

EMERGENCY DEPARTMENT VISITS FOR UNINTENTIONAL DRUG OVERDOSE AMONG VIRGINIA RESIDENTS

Quarter 1 (January - March) 2019

Table of Contents

Background	2
Methodology	2
Emergency Department Visits for All Drug Overdose among Virginia Residents	3
Figure 1A. Quarterly Percent Change for All Drug Overdose	3
Figure 1B. Rate by Calendar Quarter	3
Figure 1C. Rate by Calendar Quarter and Health Region.	4
Figure 1D. Year-to-Date Rate by Year and Health Region	4
Figure 1E. Rate by Calendar Quarter and Sex.....	5
Figure 1F. Rate by Calendar Quarter and Age Group (Years).....	5
Emergency Department Visits for Opioid or Unspecified Substance Overdose among Virginia Residents	6
Figure 2A. Quarterly Percent Change for Opioid or Unspecified Substance Overdose.	6
Figure 2B. Rate by Calendar Quarter	6
Figure 2C. Rate by Calendar Quarter and Health Region	7
Figure 2D. Year-to-Date Rate by Year and Health Region	7
Figure 2E. Rate by Calendar Quarter and Sex.....	8
Figure 2F. Rate by Calendar Quarter and Age Group (Years).....	8
Emergency Department Visits for Heroin Overdose among Virginia Residents	9
Figure 3A. Quarterly Percent Change for Heroin Overdose	9
Figure 3B. Rate by Calendar Quarter	9
Figure 3C. Rate by Calendar Quarter and Health Region	10
Figure 3D. Year-to-Date Rate by Year and Health Region	10
Figure 3E. Rate by Calendar Quarter and Sex.....	11
Figure 3F. Rate by Calendar Quarter and Age Group (Years).....	11
Appendix 1	12
Appendix 2	13

Background

The Virginia Department of Health (VDH) Office of Epidemiology collects and analyzes health data from emergency departments (EDs) to conduct public health surveillance. This report summarizes ED visit trends for unintentional drug overdose among Virginia residents for all drugs, opioids, and heroin. Visits from **72** acute care hospital EDs and **15** free-standing EDs in Virginia are analyzed in this report.

VDH analyzes chief complaints and discharge diagnoses of ED visits to identify and monitor issues of public health concern. The chief complaint is a free-text field that captures the patient's primary reason for seeking medical care as interpreted by the ED registration staff. The discharge diagnosis is a coded field using standardized values defined by the International Classification of Diseases (ICD) 9th and 10th Revision or SNOMED Clinical Terms (CT) code sets.

Methodology

ED visits are categorized into the following three unintentional drug overdose case definitions: 1) **all drug overdose**, 2) **opioid or unspecified substance overdose**, and 3) **heroin overdose**. VDH revises these case definitions based on guidance from the Centers for Disease Control and Prevention (CDC) and findings from ongoing data quality evaluations. Information on the current case definitions and case definition revisions, including historic definitions, can be found on the VDH website.

<http://www.vdh.virginia.gov/surveillance-and-investigation/syndromic-surveillance/drug-overdose-surveillance/>

Overdose rates are presented as a rate per 10,000 ED visits in this report. The total number of ED visits that occurred among Virginia residents of a city/county locality are used as the denominator to calculate this rate. This metric provides a consistent rate calculation across time when data reporting by EDs change (increases or decreases) as compared to the rate per 100,000 population. To protect confidentiality and maintain accurate rate calculations, ED visit rates with numerators of 1 to 4 are suppressed in this report. Rates of 0 are included. Geography-specific ED visit counts and rates per 100,000 population are located within the Monthly and Annual Statistics Excel file on the [VDH website](#).

The geographic location is assigned based on the patient's residential zip code provided. A single zip code may span multiple city and county localities in Virginia. If a patient resides in a spanning zip code, the visit is assigned to the locality where the majority of the population resides. Virginia city and county populations combined to calculate an overdose rate per 10,000 ED visits because of zip codes spanning multiple localities can be found in [Appendix 1](#).

**Please direct questions or comments to the Division of Surveillance and Investigation,
Enhanced Surveillance Team: syndromic@vdh.virginia.gov**

Emergency Department Visits for All Drug Overdose among Virginia Residents

Figure 1A. Quarterly Percent Change for All Drug Overdose.

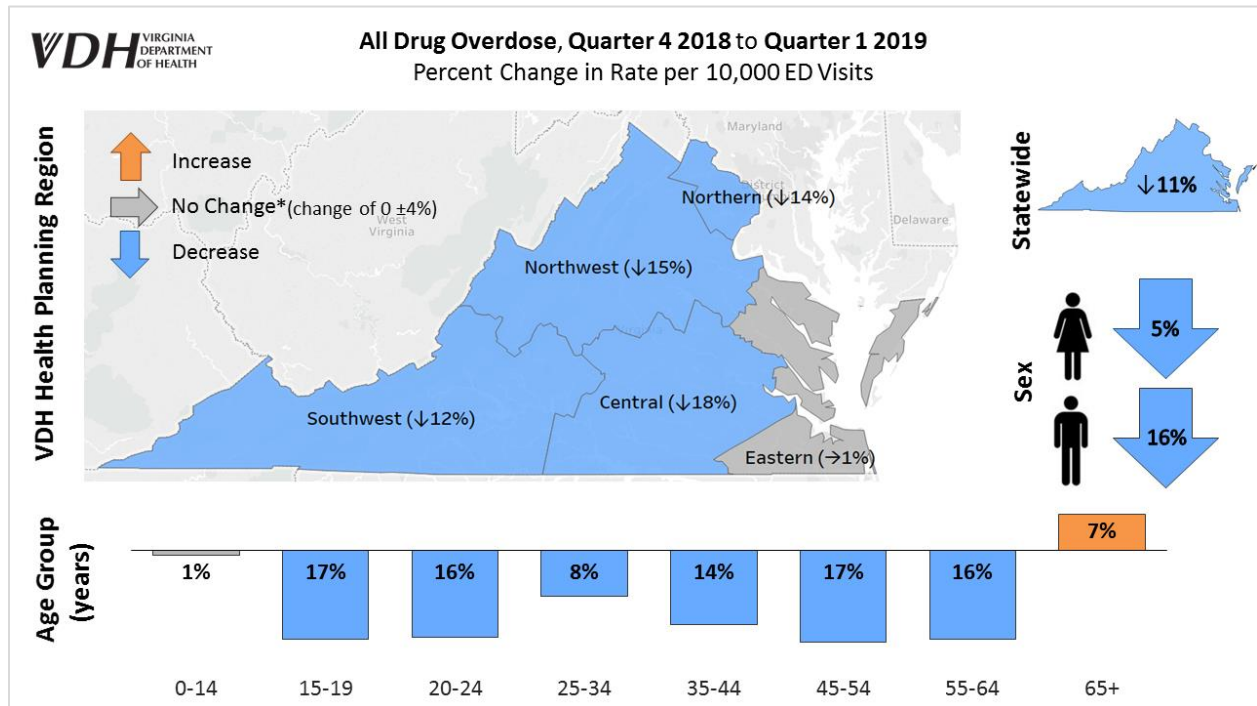


Figure 1B. Rate of ED Visits for All Drug Overdose among Virginia Residents by Calendar Quarter, 2015 - 2019.

