

# EMERGENCY DEPARTMENT VISITS FOR UNINTENTIONAL DRUG OVERDOSE AMONG VIRGINIA RESIDENTS

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## Quarter 4 (October-December) 2024

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## 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, heroin, and stimulants. Visits from **84** acute care hospital EDs and **27** 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) 10<sup>th</sup> Revision or SNOMED Clinical Terms (CT) code sets.

## Methodology

ED visits are categorized into the following four unintentional drug overdose case definitions: 1) **all drug overdose**, 2) **opioid or unspecified substance overdose (excluding heroin)**, 3) **heroin overdose**, and 4) **stimulant 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, revisions, and historic definitions can be found on the VDH website.

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

Overdose rates in this report are calculated per 10,000 ED visits rather than by total population. This metric provides a consistent rate calculation across time when the number of EDs reporting data increases or decreases. Geography-specific ED visit counts and rates per 100,000 population are included in the Monthly and Annual Statistics Excel file on the [VDH website](#).

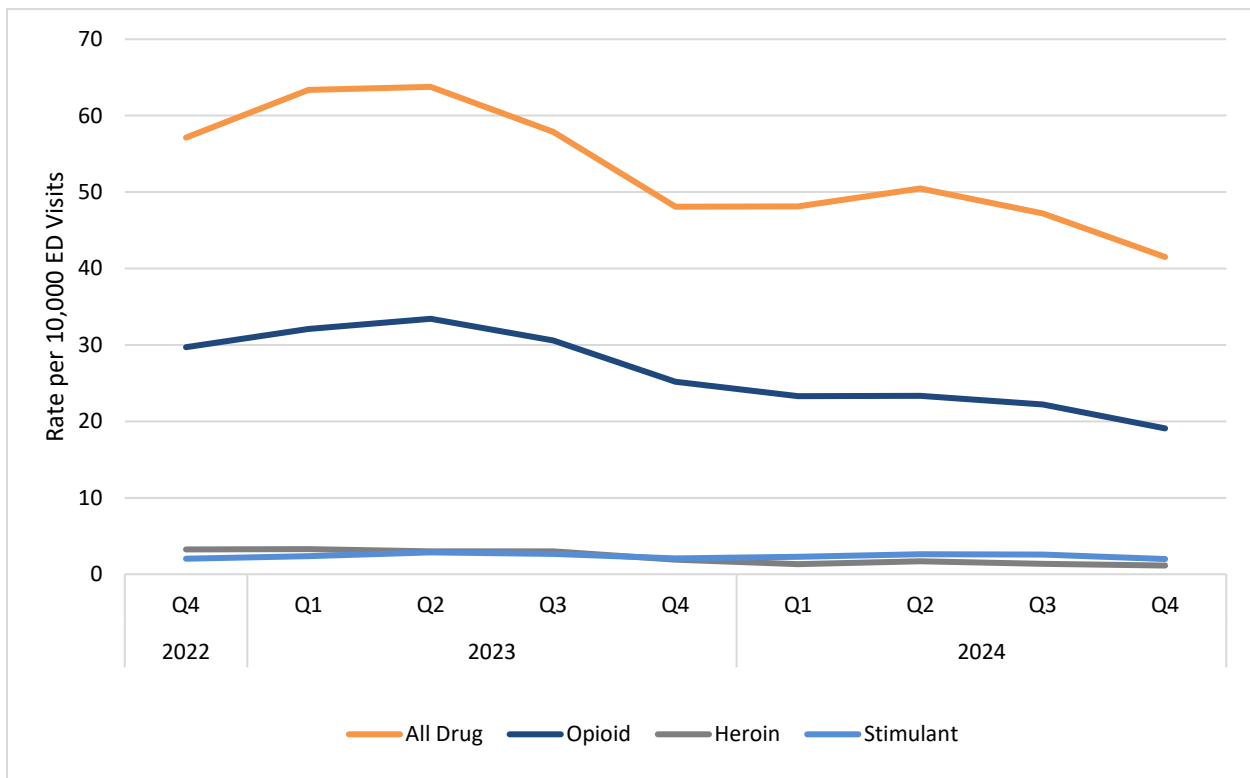
This report provides regional and statewide data. Data for Virginia cities and counties are not presented in this report. Geography information for the VDH health regions can be found here <https://www.vdh.virginia.gov/data/vdh-geography-locator-tool/>.

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

## Summary

- Statewide overdose visit rates per 10,000 ED visits **decreased** for all drug, opioid, and heroin but **remained stable** for stimulant in Q4 2024 compared to Q3 2024.
- Compared to the same quarter last year (Q4 2023), statewide overdose rates for all drug, opioid, heroin and stimulant **decreased** in Q4 of 2024.
- All five VDH Health Regions had **decreases** in all drug and opioid overdose visit rates in Q4 compared to Q3.
- For both females and males, overdose visit rates per 10,000 ED visits **decreased** for all drug, opioid, heroin and stimulant in Q4 2024 compared to Q3 2024.
- The statewide opioid overdose ED visit rate has **decreased** or **remained stable** in every quarter since Q2 of 2023.
- The statewide annual overdose ED visit rate per 10,000 ED visits **decreased** in 2024 compared to 2023 for all four drug categories: all drug decreased 19%, opioid or unspecified substance (excluding heroin) decreased 27%, heroin decreased 50% and stimulant decreased 5%.

**Summary Figure.** Unintentional Drug Overdose Rates per 10,000 ED Visits among Virginia Residents by Calendar Quarter and Overdose Type, Most Recent 9 Quarters.



