

# Heat Related Illness: ED and Urgent Care Data

Division of Surveillance and Investigation

# ESSENCE

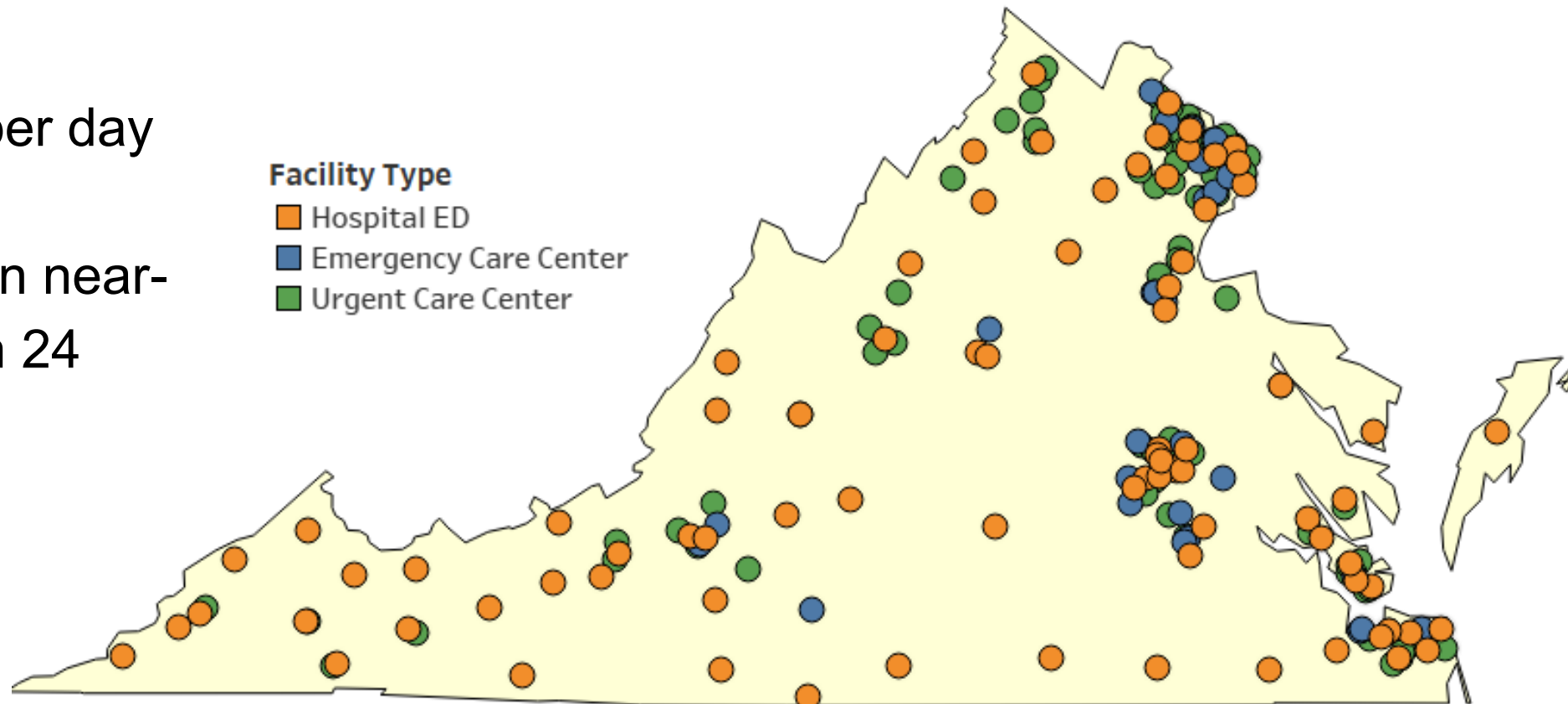


- **E**lectronic **S**urveillance **S**ystem for the **E**arly **N**otification of **C**ommunity-based **E**pidemics
- AKA syndromic surveillance system
- Includes data from emergency departments (EDs) and urgent cares
- Access limited to VDH staff for their geographic area



