

Opioid Poisoning-Related Emergency Department Visits Anne Arundel County, 2010-2014



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Prepared by: Office of Assessment and Planning, Anne Arundel County Department of Health

OVERVIEW

Drug and alcohol poisoning (also known as “overdose” or “intoxication”) is one of the leading causes of unintentional injury death in Anne Arundel County and Maryland, a statistic on the rise over the past five years.¹ Specifically, opioid-related intoxication deaths represent an increasingly greater proportion among overall intoxication deaths. In 2014, over 85 percent of all drug and alcohol intoxication deaths occurring in Maryland were related to opioid use.²

In order to develop successful drug abuse prevention strategies, it is essential to establish which populations are at greatest risk for opioid misuse. Emergency department (ED) utilization data provides insightful demographic data useful in framing these at-risk populations.

This report highlights the trends in opioid and heroin-specific poisonings by Anne Arundel County residents by sex, race/ethnicity, age group, primary insurance payer type and geographic location. This report was prepared using emergency department hospital discharge data provided by the Maryland Health Services Cost Review Commission (HSCRC). Heroin poisonings are considered a subset of overall number of opioid poisonings listed in this report.

METHODS

Data Source (unless otherwise noted): The HSCRC Outpatient Hospital Discharge Files, 2010-2014.

Definitions:

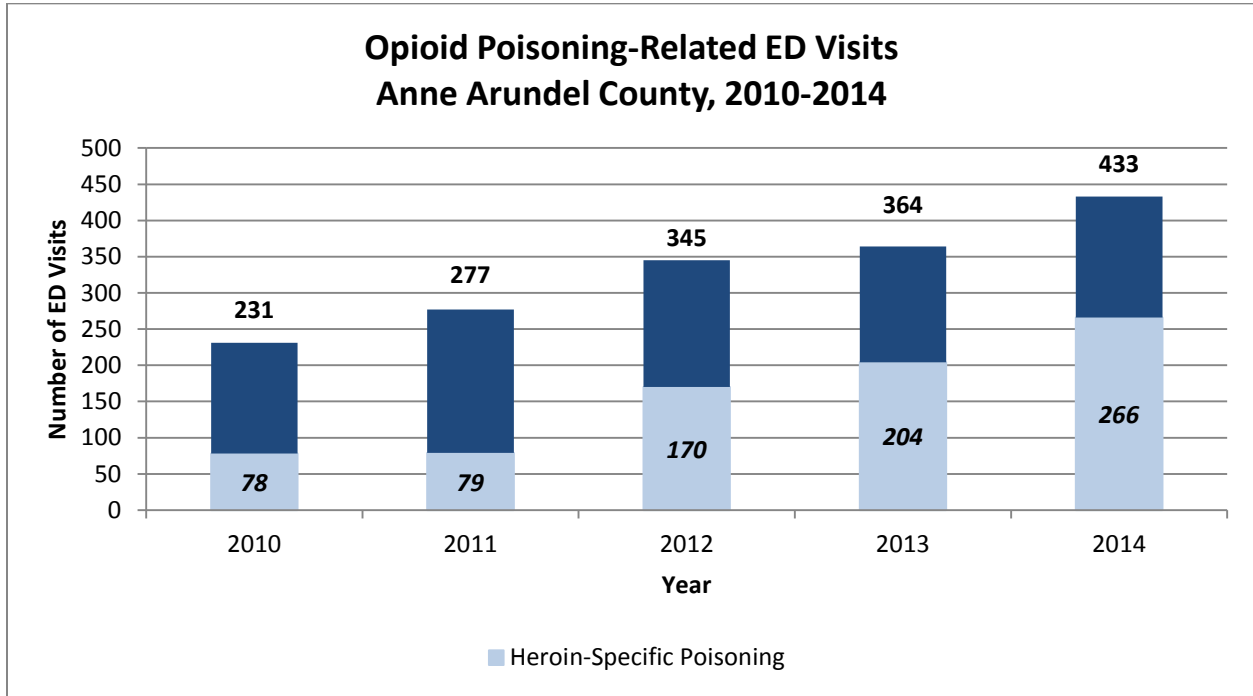
- **Opioid poisoning:** ED visit where either the primary diagnosis or any of the subsequent secondary diagnoses were listed as the following ICD-9 codes:
 - 965.00 Poisoning by opium (alkaloids), unspecified
 - 965.01 Poisoning by heroin
 - 965.02 Poisoning by methadone
 - 965.09 Poisoning by other opiates and related narcotics
 - E850.0 Accidental poisoning by heroin
 - E850.1 Accidental poisoning by methadone
 - E850.2 Accidental poisoning by other opiates and related narcotics
- **Heroin poisoning:** ED visit where either the primary diagnosis or any of the subsequent secondary diagnoses were listed as the following ICD-9 codes:
 - 965.01 Poisoning by heroin
 - E850.0 Accidental poisoning by heroin