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

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

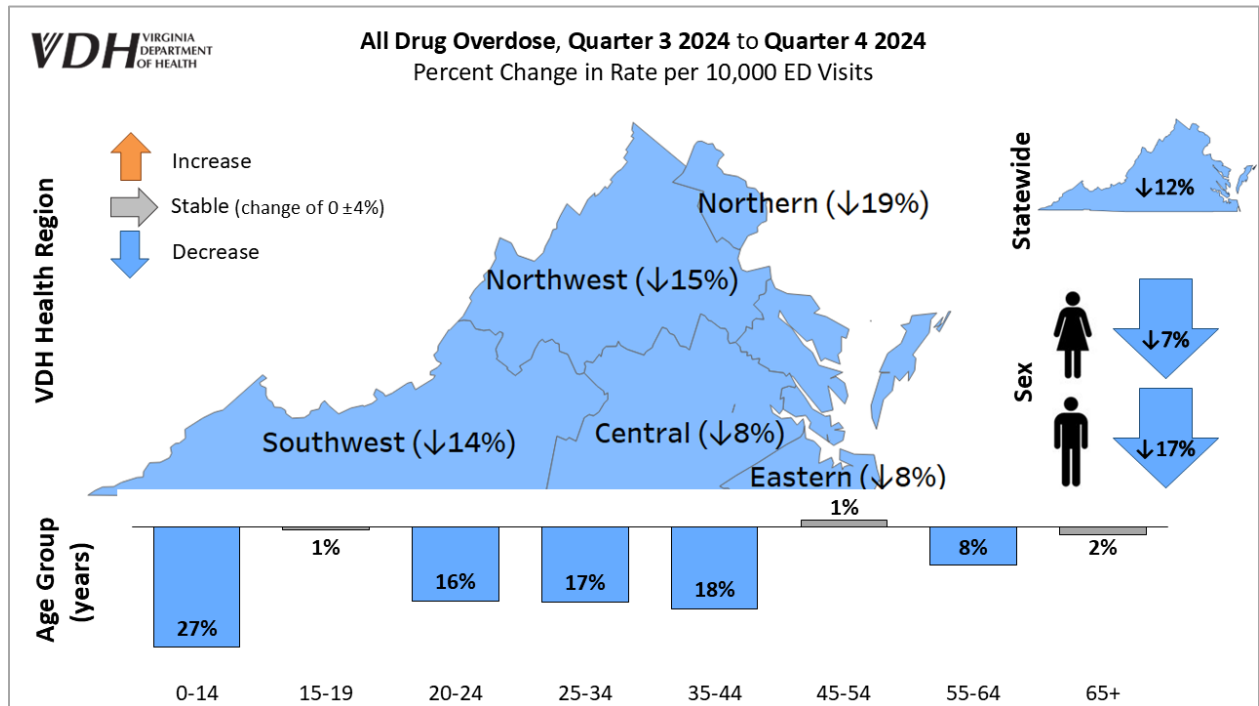
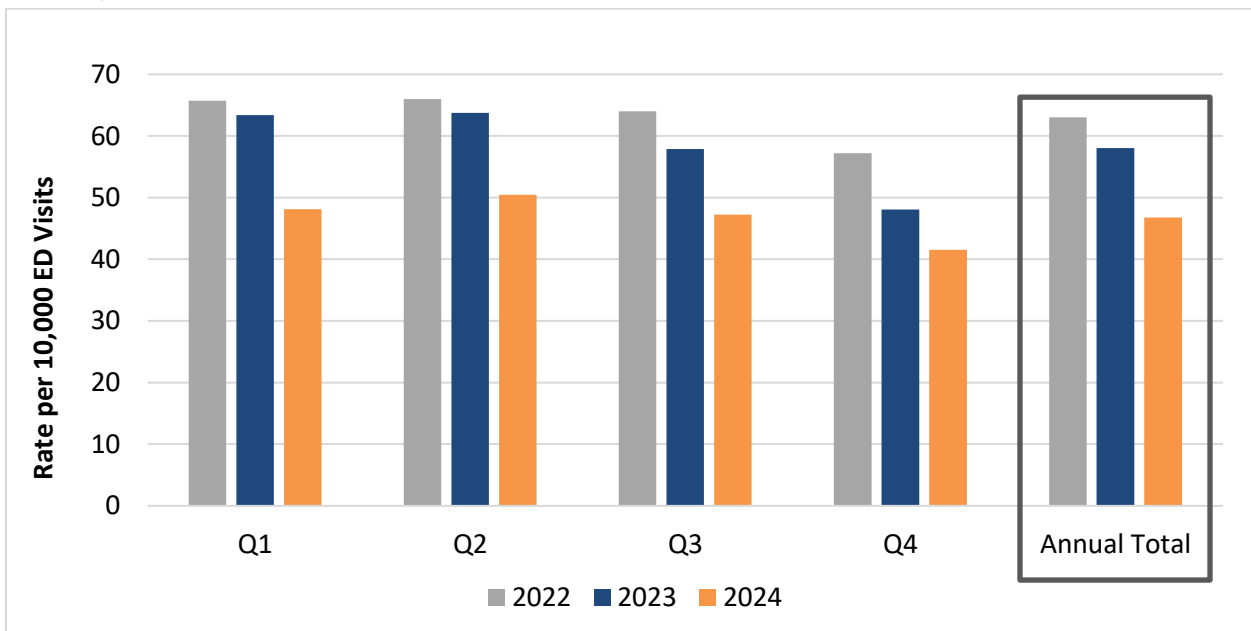
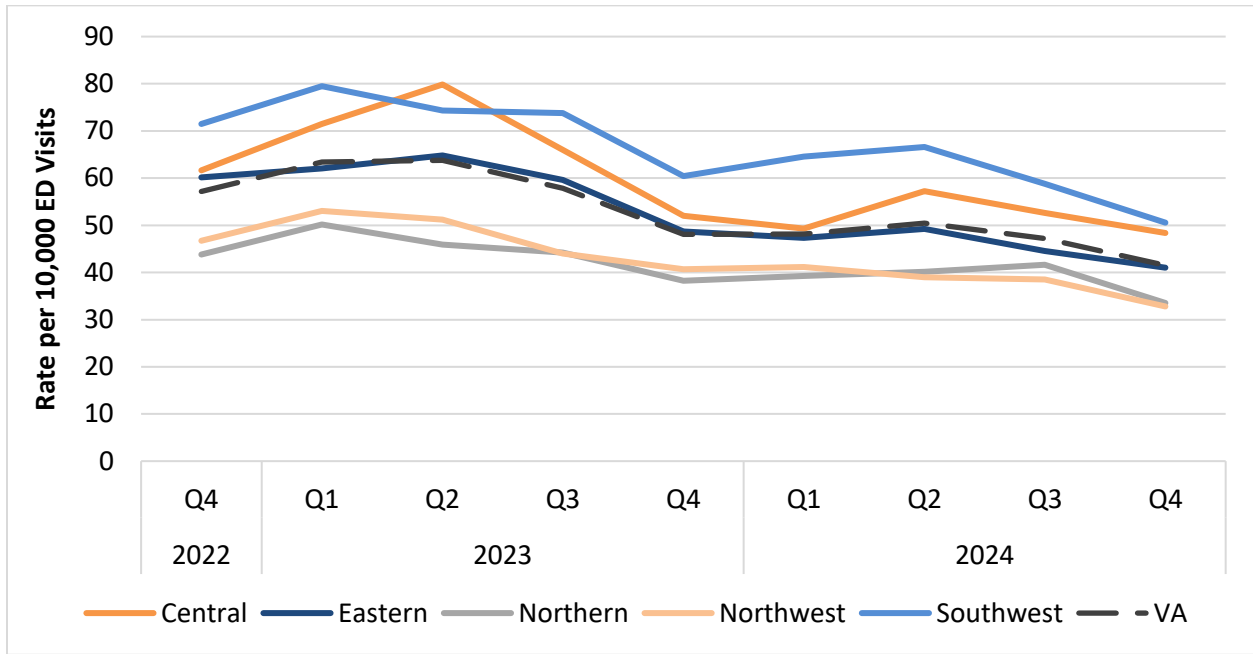