# 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

\* Some facilities send

# 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.

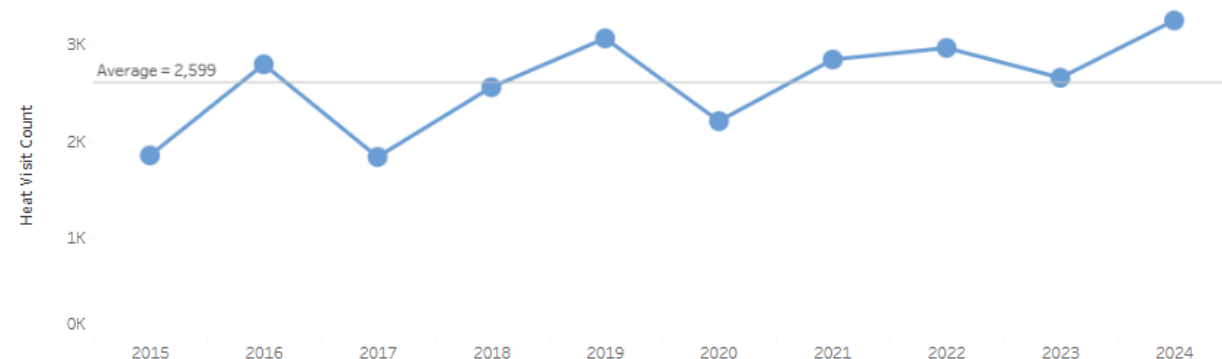
Use the filters below to view data for a specific year or health region and to switch between counts or rates. By default, the second graph displays daily HRI visit counts. Select "Rates per 10,000 visits" to view monthly HRI rates compared to the combined rate for all available years.

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

Filters		
<b>Select Year</b> <small>(Affects All Graphs and Map)</small> <div>2025</div>	<b>Select Patient Geography</b> <small>(Affects All Graphs and Map)</small> <div>All Visits</div>	<b>Select Counts or Rates</b> <small>(Affects All Graphs and Map)</small> <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

What's happening  
in my region?

## Heat-Related Illness (HRI) in Virginia

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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)