¹ Anne Arundel County Department of Health. *Drug and Alcohol Intoxication Deaths of Anne Arundel County Residents, 2007-2012*. Released May 2014.

² Maryland Department of Health and Mental Hygiene, Behavioral Health Administration. *Drug- and Alcohol-Related Intoxication Deaths in Maryland, 2014*. Released May 2016.

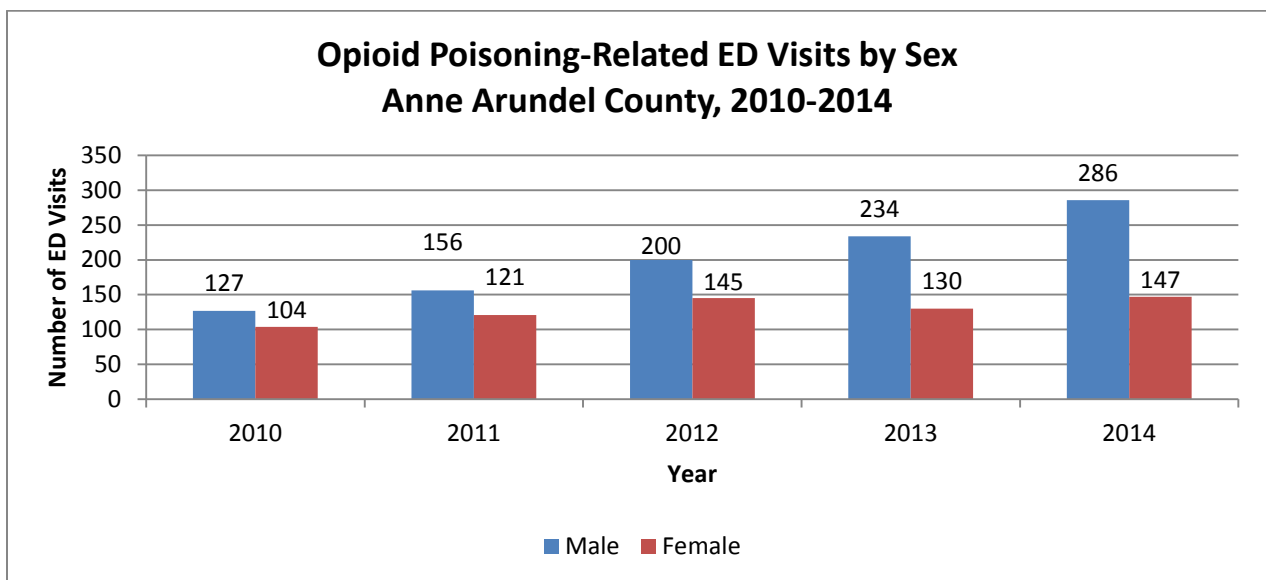
OVERALL

The number of opioid poisoning-related ED visits continued to increase in 2014 – up 87 percent since 2010. These increases were driven by larger proportions of heroin poisonings, which represented the majority (61 percent) of opioid poisonings presenting to the ED in 2014.