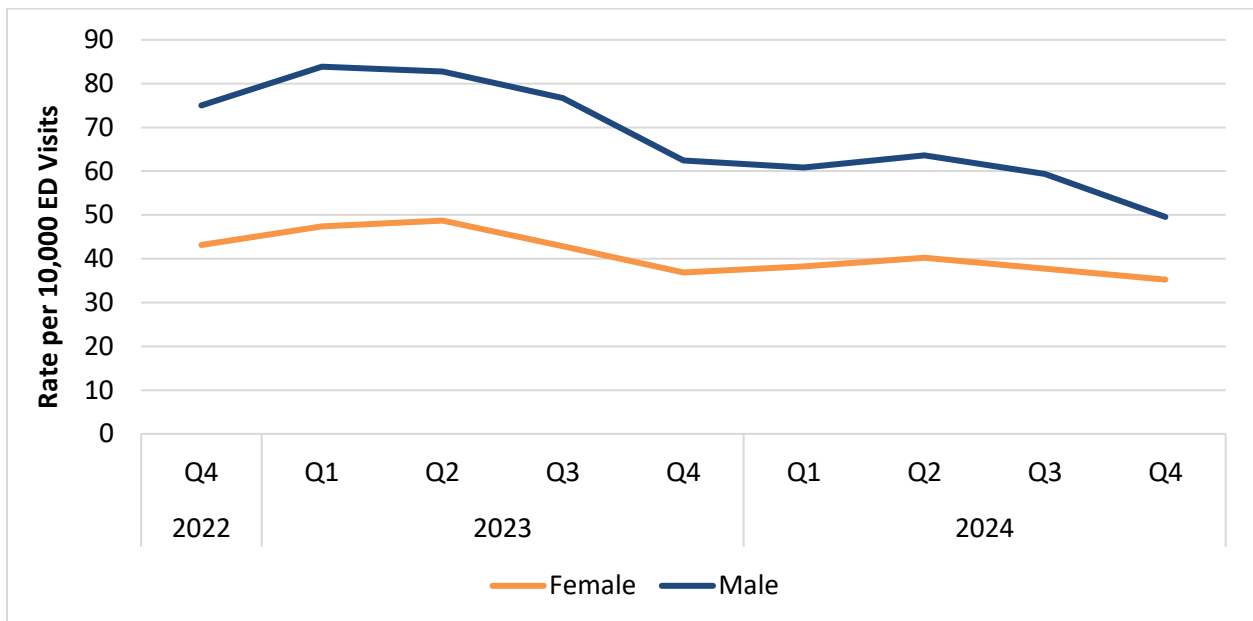
Figure 1B. Rate per 10,000 ED Visits for All Drug Overdose among Virginia Residents by Calendar Quarter, 2022-2024.



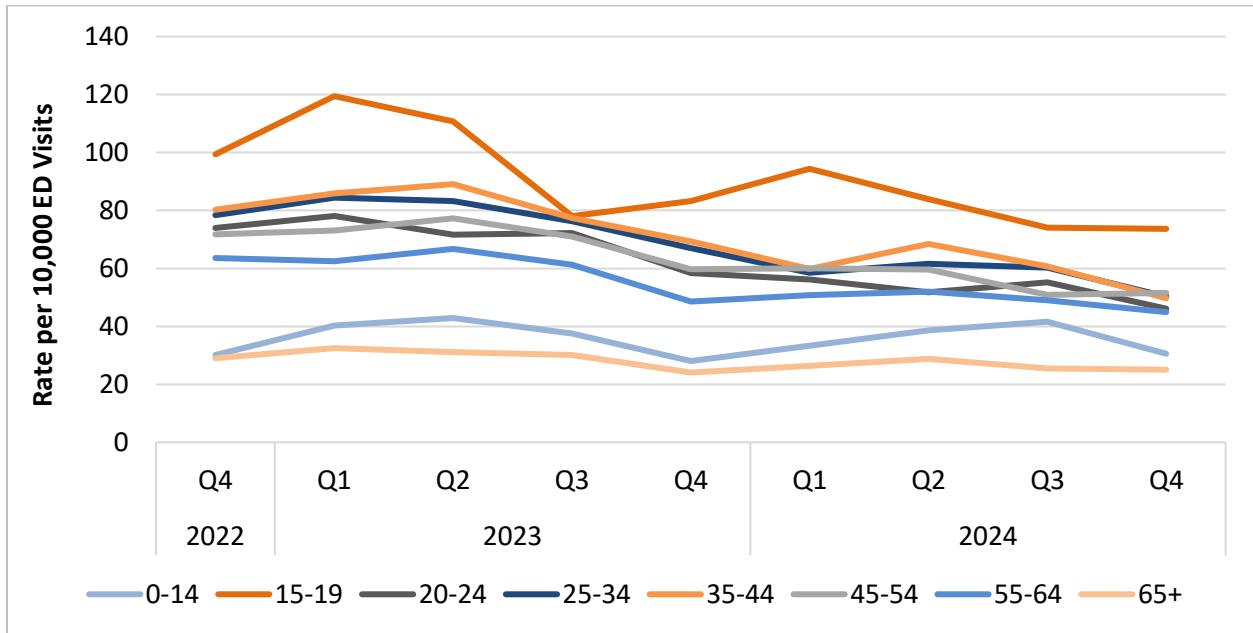
**Figure 1C.** Rate per 10,000 ED Visits for All Drug Overdose among Virginia Residents by Calendar Quarter and Health Region, Most Recent 9 Quarters.



**Figure 1D.** Rate per 10,000 ED Visits for All Drug Overdose among Virginia Residents by Calendar Quarter and Sex, Most Recent 9 Quarters.