2025

**Select Patient Geography**  
(Affects All Graphs and Map)

All Visits

All Visits

Central Region

Eastern Region

Northern Region

Northwest Region

Southwest Region

Out of State

**Select Counts or Rates**  
(Affects All Graphs and Map)

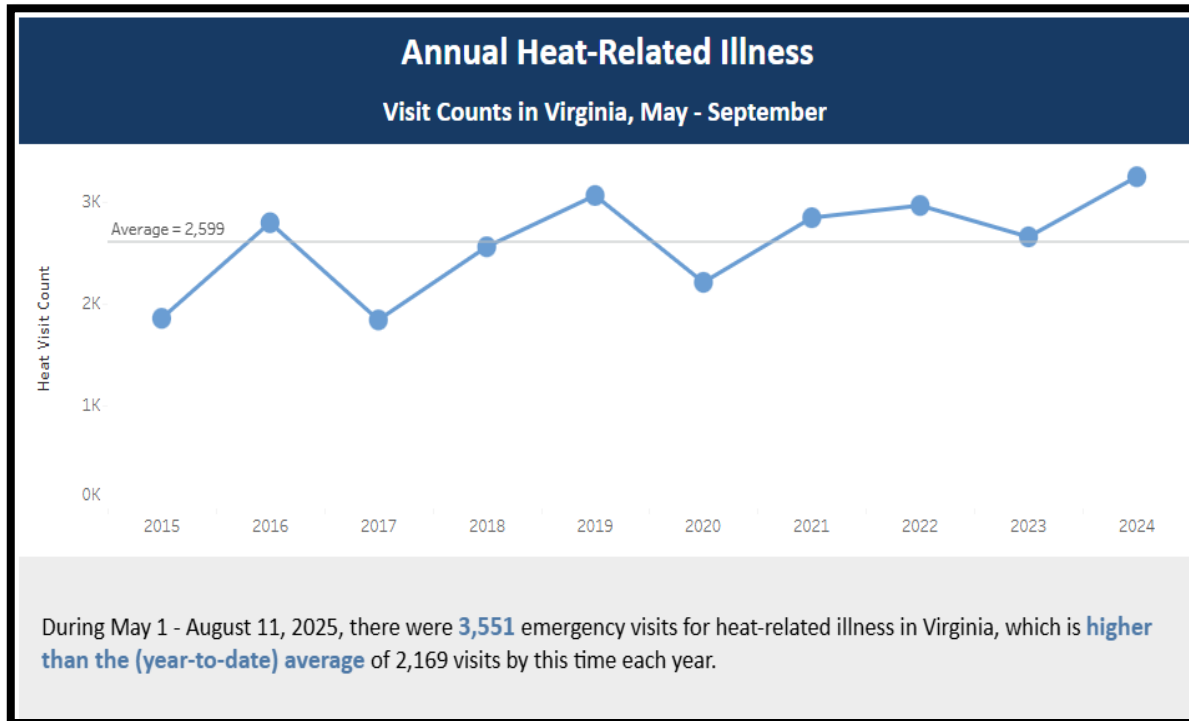
☒ Counts

☐ Rates per 10,000 visits

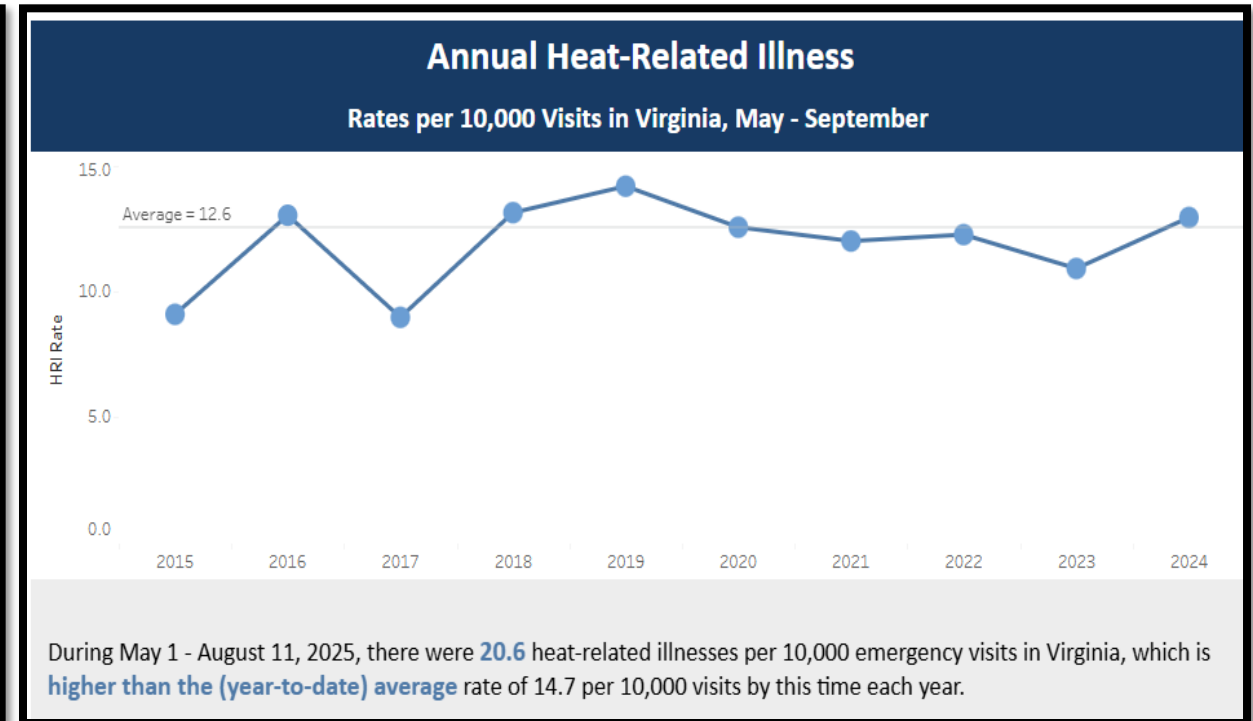
# Year-to-date comparison

How does this year compare to other years?

