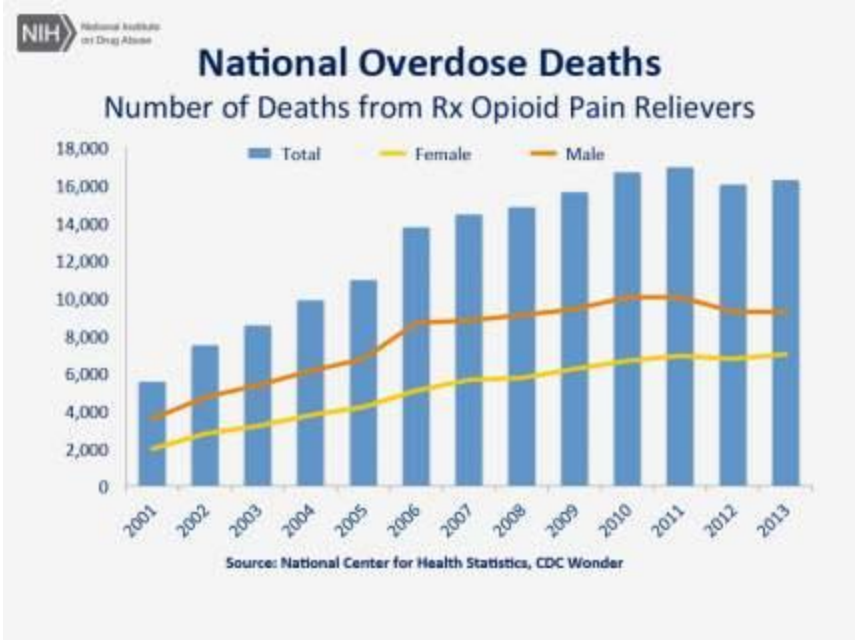
	2002-2004*	2011-2013*	% CHANGE
SEX			
Male	2.4	3.6	50%
Female	0.8	1.6	100%
AGE, YEARS			
12-17	1.8	1.6	--
18-25	3.5	7.3	109%
26 or older	1.2	1.9	58%
RACE/ETHNICITY			
Non-Hispanic white	1.4	3	114%
Other	2	1.7	--
ANNUAL HOUSEHOLD INCOME			
Less than $20,000	3.4	5.5	62%
$20,000–$49,999	1.3	2.3	77%
$50,000 or more	1	1.6	60%
HEALTH INSURANCE COVERAGE			
None	4.2	6.7	60%
Medicaid	4.3	4.7	--
Private or other	0.8	1.3	63%

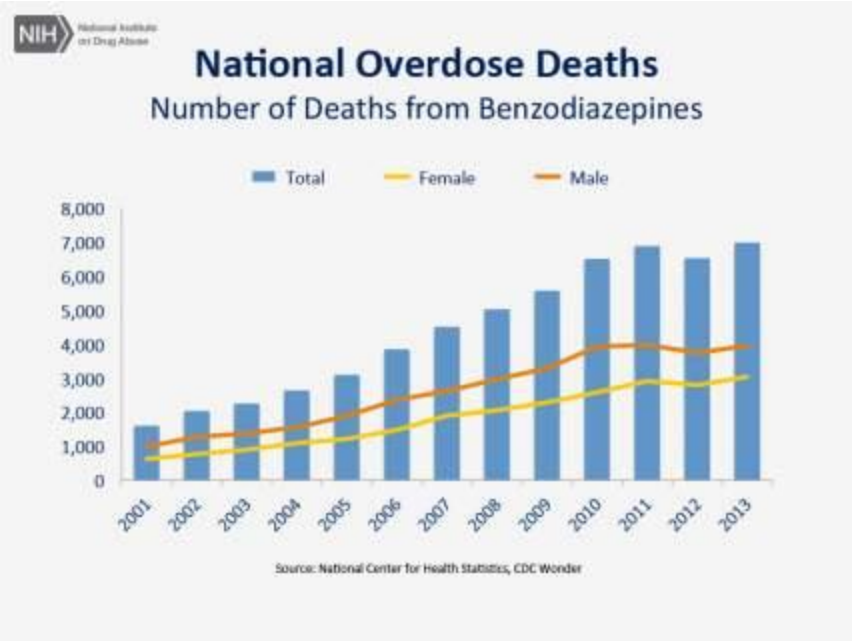
Heroin Addiction and Overdose Deaths are Climbing

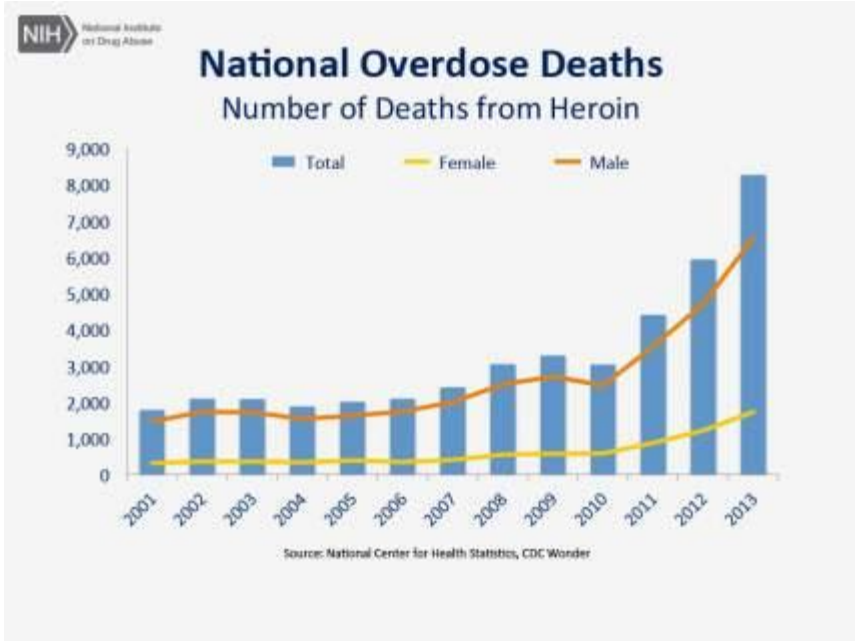


SOURCES: National Survey on Drug Use and Health (NSDUH), 2002-2013.
National Vital Statistics System, 2002-2013.


National Overdose Deaths
Number of Deaths from Prescription Drugs
Total
Female
Male
25,000
20,000
15,000
10,000
5,000
0
2001
2002
2003
2004
2005
2006
2007
2008
2009
2010
2011
2012
2013
Source: National Center for Health Statistics, CDC Wonder


National Overdose Deaths
Number of Deaths from Rx Opioid Pain Relievers
Total
Female
Male
18,000
16,000
14,000
12,000
10,000
8,000
6,000
4,000
2,000
0
2001
2002
2003
2004
2005
2006
2007
2008
2009
2010
2011
2012
2013
Source: National Center for Health Statistics, CDC Wonder


National Overdose Deaths
Number of Deaths from Benzodiazepines
Total
Female
Male
8,000
7,000
6,000
5,000
4,000
3,000
2,000
1,000
0
2001
2002
2003
2004
2005
2006
2007
2008
2009
2010
2011
2012
2013
Source: National Center for Health Statistics, CDC Wonder


National Overdose Deaths
Number of Deaths from Heroin
Total
Female
Male
9,000
8,000
7,000
6,000
5,000
4,000
3,000
2,000
1,000
0
2001
2002
2003
2004
2005
2006
2007
2008
2009
2010
2011
2012
2013
Source: National Center for Health Statistics, CDC Wonder

Nearly $130 billion of the fatal injury costs were attributable to unintentional injuries, followed by suicide ($50.8 billion) and homicide ($26.4 billion).

Drug poisonings, including prescription drug overdoses, accounted for 27% of fatal injury costs.

Maryland Department of Health and Mental Hygiene
Larry Hogan, Governor – Boyd Rutherford, Lt. Governor – Van Mitchell, Secretary
May, 2015

Drug- and Alcohol-Related Intoxication Deaths in Maryland, 2014

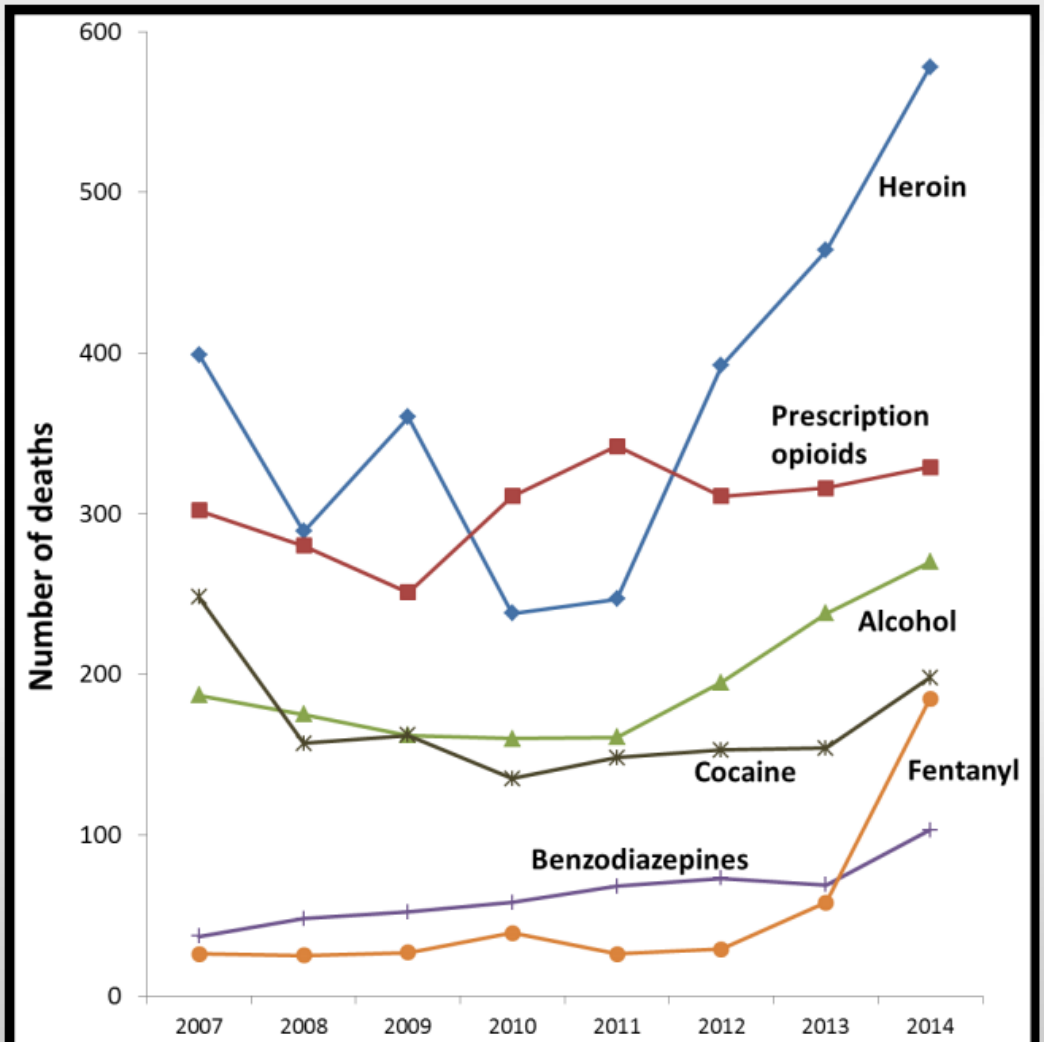


Figure 1. Total Number of Drug- and Alcohol-Related Intoxication Deaths Occurring in Maryland, 2007-2014.

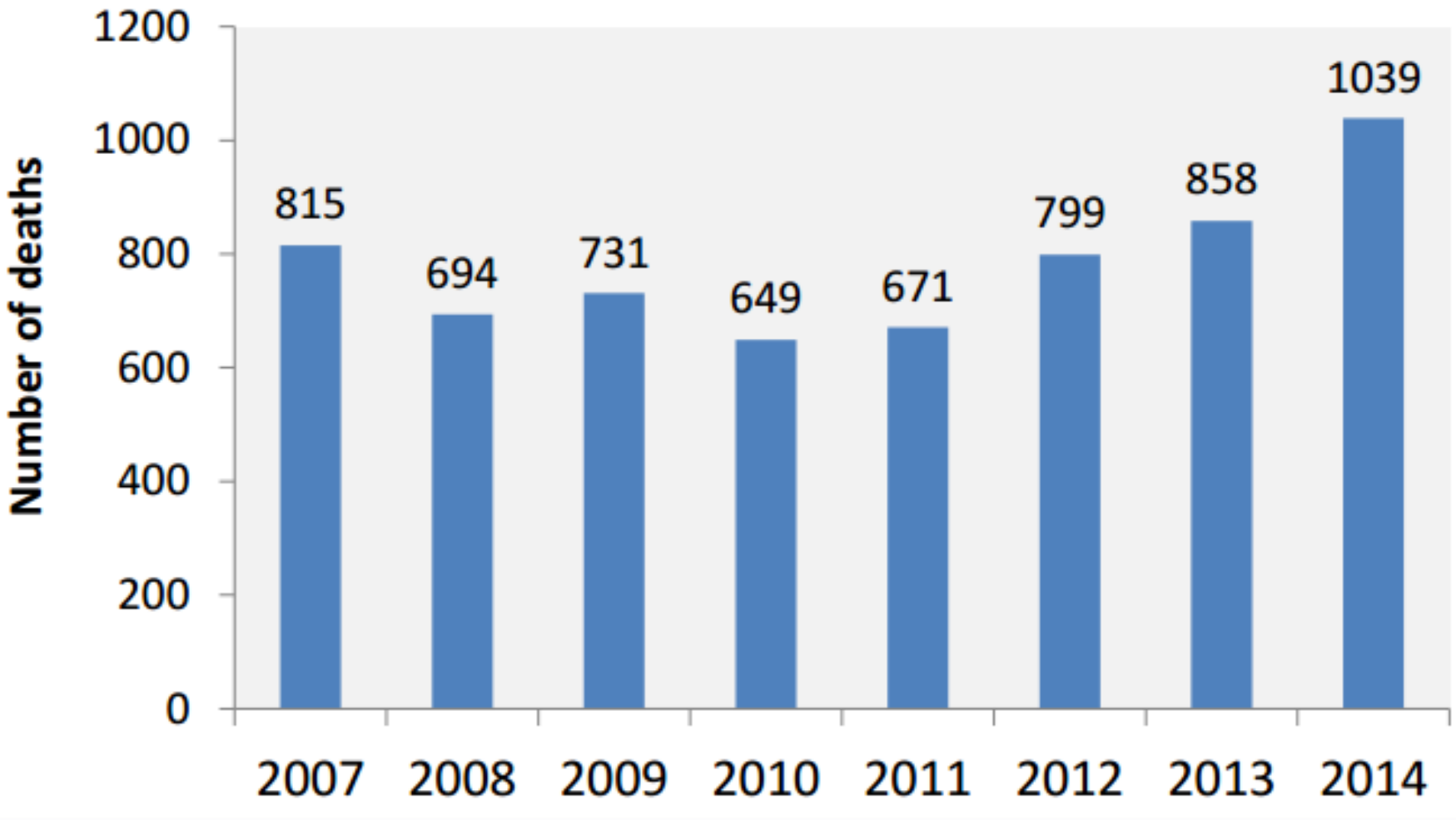


Figure 2. Total Number of Intoxication Deaths Occurring in Maryland by Age, Race/Ethnicity and Gender, 2007-2012.