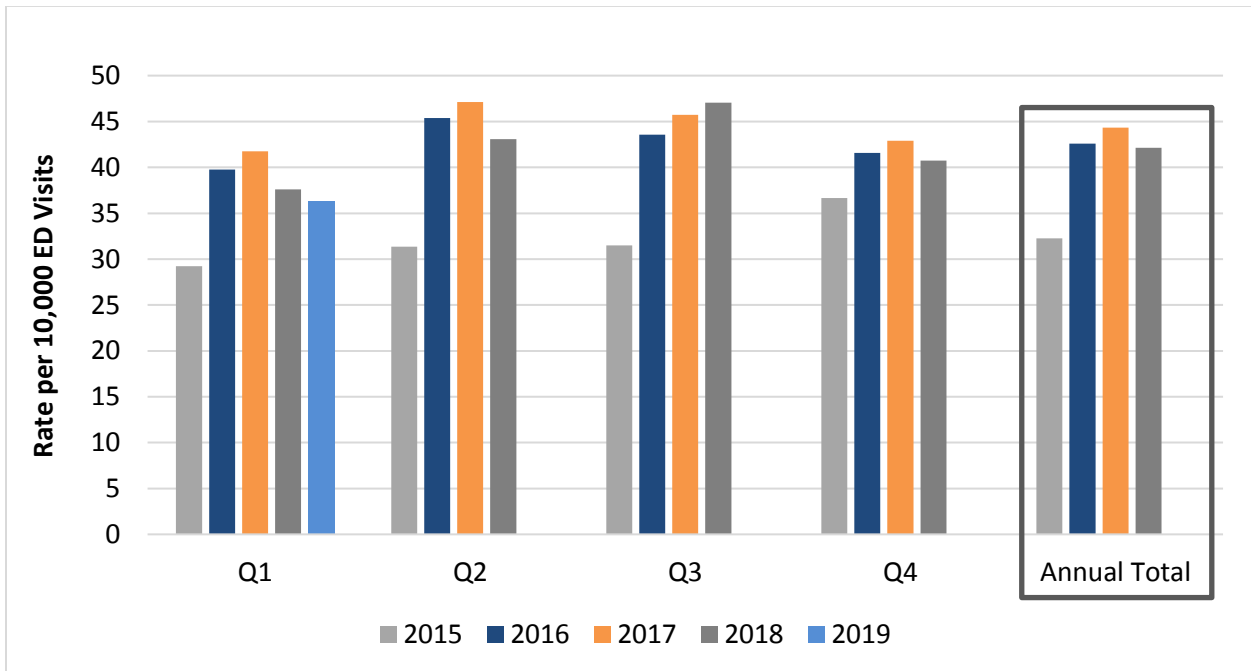


Figure 1C. Rate of ED Visits for All Drug Overdose among Virginia Residents by Calendar Quarter and Health Region, Most Recent 10 Quarters.

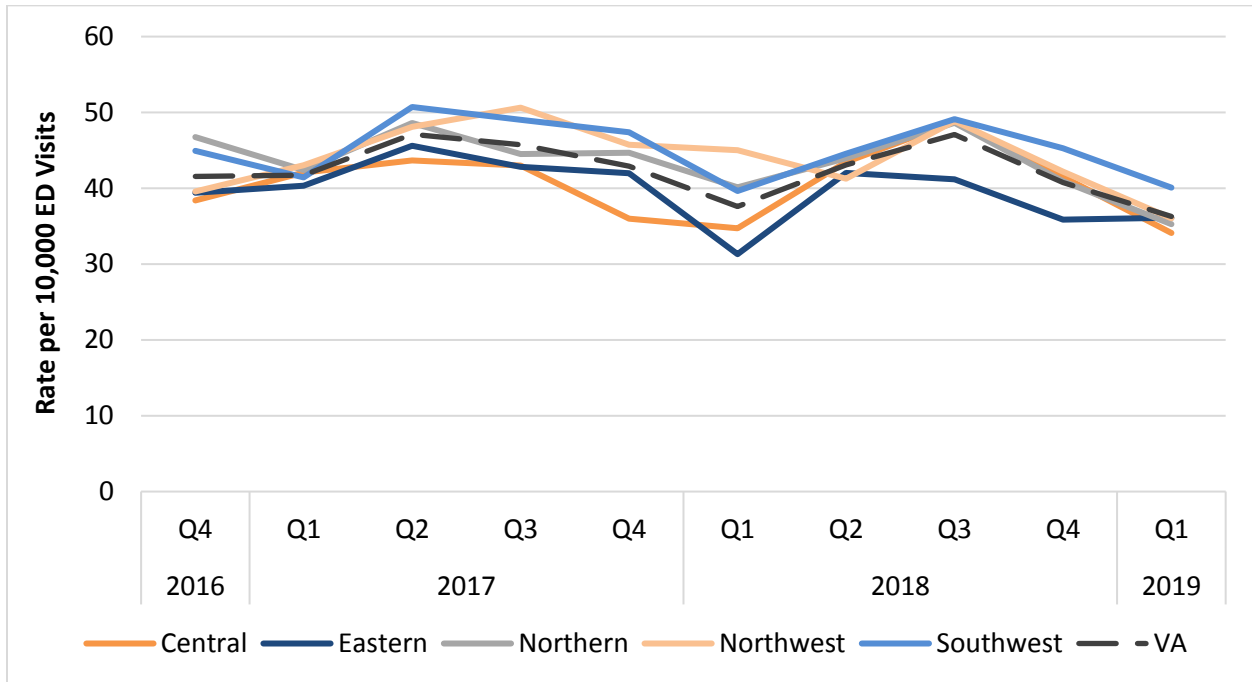


Figure 1D. Year-to-Date Rate (January-March) of ED Visits for All Drug Overdose among Virginia Residents by Year and Health Region, 2015-2019.