## Number of ED visits for HRI

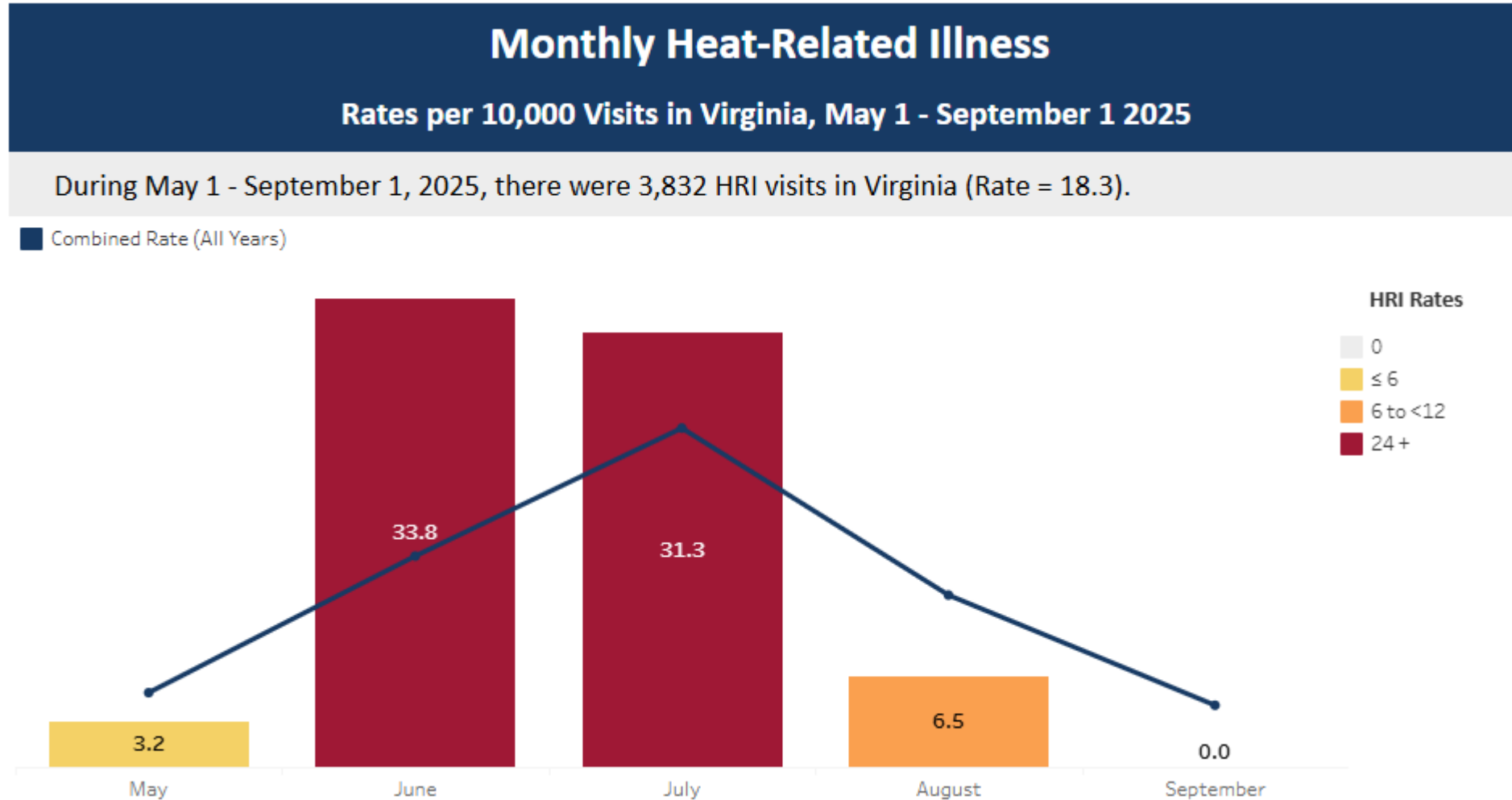


## HRI Visit Rate



# Monthly Rates

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