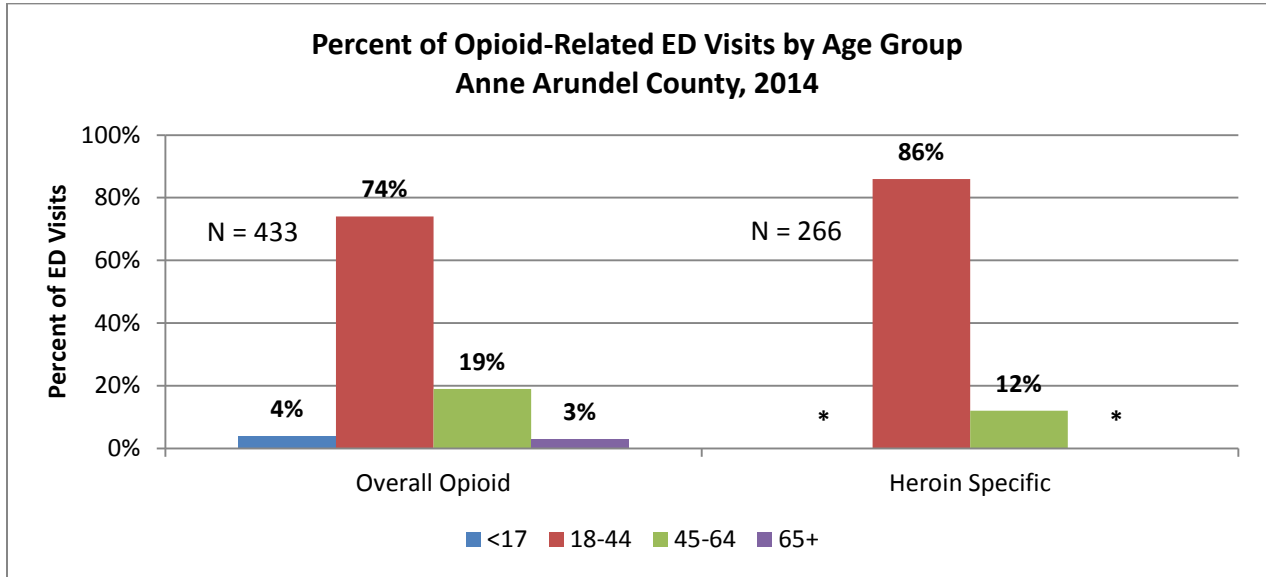


DEMOGRAPHICS

In 2014, two-thirds of opioid poisoning-related ED visits were among men. The disparity between opioid poisoning ED visits among men and opioid poisoning ED visits among women continued to increase over a five-year period. Similarly, three-quarters of heroin poisoning-related ED visits were among men in 2014.

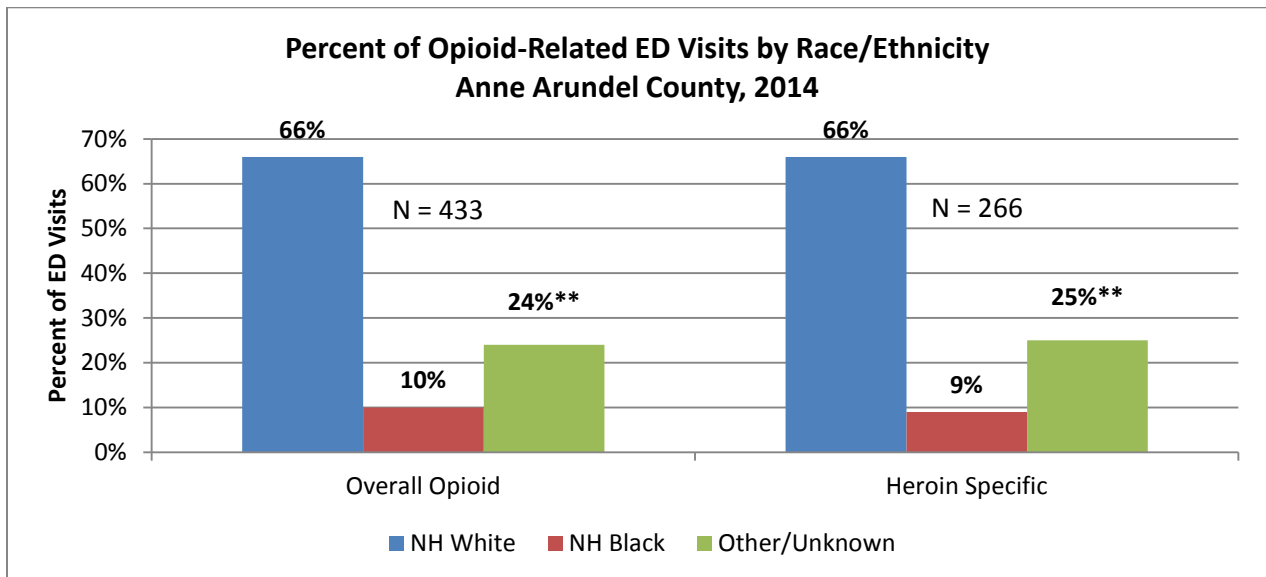


The majority of both overall opioid poisonings and heroin-specific poisonings in the ED were among people 18 to 44 years of age. However, between 2013 and 2014, the proportion of opioid and heroin poisonings increased slightly among 45 to 64 year olds (18 percent in 2013 vs. 19 percent in 2014 for opioid and 10 percent in 2013 vs. 12 percent in 2014 for heroin).