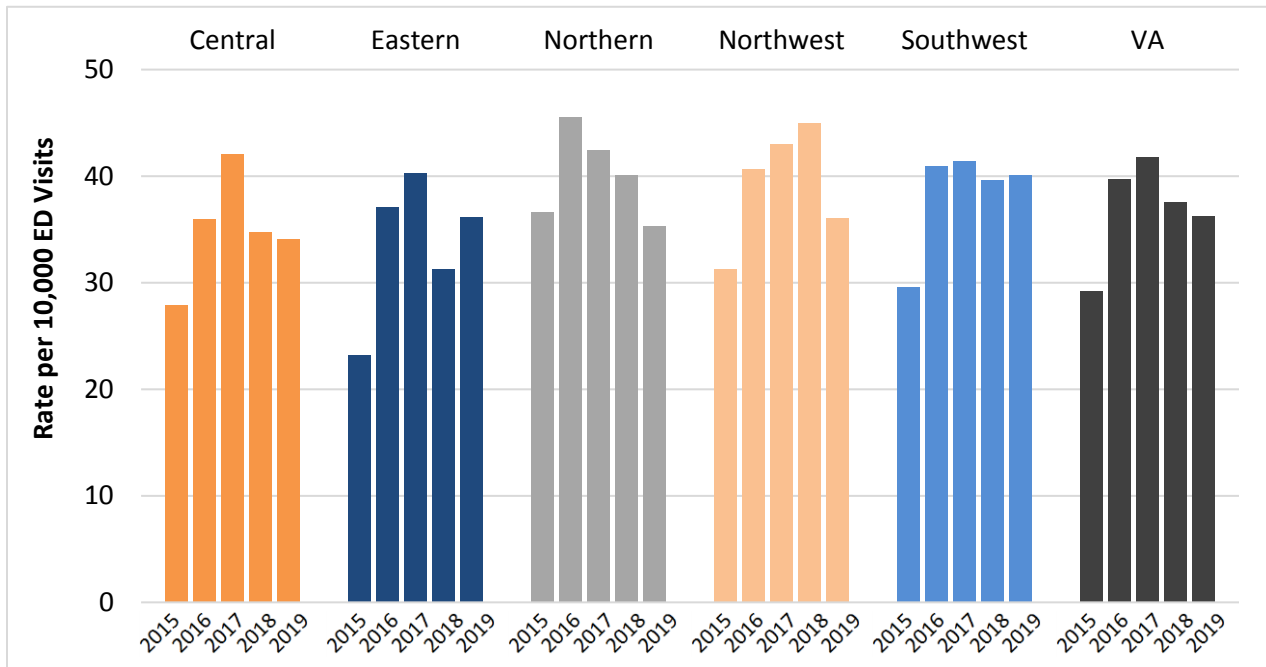


Figure 1E. Rate of ED Visits for All Drug Overdose among Virginia Residents by Calendar Quarter and Sex, Most Recent 10 Quarters.

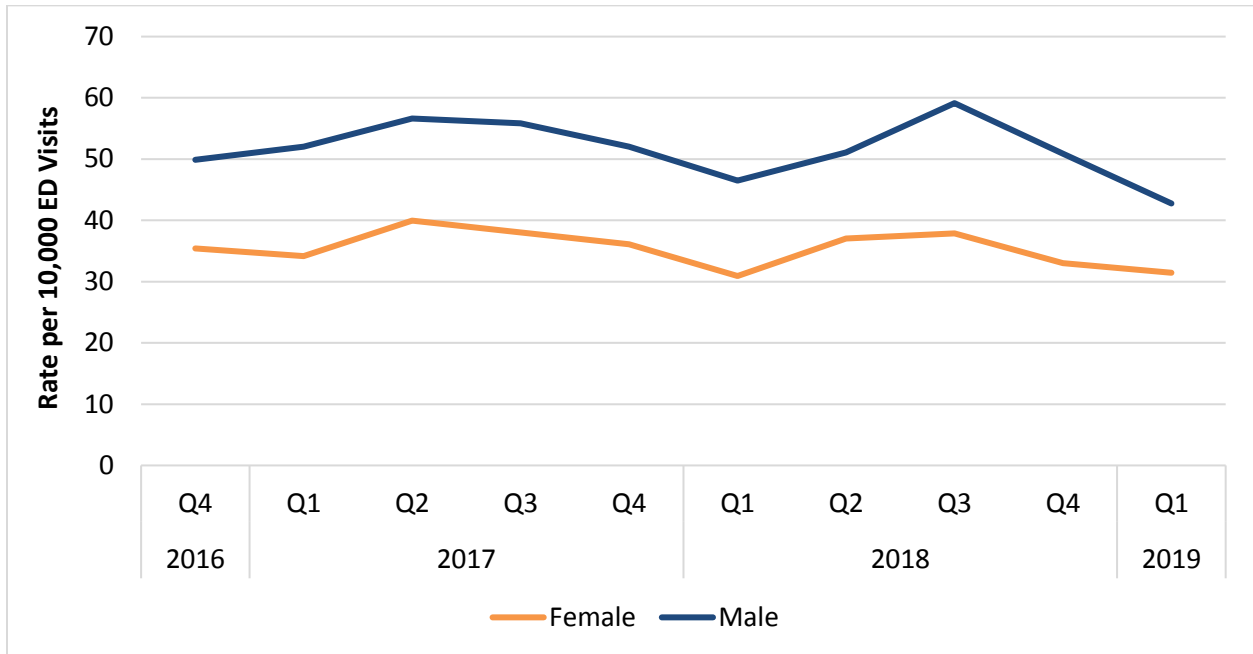
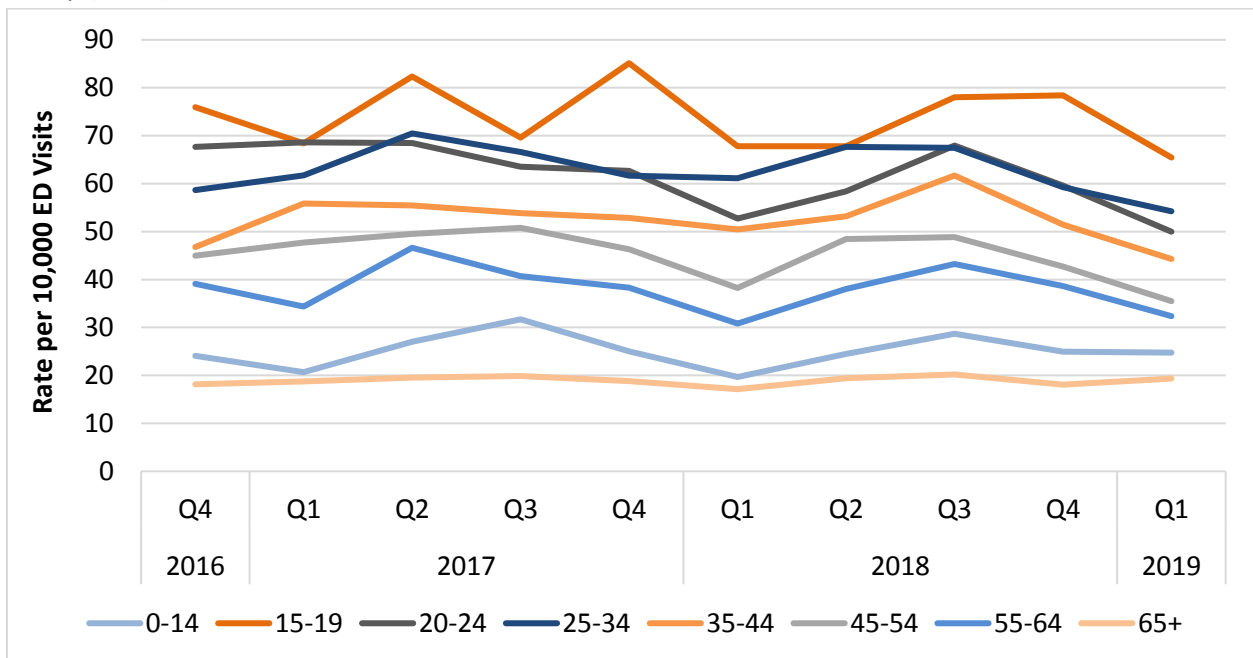


Figure 1F. Rate of ED Visits for All Drug Overdose among Virginia Residents by Calendar Quarter and Age Group (Years), Most Recent 10 Quarters.