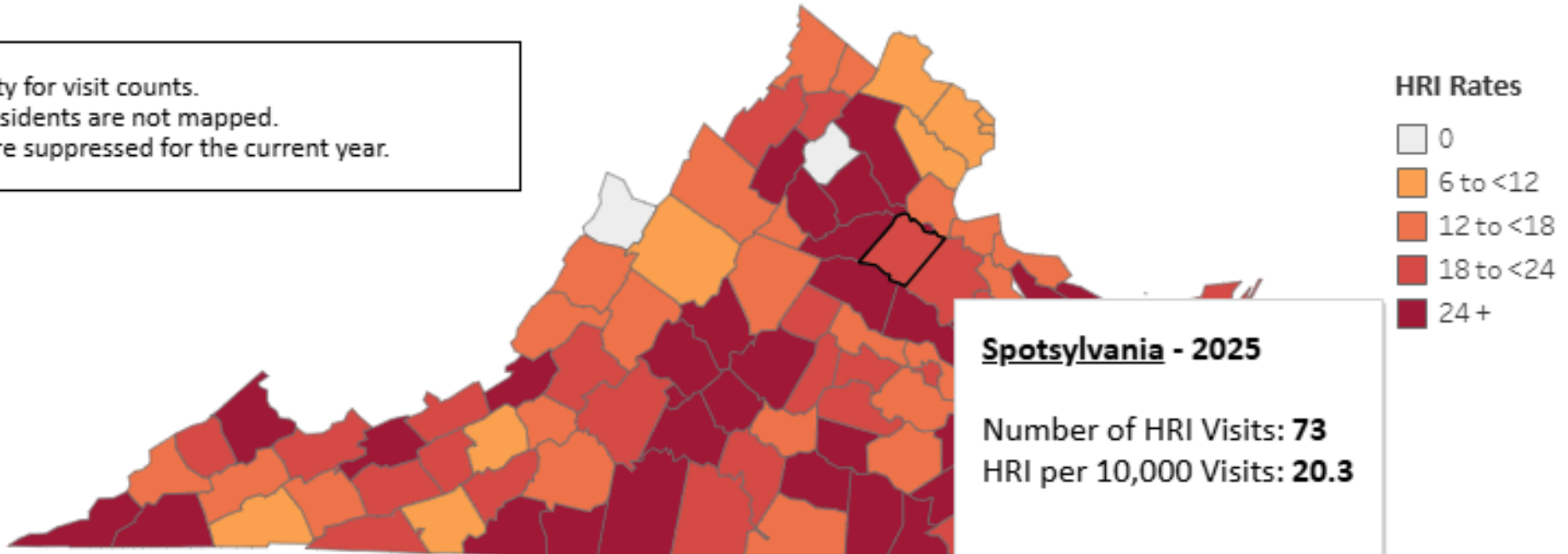
# Locality Map

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.

