

Heat Related Illness: ED and Urgent Care Data

Division of Surveillance and Investigation

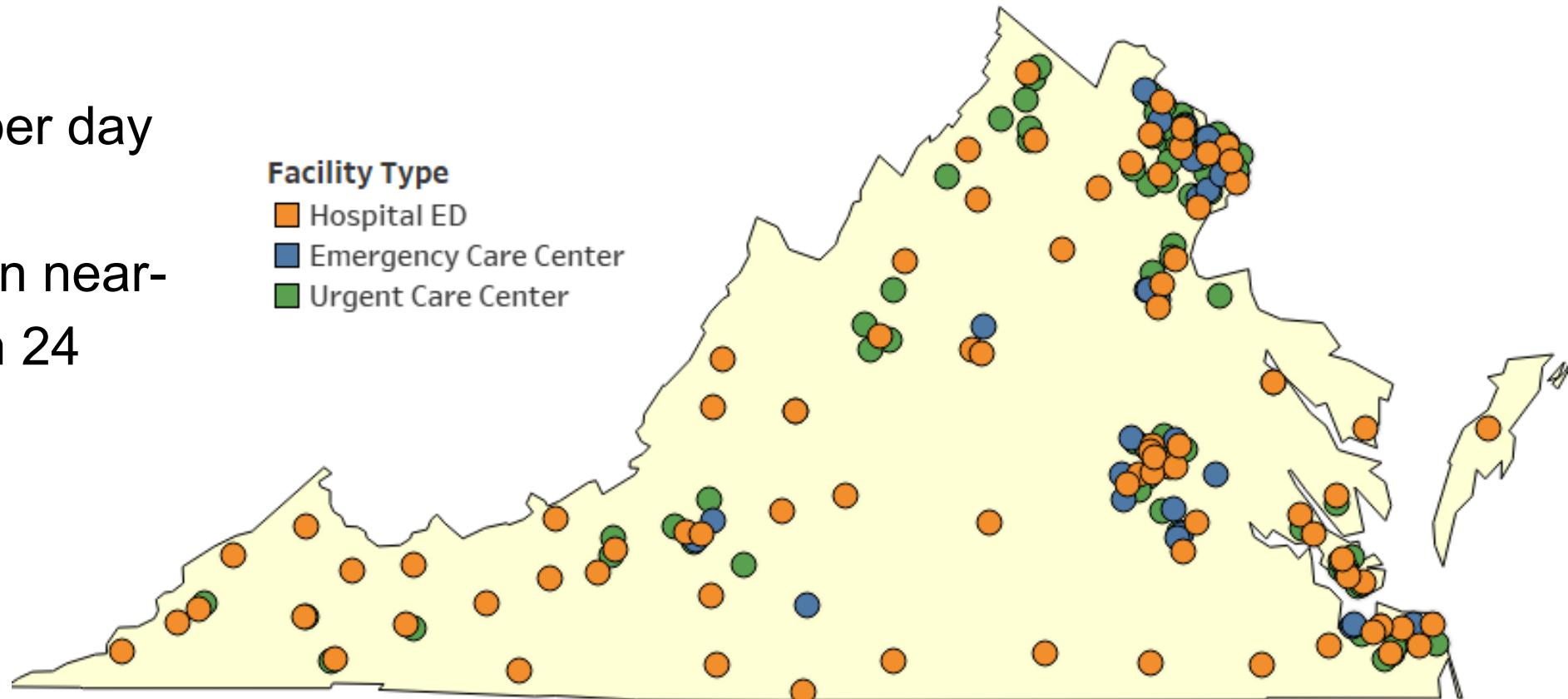
ESSENCE

- **Electronic Surveillance System for the Early Notification of Community-based Epidemics**
- AKA syndromic surveillance system
- Includes data from emergency departments (EDs) and urgent cares
- Access limited to VDH staff for their geographic area



EDs and Urgent Cares Reporting to ESSENCE

- 215 total facilities
- >17,000 visits per day
- Data available in near-real time (within 24 hours of visit)



What Data are Sent to ESSENCE?



