

# EMERGENCY DEPARTMENT VISITS FOR UNINTENTIONAL DRUG OVERDOSE AMONG VIRGINIA RESIDENTS

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**Quarter 4 (October - December) 2021**

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**The Coronavirus Disease 2019 (COVID-19) pandemic has affected healthcare seeking behavior across Virginia. Emergency department use decreased substantially in March 2020 and remained below pre-pandemic levels through May 2021. Please note this report format differs from drug overdose reports published by VDH prior to 2021.**

## 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 **84** acute care hospital EDs and **22** 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) 9<sup>th</sup> and 10<sup>th</sup> 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 (excluding heroin)**, 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 100,000 population in this report. The 2017, 2018 and 2019 census estimates for Virginia residents are used as the denominator to calculate this rate for 2019, 2020 and 2021, respectively. This metric provides a consistent rate calculation across the state as compared to the rate per 10,000 ED visits because of the decrease in ED utilization during the COVID-19 pandemic. Geography-specific ED visit counts and rates per 10,000 ED visits are located within the *Monthly and Annual Statistics Excel* file on the [VDH website](#).

This report provides regional and statewide data. Individual Virginia city and county data are not presented in this report. Geography information for the VDH Health Regions can be found here - <https://www.vdh.virginia.gov/data/vdh-geography-locator-tool/>.