Emergency Department Visits for Opioid or Unspecified Substance Overdose among Virginia Residents

Figure 2A. Quarterly Percent Change for Opioid or Unspecified Substance Overdose.

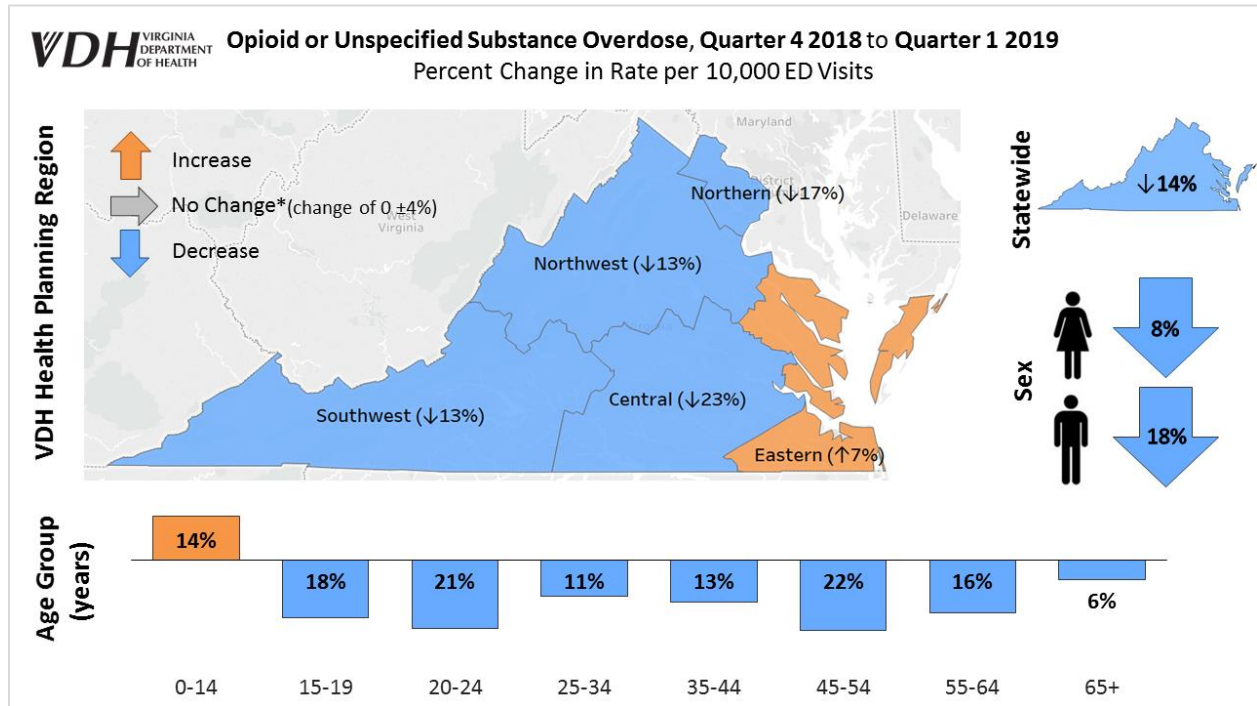


Figure 2B. Rate of ED Visits for Opioid or Unspecified Substance Overdose among Virginia Residents by Calendar Quarter, 2015 - 2019.

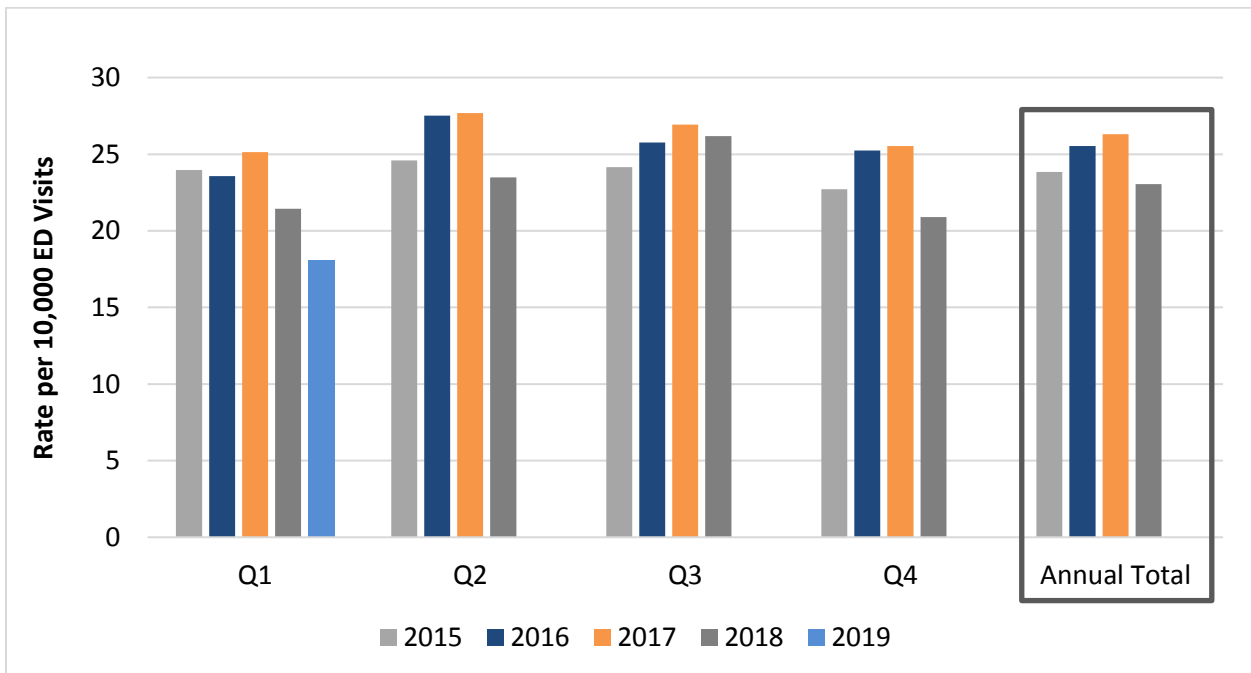


Figure 2C. Rate of ED Visits for Opioid or Unspecified Substance Overdose among Virginia Residents by Calendar Quarter and Health Region, Most Recent 10 Quarters.