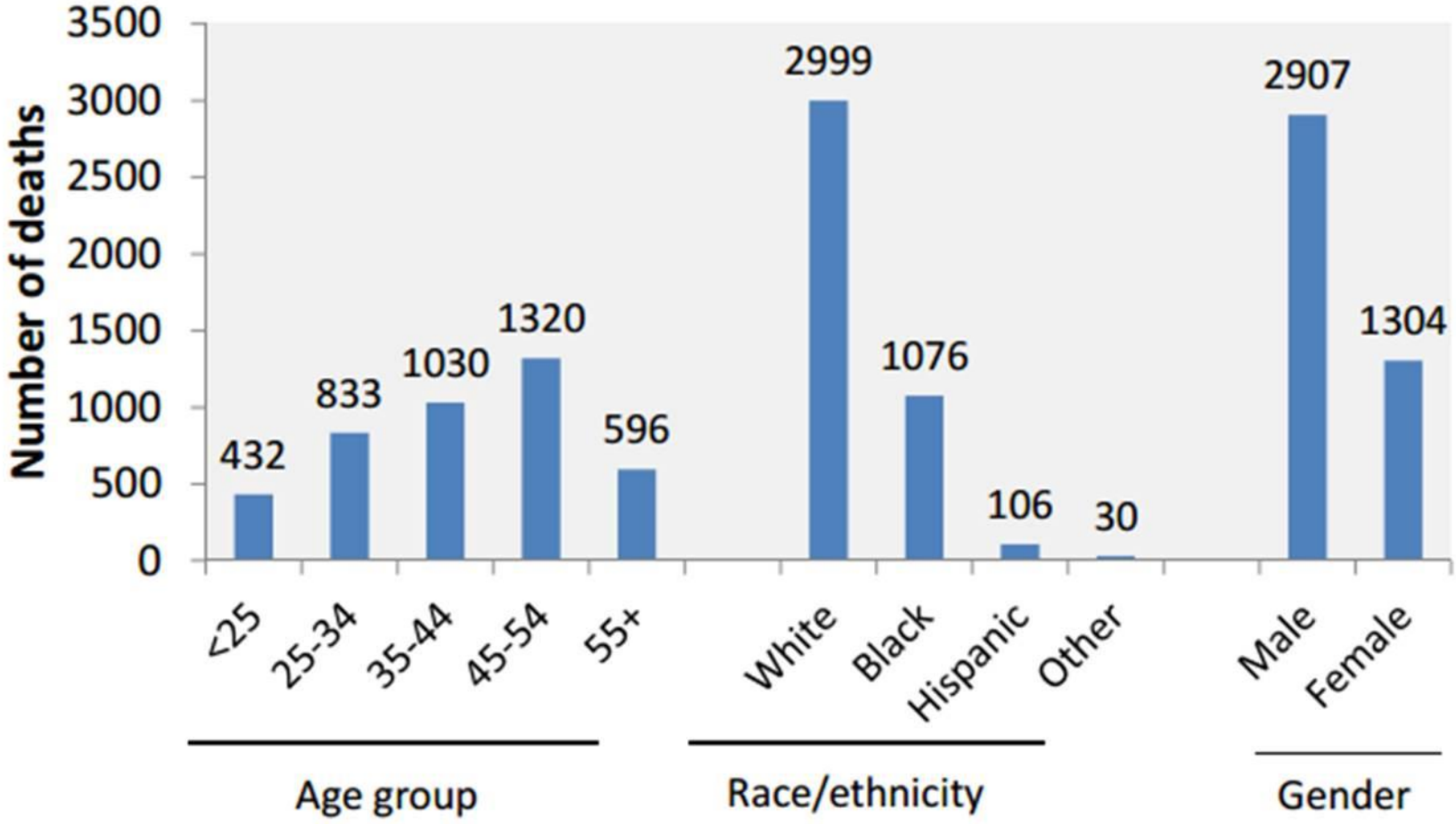
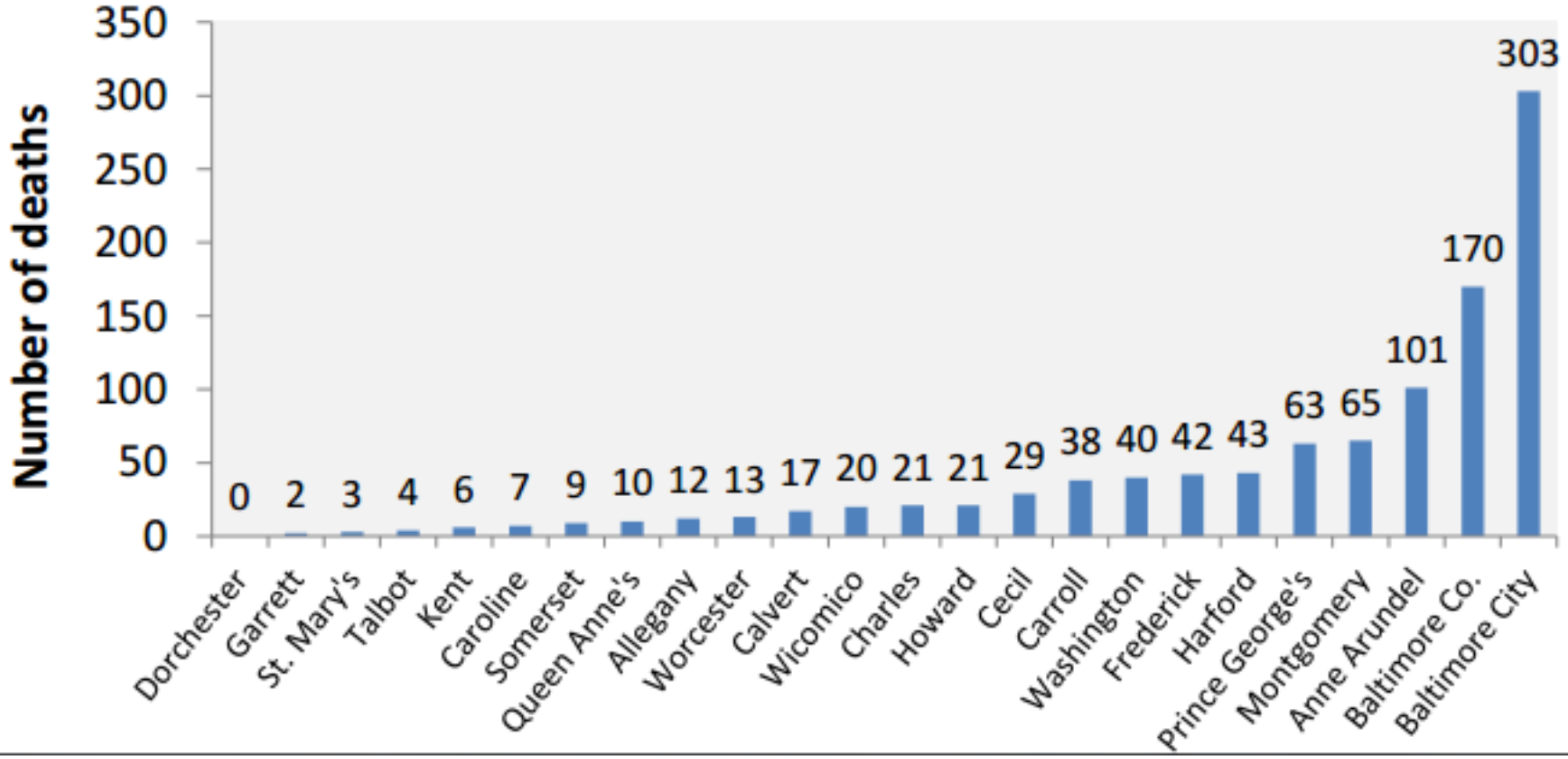


Figure 2. Total Number of Intoxication Deaths Occurring in Maryland by Place of Occurrence, 2014.



Crude Death Rates for Total Intoxication Deaths by Place of Residence, Maryland, 2007-2012.

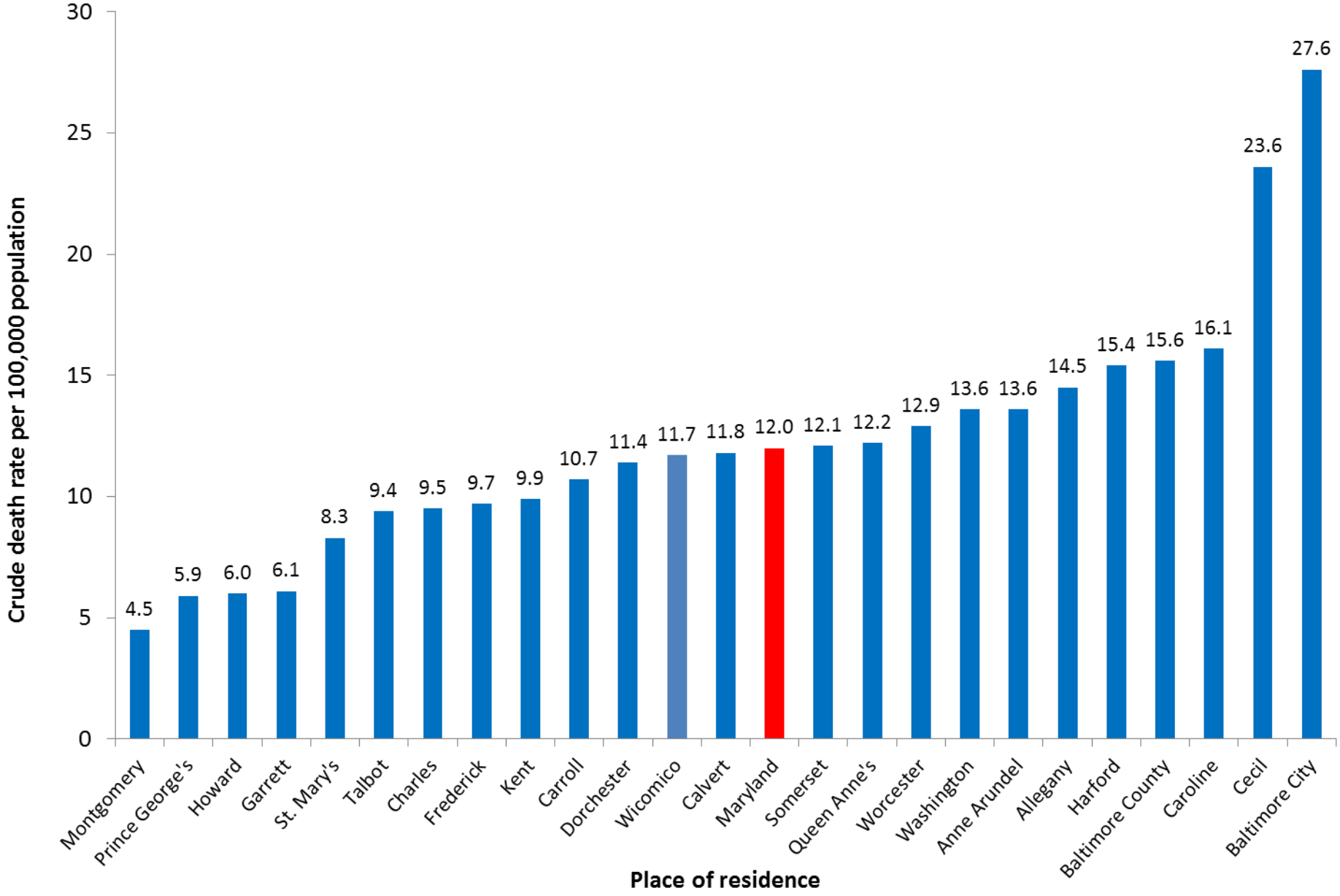
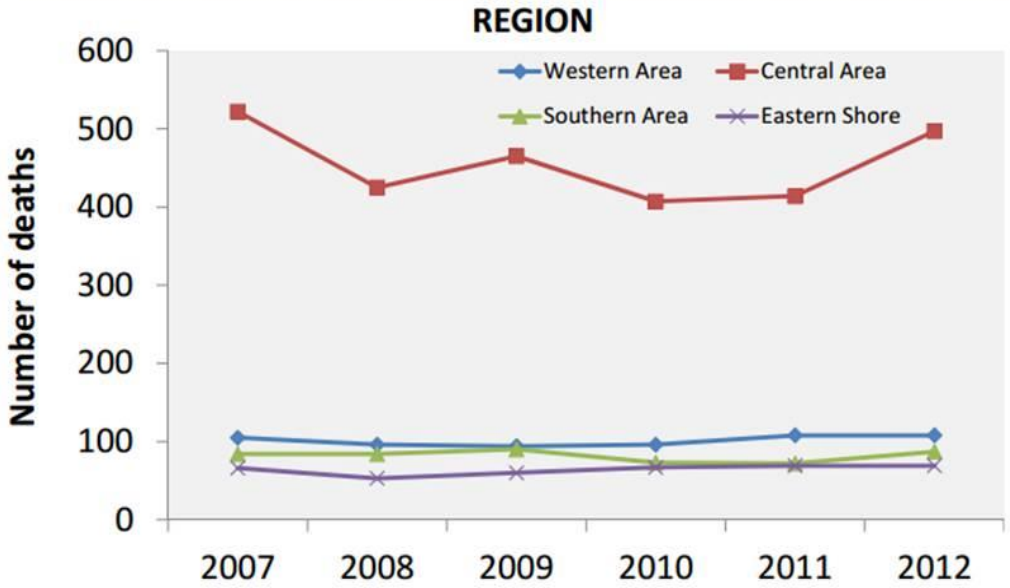


Figure 4. Total Number of Drug Intoxication Deaths by Place of Occurrence, Maryland, 2007-2012.