Facility Name



Visit Information

Visit Date and Time
Chief Complaint
Discharge Diagnosis
Discharge Disposition
Clinical Impression*
Triage Notes*



Patient Information

Name
Date of Birth
Sex
Race/Ethnicity
Zip Code
Medical Record Number



Other*

Height/weight/BMI
Pregnancy Status
Travel History
Smoking Status
Prescription Meds

Queries Use Chief Complaint and Diagnosis

Chief Complaint

- Reason for visit
- Available quickly (2-24 hours after visit)
- Lacks specificity
- Free-text or pre-set menu list
- Available for 100% of ESSENCE records

Discharge Diagnosis

- Diagnosis used for billing
- Diagnosis codes (ICD-10) are standardized
- May be delayed (up to 2 weeks after visit)
- Available for 97% of ESSENCE records in 2024

Heat Related Illness Visits

HRI Case Definition

Key Terms: heat, heat exhaustion, heat stroke, heat cramp, sun stroke, heat stress, heat exposure, hyperthermia

OR

Diagnosis Codes:

- Effects of heat and light (992, T67)
 - Includes: heatstroke, heat cramp, heat exhaustion
- Accident caused by excessive heat (E900)
- Exposure to excessive natural heat (X30.X)

VDH HRI Dashboard

What

ED and urgent care visit counts and rates per 10,000 visits

When

2015 – current year (May – September)

Who

Virginia and out-of-state residents

Stratification

Year, health region, city/county, age group, race/ethnicity, and sex

Heat-Related Illness Dashboard

Updated:

- Weekdays in July, August
- Weekly in May, June, September

- Year to date comparison
- Annual counts compared to average
- Monthly rates comparison
- City/county map
- Demographics: age, sex, race/ethnicity

Heat-Related Illness (HRI) in Virginia

Heat-related illness (HRI) ranging from mild (heat cramps) to severe (heat stroke, death) occurs when the body is unable to properly cool itself. This dashboard includes emergency department and urgent care visits for heat-related illness from May - September for years 2015 - 2025.

Use the filters below to view data for a specific year or health region and to switch between counts or rates. By default, the second graph displays daily HRI visit counts. Select "Rates per 10,000 visits" to view monthly HRI rates compared to the combined rate for all available years.

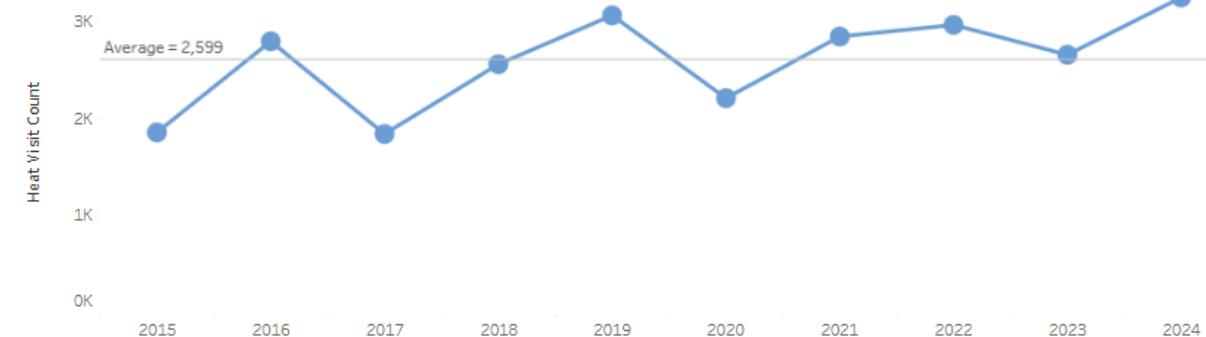
Use the [VDH Geography Reference Guide](#) for a list of cities and counties in each health region.

Filters

Select Year (Affects All Graphs and Map)	Select Patient Geography (Affects All Graphs and Map)	Select Counts or Rates (Affects All Graphs and Map)
2025	All Visits	<input checked="" type="radio"/> Counts <input type="radio"/> Rates per 10,000 visits

Annual Heat-Related Illness

Visit Counts in Virginia, May - September



During May 1 - September 1, 2025, there were **3,832** emergency visits for heat-related illness in Virginia, which is **higher than the (year-to-date) average** of 2,539 visits by this time each year.