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

## Emergency Department Visits for All Drug Overdose among Virginia Residents

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

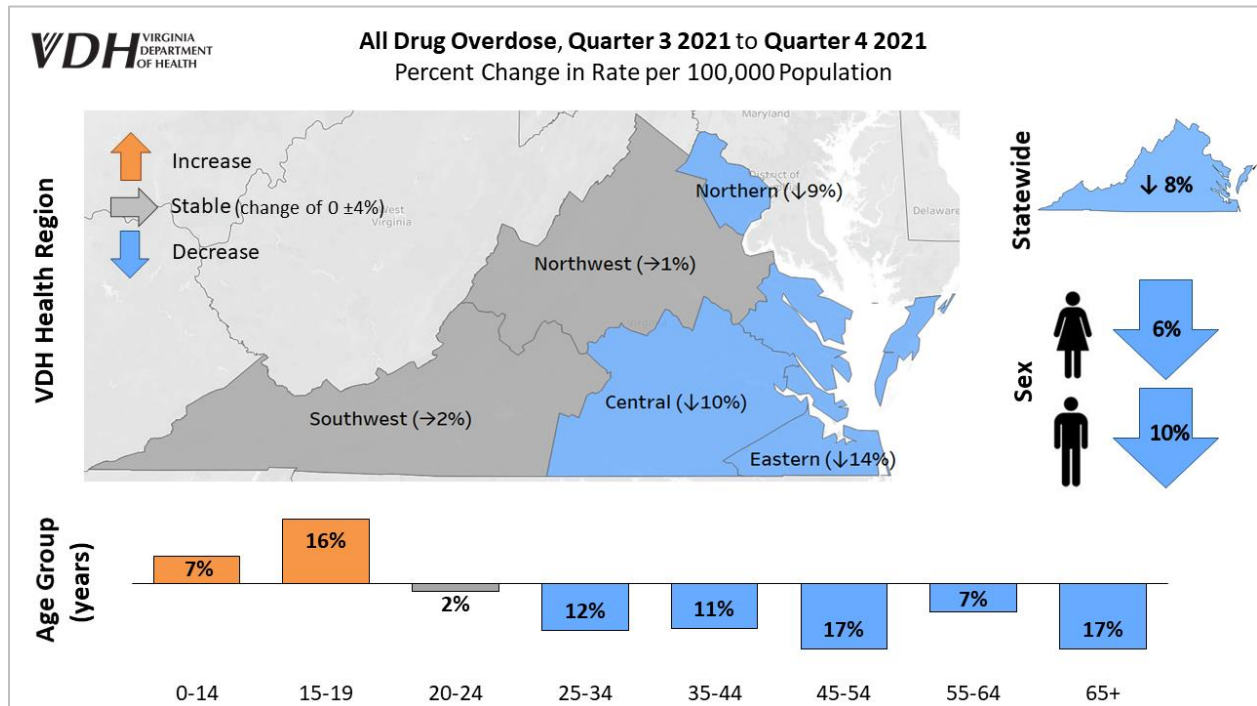
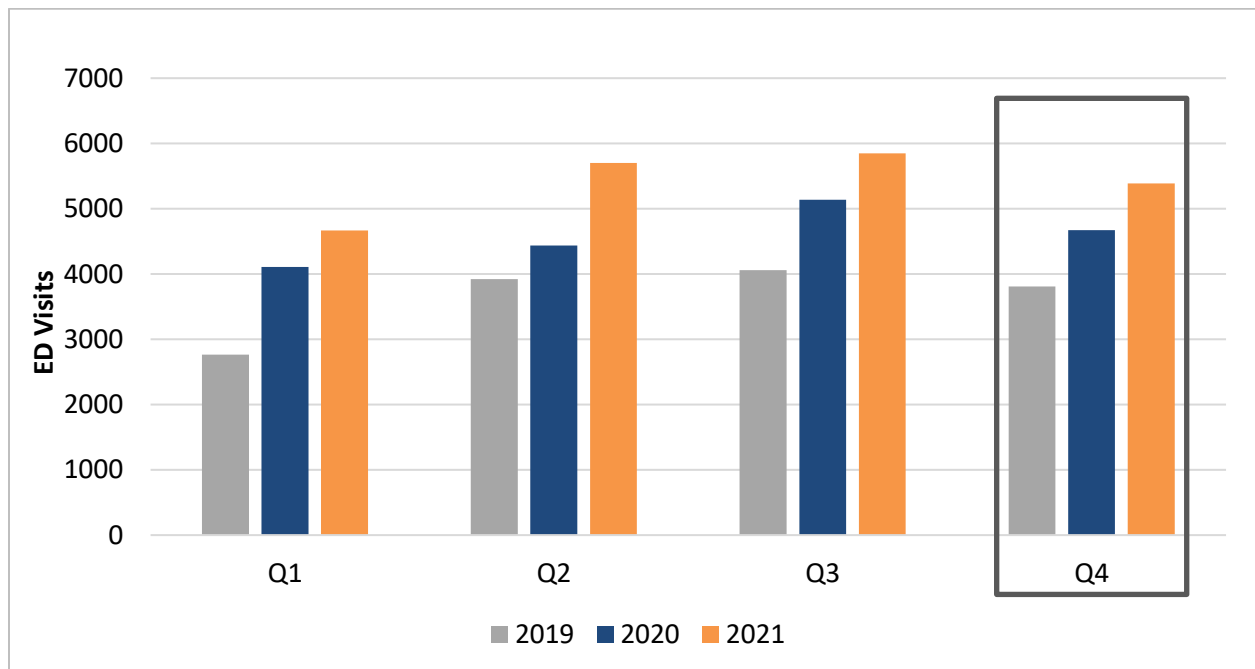
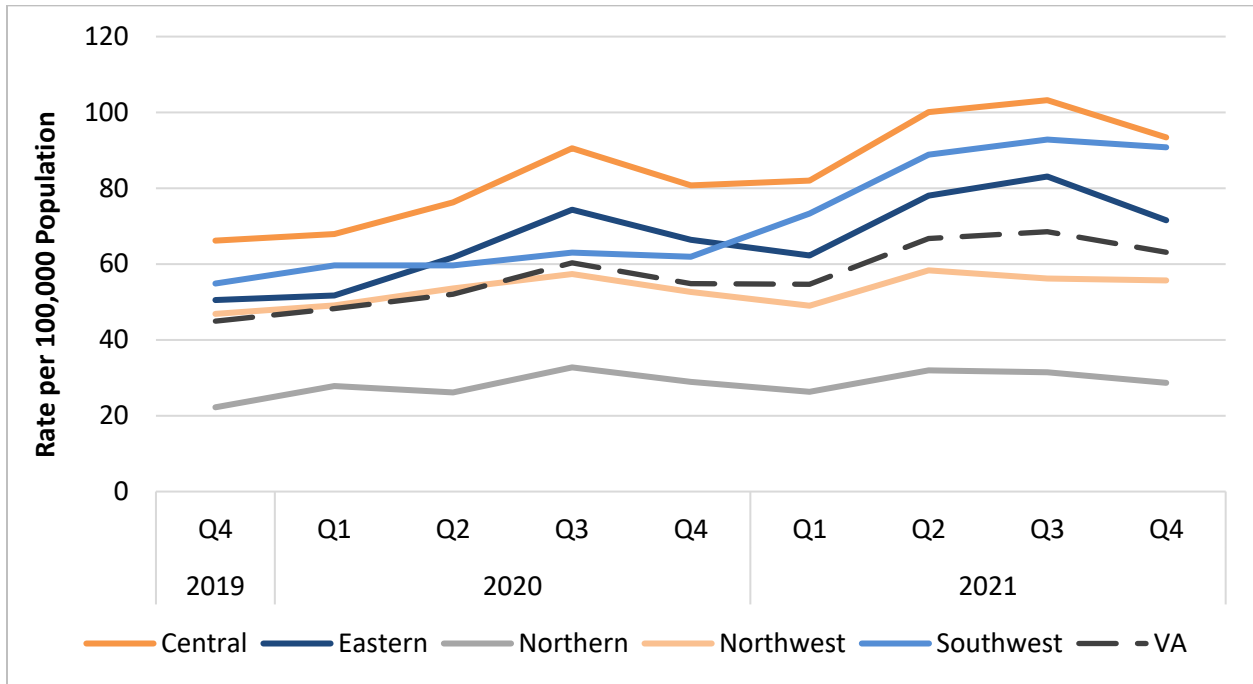