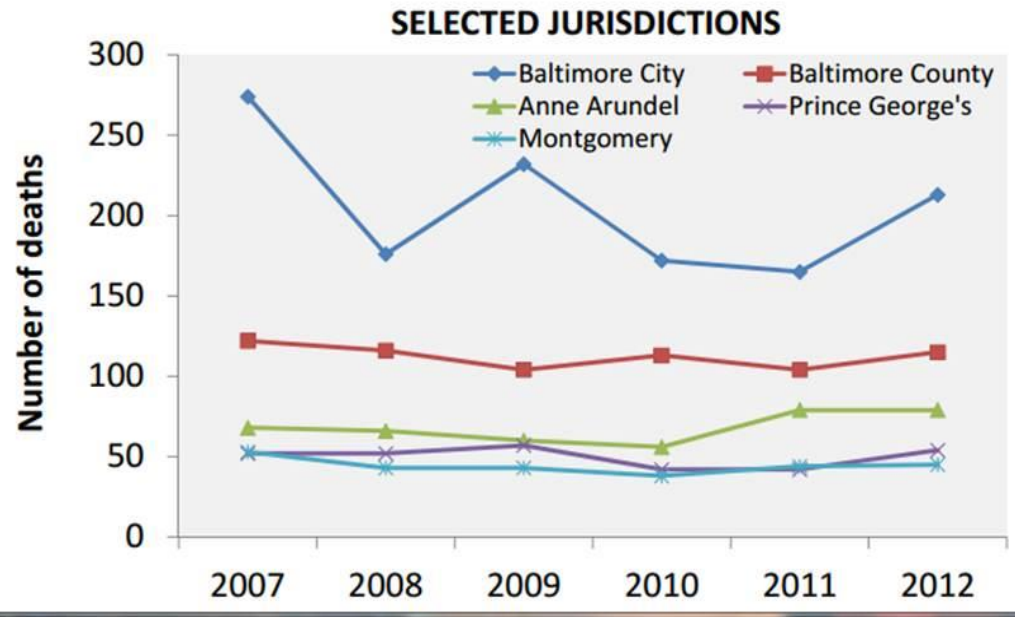
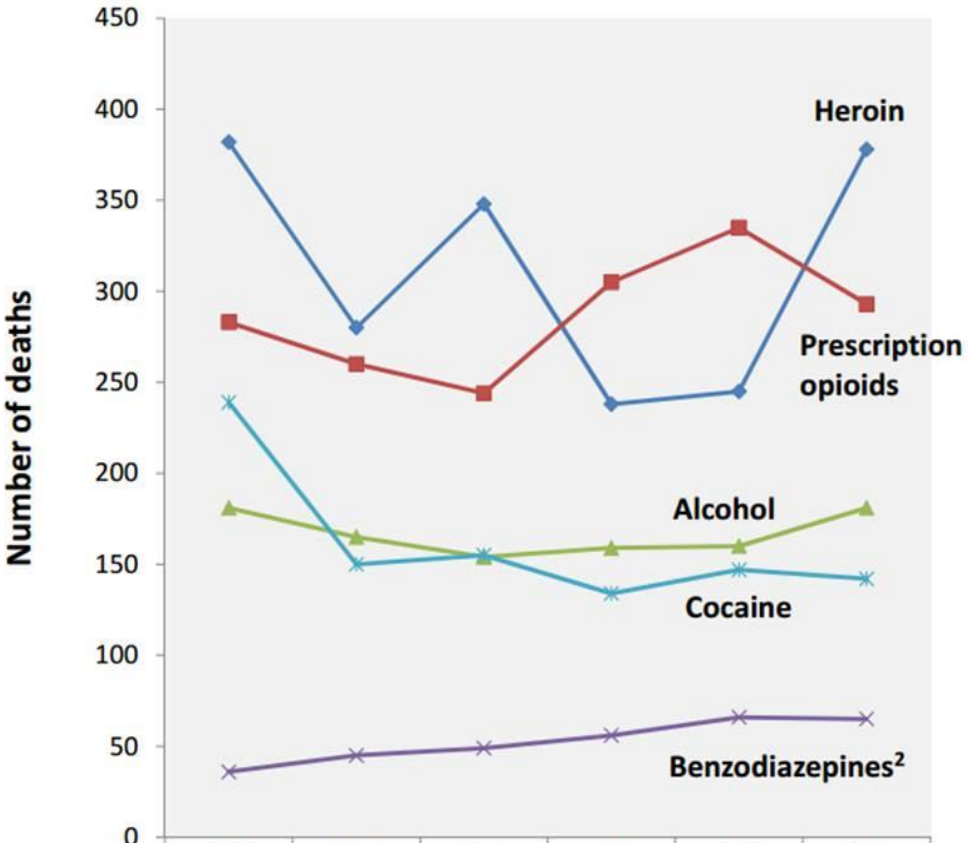


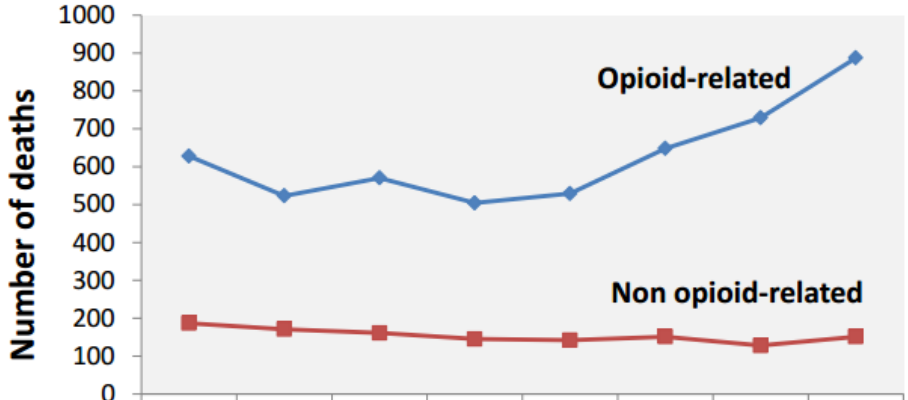
Figure 5. Total Number of Drug Intoxication Deaths by Selected Substances[1], Maryland, 2007-2012.



	2007	2008	2009	2010	2011	2012
Heroin	382	280	348	238	245	378
Prescription opioids	283	260	244	305	335	293
Alcohol	181	165	154	159	160	181
Benzodiazepines2	36	45	49	56	66	65
Cocaine	239	150	155	134	147	142

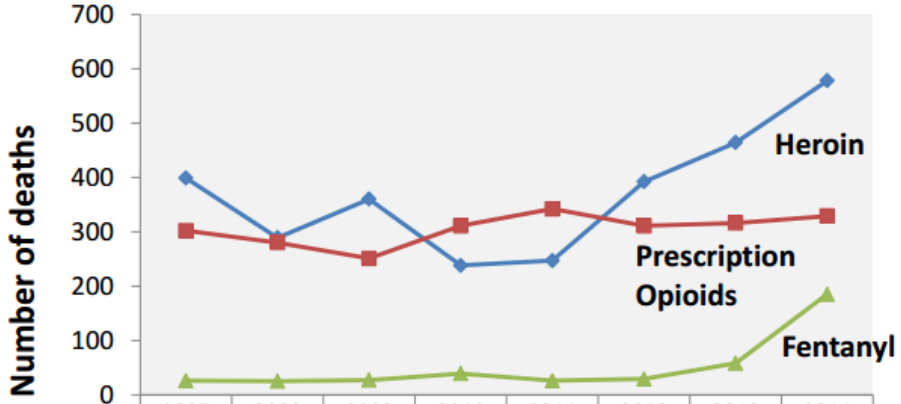
[1]Since an intoxication death may involve more than one substance, counts of deaths related to specific substances do not sum to the total number of deaths.
[2]Includes deaths caused by benzodiazepines and related drugs with similar sedative effects.

Figure 6. Total Number of Opioid* and Non-Opioid-Related Deaths Occurring in Maryland, 2007-2014.



	2007	2008	2009	2010	2011	2012	2013	2014
Opioid-related	628	523	570	504	529	648	729	887
Non opioid-related	187	171	161	145	142	151	128	151

Figure 6. Number of Opioid-Related Deaths Occurring in Maryland by Substance, 2007-2014.



	2007	2008	2009	2010	2011	2012	2013	2014
Heroin	399	289	360	238	247	392	464	578
Prescription opioids	302	280	251	311	342	311	316	329
Fentanyl	26	25	27	39	26	29	58	185

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

Figure 7. Number of Heroin-Related Deaths Occurring in Maryland, 2007-2014.

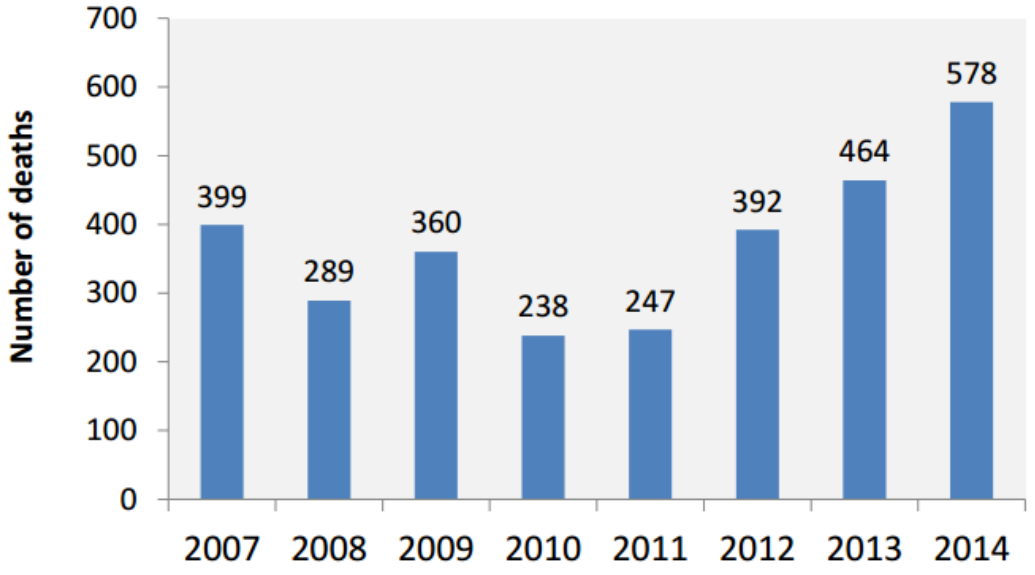


Figure 8. Number of Heroin-Related Deaths Occurring in Maryland by Place of Occurrence, 2014.

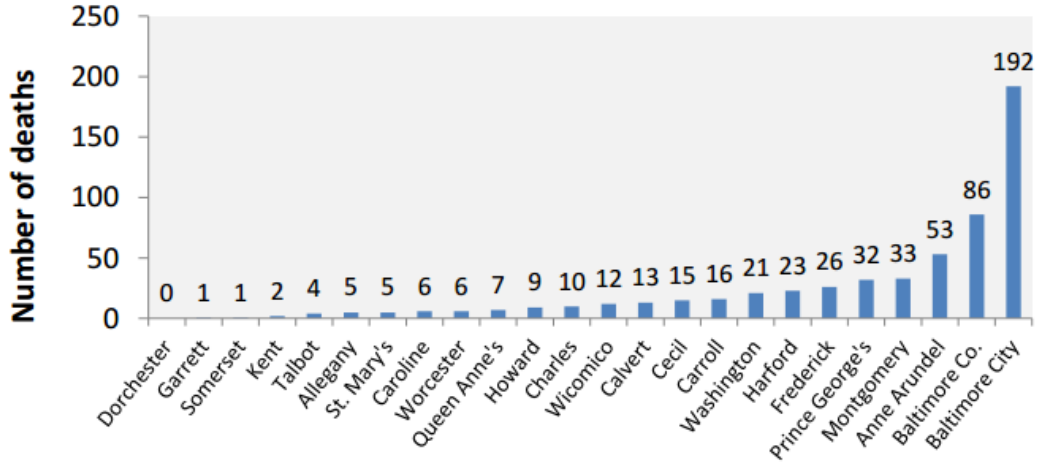
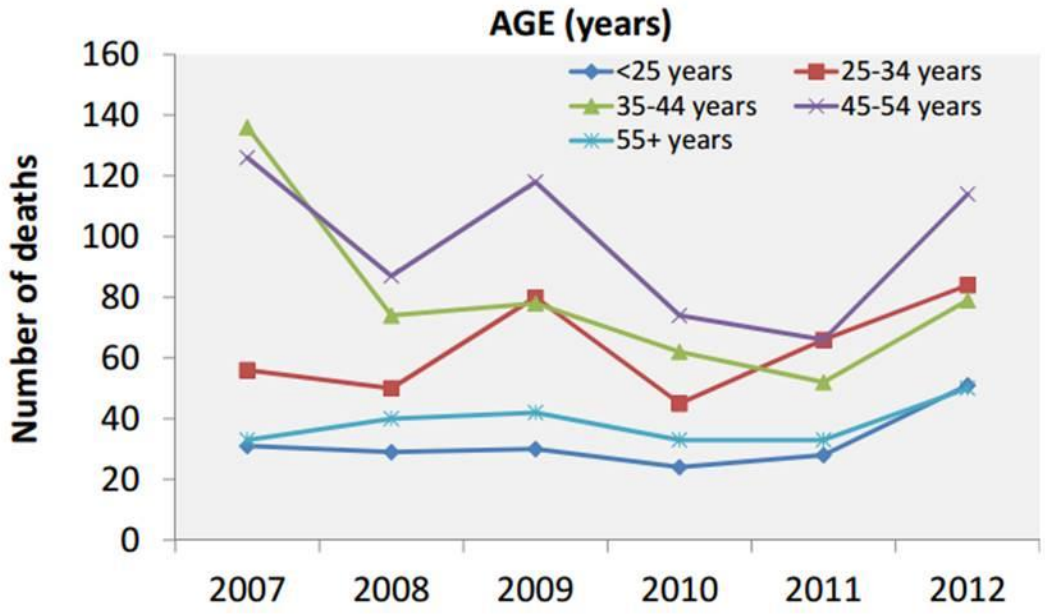
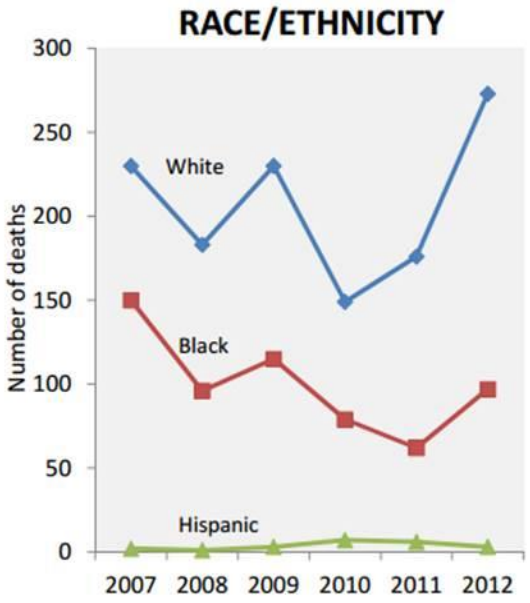


Figure 9. Number of Heroin-Related Deaths Occurring in Maryland by Age Group, Race/Ethnicity and Gender, 2007-2012.





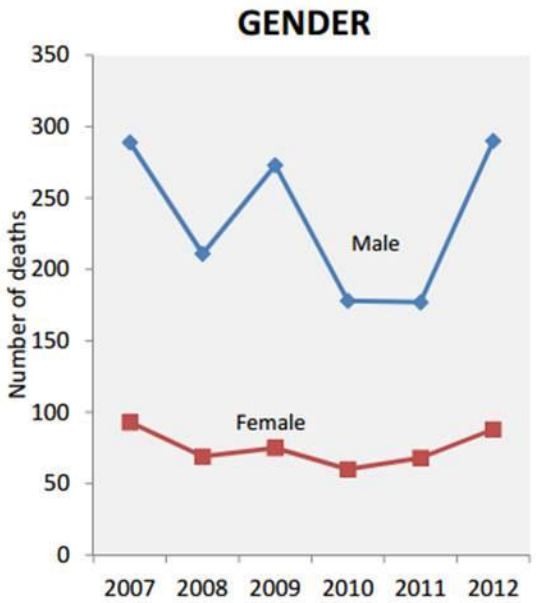


Figure 12. Number of Prescription Opioid-Related Deaths Occurring in Maryland, 2007-2012.

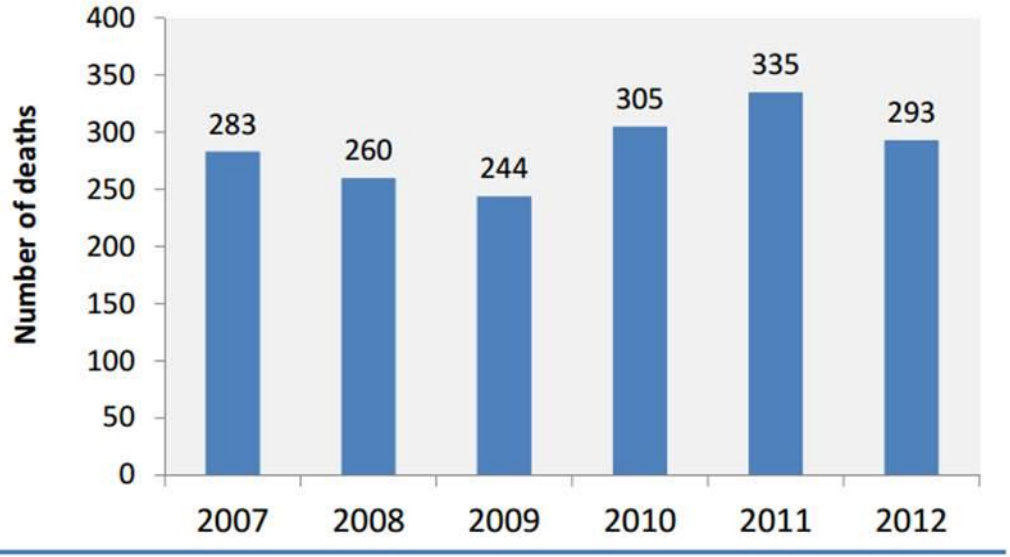


Figure 13. Number of Prescription Opioid-Related Deaths Occurring in Maryland by Age, Race/Ethnicity and Gender, 2007-2012.