*Note: Percentages based from less than 11 observations not presented due to HSCRC data use policy.

Non-Hispanic whites represented two-thirds of all opioid poisoning ED visits in 2014, and Non-Hispanic whites represented the same proportion as heroin poisoning ED visits. However, because almost one quarter of race was listed as 'unknown' in the 2014 outpatient discharge file, these data are an underestimate of the true racial breakdown.



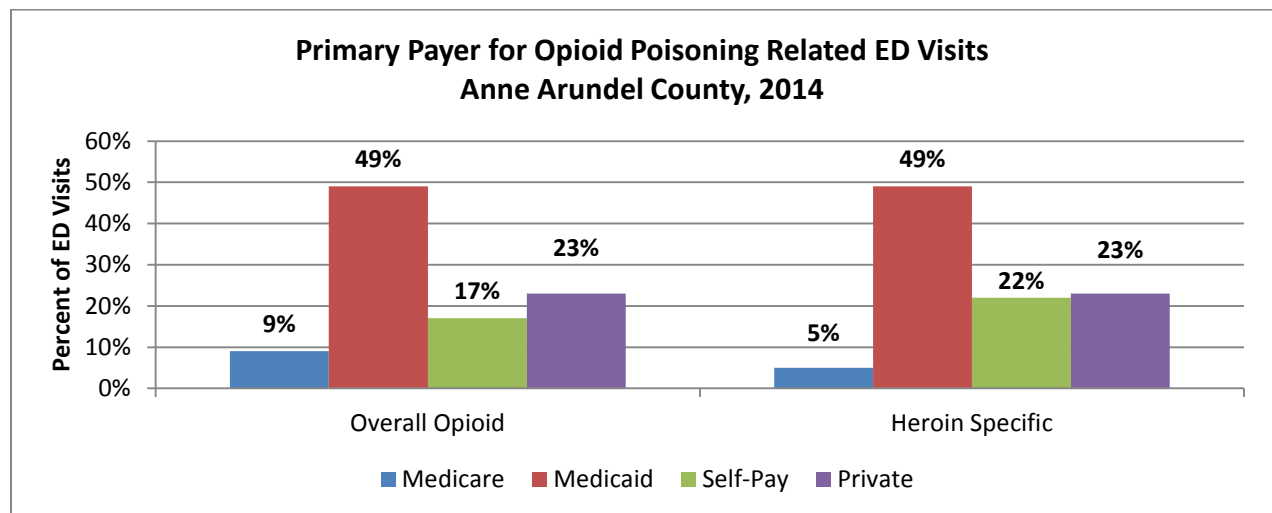
**Note: Data for race categories are underestimated in 2014 due to missing data during a methodology change; data should be interpreted with caution.

HOSPITAL AND INSURANCE

Medicaid was the largest primary payer for opioid poisoning-related ED visits in 2014, representing almost half of all payments. Baltimore Washington Medical Center’s ED treated 45 percent (198 cases) of opioid poisoning cases, followed by Anne Arundel Medical Center (32 percent) and MedStar Harbor Hospital (19 percent).

Opioid Poisoning-Related ED Visits by Hospital and Payer, Anne Arundel County Residents, 2014					
	TOTAL CASES	MEDICARE	MEDICAID	SELF-PAY	PRIVATE
BWMC	198	19 (10%)	96 (49%)	29 (15%)	46 (23%)
AAMC	138	*	65 (51%)	23 (17%)	43 (31%)
Harbor	81	18 (22%)	37 (46%)	20 (25%)	*

*Note: Percentages based from less than 11 observations not presented due to HSCRC data use policy.



Most (85 percent) opioid poisoning ED visits were discharged to home or self-care (including to prison) in 2014. Five percent were discharged to another healthcare facility and six percent left the ED against medical advice.

Disposition of Patient After ED Visit for Opioid Poisoning, Anne Arundel County, 2014		
	Opioid Overall	Heroin-Specific
Home or self-care (including prison)	85%	87%
Discharged to another healthcare facility	5%	*
Left against medical advice	6%	8%

*Note: Percentages based from less than 11 observations not presented due to HSCRC data use policy.