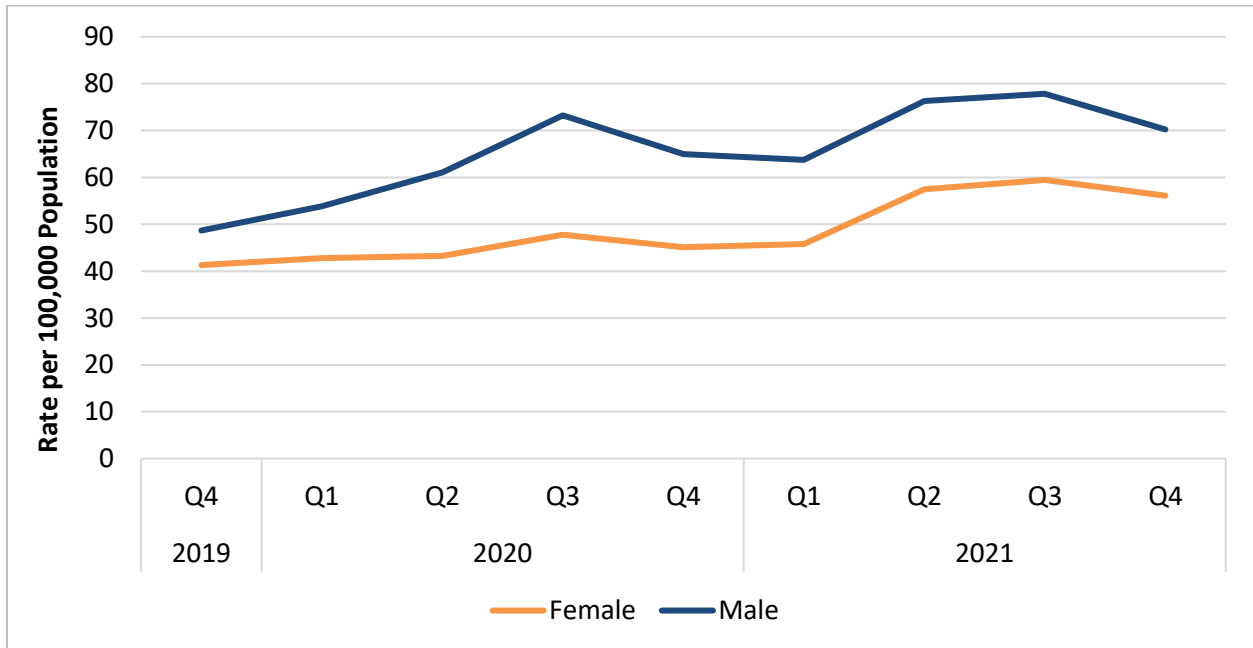
Figure 1B. Count of ED Visits for All Drug Overdose among Virginia Residents by Calendar Quarter, 2019 - 2021.



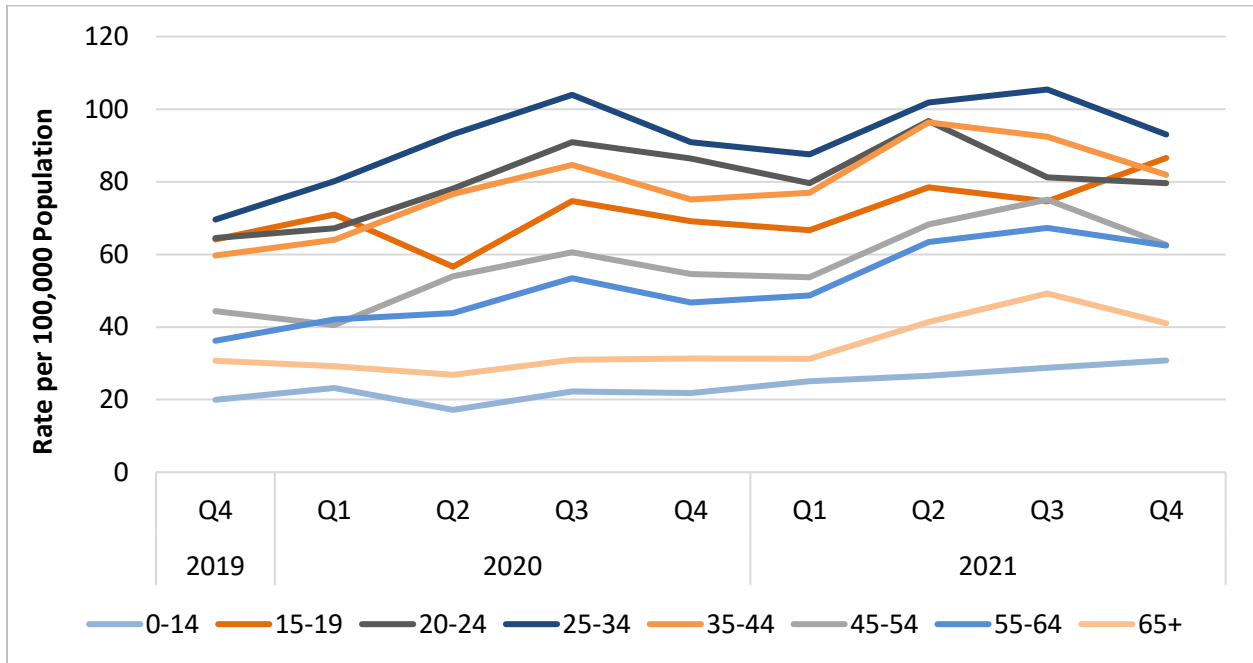
**Figure 1C.** Rate per 100,000 Population for All Drug Overdose among Virginia Residents by Calendar Quarter and Health Region, Most Recent 9 Quarters.



**Figure 1D.** Rate per 100,000 Population for All Drug Overdose among Virginia Residents by Calendar Quarter and Sex, Most Recent 9 Quarters.