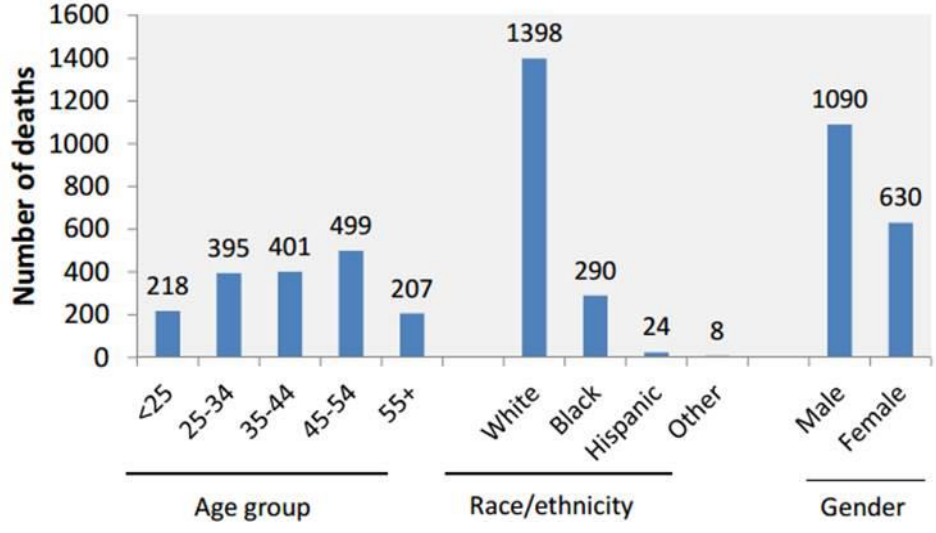
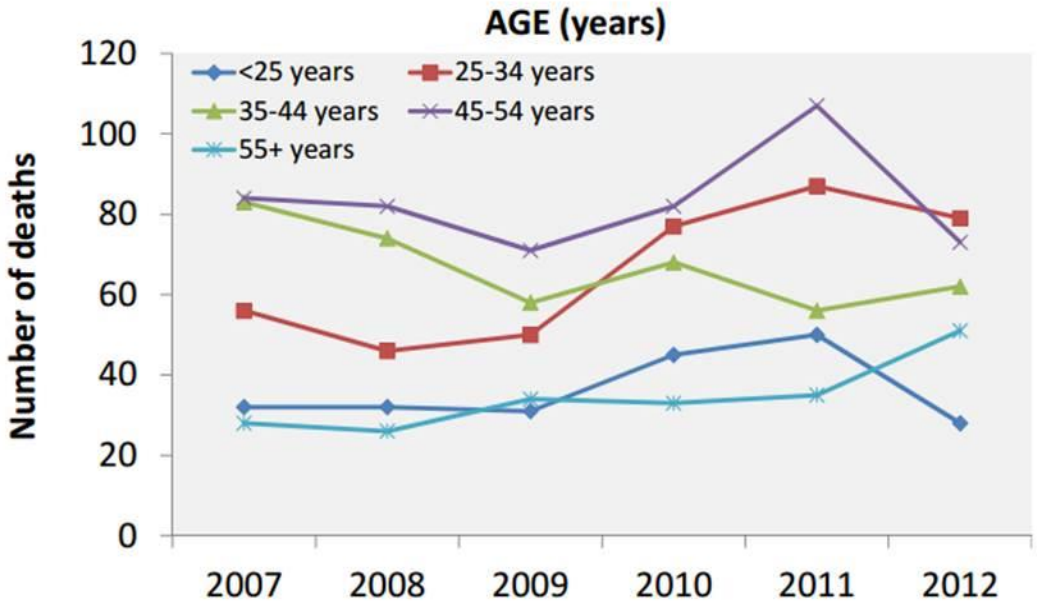
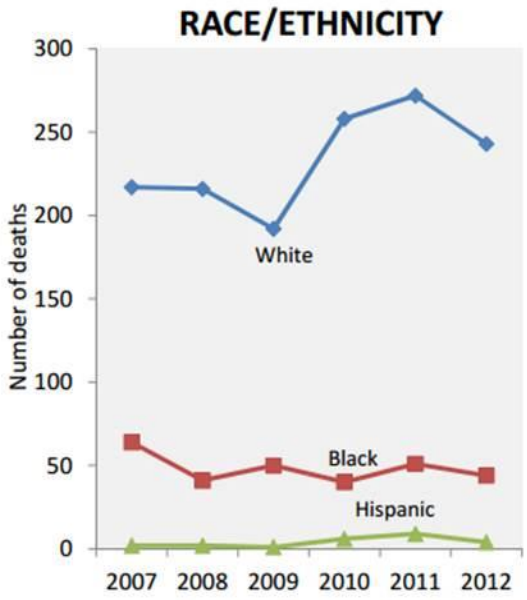


Figure 14. Number of Prescription Opioid-Related Deaths Occurring in Maryland by Age Group, Race/Ethnicity and Gender, 2007-2012.





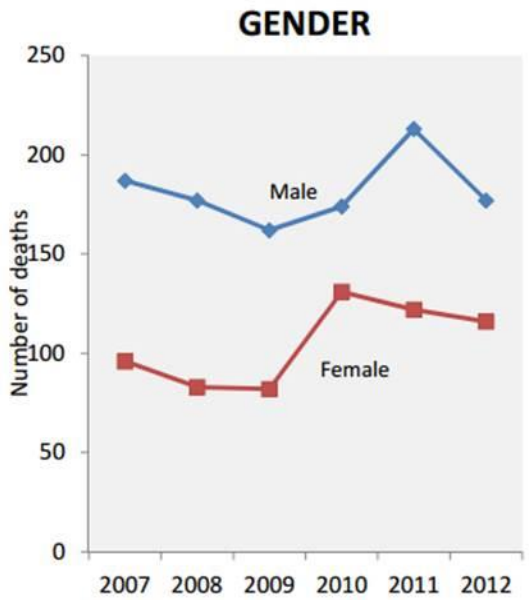
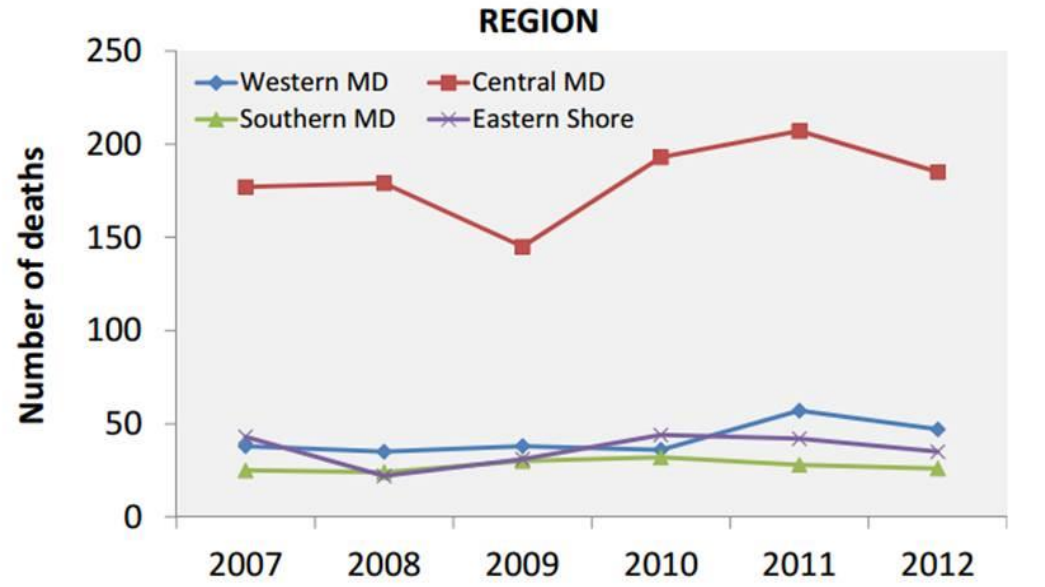


Figure 15. Number of Prescription Opioid-Related Deaths by Place of Occurrence, Maryland, 2007-2012.



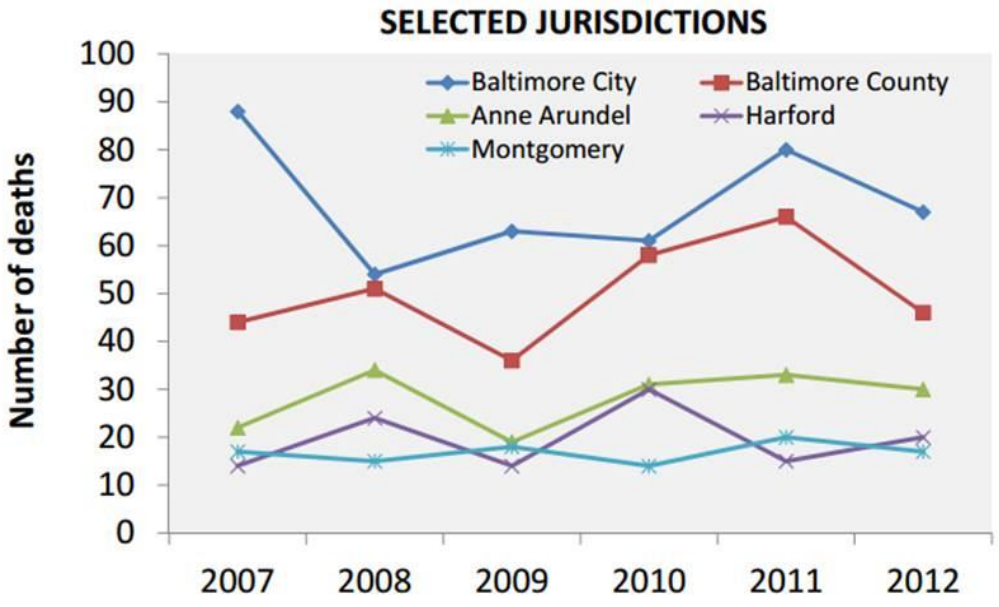
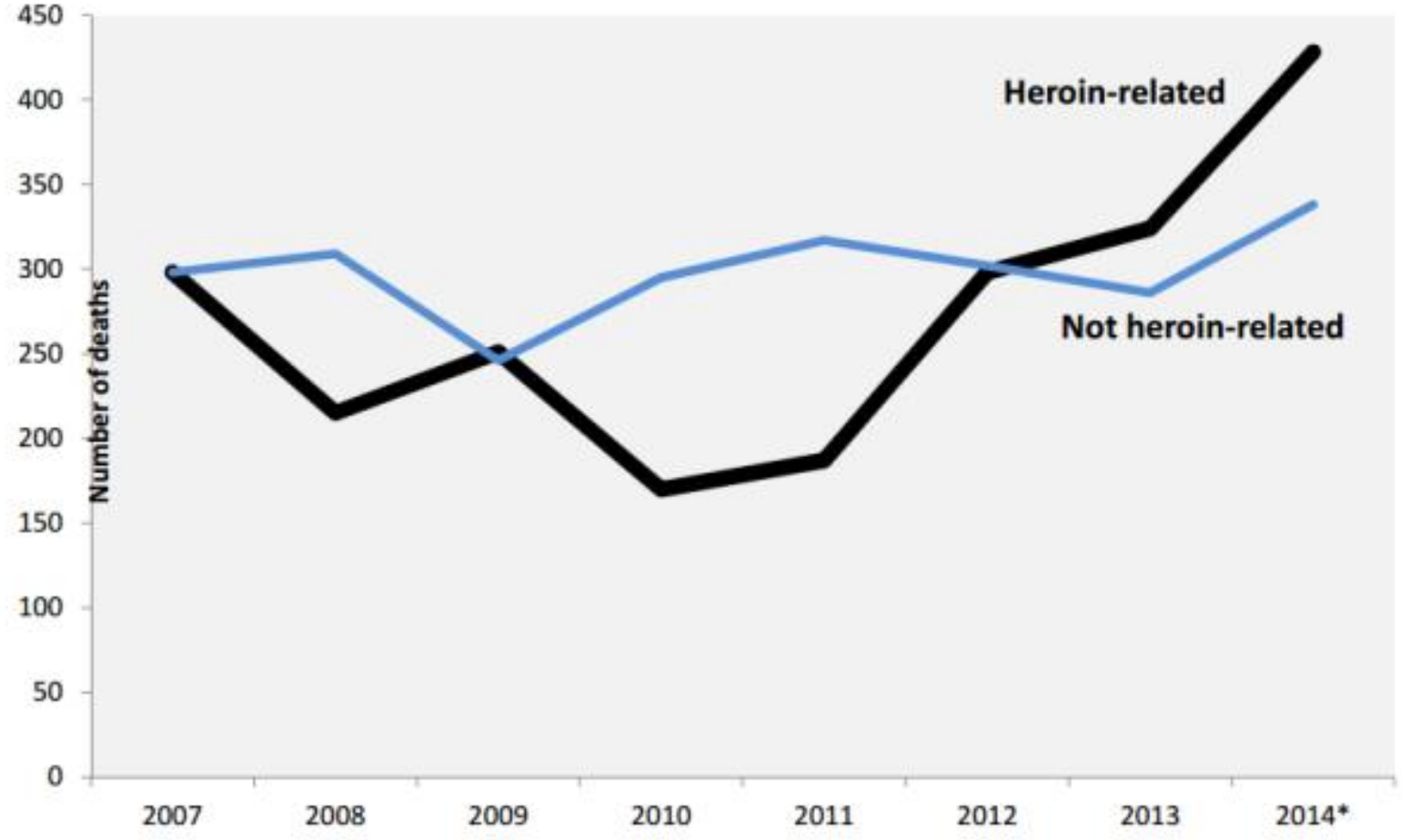
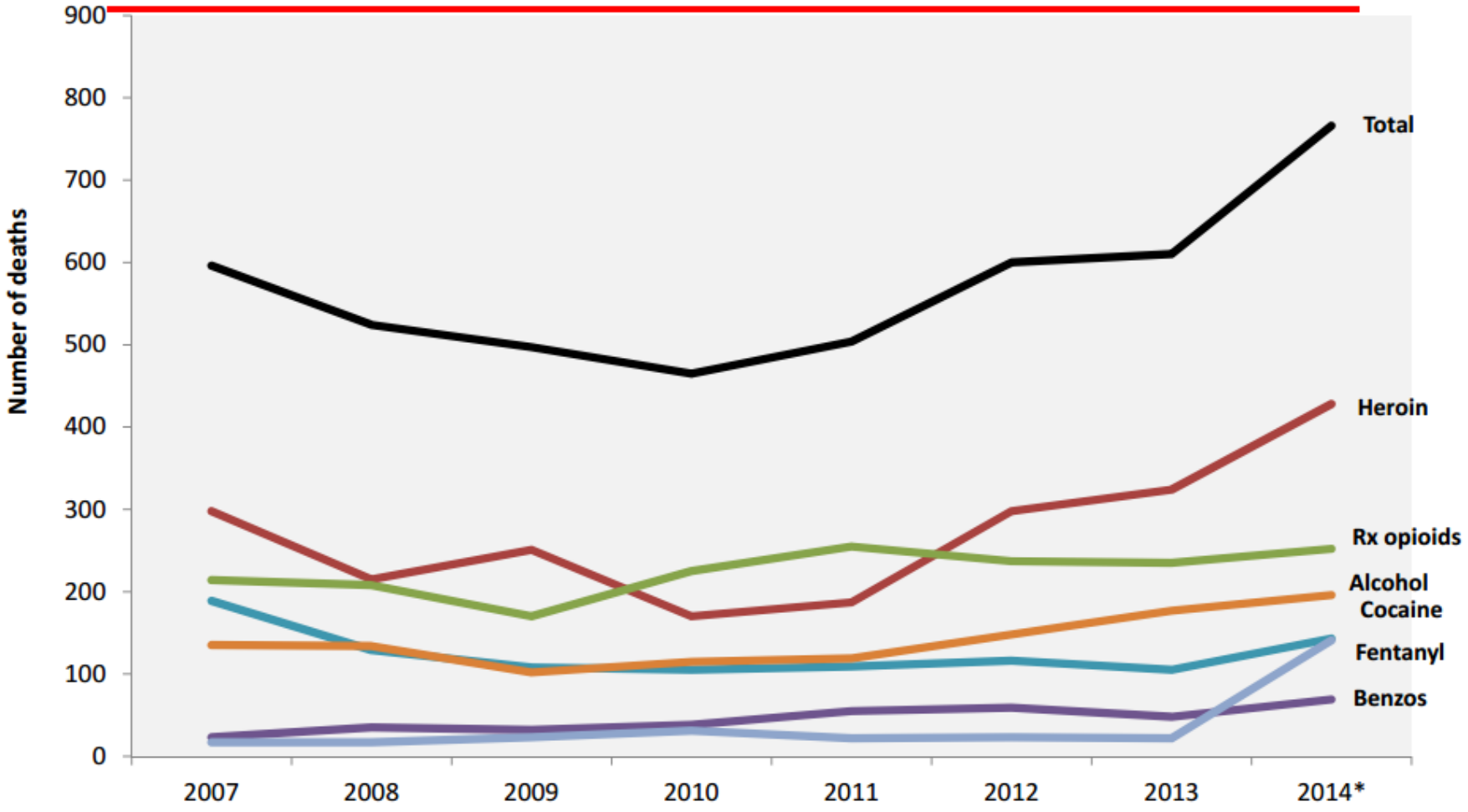