Region Filter

Heat-Related Illness (HRI) in Virginia

Heat-related illness (HRI) ranging from mild (heat cramps) to severe (heat stroke, death) occurs when the body is unable to properly cool itself. This dashboard includes emergency department and urgent care visits for heat-related illness from May - September for years 2015 - 2025.

What's happening
in my region?

Use the filters below to view data for a specific year or health region and to switch between counts or rates. By default, the second graph displays daily HRI visit counts. Select "Rates per 10,000 visits" to view monthly HRI rates compared to the combined rate for all available years.

Use the [VDH Geography Reference Guide](#) for a list of cities and counties in each health region.

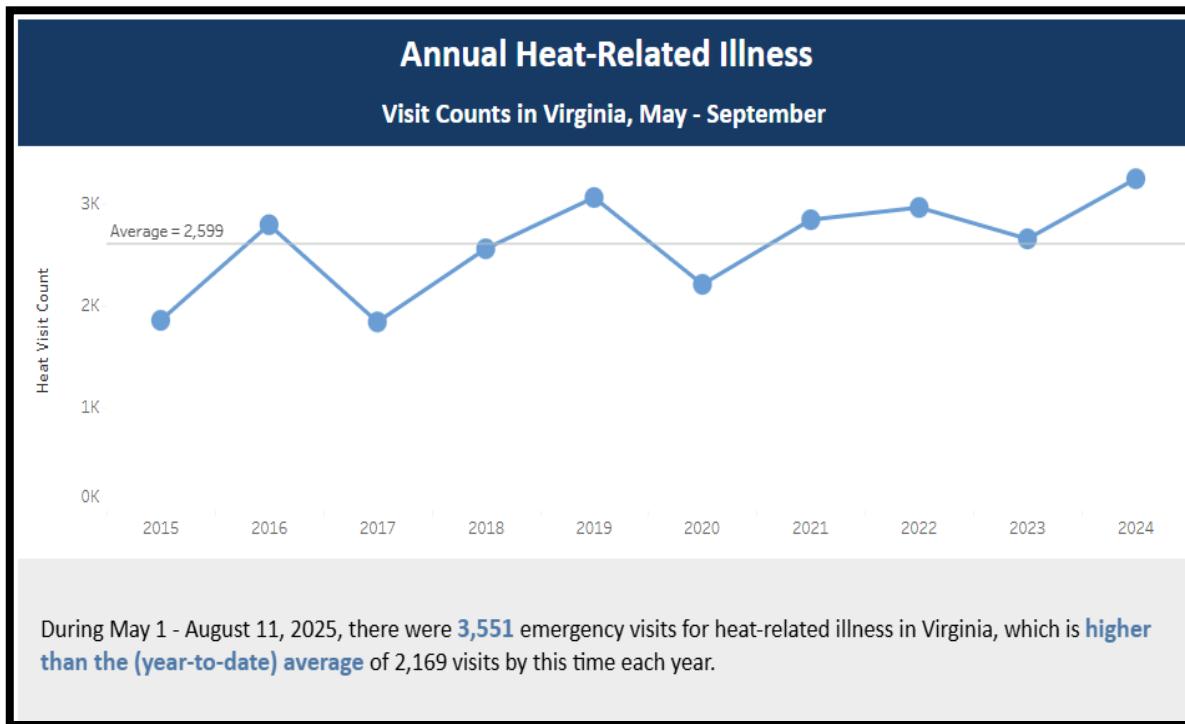
Filters

Select Year (Affects All Graphs and Map)	Select Patient Geography (Affects All Graphs and Map)	Select Counts or Rates (Affects All Graphs and Map)
2025	All Visits All Visits Central Region Eastern Region Northern Region Northwest Region Southwest Region Out of State	<input checked="" type="radio"/> Counts <input type="radio"/> Rates per 10,000 visits