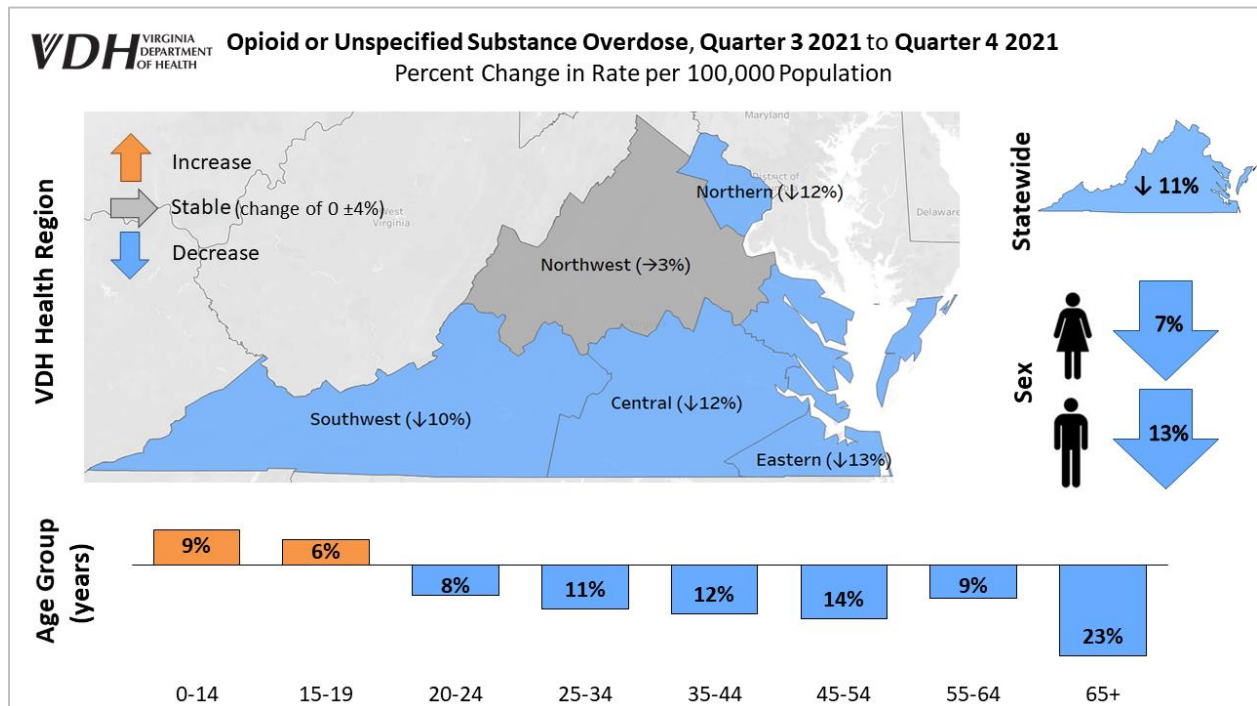


**Figure 1E.** Rate per 100,000 Population for All Drug Overdose among Virginia Residents by Calendar Quarter and Age Group (Years), Most Recent 9 Quarters.