Figure 9. Number of Drug and Alcohol-Related Intoxication Deaths Involving Heroin Through September of Each Year, 2007-2014.*



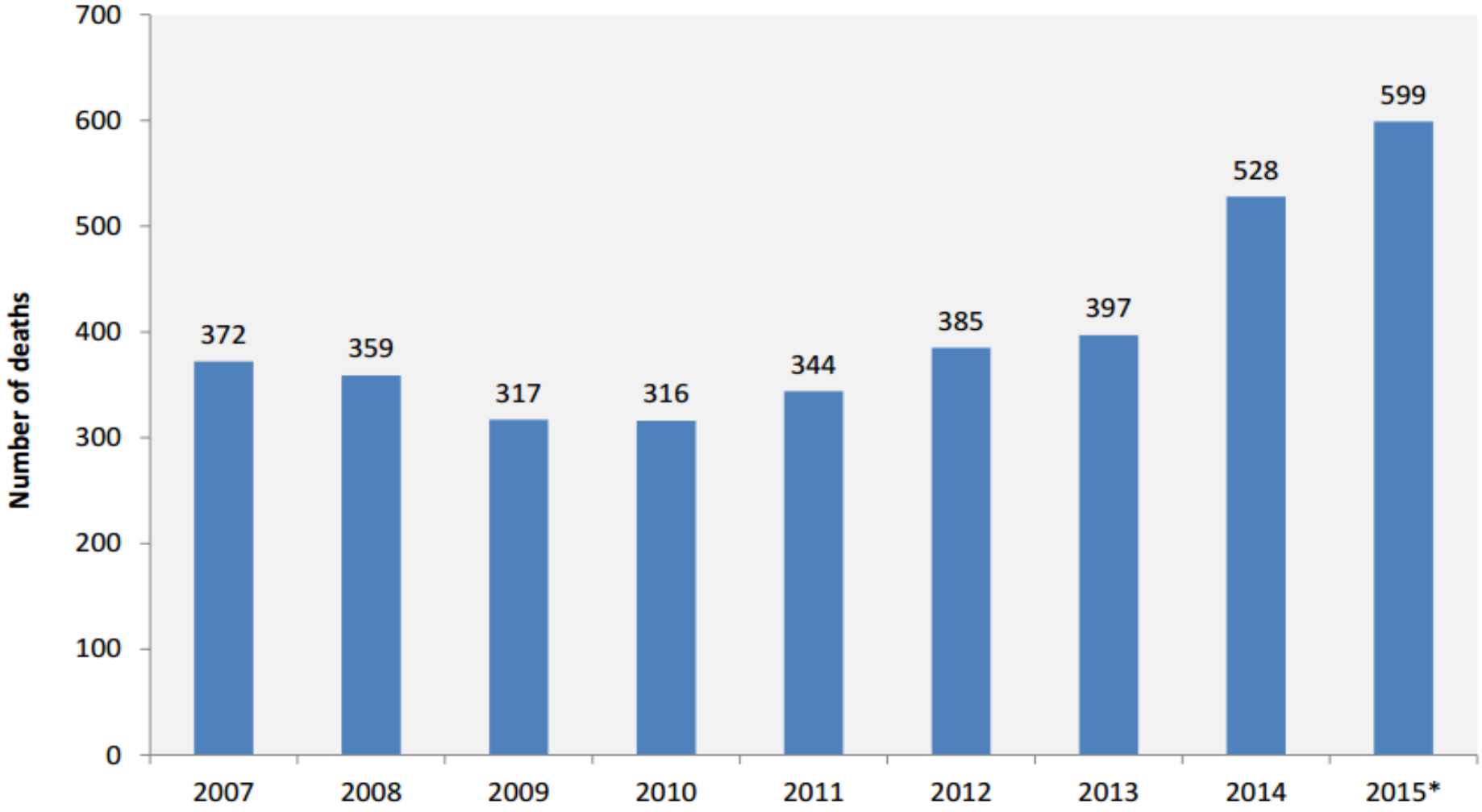
*2014 counts are preliminary.

Figure 11. Number of Unintentional Intoxication Deaths Occurring in Maryland Through September of Each Year, 2007-2014.*



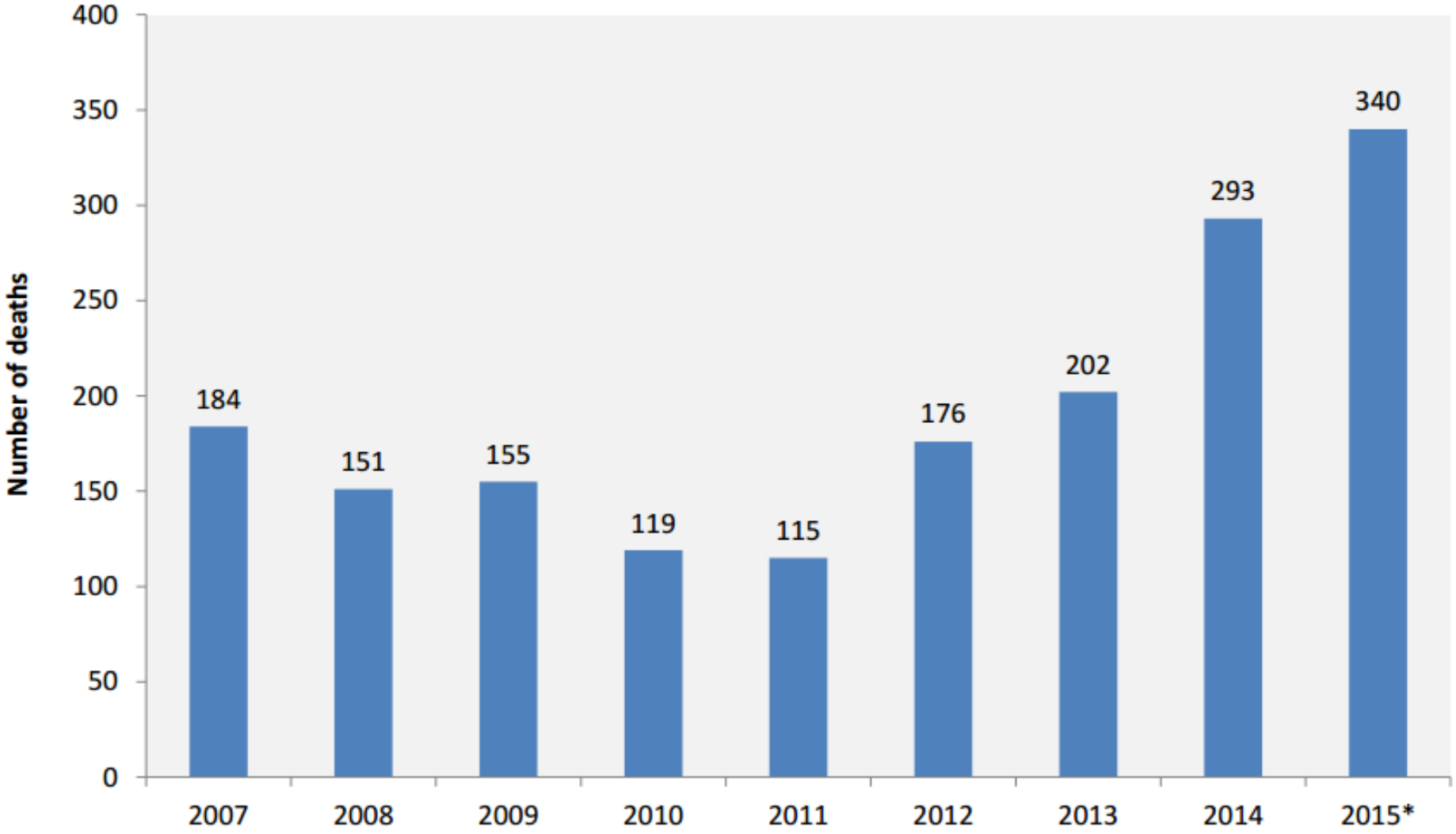
*2014 counts are preliminary.

Figure 1. Total Number of Unintentional Intoxication Death Occurring in Maryland from January-June of Each Year.*



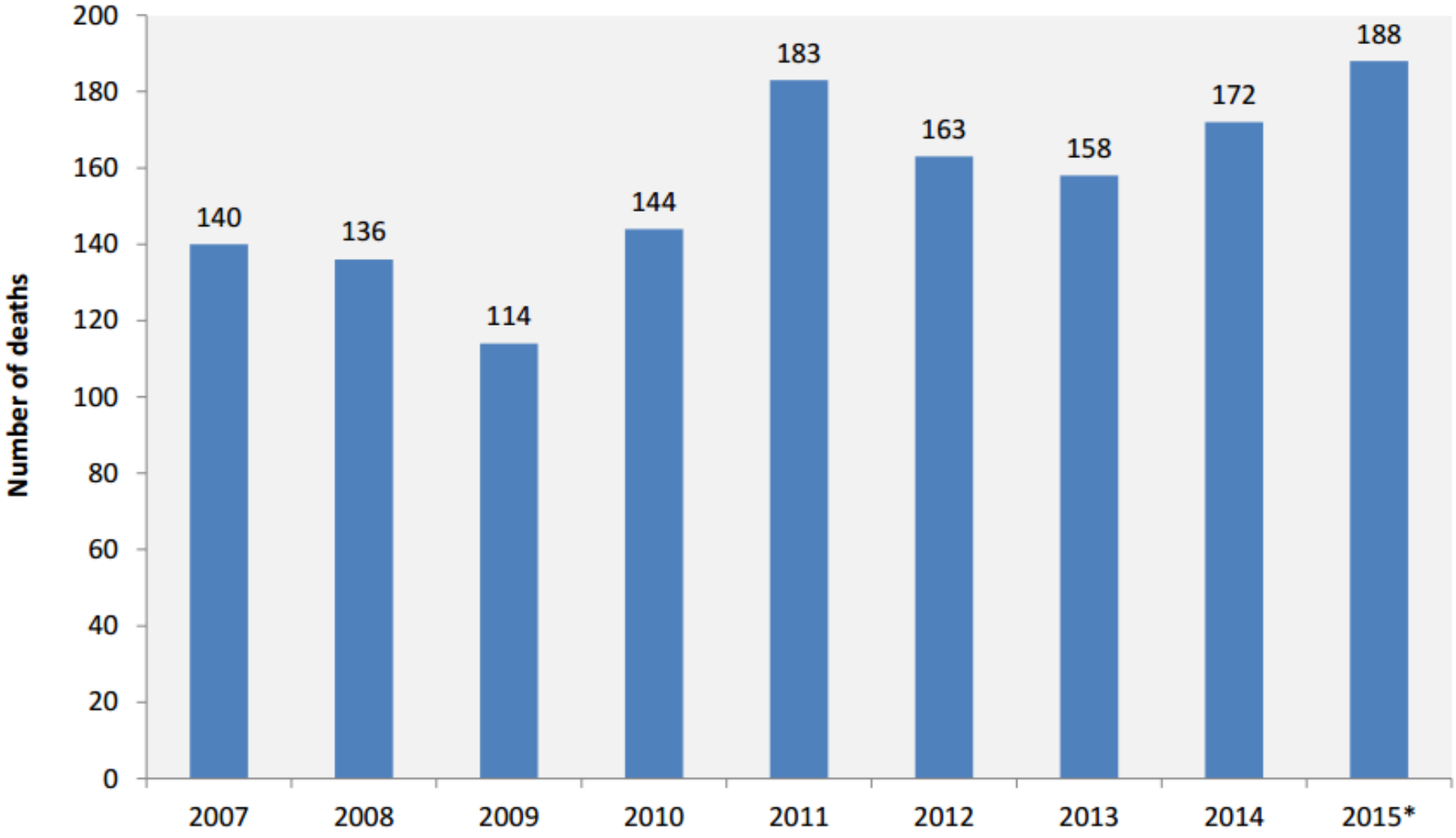
*2015 counts are preliminary.

Figure 2. Number of Heroin-Related Deaths Occurring in Maryland from January through June of Each Year.*



*2015 counts are preliminary.

Figure 3. Number of Prescription Opioid-Related Deaths Occur in Maryland from January through June of Each Year.*



*2015 counts are preliminary.

This is an official

CDC HEALTH ADVISORY

Distributed via the CDC Health Alert Network
June 20, 2013, 15:15 ET (3:15 PM ET)
CDCHAN-00359

Recommendations for Laboratory Testing for Acetyl Fentanyl and Patient Evaluation and Treatment for Overdose with Synthetic Opioids

***Summary**: Recently, a number of intravenous drug users have overdosed on a new, non-prescription injected synthetic opioid, acetyl fentanyl. Acetyl fentanyl is a fentanyl analog previously undocumented in illicit drug use that is up to five times more potent than heroin. CDC recommends increased vigilance by public health agencies, emergency departments, state laboratories, medical examiners, and coroners for patients with symptoms consistent with opioid overdose and laboratory results showing an enzyme-linked immunosorbent assay (ELISA) positive for fentanyl.*

CDC also recommends that public health officials work with laboratories to carry out ELISA screens for fentanyl, and if the results of these screens are positive for fentanyl, conduct gas chromatography-mass spectrometry (GC/MS) confirmatory testing on specimens to confirm or rule out fentanyl and its analogs, including acetyl fentanyl.

Background:

Since March 6, 2013, 14 overdose deaths related to a novel, injected non-prescription synthetic opioid have occurred among intravenous drug users in Rhode Island. Ten of those deaths occurred in March. On May 30, 2013, Rhode Island Department of Health confirmed that the implicated synthetic opioid is acetyl fentanyl, a fentanyl analog previously undocumented in illicit drug use. Acetyl fentanyl is not available as a prescription drug in the U.S.