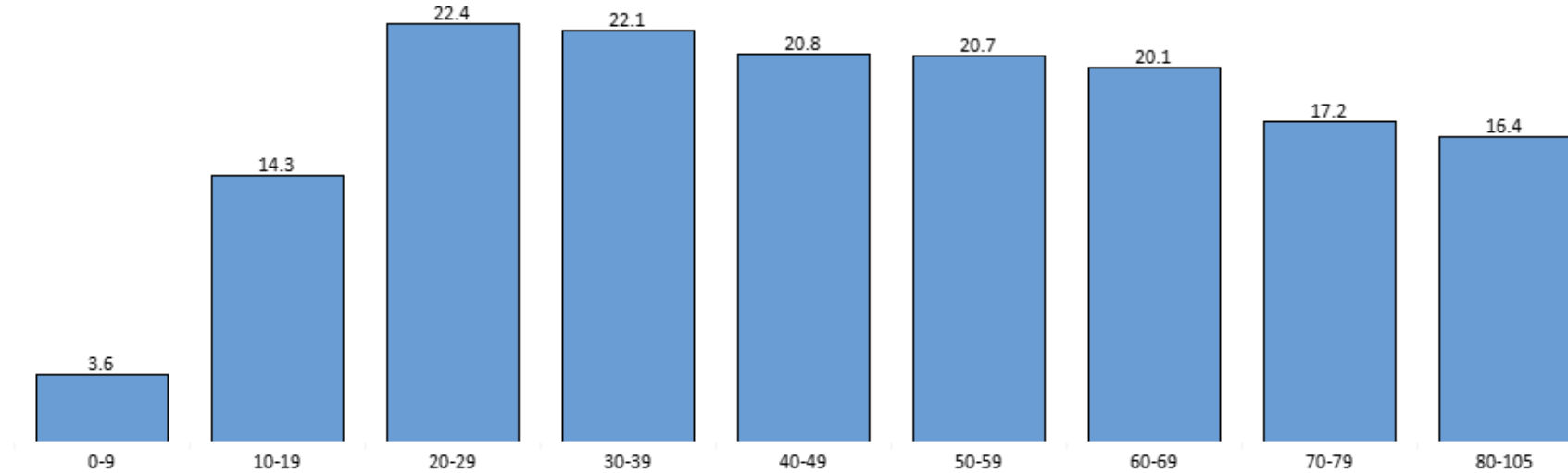


# Demographic Data

Which groups  
are most  
affected?

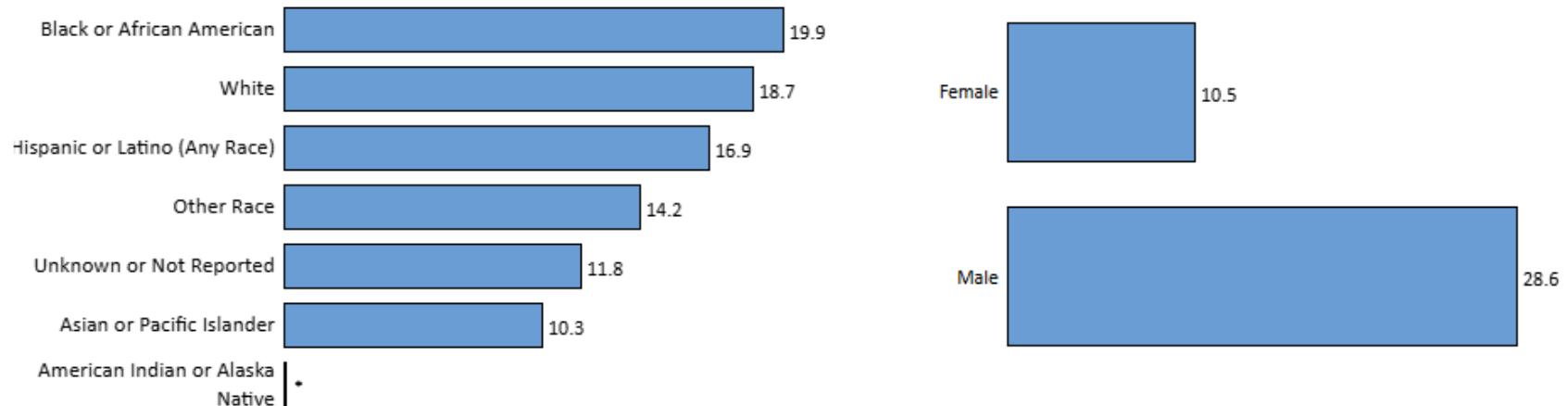
## Heat-Related Illness by 10-Year Age Group

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



## 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



LOCAL NEWS



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](mailto:Syndromic@vdh.virginia.gov)

# Acknowledgements

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