**Figure 1E.** Rate per 10,000 ED Visits 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).

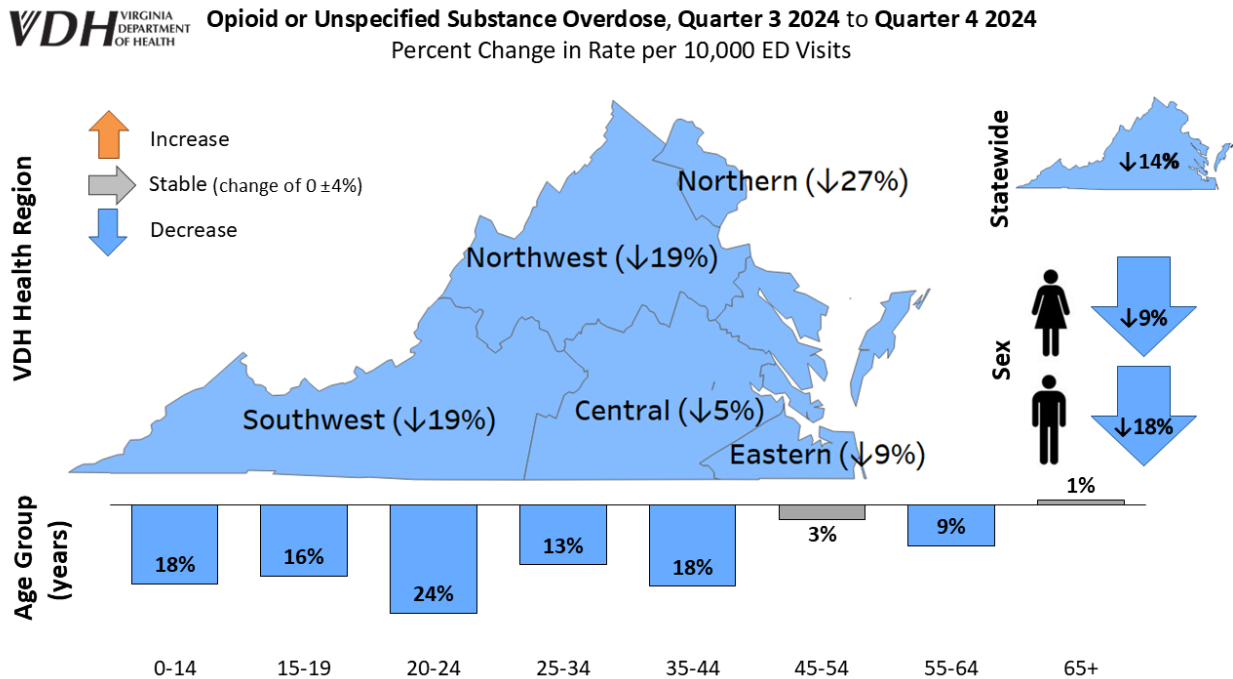
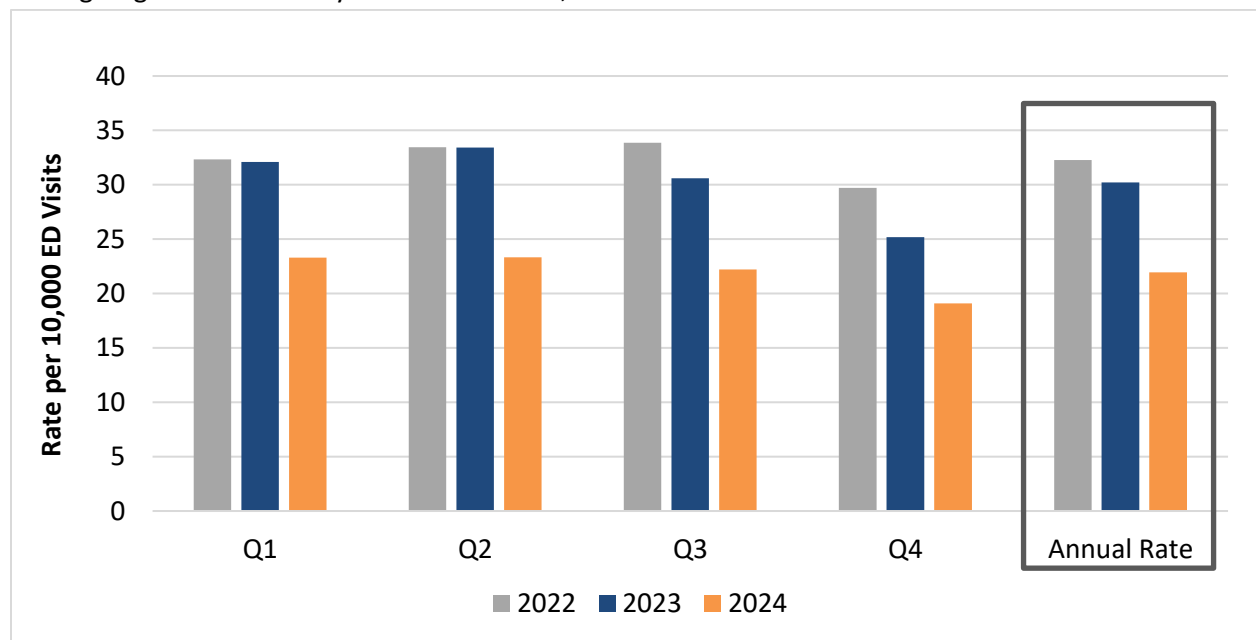
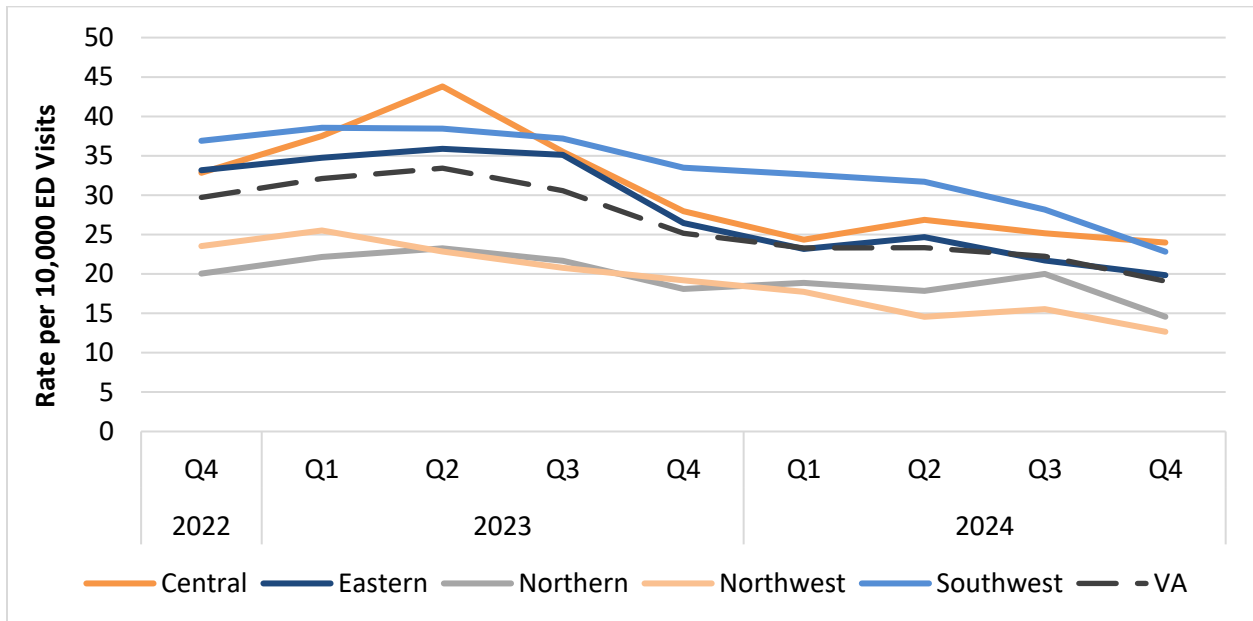


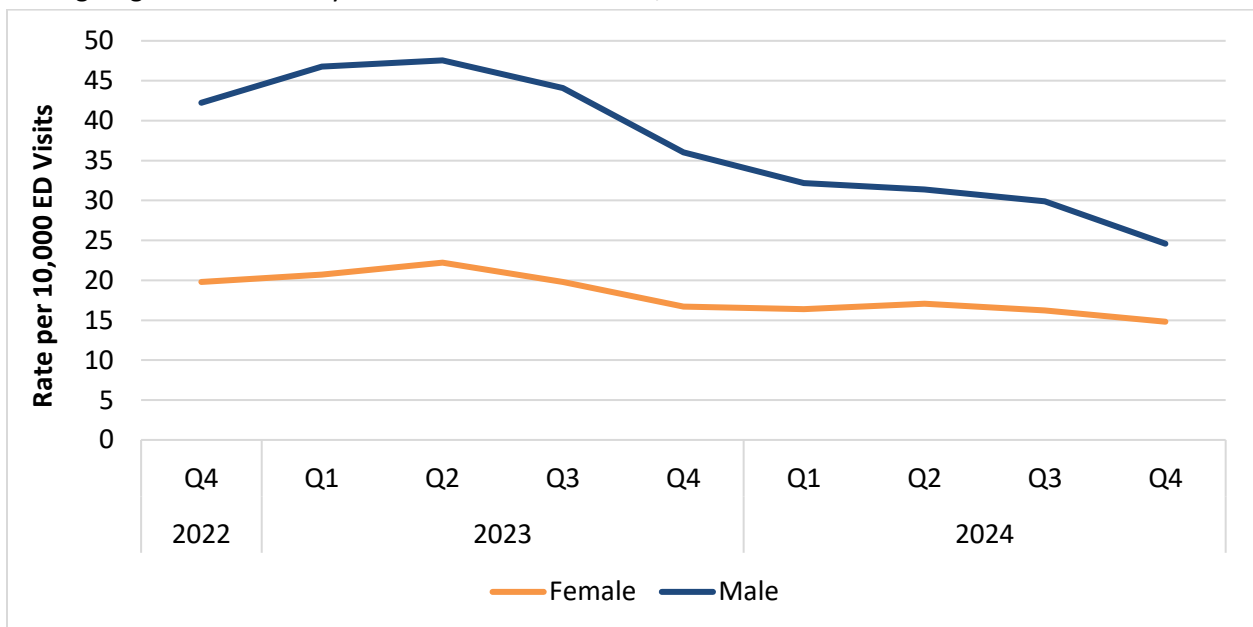
Figure 2B. Rate per 10,000 ED Visits for Opioid or Unspecified Substance Overdose (Excluding Heroin) among Virginia Residents by Calendar Quarter, 2022-2024.