The age of the persons who died from an acetyl fentanyl overdose ranged from 19 – 57 years, and 10 of the decedents were male. The toxicology testing results for most of the decedents showed, in addition to acetyl fentanyl, varying mixtures of drugs, including cocaine, heroin (morphine), ethanol, and benzodiazepines. However, none of these additional substances were present in all decedents and none of these persons tested positive for fentanyl by GC/MS after testing positive for fentanyl by ELISA. Toxicology results for one decedent showed only acetyl fentanyl (by GC/MS) and no other substances. These deaths represent a significant increase in the number of illicit drug overdose deaths compared with the number of cases typically reported in one month in Rhode Island.

There have been unconfirmed reports from other states of increases in illicit opioid-related overdose events seen in emergency departments. Media stories have associated these events with "fentanyl-contaminated heroin" or, in some cases, to fentanyl alone. It is possible that these events are related to acetyl fentanyl, but confirmatory testing is needed. States other than Rhode Island have not informed CDC that they are testing for acetyl fentanyl.

Case definitions:

1. *Illicit opioid-related overdose*: A diagnosis by a physician of illicit opioid overdose.

   Note: If a suspected illicit opioid overdose event results in death, jurisdictions often carry out drug screening. Some jurisdictions perform an ELISA that includes a screen for fentanyl, while others do not routinely screen for fentanyl. CDC recommends screening for fentanyl by ELISA to

THE BALTIMORE SUN

Fentanyl-laced heroin killing Marylanders

January 31, 2014 | By Andrea K. Walker, The Baltimore Sun

Drug dealers are lacing heroin with the potent painkiller fentanyl, creating a deadly cocktail that is killing unknowing users — sometimes within minutes of use.

The drug combination has killed dozens of people in several states, prompting law enforcement and health officials to issue warnings about its danger.

The Maryland Department of Health and Mental Hygiene said Friday that 37 Marylanders had died since September of overdoses after taking the drug mixture. The deaths accounted for 12 percent of 318 overdose deaths in the past four months.

- SPECIAL INTELLIGENCE AND SAFETY ALERT -

WIDESPREAD FENTANYL-RELATED OVERDOSES AND DEATHS IN THE NORTHEASTERN AND UPPER MID-EASTERN UNITED STATES !

Over the past year, law enforcement encounters with illicitly manufactured fentanyl have dramatically increased. Two clandestine fentanyl laboratories, a kilogram package of high purity fentanyl hydrochloride, a variety of fentanyl containing tablets (both Ecstasy-type mimics and Oxycontin® counterfeits), various mixtures of heroin/fentanyl powders, and at least one cocaine/fentanyl powder, have been seized from locations throughout the United States. Of particular concern, the distribution of heroin/fentanyl powders in and nearby the Chicago and Philadelphia metropolitan areas starting in February 2006 has (as of mid-May) resulted in several hundred overdoses and about fifty deaths, with additional overdoses and deaths being

[ASSOCIATED PRESS]

SOMERSET COUNTY: PRINCESS ANNE

Charges in sale of deadly drug

A Somerset County man could be sentenced to up to 24 years in prison if convicted of selling a deadly drug that is blamed for more than 100 deaths nationwide.

Robert L. Wise, 29, has been charged with distributing fentanyl, a painkiller stronger than morphine. Fentanyl has been discovered mixed with heroin and is thought to be responsible for more than 100 deaths. A Princess Anne man died in April after taking the drug.

Wise was arrested after a police investigation into a "possible drug overdose" of two female acquaintances, an alleged transaction that sent the buyers to Peninsula Regional Medical Center. Outside the courtroom where he was arraigned Thursday, Wise called himself a drug "user" who went with a female acquaintance "to get some," but he was not specific. He also said his activities were not linked to the April death.

•**Delaware** has had five deaths and 18 non-fatal overdoses in the last month, says Delaware State Police Sgt. Melissa Zebley.

Nearby, one person has died and eight others have overdosed in the Salisbury, Md., area sin
was believed to be fentanyl-laced heroin or straight fentanyl, says Judith Sensenbrenner of th
Health Department.

"Certainly we have heroin use here," she says, "but we don't tend to see that number of overd

Thursday, June 01, 2006

Fentanyl made in illegal labs

Chemical tests show pain drug suspected in

CESAR FAX

April 6, 1992
Vol. 1 Issue 8

A Weekly FAX From the Center for Substance Abuse Research

University of Maryland At College Park *

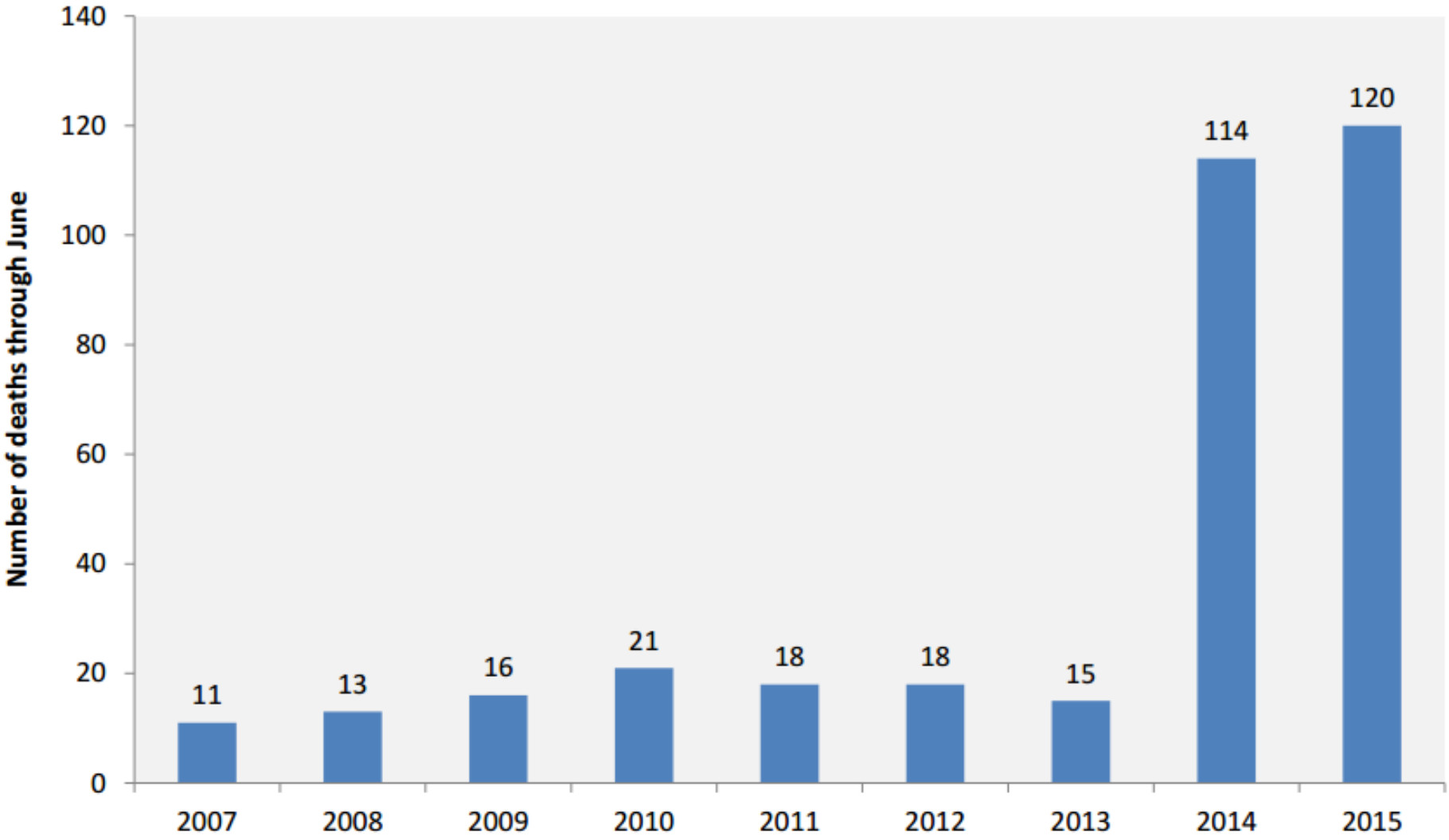
Demographic Characteristics of 23 Fentanyl Related Deaths in Maryland in 1992

Two-thirds of Fentanyl related deaths in Maryland involved a black male or female and were over 30 years of age. Almost all of the incidents occured in Baltimore City or Baltimore County in February or March. 550 envelopes containing Fentanyl have been seized by the state police. State police indicate the Fentanyl to be be licitly manufactured rather than produced in clandestine labs. Heroin addicts should be alerted that drugs sold as heroin may contain Fentanyl ("China White").

Demographics of Maryland Fentanyl Incidents

RACE:	f	%	AGE:	f	%

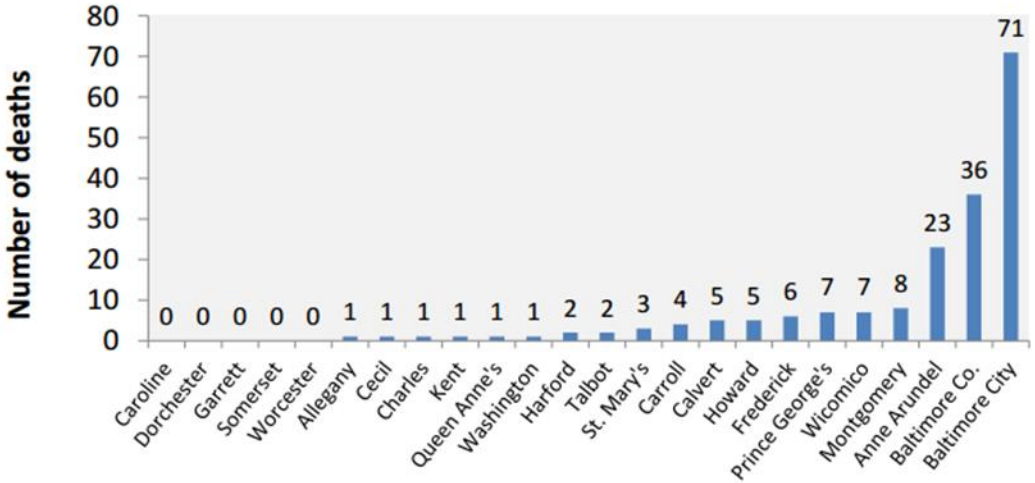
Figure 5. Number of Fentanyl-Related Intoxication Deaths Occurring in Maryland Through June of Each Year.*



*2015 counts are preliminary.

Figure 15. Number of Fentanyl-Related Deaths Occurring in Maryland, 2007-2014.

igure 16. Number of Fentanyl-Related Deaths Occurring in Maryland by Place of Occurrence, 2014.



MARYLAND
DEPARTMENT OF HEALTH AND MENTAL HYGIENE

Total Number of Drug and Alcohol-Related Intoxication Deaths by Place of Occurrence, Maryland. January – June, 2015 and 2014.

State of Maryland	Drug & Alcohol Intoxication Deaths		2015 vs 2014
COUNTY	Jan. - Jun. 2015	Jan. - Jun. 2014	# DIFFERENCE
Allegany County	12	4	8
A. A. County	50	51	-1
Baltimore City	188	162	26
Baltimore County	102	83	19
Calvert County	11	13	-2
Caroline County	0	4	-4
Carroll County	19	22	-3
Cecil County	13	20	-7
Charles County	10	8	2
Dorchester County	0	0	0
Frederick County	18	19	-1
Garrett County	3	1	2
Harford County	22	16	6
Howard County	11	10	1
Kent County	2	2	0
Montgomery County	38	28	10
P.G. County	33	35	-2
Queen Anne's County	2	6	-4
Somerset County	6	1	5
St. Mary's County	10	6	4
Talbot County	2	2	0
Washington County	36	19	17
Wicomico County	7	12	-5
Worcester County	4	4	0
Total	599	528	71

[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.

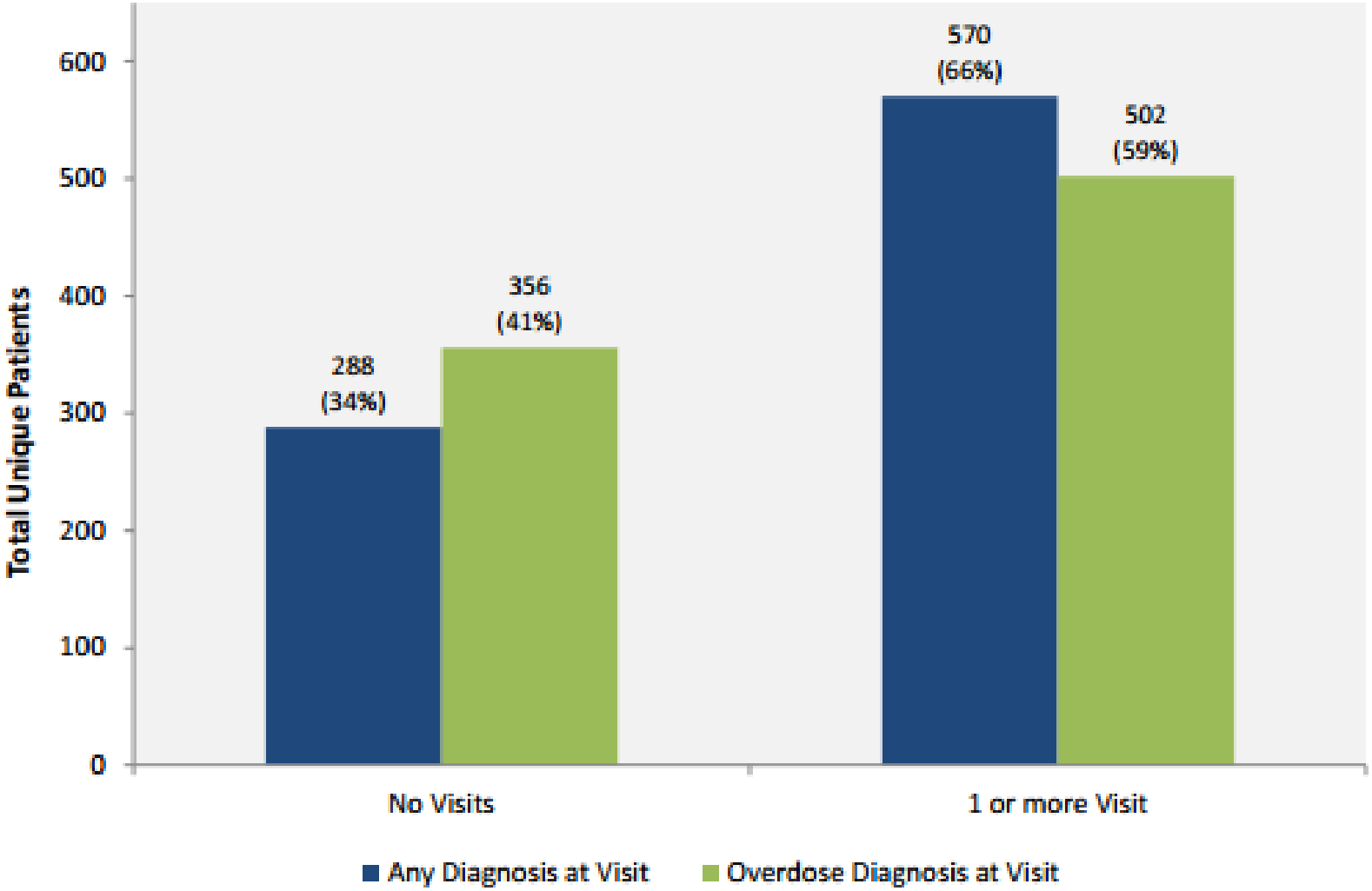
[3]Counts for 2015 are preliminary.