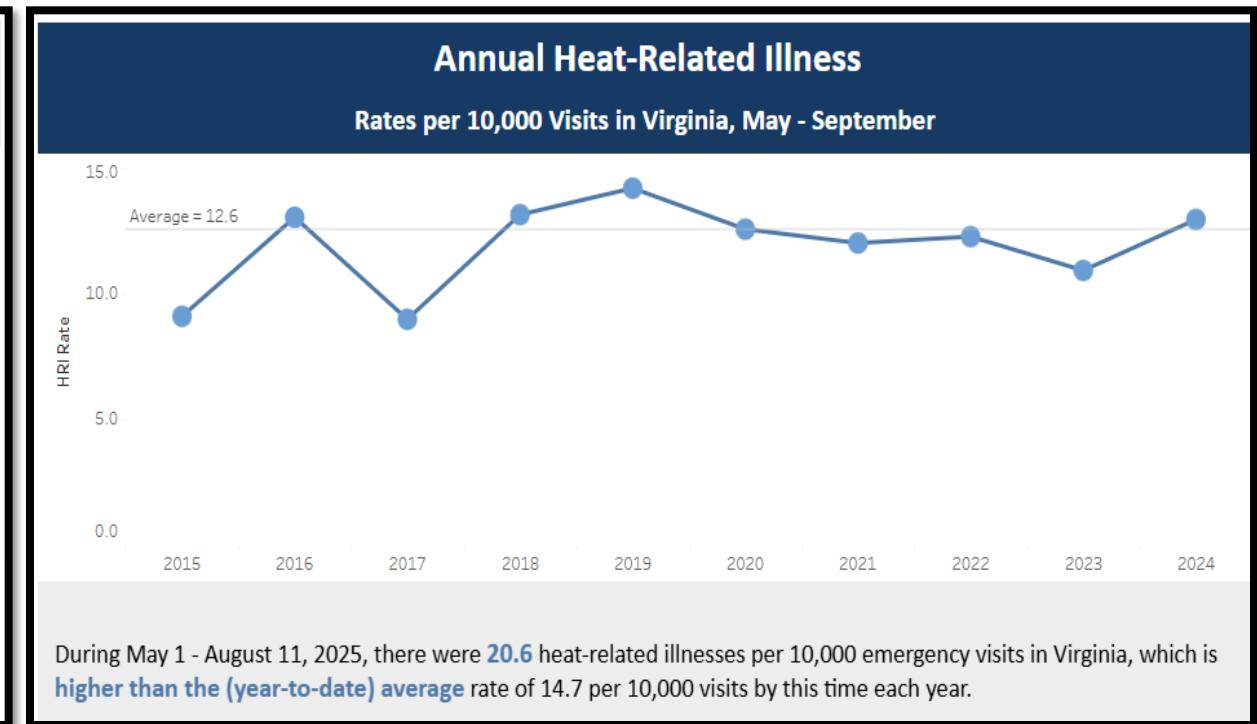
Year-to-date comparison

How does this year compare to other years?