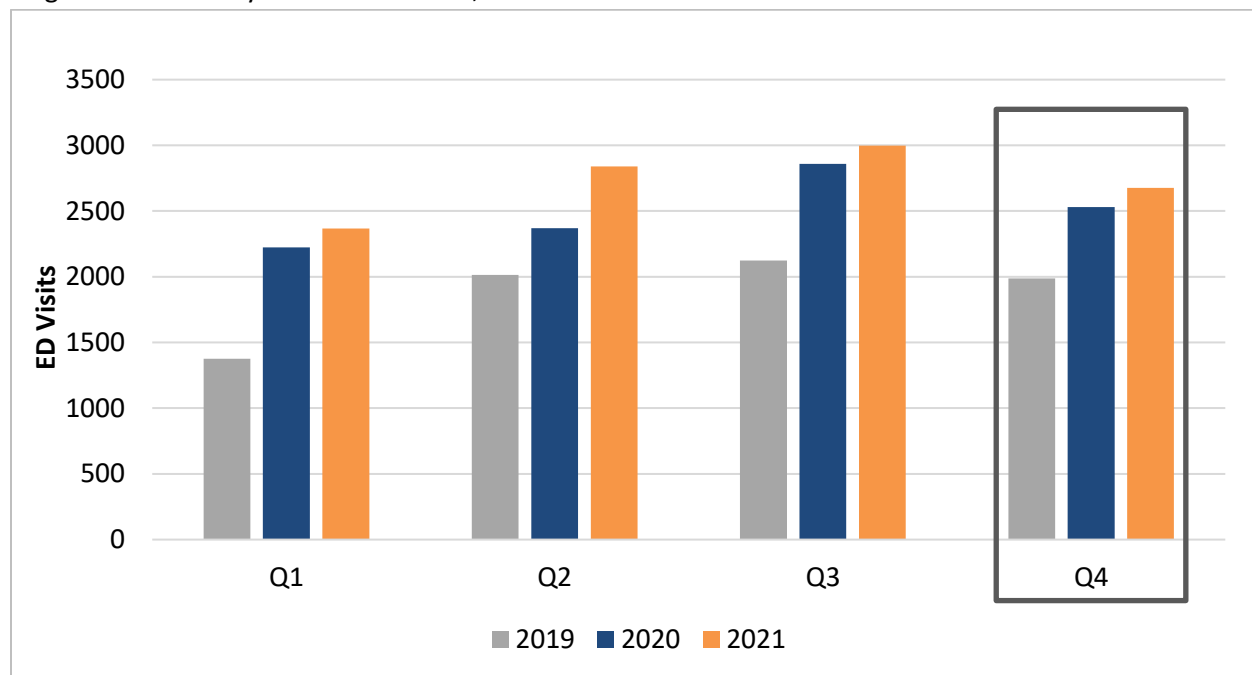


## Emergency Department Visits for Opioid or Unspecified Substance Overdose (Excluding Heroin) among Virginia Residents

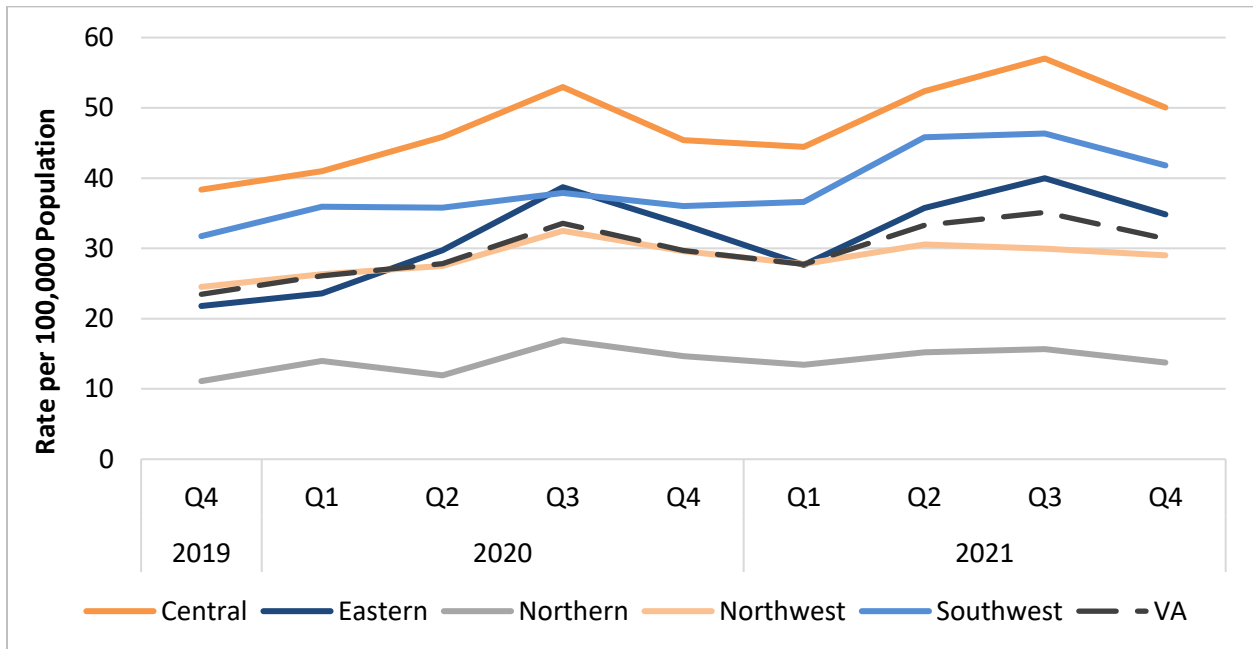
**Figure 2A.** Quarterly Percent Change for Opioid or Unspecified Substance Overdose (Excluding Heroin).



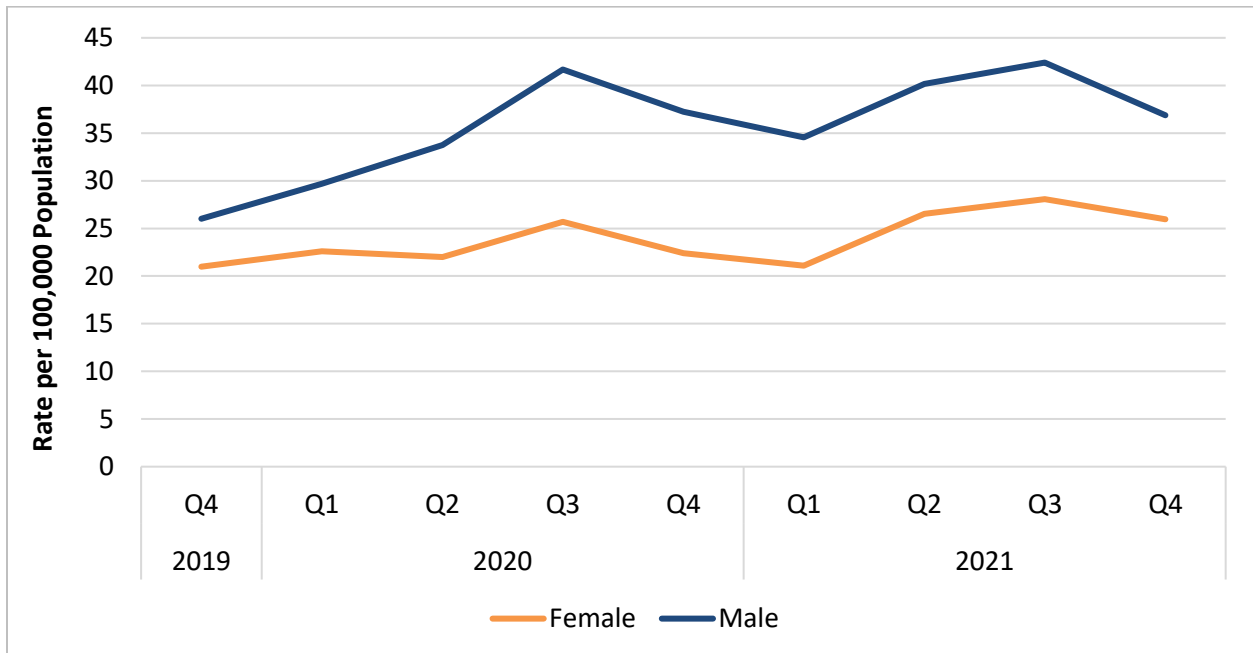
**Figure 2B.** Count of ED Visits for Opioid or Unspecified Substance Overdose (Excluding Heroin) among Virginia Residents by Calendar Quarter, 2019 - 2021.