Description

- In 2013, 858 individuals died of an overdose in Maryland.
  - Of these 858 individuals, **59% (n=502) had at least 1 or more visits* *for an overdose* up to one year prior to the overdose death.** (Total overdose visits = 1,507)
    - 41% (n=356) of the individuals that died of an overdose in 2013 did not have a visit* *for an overdose* up to one year prior to the overdose death.
  - Of these 858 individuals, **66% (n=570) had at least 1 or more visits* *for any reason* up to one year prior to the overdose death.** (Total visits = 2,207)
    - 34% (n=288) of the individuals that died of an overdose in 2013 did not have a visit* *for any reason* within a year before the overdose death.

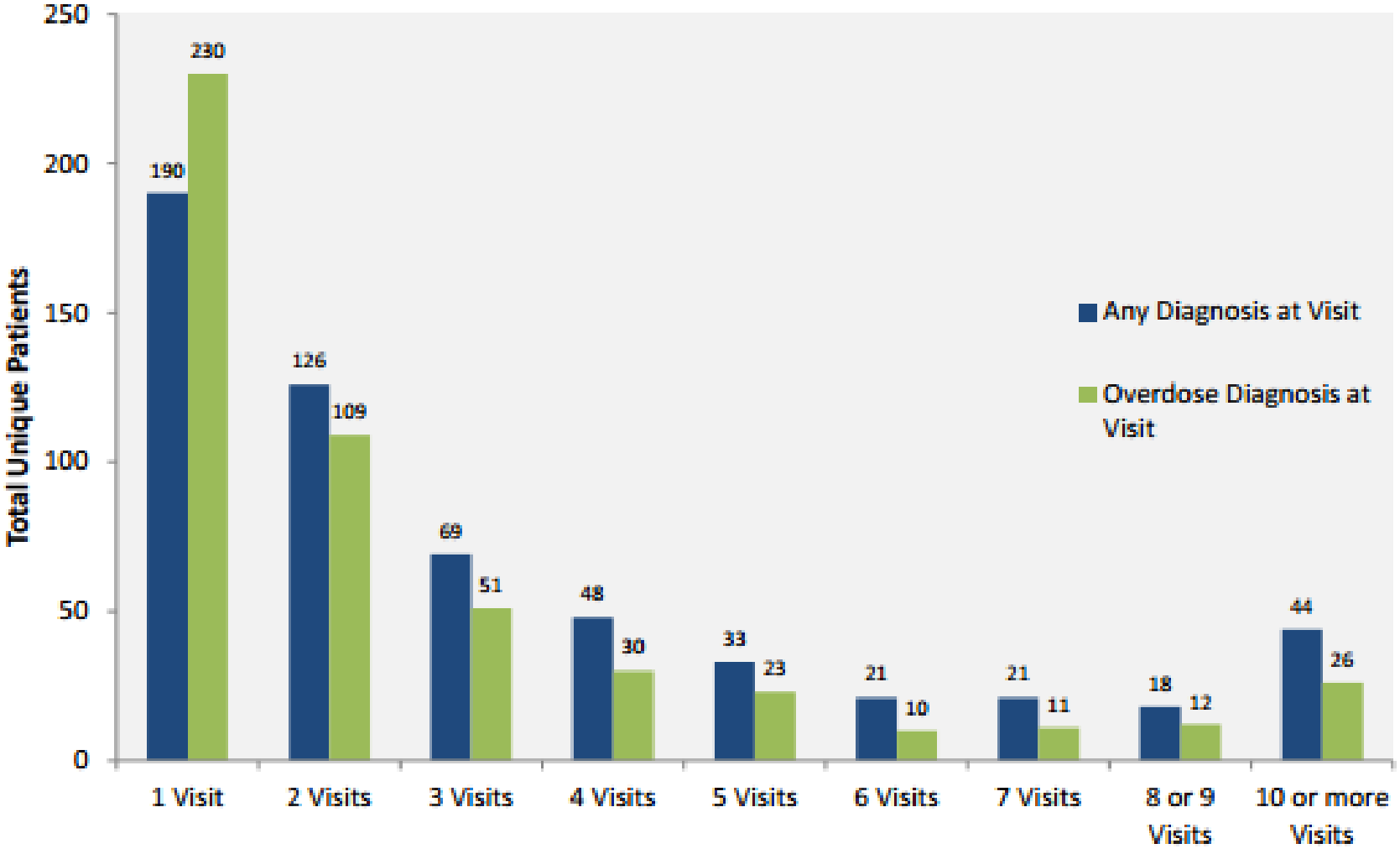
*Hospitalization or emergency department visit in Maryland.

Figure 1: Maryland: Total Hospitalizations/ED Visits Occurring within 1 Year Prior to Overdose Death*



*Based on the 858 individuals who died of an overdose in 2013.

Figure 2: Maryland: Total Hospitalizations/ED Visits Occurring within 1 Year Prior to Overdose Death, By Number of Visits*



*Based on the 858 individuals who died of an overdose in 2013.

MARYLAND
Department of Health and Mental Hygiene

Martin O'Malley, Governor
Anthony Brown, Lt. Governor
Joshua Sharfstein, MD, Secretary

Risk of Overdose Death Following Release from Prison or Jail

November 2014

Background

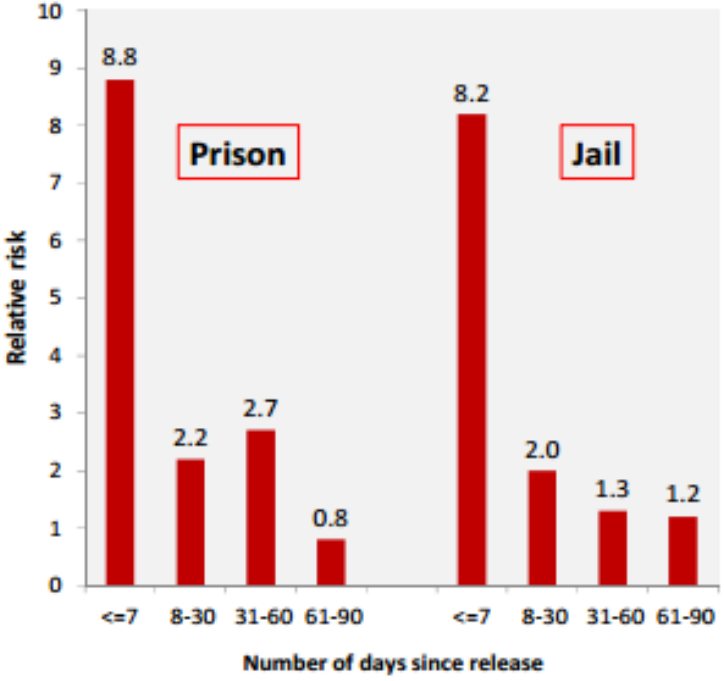
In response to the sharp increase in opioid-related deaths across the state, Governor O'Malley directed the Department of Public Safety and Correctional Services (DPSCS) and the Department of Health and Mental Hygiene (DHMH) to review opioid-related deaths post release.

Current Update

DHMH and DPSCS matched data on overdoses from 2007 to 2013. This data match found that 39 individuals (out of 94,569 released from prison or the Baltimore City jail from 2007 to 2013) died of an overdose within the first seven days of release. For the prison population, the risk of overdose was 8.8 times greater in the first week after release, compared to the period of three months to a year after release. Notably, a majority of deaths happened after one year, potentially as a result of discontinued treatment.

For the Baltimore city jail population, the risk of overdose was 8.2 times greater in the first week after release, compared to the period of three months to a year after release. Heroin was involved in nearly 90 percent of deaths in the first week after release.

Relative Risk* of Dying of an Unintentional Opioid Overdose by Time Since Release from Prison or Jail, Maryland, 2007-2013.



*Compared to deaths occurring 91-365 days following release

POSSIBLE INTERVENTIONS

1º, 2º, 3º, 4º

- Education/Public Awareness
- Legislation
- Early Warning Network- Interagency Collaboration
  - Local Overdose Fatality Review Teams
- Increased Drug Treatment
- Prescription Drug Monitoring Programs
- Physician Prescribing Education
- Prescription Medication Take-Back
- Naloxone Distribution (3rd party, law enforcement, co-prescribing)
- Assistance for loved ones
- Safe Injection Rooms/Prescribed Heroin

Responding to the Heroin Epidemic

PREVENT
People From Starting Heroin

Reduce prescription opioid painkiller abuse.
Improve opioid painkiller prescribing practices and identify high-risk individuals early.

REDUCE
Heroin Addiction

Ensure access to Medication-Assisted Treatment (MAT).
Treat people addicted to heroin or prescription opioid painkillers with MAT which combines the use of medications (methadone, buprenorphine, or naltrexone) with counseling and behavioral therapies.

REVERSE
Heroin Overdose

Expand the use of naloxone.
Use naloxone, a life-saving drug that can reverse the effects of an opioid overdose when administered in time.

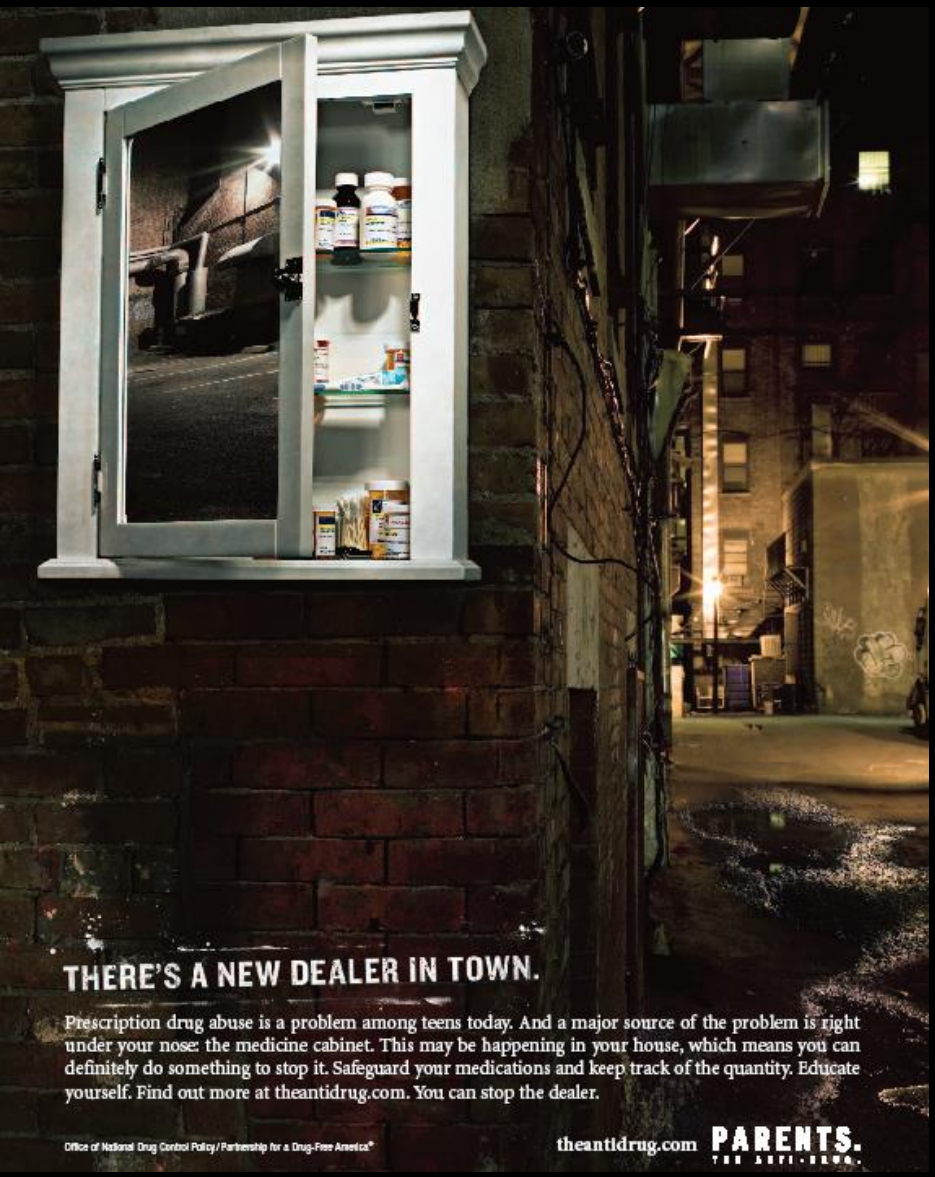
SOURCE: CDC Vitalsigns, July 2015

TAKE ACT!ON

BE A
SAVE A LIFE
HERO

YOU CAN
STOP
OVERDOSE
DEATH

GET NALOXONE SAVE A LIFE



THERE'S A NEW DEALER IN TOWN.

Prescription drug abuse is a problem among teens today. And a major source of the problem is right under your nose: the medicine cabinet. This may be happening in your house, which means you can definitely do something to stop it. Safeguard your medications and keep track of the quantity. Educate yourself. Find out more at theantidrug.com. You can stop the dealer.

Office of National Drug Control Policy / Partnership for a Drug-Free America®

theantidrug.com PARENTS. THE ANTI-DRUG.

THERE'S A NEW DEALER IN TOWN.

These days, teens don't have to go out looking for drugs; they can just go to the medicine cabinet. Even as teen use of "street drugs" is on the decline, the abuse of prescription drugs is increasing. The perception is that they're safe even though abuse can lead to paranoia, addiction, seizures, and death. You can prevent abuse by safeguarding and monitoring your family's medications. Educate yourself. Find out more at theantidrug.com. You can stop the dealer.