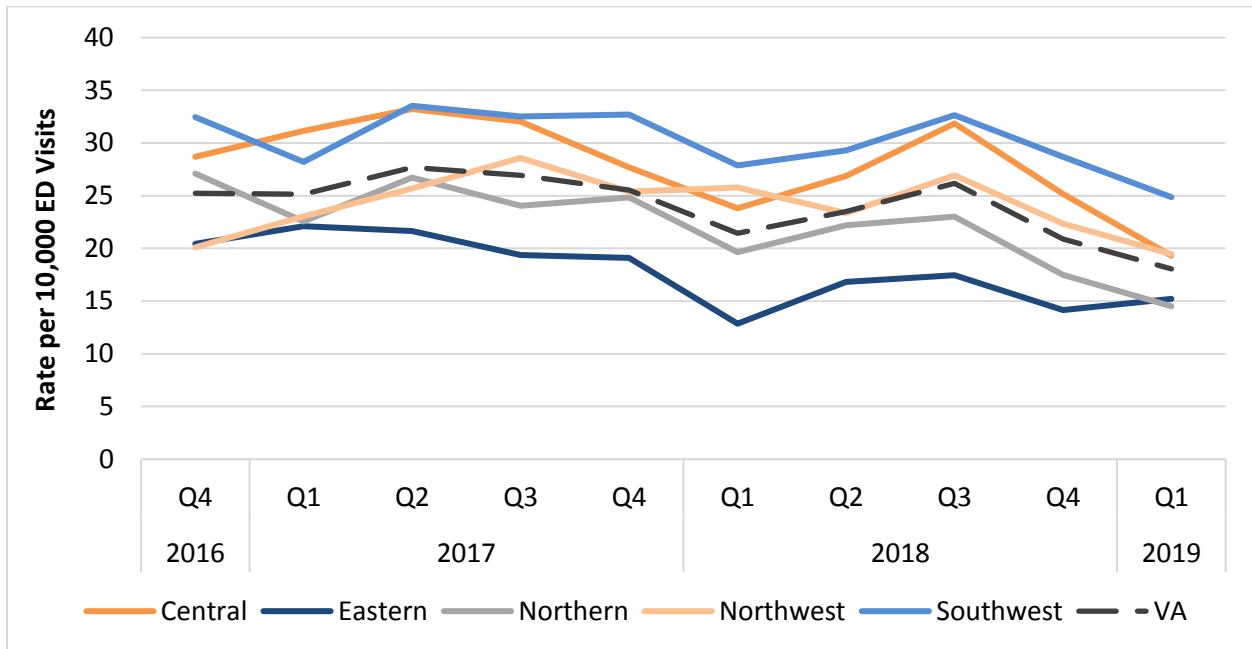


Figure 2D. Year-to-Date Rate (January-March) of ED Visits for Opioid or Unspecified Substance Overdose among Virginia Residents by Year and Health Region, 2015 -2019.

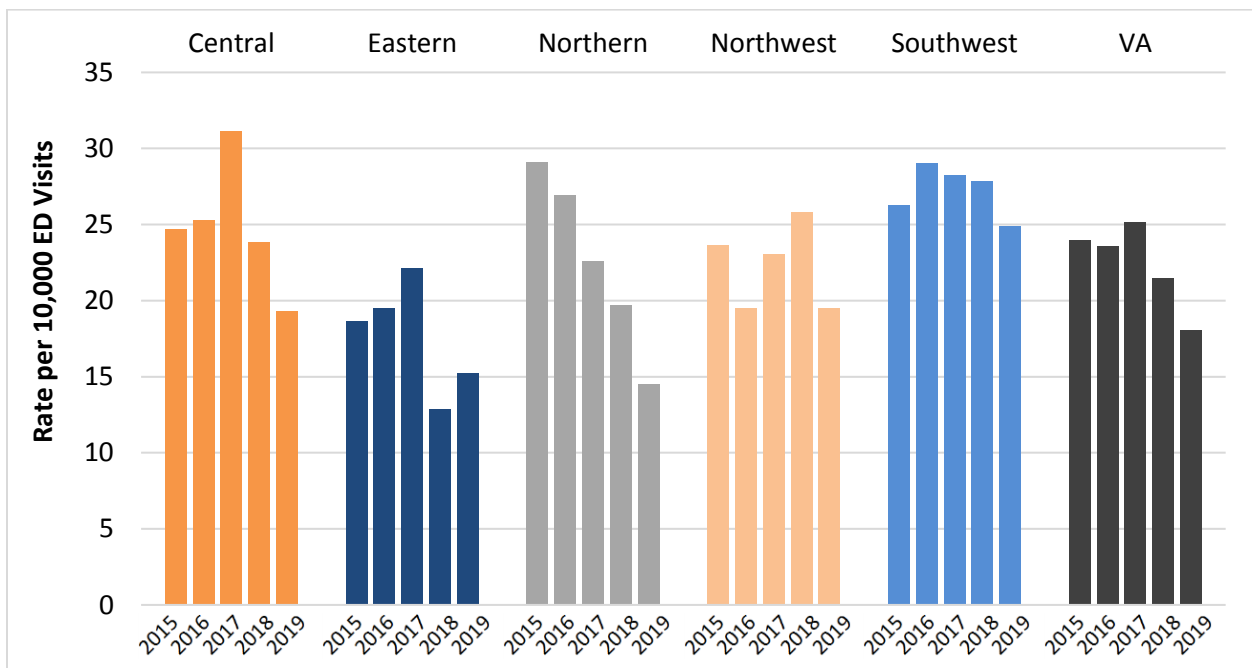


Figure 2E. Rate of ED Visits for Opioid or Unspecified Substance Overdose among Virginia Residents by Calendar Quarter and Sex, Most Recent 10 Quarters.