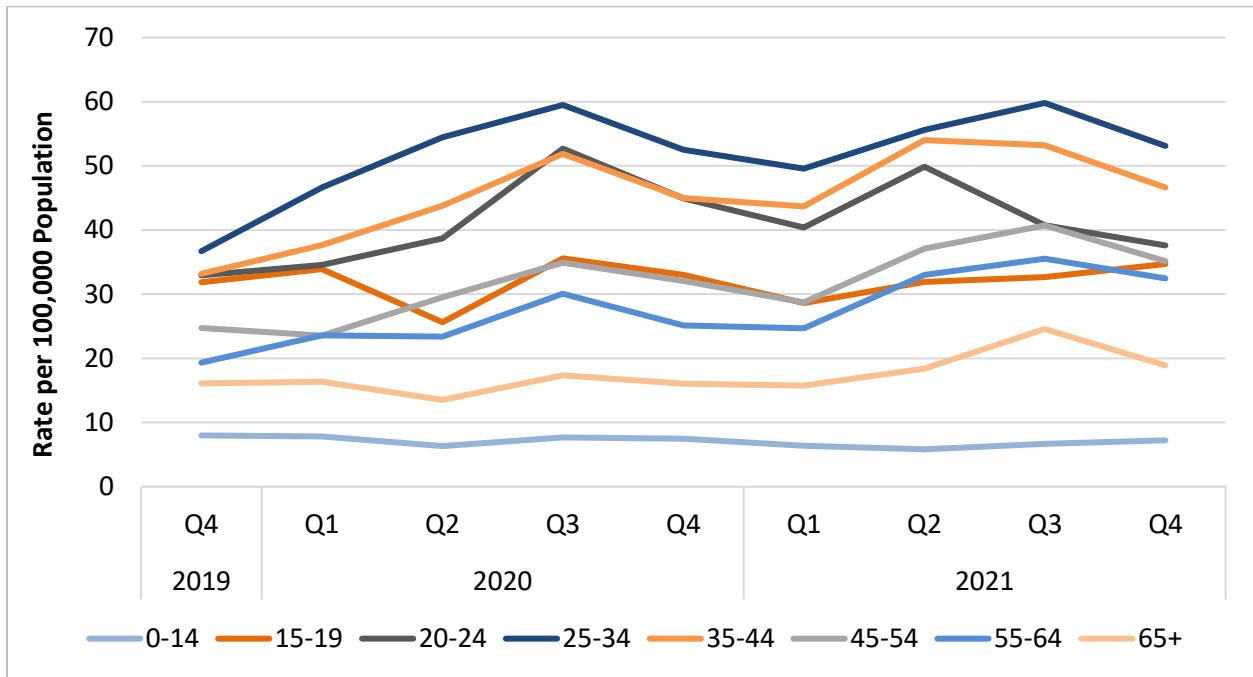
**Figure 2C.** Rate per 100,000 Population for Opioid or Unspecified Substance Overdose (Excluding Heroin) among Virginia Residents by Calendar Quarter and Health Region, Most Recent 9 Quarters.



**Figure 2D.** Rate per 100,000 Population Opioid or Unspecified Substance Overdose (Excluding Heroin) among Virginia Residents by Calendar Quarter and Sex, Most Recent 9 Quarters.