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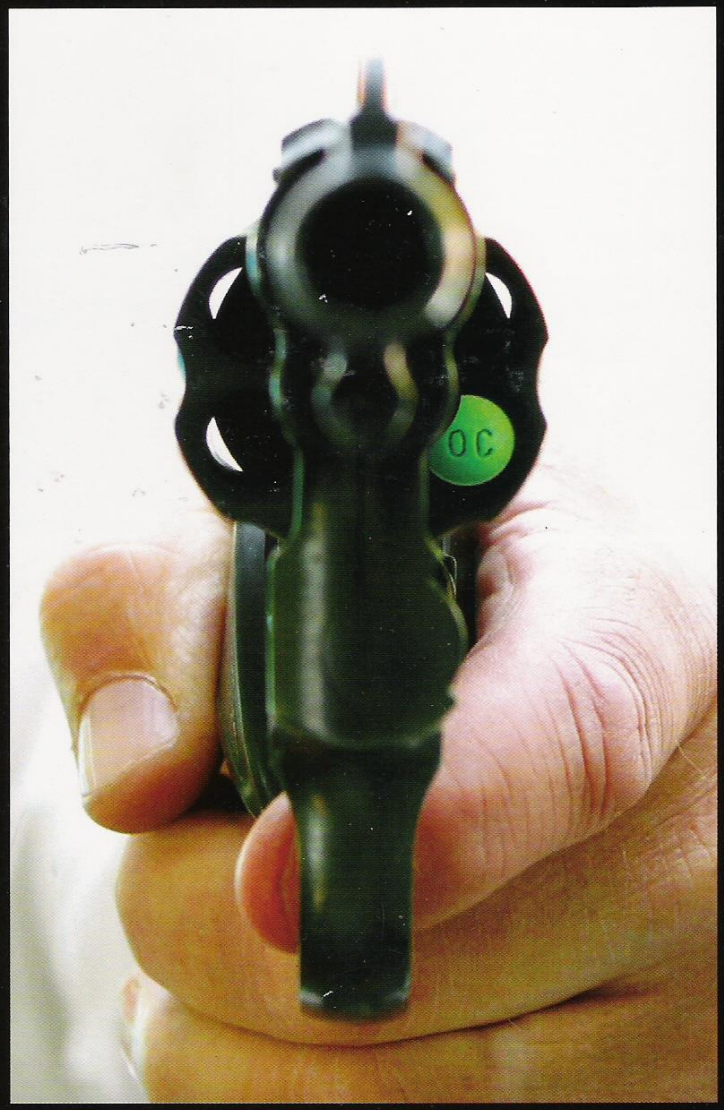
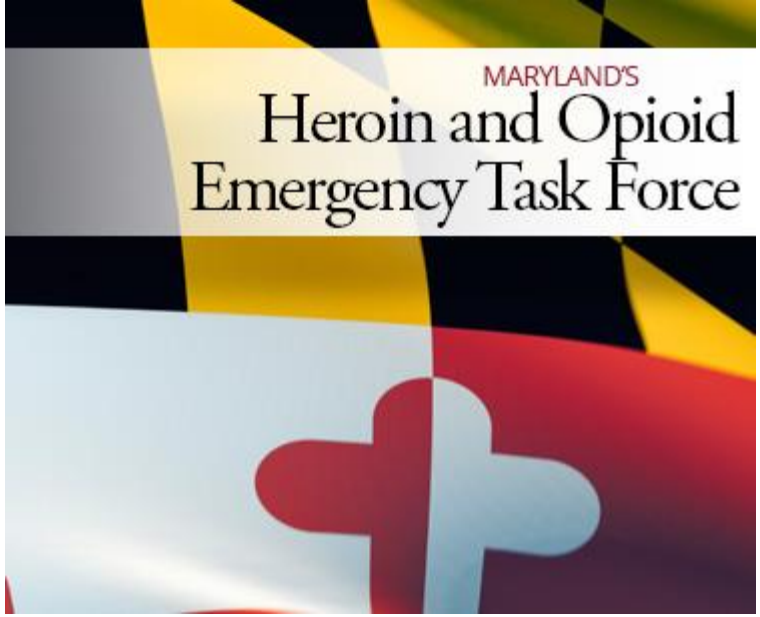
Just one can't hurt ..... Can it?



Wonder about the value of keeping leftovers?

Your kid knows.

Destroy leftover medications.



Health-General §§13-3101-3109
effective Oct. 1, 2013

COMAR 10.47.08.01-.11
effective Mar. 3, 2014.

Federal Lawmakers Introducing Overdose Prevention Bill to Combat Heroin and Opioid Overdose Crisis

Md. law protects people seeking help for overdose victims

Prescription Drug Monitoring Program (PDMP)

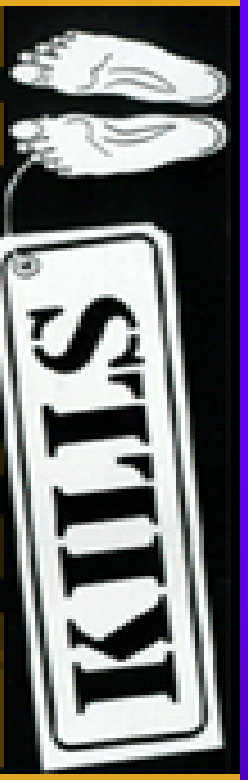
(aka “CRISP”)

Got Drugs?

Turn in your unused or expired medication for safe disposal

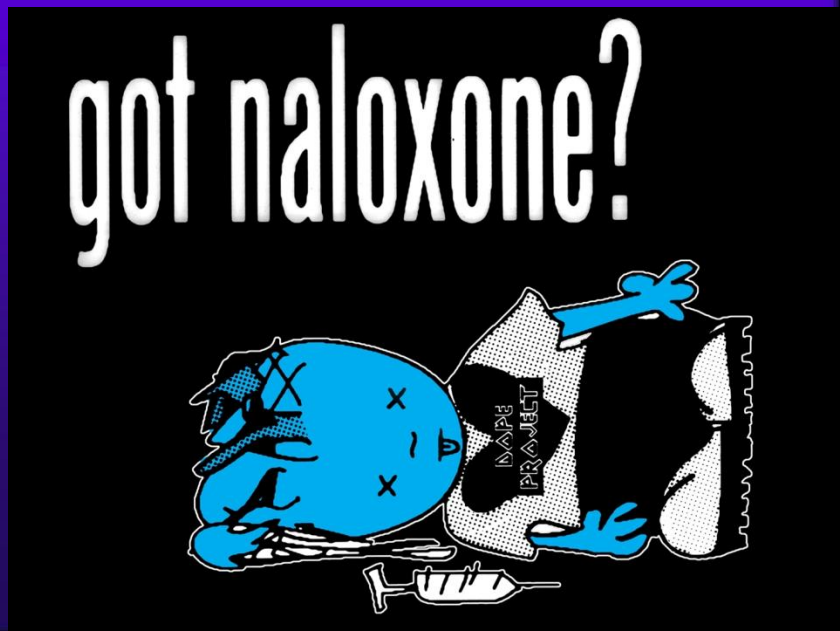
Next event:

September 26, 2015



FORMS OF NALOXONE

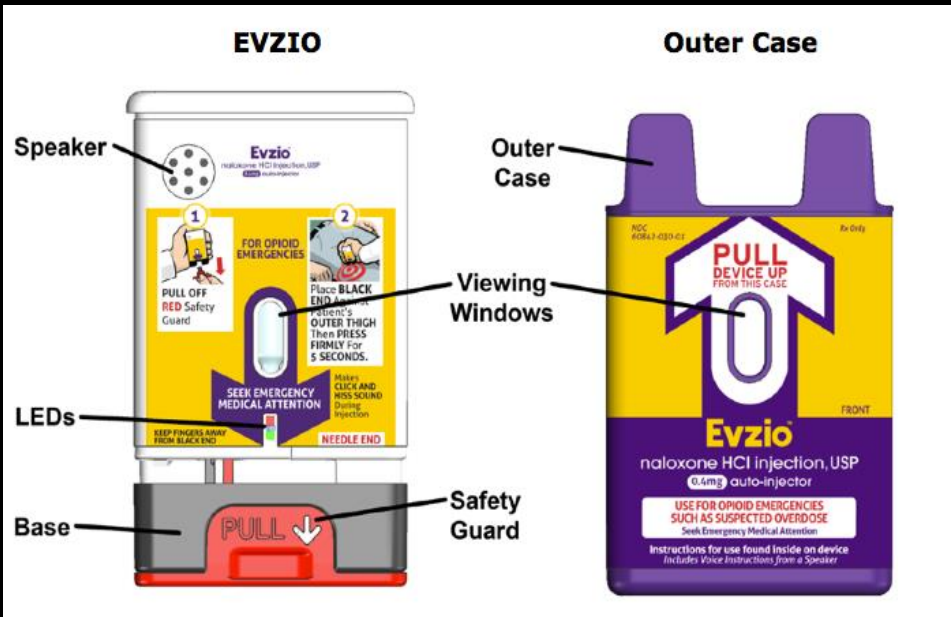
- Pre-loaded single-dose syringes
- Single-dose glass ampules
- Multi-dose 10cc bottles
- Talking auto injector
- Nasal spray*



*Not yet FDA approved


Naloxone
HCl
Injection, USP
NARCAN
1 mg/mL
ANTIRA


Rx Only
NALOXONE
HYDROCHLORIDE
INJ, USP
(1 mg/mL)
2 mg
per
2 mL


EVZIO
Outer Case
Speaker
Outer Case
Viewing Windows
LEDs
Base
Safety Guard
Evzio
FOR OPIOID EMERGENCIES
PULL OFF RED Safety Guard
Place BLACK END
OUTER THIGH
Then PRESS FIRMLY For 5 SECONDS.
SEEK EMERGENCY MEDICAL ATTENTION
NEEDLE END
PULL
PULL DEVICE UP FROM THIS CASE
FRONT
Evzio
naloxone HCl injection, USP
0.4mg auto-injector
USE FOR OPIOID EMERGENCIES SUCH AS SUSPECTED OVERDOSE
Seek Emergency Medical Attention
Instructions for use found inside on device
Includes Voice Instructions from a Speaker

Baltimore to Give Heroin Users Overdose Drug

March 7, 2003

Communities in Action

This spring, Baltimore health officials are planning to launch a program that will enable heroin users to inject naloxone, an opiate-blocking drug used to revive a person who overdoses, the Baltimore Sun reported March 3.

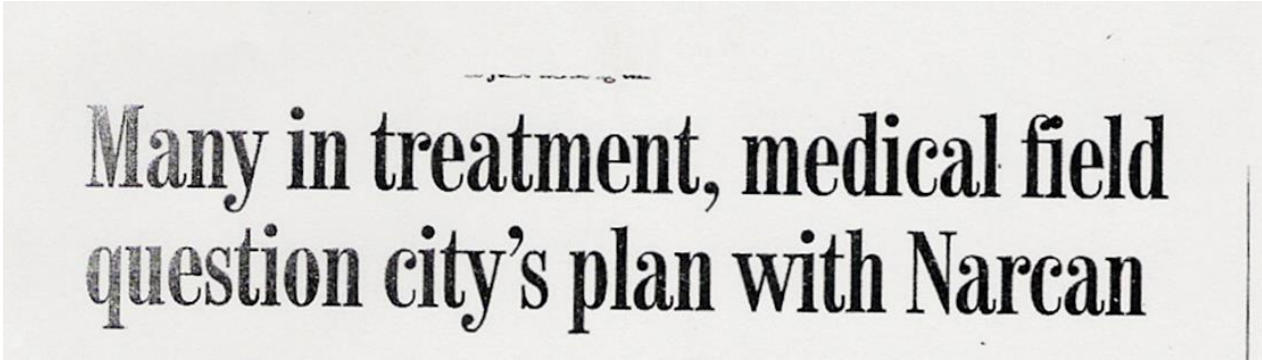
Health officials said the program is aimed at curbing the rising number of fatal heroin overdoses. "There is a chronic problem here," said Dr. Peter L. Beilenson, Baltimore health commissioner. "A significant number of people are dying each year from heroin overdoses -- in one year, more than the homicide rate -- and while this may be viewed as enabling, this is a worthwhile attempt to keep people alive."

Under the program, vials of the drug Narcan would be distributed to heroin users, who will receive training from emergency-services and health officials. Narcan is used in the medical community to treat opium-based narcotics overdoses.

Baltimore: The Heroin Capital of the United States

Though Baltimore already had an abnormally high degree of heroin abuse before the U.S. heroin epidemic of the 1990s, the city came to be widely considered by health and law enforcement officials as the heroin capital of the nation at the beginning of the twenty-first century. When Baltimore became a key East Coast distribution point for high-purity South American heroin during the mid-1990s, its street heroin became more pure, and thus more addictive and more deadly, than that of most other cities in the nation, and its heroin use rate began to skyrocket.

In the year 2000 alone, there were more than three hundred fatal heroin-related overdoses in Baltimore and a similar number of heroin-related hospital emergencies. With official estimates of one out of every ten Baltimore residents addicted to heroin by 2001—some sixty thousand men and women, the majority of whom were believed to use the drug intravenously—the problem became so serious that the federal government designated the city a "high intensity drug trafficking area," making it eligible for special federal assistance to local police.


Many in treatment, medical field question city's plan with Narcan

Overdose Response Program Training & Dispensing Statistics*

As of October 16, 2015

Individuals Trained Under the ORP*

FY 14	1,431	
FY 15	7,524	
FY 16*	2,499	thru October 16, 2015
Total*	11,184	

Doses of Naloxone Dispensed*

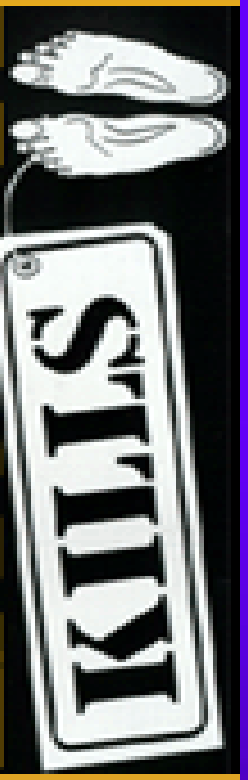
FY 14	1,741	
FY 15	6,279	
FY 16*	3,382	thru October 16, 2015
Total*	11,402	

Administrations of Naloxone Reported**

FY 14	14	
FY 15	131	
FY 16*	71	thru October 16, 2015
Total*	216	

* Training and dispensing statistics are maintained by authorized training entities and reported to DHMH on a monthly basis.

** Naloxone administration information is voluntarily reported by certificate holders to the Maryland Poison Center or to an authorized training entity and subsequently provided to DHMH on a monthly basis.



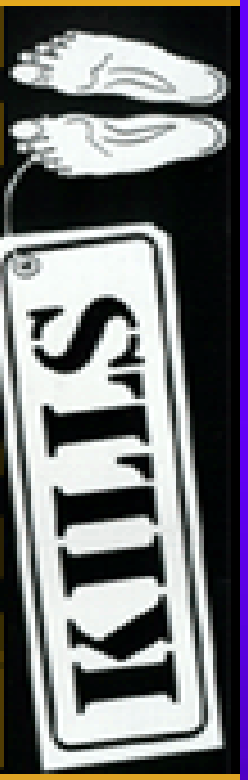
"DETOX"

"The liver detoxifies but clinicians manage withdrawal."

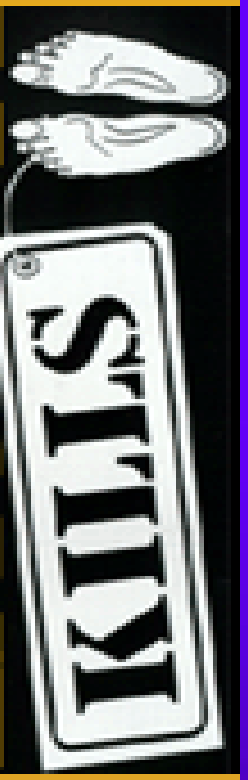
ASAM

- = "Withdrawal Management"

“DETOX”



- Should we be “detoxing” most patients?
  - High relapse rates
  - Lack of good data
  - Legal limitations
  - Law suits



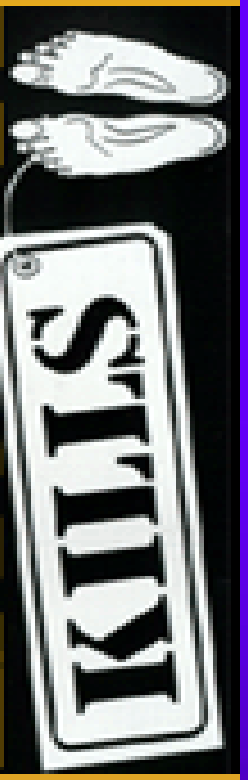
"DETOX"

- **The Controlled Substances Act (1970)**
  - …to administer/dispense a "narcotic" drug for the purposes of maintenance or detoxification: the practitioner must be separately registered with the DEA as a narcotic treatment program… and must be in compliance with DEA regulations…
  - Exceptions:

    Incidental Exception: "…in a hospital to maintain or detoxify a person if such action is incidental adjunct to medical or surgical treatment of conditions other than addiction."

    Relief of Acute Withdrawal Symptom Exception: "…administer (but not prescribe) narcotic drugs 'to a person for the purpose of relieving acute withdrawal symptoms when necessary while arrangements are being made for referral for treatment' …may not administer more than one day's medication at one time and such treatment may not last for more than three (3) days; no renewals or extensions of that period are permitted."

So What's A Psychiatrist To Do?



- Use the PDMP!!!
- Prescribe controlled substances thoughtfully
- Communicate with other medical/mental health providers
- Refer/consult in situations that are out of your comfort zone