**Figure 2C.** Rate per 10,000 ED Visits for Opioid or Unspecified Substance Overdose (Excluding Heroin) among Virginia Residents by Calendar Quarter and Health Region, Most Recent 9 Quarters.

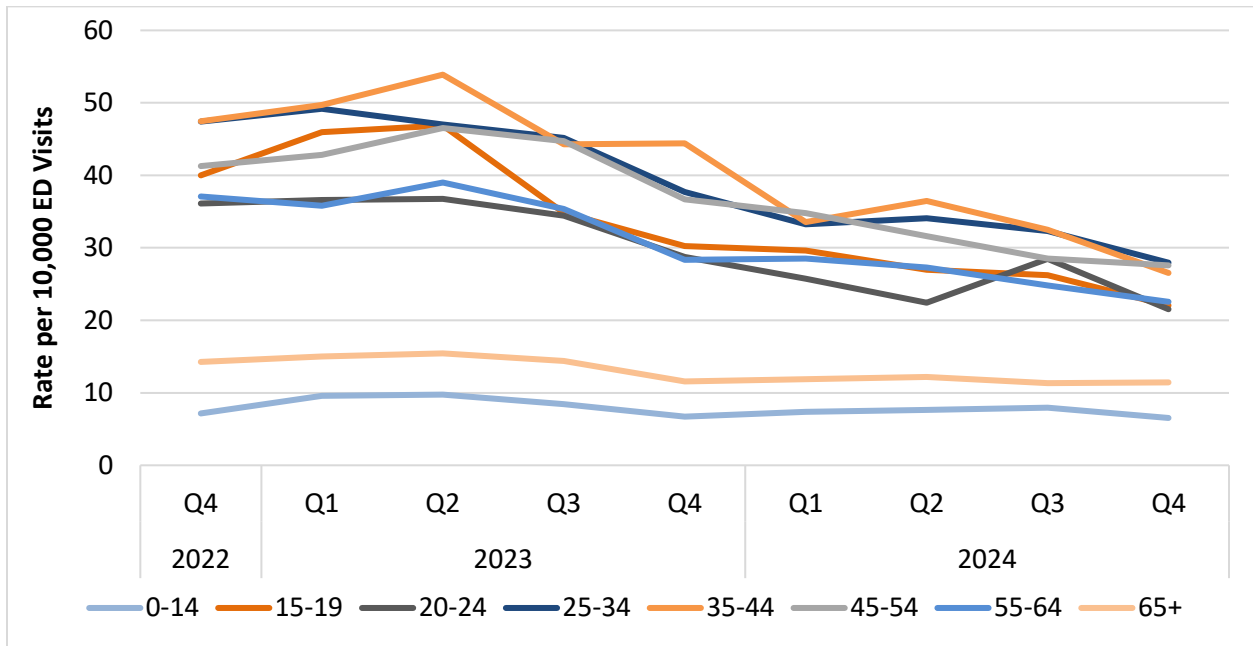


**Figure 2D.** Rate per 10,000 ED Visits Opioid or Unspecified Substance Overdose (Excluding Heroin) among Virginia Residents by Calendar Quarter and Sex, Most Recent 9 Quarters.