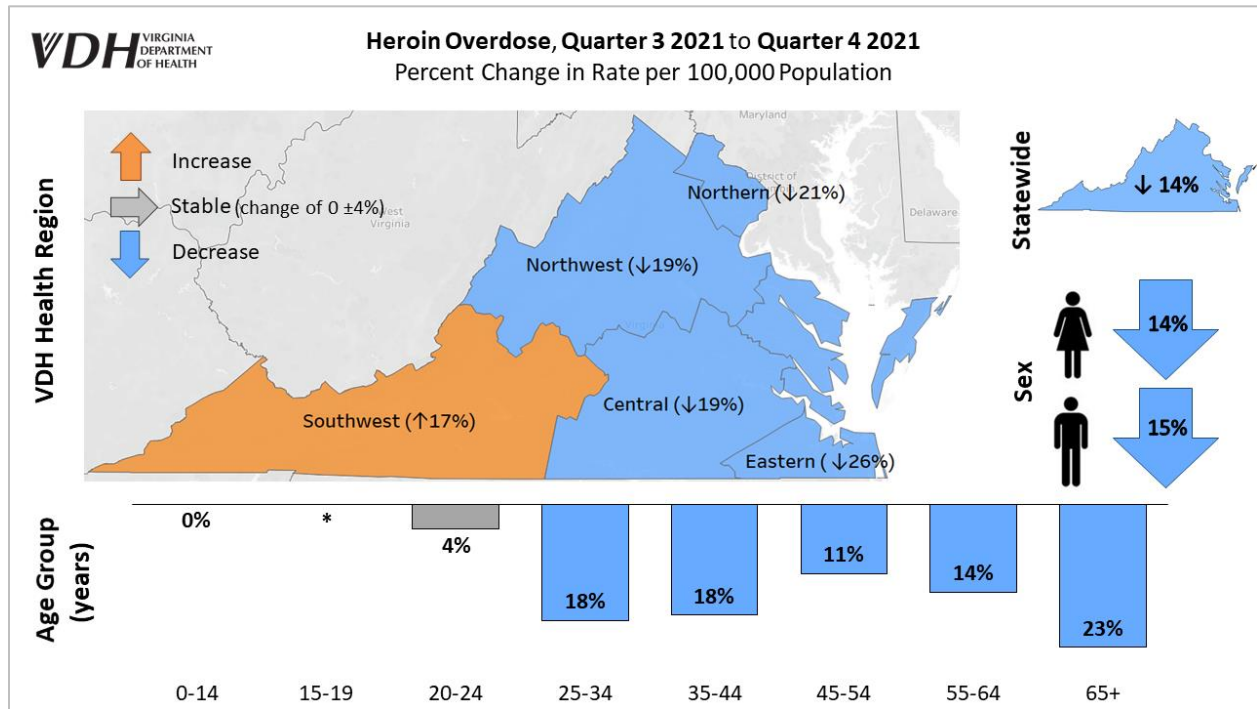
**Figure 2E.** Rate per 100,000 Population for Opioid or Unspecified Substance Overdose (Excluding Heroin) among Virginia Residents by Calendar Quarter and Age Group (Years), Most Recent 9 Quarters.





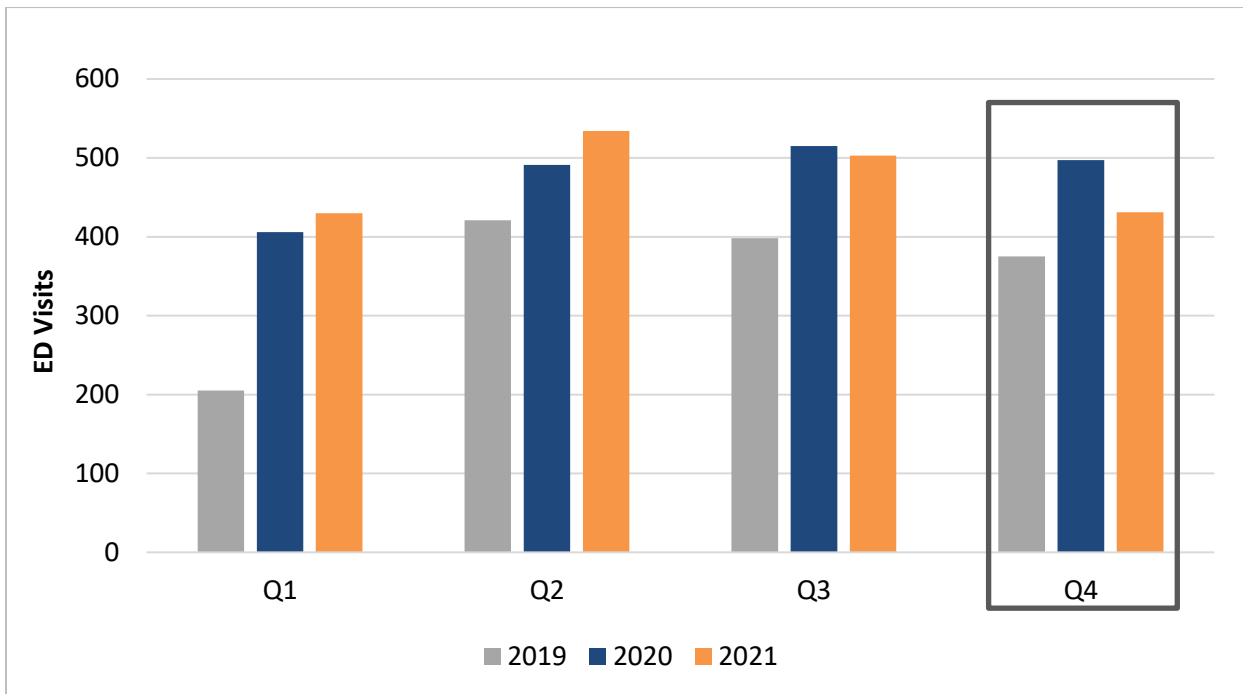
## Emergency Department Visits for Heroin Overdose among Virginia Residents

Figure 3A. Quarterly Percent Change for Heroin Overdose.