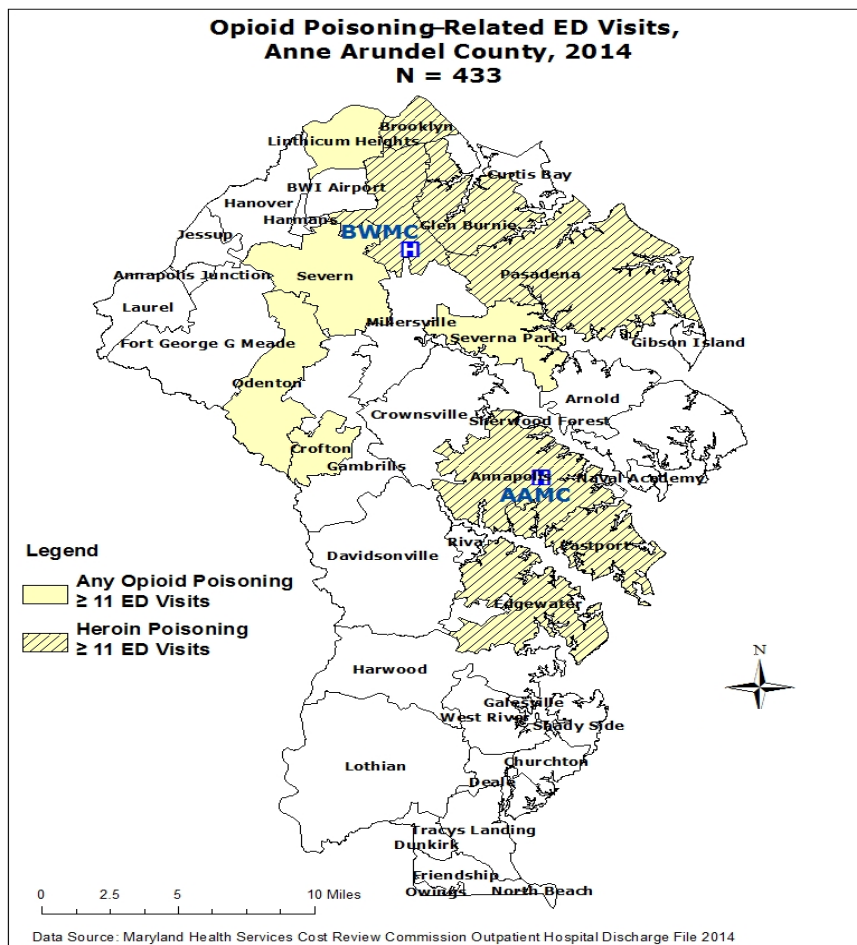
Of the 433 ED visits for opioid poisonings in 2014, 394 (91 percent) visits were from unique patients, out of which 39 (10 percent) of the patients made more than one ED visit within the same hospital. Of the 266 ED visits for heroin poisonings in 2014, 245 (92 percent) visits were from unique patients, out of which 20 (8 percent) of the patients made more than one ED visit within the same hospital.

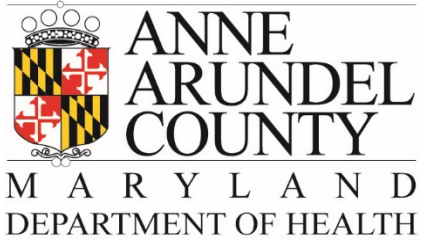
GEOGRAPHY

Over half of all opioid poisoning ED visits were made by Anne Arundel County residents from five ZIP codes: Glen Burnie (21060 and 21601), Pasadena (21222), Edgewater (21037) and Annapolis (21401). Almost two-thirds of heroin poisoning ED visits were made by Anne Arundel County residents in those same five ZIP codes.

Number of Opioid Poisoning-Related ED Visits by ZIP Code, Anne Arundel County, 2014			
ZIP Code	Area Name	Opioid Overall	Heroin-Specific
21061	Glen Burnie (West)	82	45
21122	Pasadena	65	41
21060	Glen Burnie (East)	35	18
21037	Edgewater	26	24
21401	Annapolis	25	15
21225*	Brooklyn Park	22	14
21113	Odenton	17	<11
21403	Eastport	16	11
21114	Crofton	14	<11
21144	Severn	13	<11
21146	Severna Park	12	<11
21090	Linthicum Heights	11	<11

*Note: ZIP Code shared with other county; data presented is an estimate of Anne Arundel County only.





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