**Figure 2E.** Rate per 10,000 ED Visits 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.

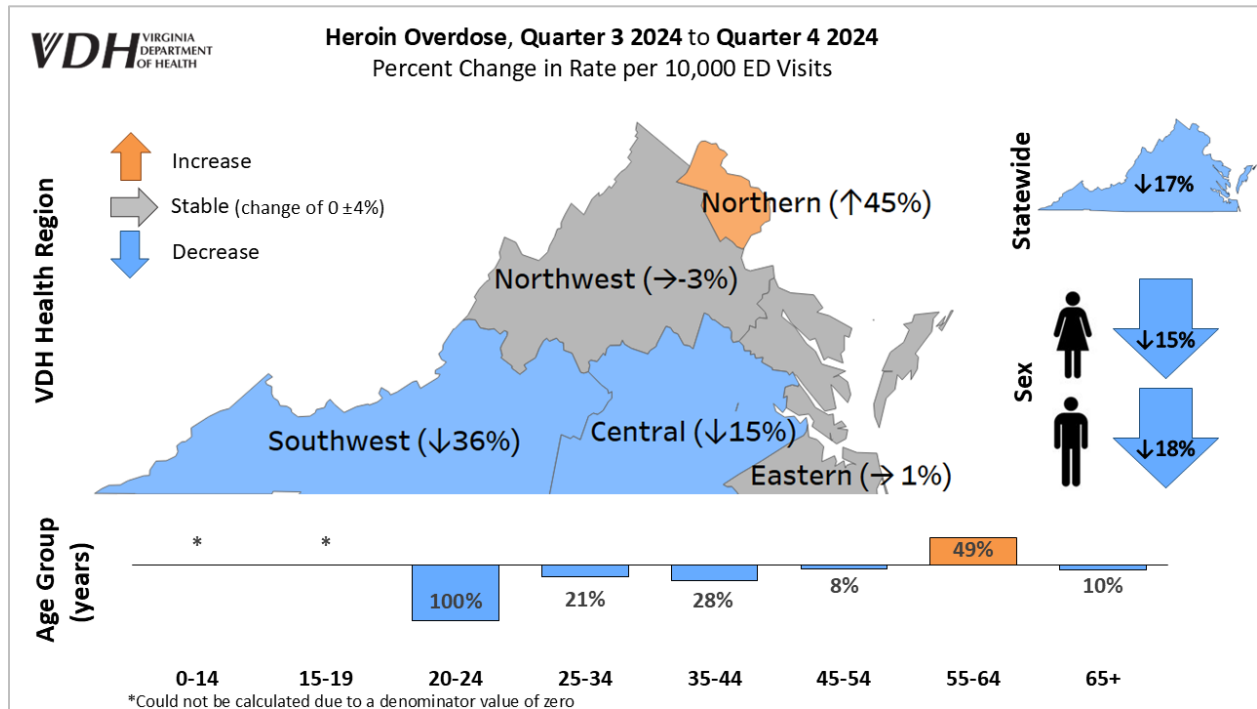
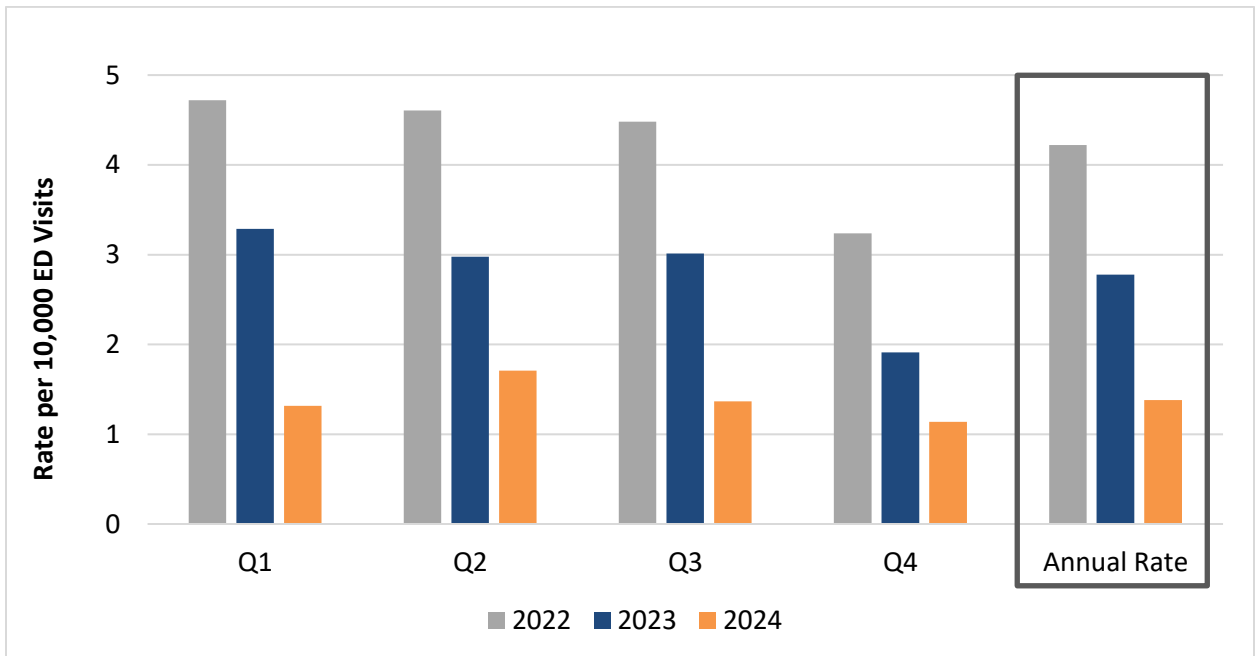
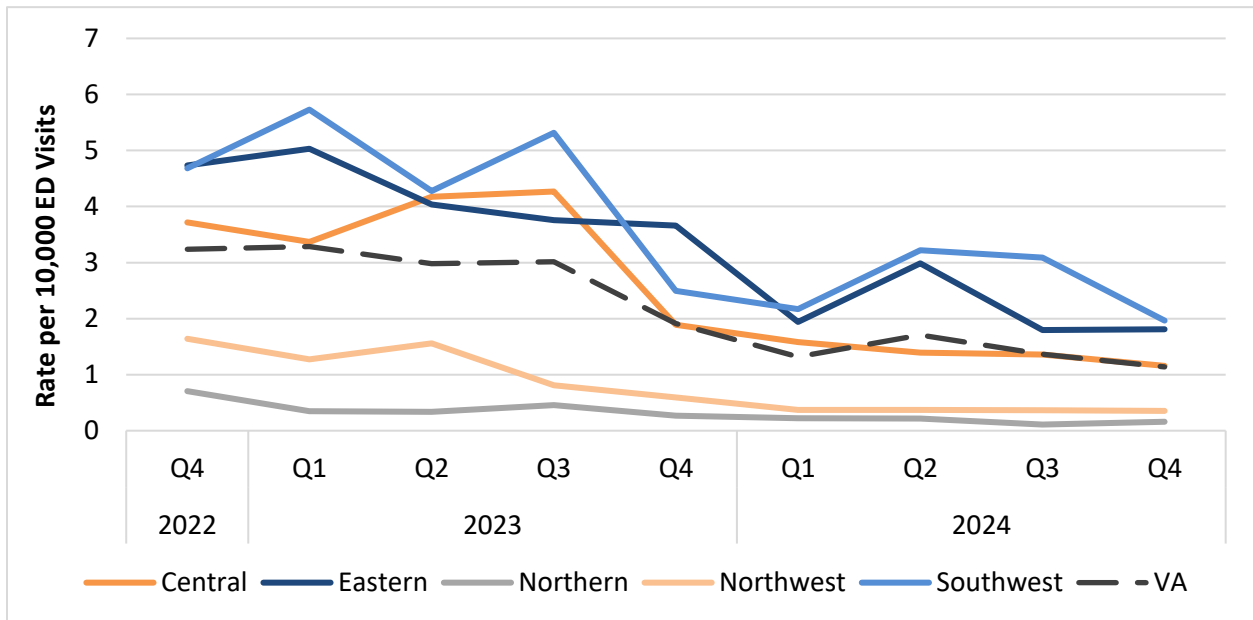


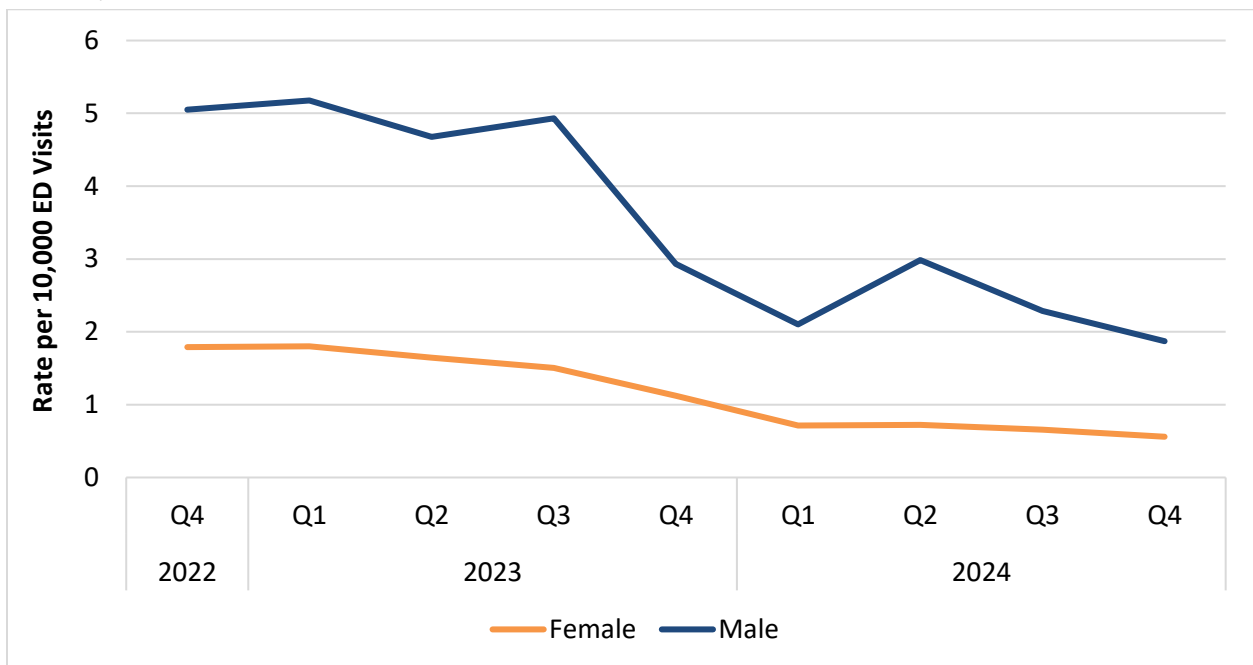
Figure 3B. Rate per 10,000 ED Visits for Heroin Overdose among Virginia Residents by Calendar Quarter, 2022-2024.