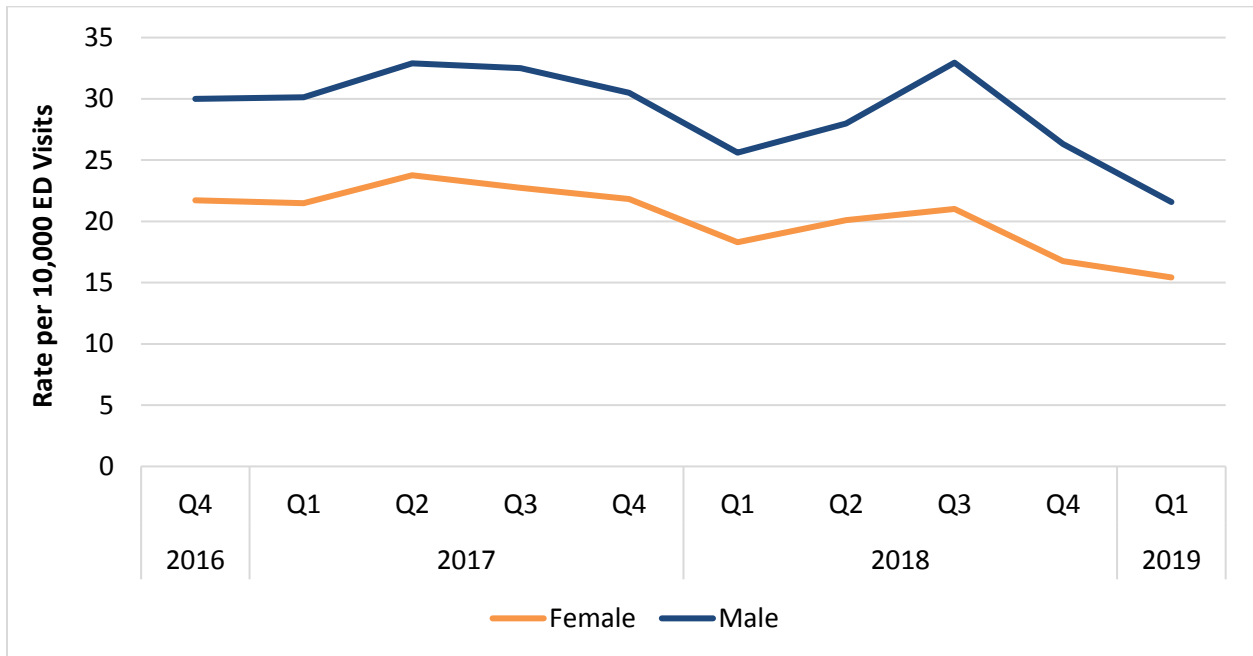
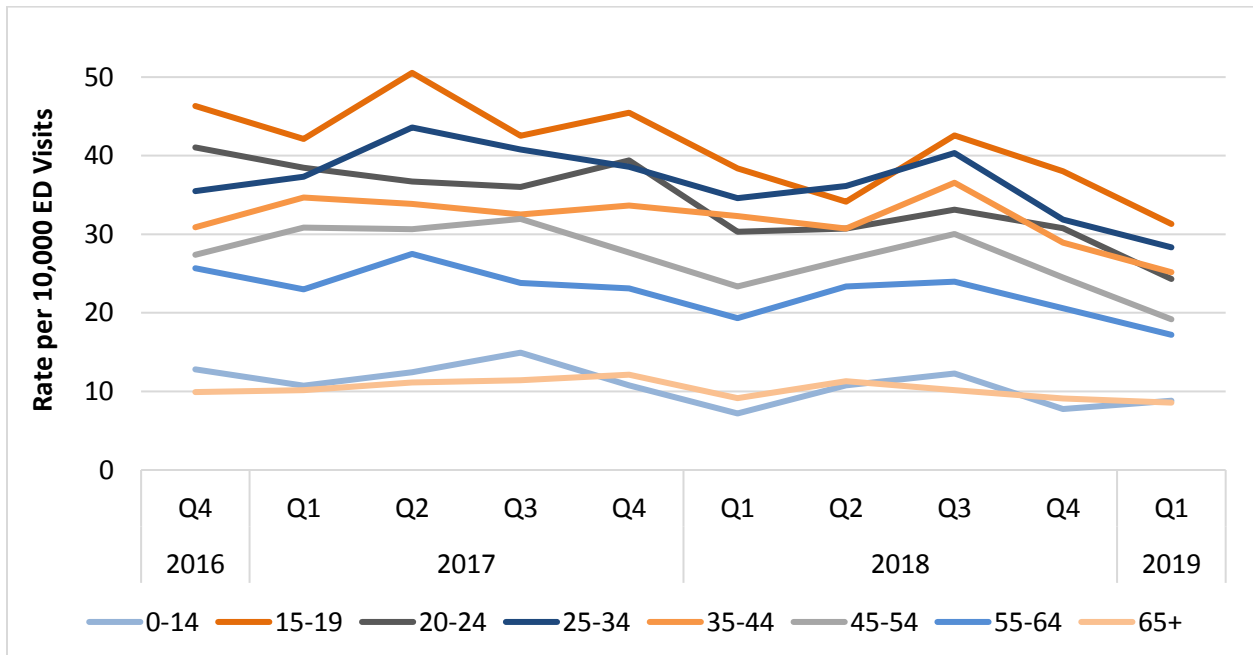


Figure 2F. Rate of ED Visits for Opioid or Unspecified Substance Overdose among Virginia Residents by Calendar Quarter and Age Group (Years), Most Recent 10 Quarters.



Emergency Department Visits for Heroin Overdose among Virginia Residents

Figure 3A. Quarterly Percent Change for Heroin Overdose.

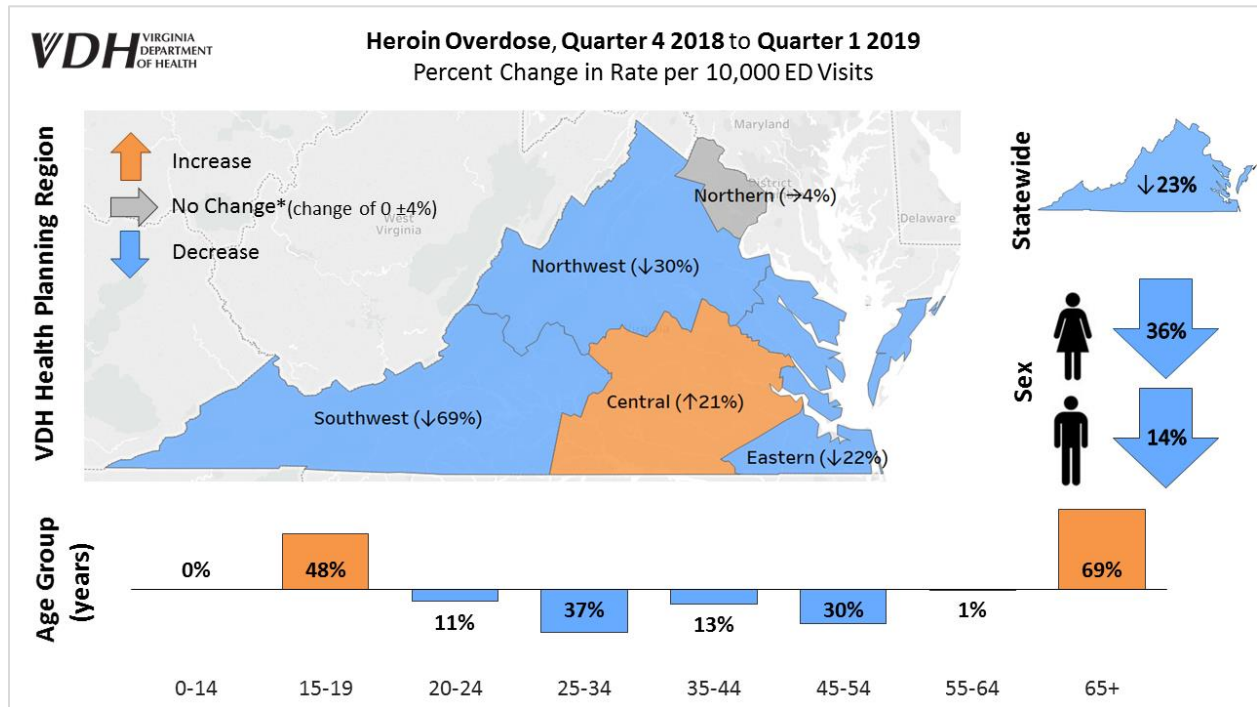


Figure 3B. Rate of ED Visits for Heroin Overdose among Virginia Residents by Calendar Quarter, 2015 - 2019.