Number of ED visits for HRI

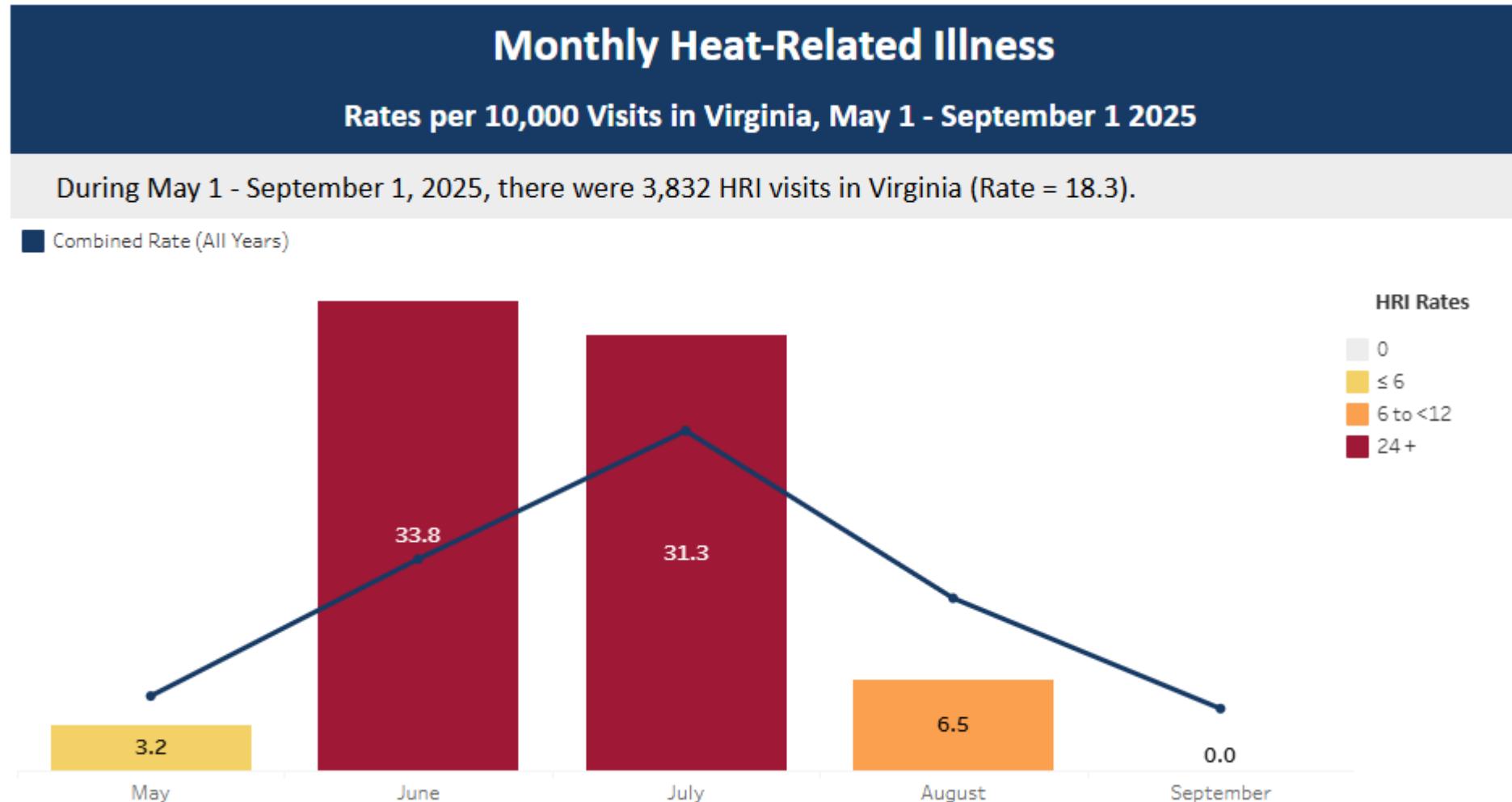


HRI Visit Rate



Monthly Rates

How does this month compare to the same month in other years?