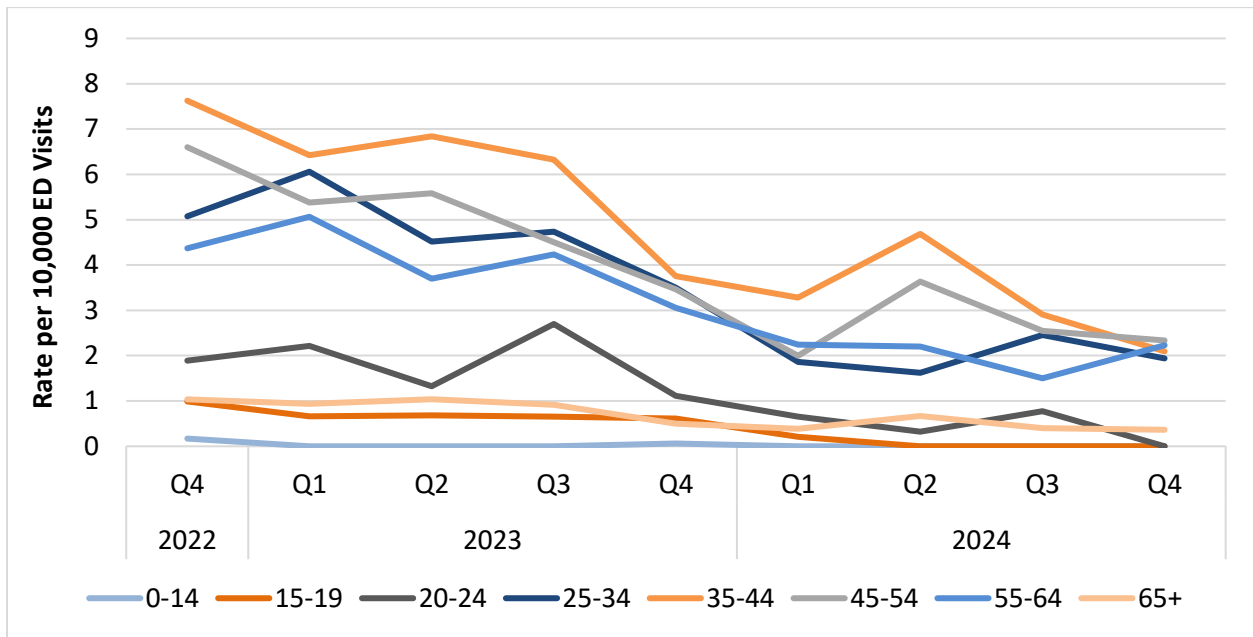
**Figure 3C.** Rate per 10,000 ED Visits for Heroin Overdose among Virginia Residents by Calendar Quarter and Health Region, Most Recent 9 Quarters.



**Figure 3D.** Rate per 10,000 ED Visits for Heroin Overdose among Virginia Residents by Calendar Quarter and Sex, Most Recent 9 Quarters.



**Figure 3E.** Rate per 10,000 ED Visits for Heroin Overdose among Virginia Residents by Calendar Quarter and Age Group (Years), Most Recent 9 Quarters.



## Emergency Department Visits for Stimulant Overdose among Virginia Residents

Figure 4A. Quarterly Percent Change for Stimulant Overdose.