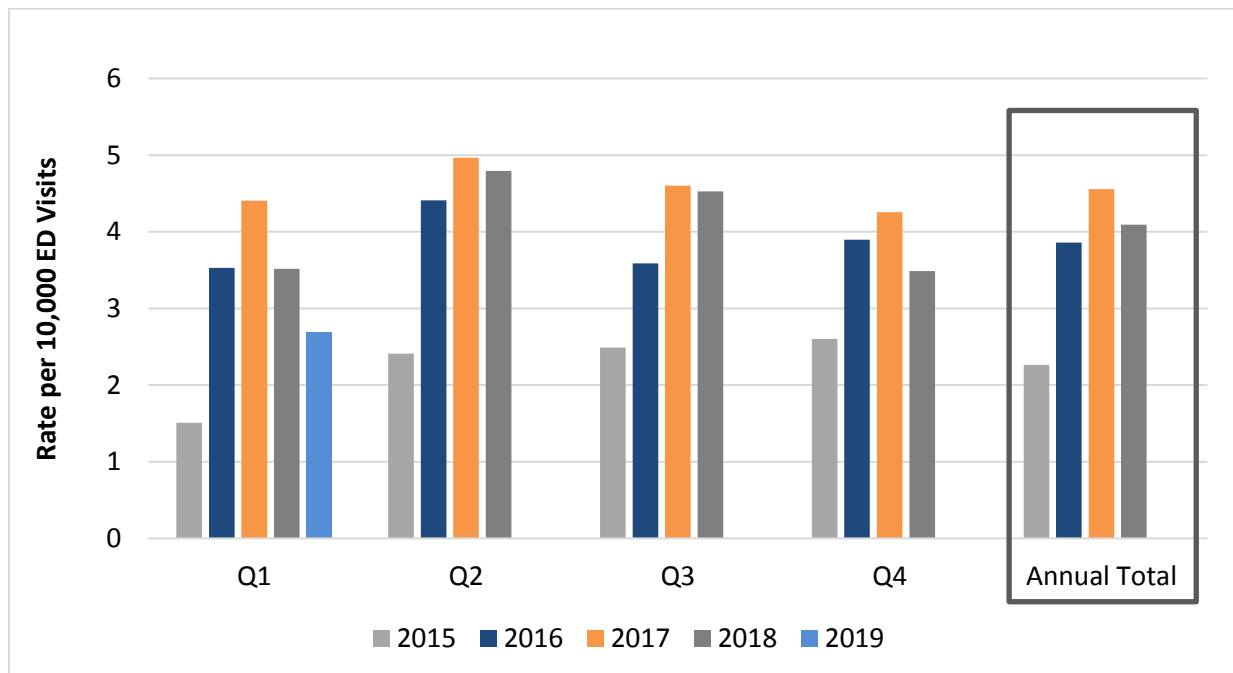


Figure 3C. Rate of ED Visits for Heroin Overdose among Virginia Residents by Calendar Quarter and Health Region, Most Recent 10 Quarters.

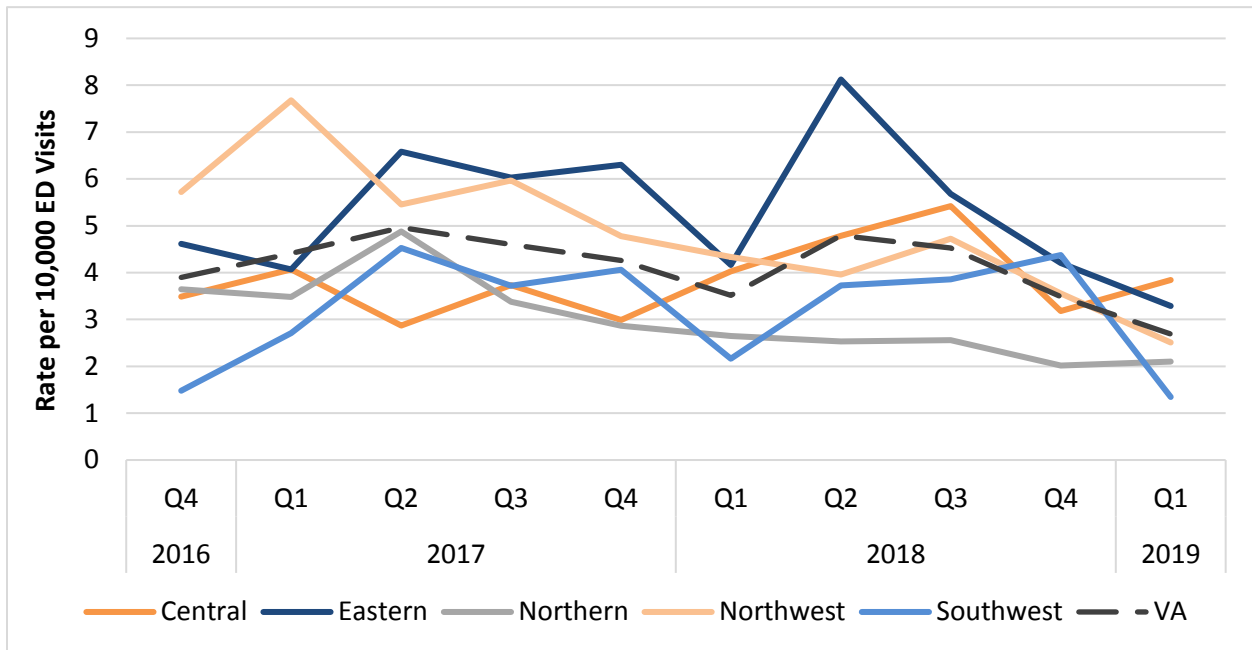


Figure 3D. Year-to-Date Rate (January-March) of ED Visits for Heroin Overdose among Virginia Residents by Year and Health Region, 2015 - 2019.

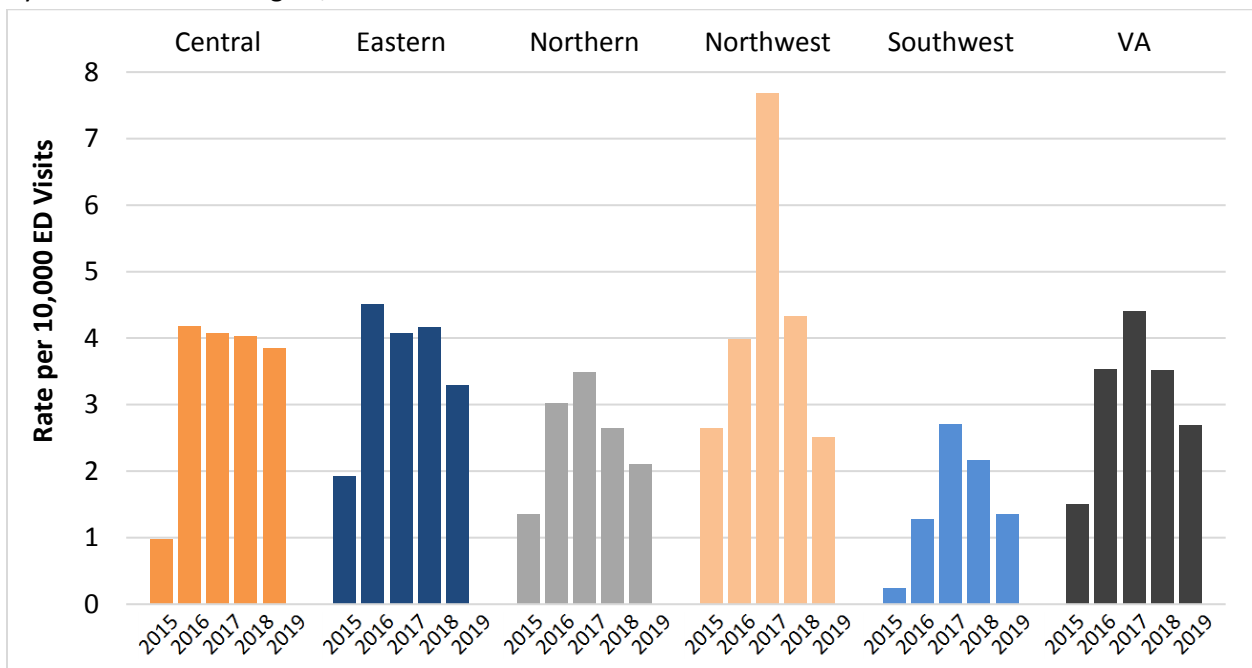


Figure 3E. Rate of ED Visits for Heroin Overdose among Virginia Residents by Calendar Quarter and Sex, Most Recent 10 Quarters.