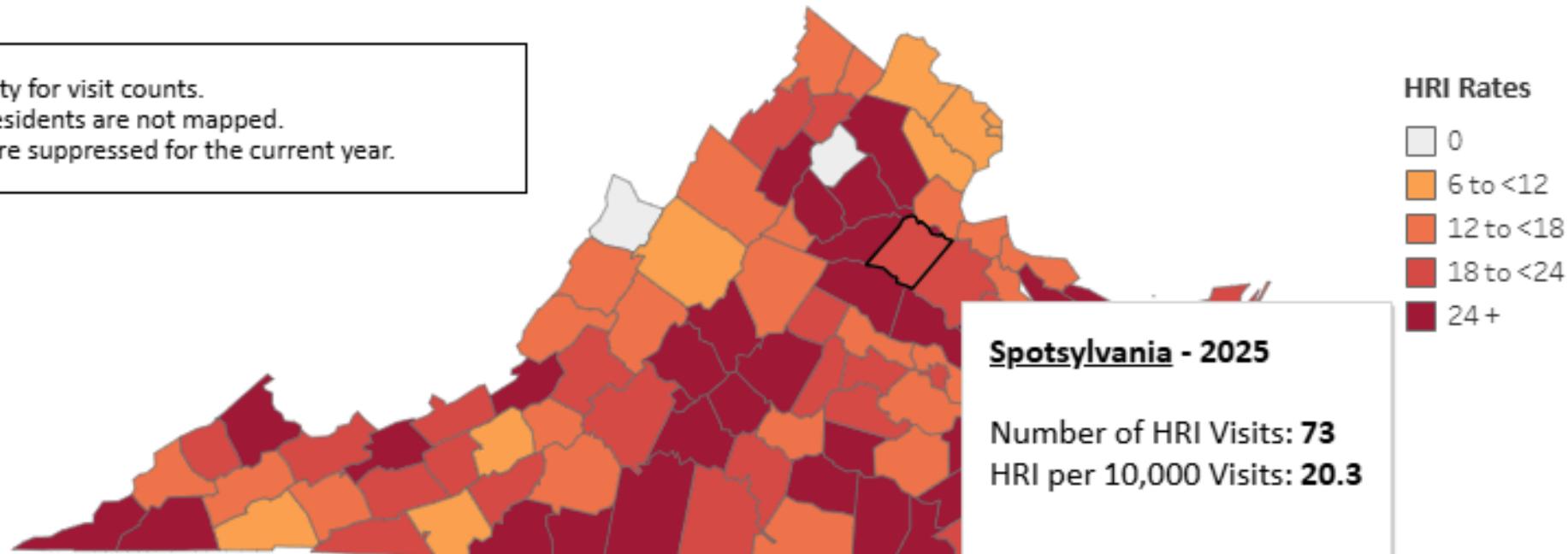
Locality Map

How does my city/county
compare to others?

Heat-Related Illness by City/County

Rates per 10,000 Visits in Virginia, May 1 - September 1 2025

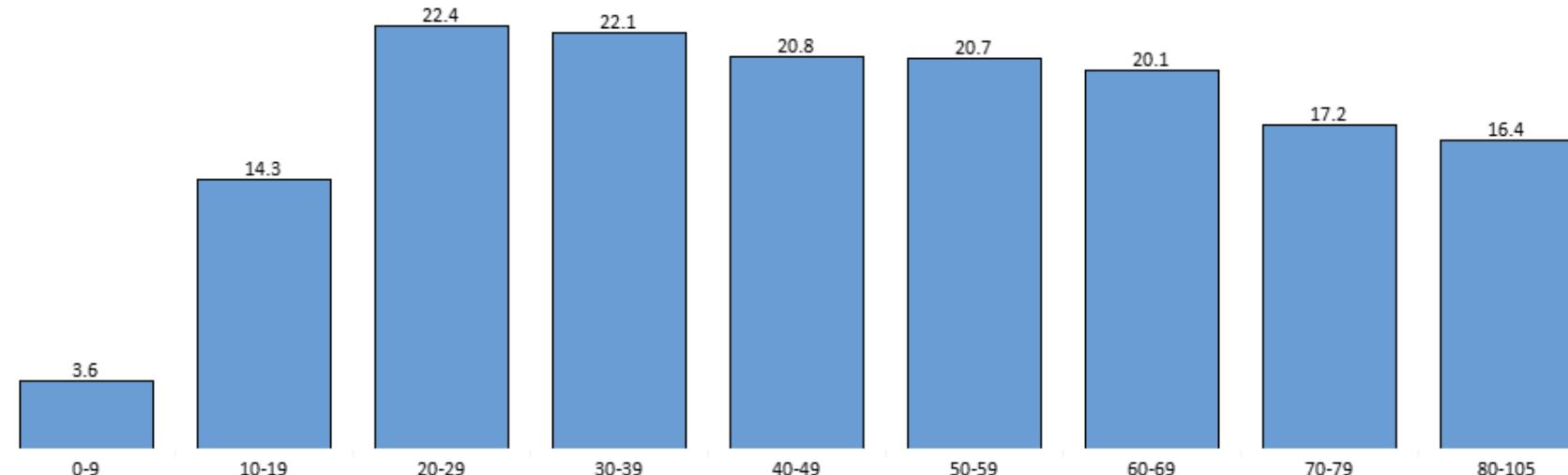
Hover over city or county for visit counts.
Visits by Out-of-State residents are not mapped.
*Counts between 1-4 are suppressed for the current year.