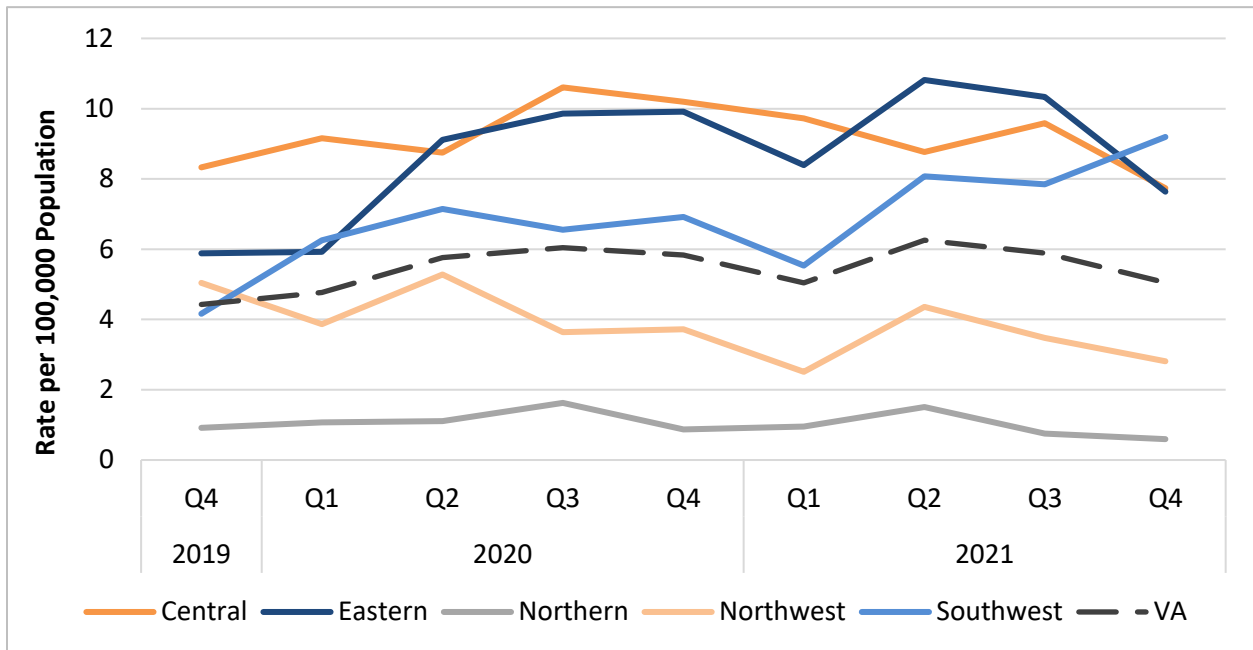


\*Rates with numerators of 1-4 are suppressed.

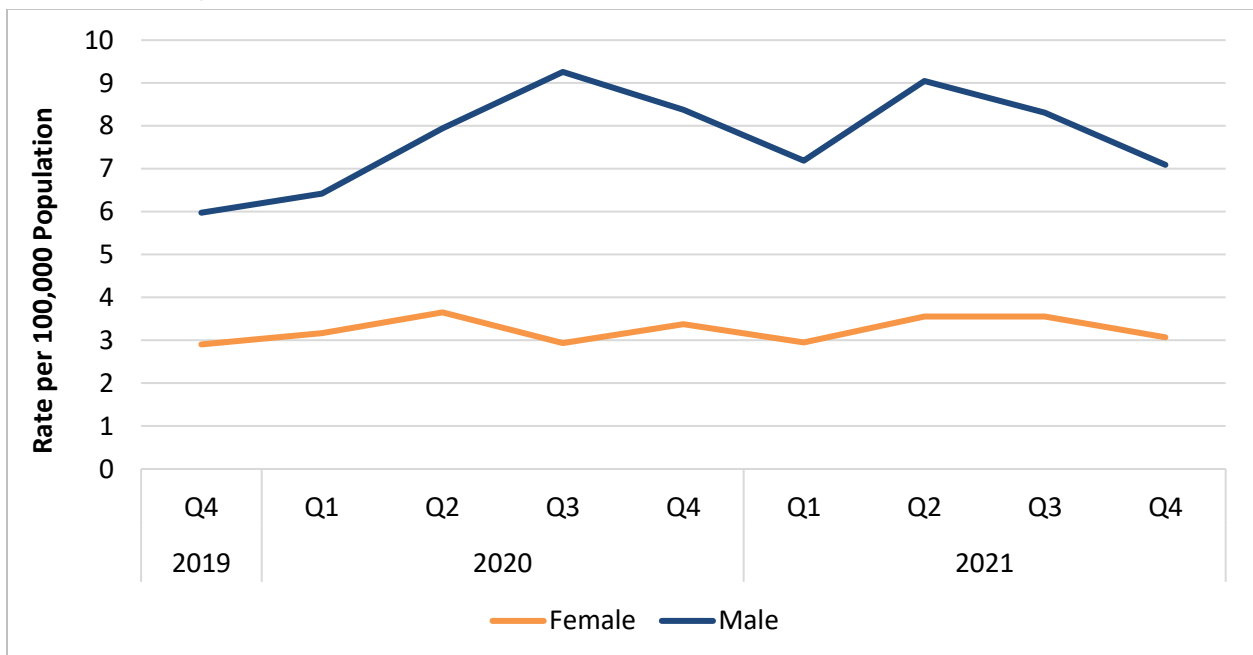
Figure 3B. Count of ED Visits for Heroin Overdose among Virginia Residents by Calendar Quarter, 2019 – 2021.



**Figure 3C.** Rate per 100,000 Population for Heroin Overdose among Virginia Residents by Calendar Quarter and Health Region, Most Recent 9 Quarters.



**Figure 3D.** Rate per 100,000 Population for Heroin Overdose among Virginia Residents by Calendar Quarter and Sex, Most Recent 9 Quarters.



**Figure 3E.** Rate per 100,000 Population for Heroin Overdose among Virginia Residents by Calendar Quarter and Age Group (Years), Most Recent 9 Quarters.

