EMERGENCY DEPARTMENT AND URGENT CARE VISITS FOR HEAT-RELATED ILLNESS IN VIRGINIA

July 17-21, 2020

Background
At the time of this report, the Virginia Department of Health (VDH) received data on visits to 84 acute care hospital emergency departments (EDs), 18 free-standing EDs, and 61 urgent care centers (UCs) in Virginia for purposes of public health surveillance. This report characterizes ED and UC visit trends for heat-related illness.

See page 3 for data sources and case definitions used in this report.

Data Summary
A total of 275 ED and UC visits for heat-related illness occurred July 17-21, with 8% admitted to the hospital and 1 suspected heat-related death. The graph below displays the daily number of heat-related visits in Virginia between July 1 and July 21, 2020.

![Number of ED and UC Visits for Heat-Related Illness in Virginia by Discharge Type (July 17-21, 2020)]

<table>
<thead>
<tr>
<th>Discharge Type</th>
<th>Number of Visits (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Admitted</td>
<td>23 (8%)</td>
</tr>
<tr>
<td>Deceased</td>
<td>1 (0.4%)</td>
</tr>
<tr>
<td>Discharged to Home</td>
<td>244 (89%)</td>
</tr>
<tr>
<td>Not Reported</td>
<td>7 (3%)</td>
</tr>
</tbody>
</table>

[Graph showing daily number of visits between July 1 and July 21, 2020]
Both males and females displayed a significant increase in heat-related visits but males accounted for 70% (N=195) of visits July 17-21. The largest proportion of visits by age were among adults 30-39 years old (18%, N=50) followed by ages 20-29 (17%) and 50-59 (16%). The graphs below show ED and UC heat-related illness visits in Virginia by sex and age group.
The map below displays VDH Health Districts with significant increases in heat-related visits on July 17-21 compared to baseline levels. **29 VDH Health Districts** (out of 35) experienced elevated levels for heat-related illness (red alerts: p-value < 0.01; yellow warning: p-value < 0.05).

Health Districts with elevated visits include 9 in the Eastern Region (Chesapeake, Eastern Shore, Hampton, Norfolk, Peninsula, Portsmouth, Three Rivers, Virginia Beach, Western Tidewater), all 5 health districts in the Northern Region (Alexandria, Arlington, Fairfax, Loudoun, Prince William), 7 in the Southwest (Alleghany, Central Virginia, Cumberland Plateau, New River, Pittsylvania-Danville, Roanoke City, West Piedmont), 3 in the Northwest (Rappahannock, Rappahannock Rapidan, Thomas Jefferson), and 5 in Central (Chesterfield, Henrico, Piedmont, Richmond City, Southside).

**Data Sources**

VDH analyzes chief complaints and discharge diagnoses of ED and UC visits to identify and monitor issues of public health concern across Virginia. The chief complaint is a free-text field capturing the patient’s primary reason for seeking medical care as interpreted by the ED registration staff. The discharge diagnosis is a coded field that uses standardized values outlined by the International Classification of Diseases (ICD) 10th Revision and SNOMED Clinical Terms (CT) code sets. Readers are strongly encouraged to review syndromic surveillance data limitations when interpreting this report.

**Case Definitions**

ED and UC visits for **heat-related illness** were identified based on the Heat-Related Illness Syndrome Query definition published by the Council of State and Territorial Epidemiologists (CSTE) using the following terms for Chief Complaint and Discharge Diagnosis: heat exhaustion; heat exposure; heat cramps; heat stroke; hyperthermia; ICD-10 codes: T67, X30.; and SNOMED CT codes: 95868006, 95867001.