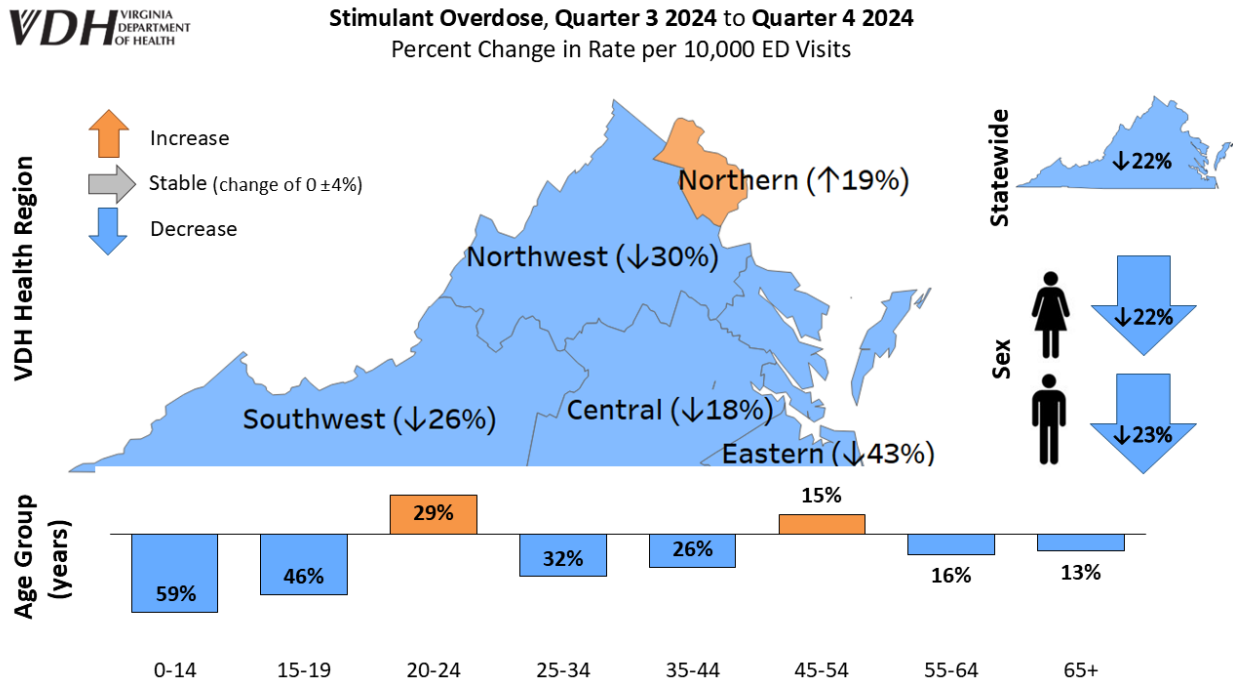
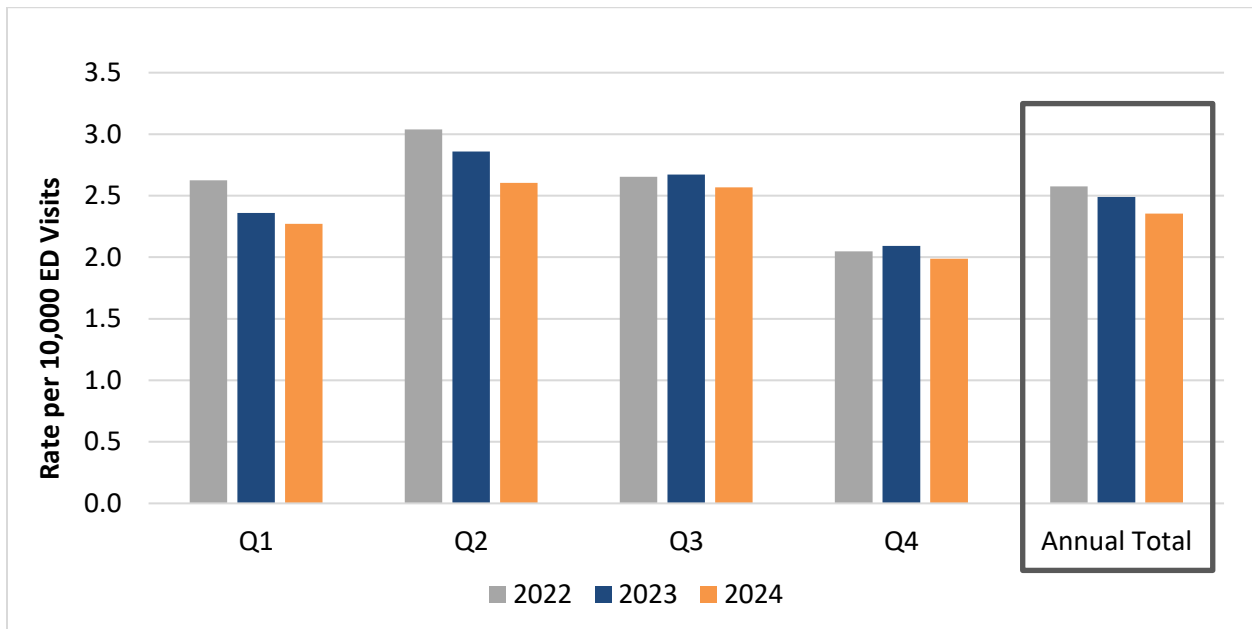
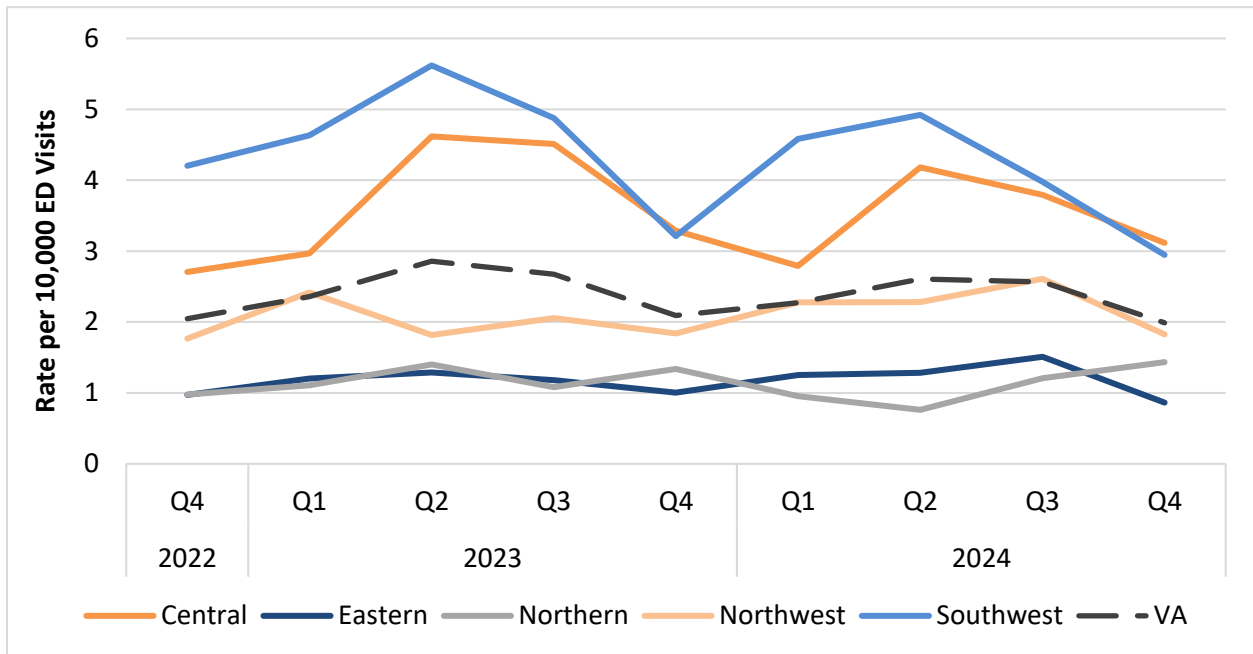


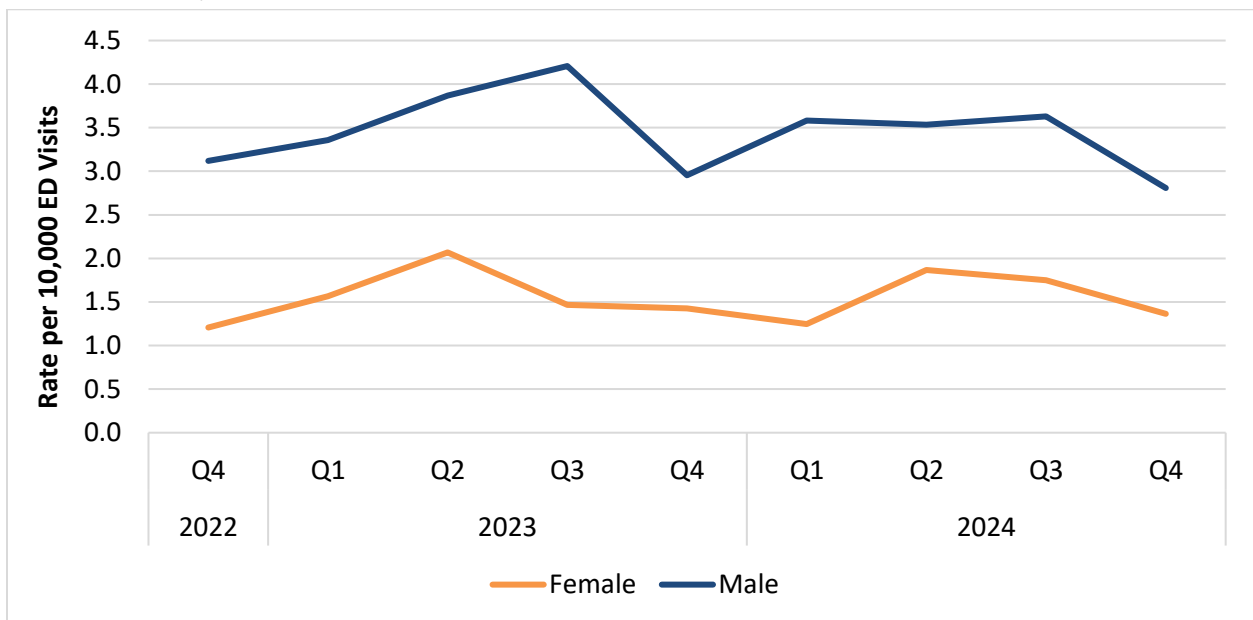
Figure 4B. Rate per 10,000 ED Visits for Stimulant Overdose among Virginia Residents by Calendar Quarter, 2022-2024.



**Figure 4C.** Rate per 10,000 ED Visits for Stimulant Overdose among Virginia Residents by Calendar Quarter and Health Region, Most Recent 9 Quarters.



**Figure 4D.** Rate per 10,000 ED Visits for Stimulant Overdose among Virginia Residents by Calendar Quarter and Sex, Most Recent 9 Quarters.



**Figure 4E.** Rate per 10,000 ED Visits for Stimulant Overdose among Virginia Residents by Calendar Quarter and Age Group (Years), Most Recent 9 Quarters.