Heat-Related Illness by 10-Year Age Group

Rates per 10,000 Visits in Virginia, May 1 - September 1 2025

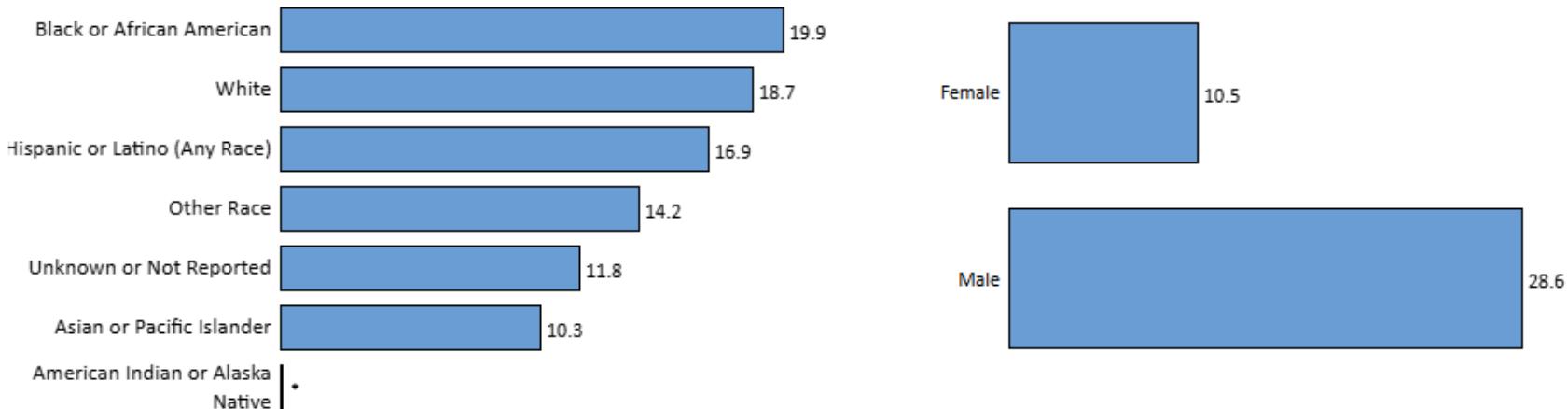
Demographic Data



Which groups
are most
affected?

Heat-Related Illness by Race/Ethnicity and Sex

Rates per 10,000 Visits in Virginia, May 1 - September 1 2025



In the News

VDH Office of Epidemiology responded to **7 heat-related illness media requests** this summer

HEALTH

Record heat fuels surge in heat-related illnesses across Virginia

by: [Sahara Sriraman](#)

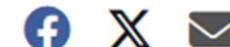
Posted: Jun 26, 2025 / 10:29 AM EDT

Updated: Jun 26, 2025 / 10:29 AM EDT

Virginia sees above average emergency visits for heat-related illnesses



Virginia reports record heat-related illnesses as temperatures soar across the Commonwealth



Resources

- VDH [Heat-Related Illness Dashboard](#)
- VDH Heat-Related Illness ED and urgent care visits [public use datasets](#)
- [CDC Heat Risk tool](#) – provides daily HeatRisk by zip code
- [CDC Heat and Health Tracker](#) – dashboard integrating national weather and health outcome data
- VDH Environmental Public Health Tracking [Climate/Weather site](#)

To learn more about VDH heat-related illness ED and urgent care data, email
Syndromic@vdh.virginia.gov

Acknowledgements

- Alexandra Baldwin – Enhanced Surveillance Program Coordinator
- Meredith Davis – Enhanced Surveillance Epidemiologist
- Arden Norfleet – Enhanced Surveillance Consultant