

# EMERGENCY DEPARTMENT AND URGENT CARE VISITS FOR WINTER WEATHER-RELATED ILLNESS AND INJURY IN VIRGINIA

Report Generated: March 14, 2018

## **Background**

At the time of this report, the Virginia Department of Health (VDH) received data on visits to 77 acute care hospital emergency departments (EDs), 13 free-standing EDs, and 44 urgent care centers (UCCs) in Virginia for purposes of public health surveillance. The purpose of this report is to characterize ED and UCC visit trends for winter weather-related hypothermia; motor vehicle injury; slips, trips, and falls; and general injury.

Chief complaints and discharge diagnoses of ED visits are analyzed by VDH to identify and monitor issues of public health concern across Virginia. 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 that uses standardized values outlined by the International Classification of Diseases (ICD) 9<sup>th</sup> and 10<sup>th</sup> Revision code sets. Analyses were conducted by sex, age group, and VDH Health Planning Region. Readers are strongly encouraged to review syndromic surveillance data limitations when interpreting this report.

The National Syndromic Surveillance Program (NSSP) receives weather data from the National Oceanic and Atmospheric Administration (NOAA) for purposes of supplementing interpretation of syndromic surveillance data. These data are made available to jurisdictions participating in the NSSP, including Virginia.

#### Methodology

ED and UCC visits for **hypothermia** were identified using the following terms for Chief Complaint and Discharge Diagnosis: *hypothermia*, *cold exposure*, *frost bite*, *numb skin*, *cold and outside*, *T68*, *R68.0* (and not *E16*).

ED and UCC visits for **motor vehicle injury** were identified using the following inclusion criteria for Chief Complaint: [vehicle, car, auto, bus, taxi, cab, truck, or pedestrian] and [hit, struck, accident, crash, wreck, collision, vs, or versus].

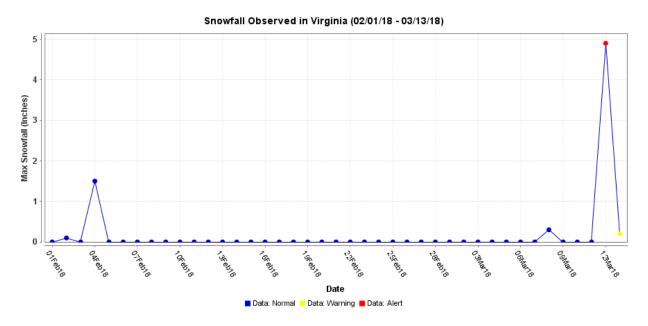
ED and UCC visits for **slips, trips, and falls** were identified using the following terms for Chief Complaint and Discharge Diagnosis: *fall, fell, trip, slip, ground level fall, W0, W1, E88* (and not *E88.*).

ED and UCC visits for **general injury** were identified using the following terms for Chief Complaint: *injury, fracture, broke, sprain, contusion, concussion, laceration, abrasion, scrape, gash, puncture, wound, pierce, amputate, avulsion, dislocation, cut, trauma, hit by, struck, accident, trip, torn, twist, collide, collision, poke, and road rash.* 



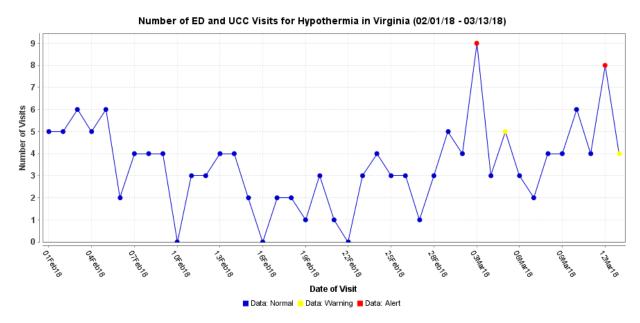
#### **NOAA** Weather Stations

On March 12<sup>th</sup>, 2018, 55% of reporting NOAA weather stations in Virginia observed 2 or more inches of snowfall (N=5, of 9 total stations). The highest snowfall, 5 inches, was reported by the NOAA station in Blacksburg, VA.



## **Hypothermia**

On March 12<sup>th</sup>, 2018, ED and UCC visits for hypothermia were statistically elevated with 8 total visits. Among these 8 visits, 25% were residents of the Eastern, Northern, and Northwest Regions (N=2 for each region) and the highest proportion of patients were between 20 and 29 years old (38%, N=3).



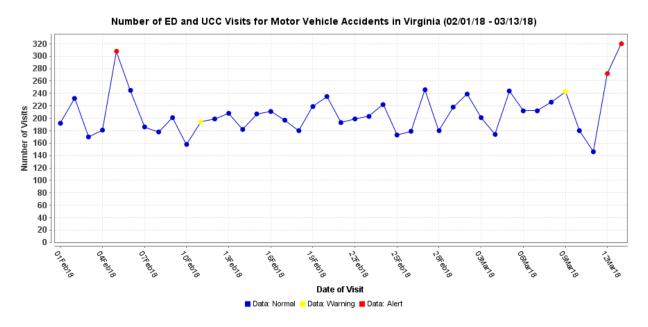
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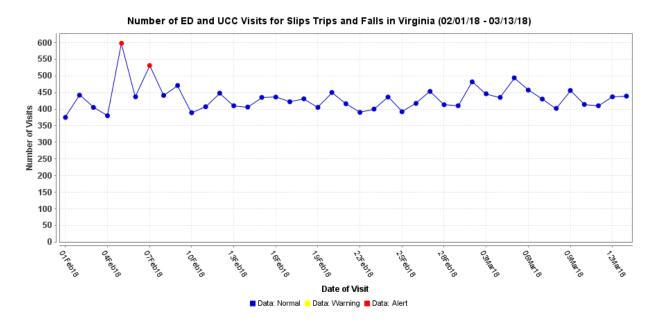
#### **Motor Vehicle Injury**

On March 12<sup>th</sup> and 13<sup>th</sup>, 2018, 593 ED and UCC visits for motor vehicle accidents were observed, with the highest number occurring on Tuesday, March 13<sup>th</sup> (54%, N=321). Among the 593 visits, the highest proportion were residents of the Eastern Region (36%, N=213) and ages 20-29 years old (26%, N=152). The majority of these patients were female (60%, N=355).



#### Slips, Trips, and Falls

There was no statistically significant increase in the number of ED and UCC visits for slips, trips, or falls observed during the winter weather event on March 12<sup>th</sup> or 13<sup>th</sup>, 2018.



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## **General Injury**

There was no statistically significant increase in the number of ED and UCC visits for general injury observed during the winter weather event on March 12<sup>th</sup> or 13<sup>th</sup>, 2018.