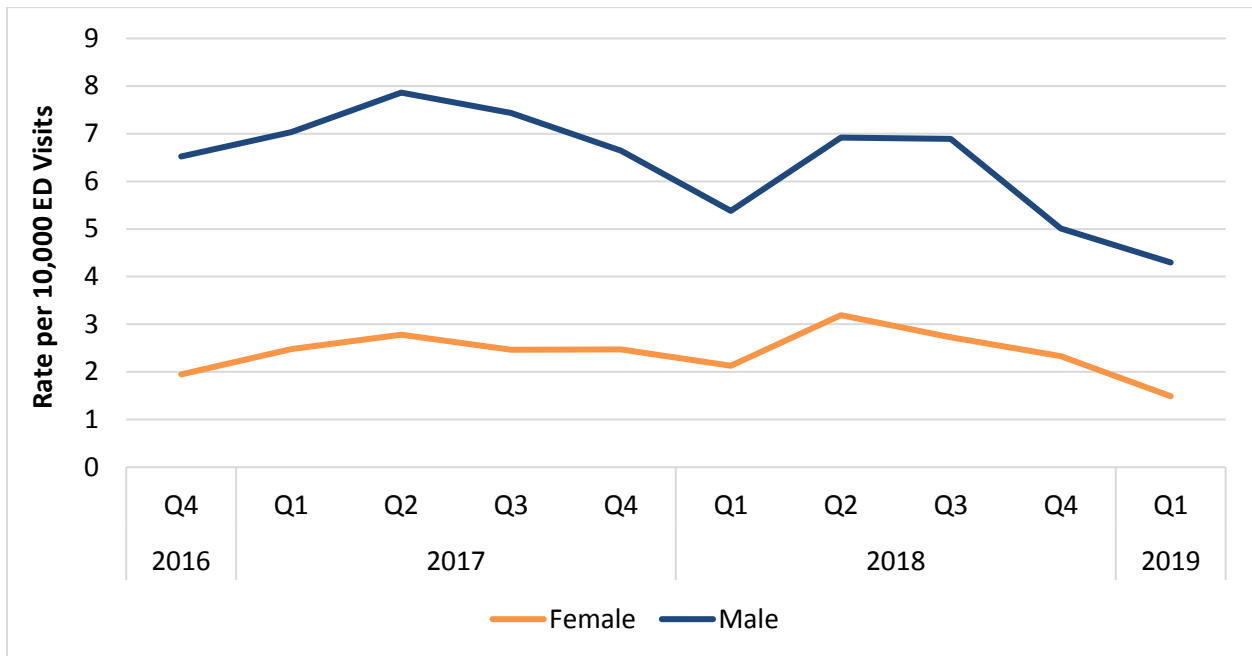
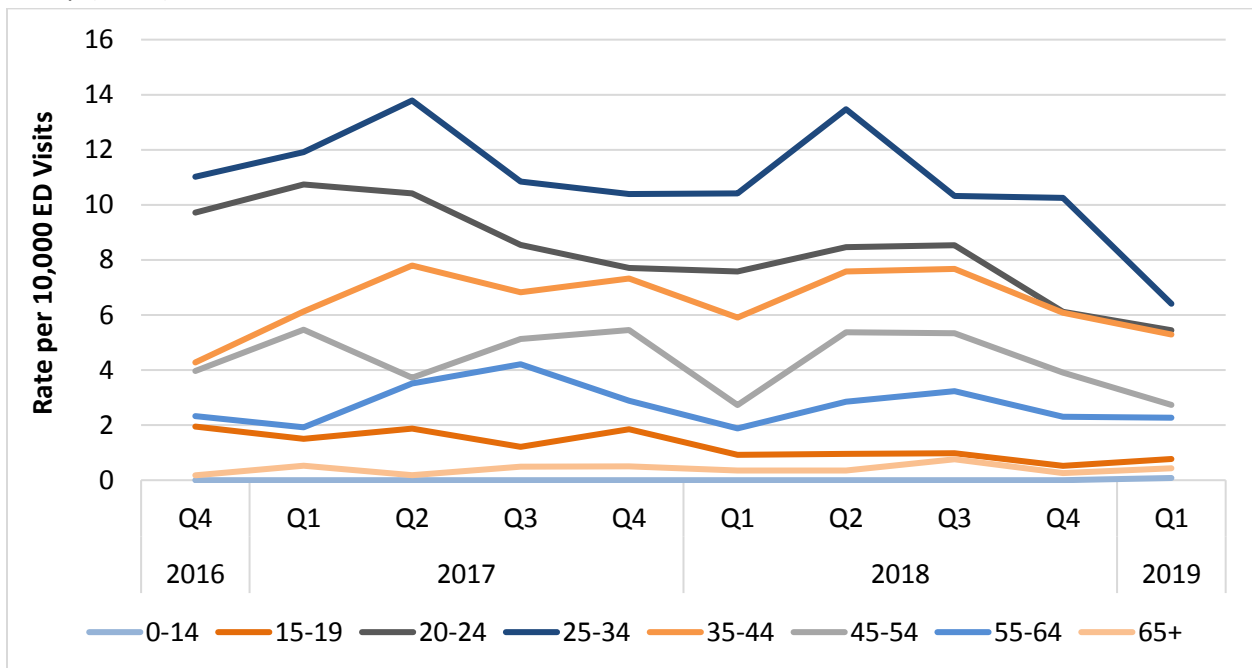


Figure 3F. Rate of ED Visits for Heroin Overdose among Virginia Residents by Calendar Quarter and Age Group (Years), Most Recent 10 Quarters.



Appendix 1

Virginia Localities Combined for Rate Calculations

- Alleghany County and Covington City
- Albemarle County and Charlottesville City
- Augusta County, Staunton City, and Waynesboro City
- Chesterfield County and Colonial Heights City
- Frederick County and Winchester City
- Fairfax County, Fairfax City, and Falls Church City
- Grayson County and Galax City
- Greensville County and Emporia City
- Henry County and Martinsville City
- Montgomery County and Radford City
- Pittsylvania County and Danville City
- Prince George County, Hopewell City, and Petersburg City
- Prince William County, Manassas City, and Manassas Park City
- Roanoke County, Roanoke City, and Salem City
- Rockingham County and Harrisonburg City
- Rockbridge County, Buena Vista City, and Lexington City
- Southampton County and Franklin City
- Washington County and Bristol City
- Wise County and Norton City

Appendix 2

VDH Health Planning Regions and Health Districts Map

