

North Carolina Heat Report

August 27–September 2, 2023



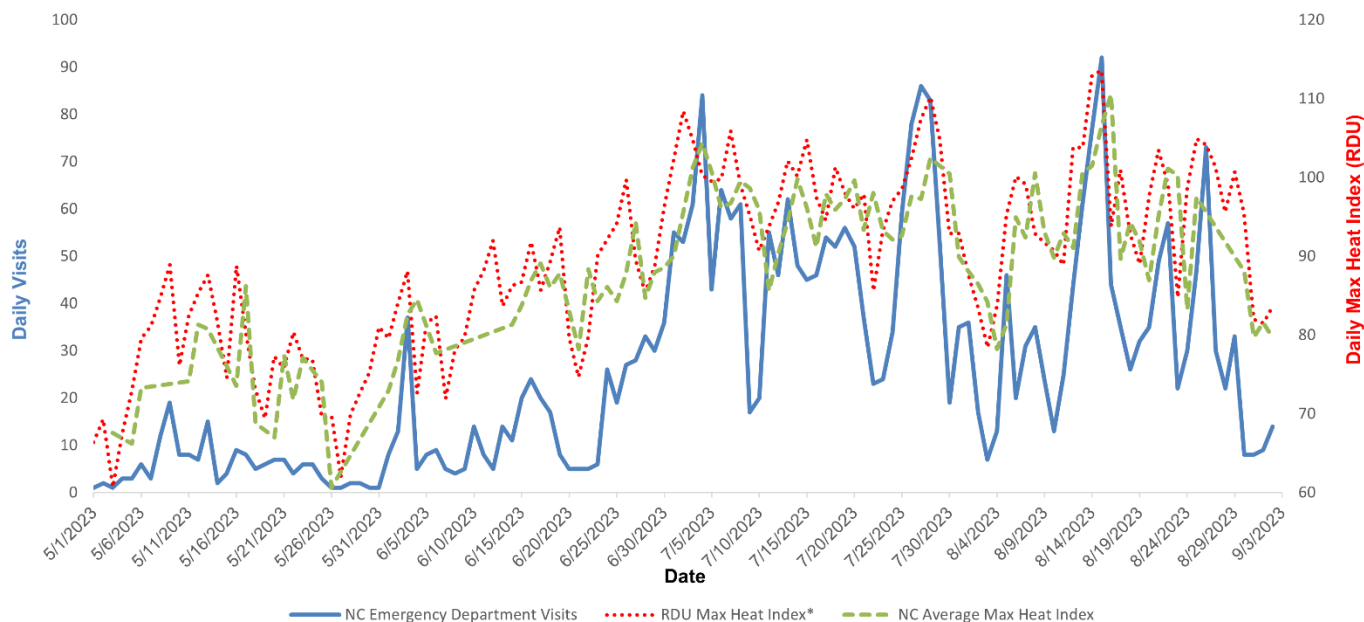
This Week

- Daily maximum heat indices ranged from 81°F to 101°F (median = 95°F) at Raleigh-Durham International Airport (RDU)
- 124 emergency department visits for heat-related illness were identified (Figure 1)
 - 63% of visits were among males (Table 1)
 - The highest proportion of visits were among patients aged 65 and over (35%) (Table 1)
 - The most frequent heat related diagnosis code was Heat Exhaustion (n = 36) (Table 2)
 - The highest proportion of visits occurred in hospitals in the Piedmont (61%) and Coastal (55%) regions
 - 20% of visits occurred in hospitals in the Sandhills sub-region¹
- During August 27–September 2, the proportion of emergency department visits for heat-related illness was 0.13%, lower than the 2018-2022 average of 0.17%. (Figure 2)

Season to Date (September 2, 2023)

- 3,442 emergency department visits for heat-related illness have been identified (Figure 1)

Figure 1. Emergency Department Visits for Heat-Related Illness and Maximum Heat Index -- North Carolina, May 1 - September 02, 2023



Source: NC DETECT Data and State Climate Office at NC State University
Max Heat Index is for Raleigh-Durham International Airport (RDU). NC Average Max Heat Index is for emergency department visit location.

¹The Sandhills sub-region is comprised of the following counties from the Piedmont and Coastal regions: Bladen, Cumberland, Harnett, Hoke, Lee, Montgomery, Moore, Richmond, Robeson, and Scotland.



Table 1. Visits by sex and age group - August 27- September 2, 2023

| | N=124 | (%)† |
|------------|-------|------|
| Sex | | |
| Male | 78 | (63) |
| Female | 46 | (37) |
| Age | | |
| 0-14 | 10 | (8) |
| 15-18 | 6 | (5) |
| 19-24 | 12 | (10) |
| 25-44 | 30 | (24) |
| 45-64 | 23 | (19) |
| 65+ | 43 | (35) |

† may not total 100 due to rounding ‡ missing severity data = 56 § definitions of heat related illness categories:

<https://www.cdc.gov/niosh/topics/heatstress/heatrelatedillness.html> || other effects include heat fatigue, heat edema, other effects of heat and light, and other effects unspecified

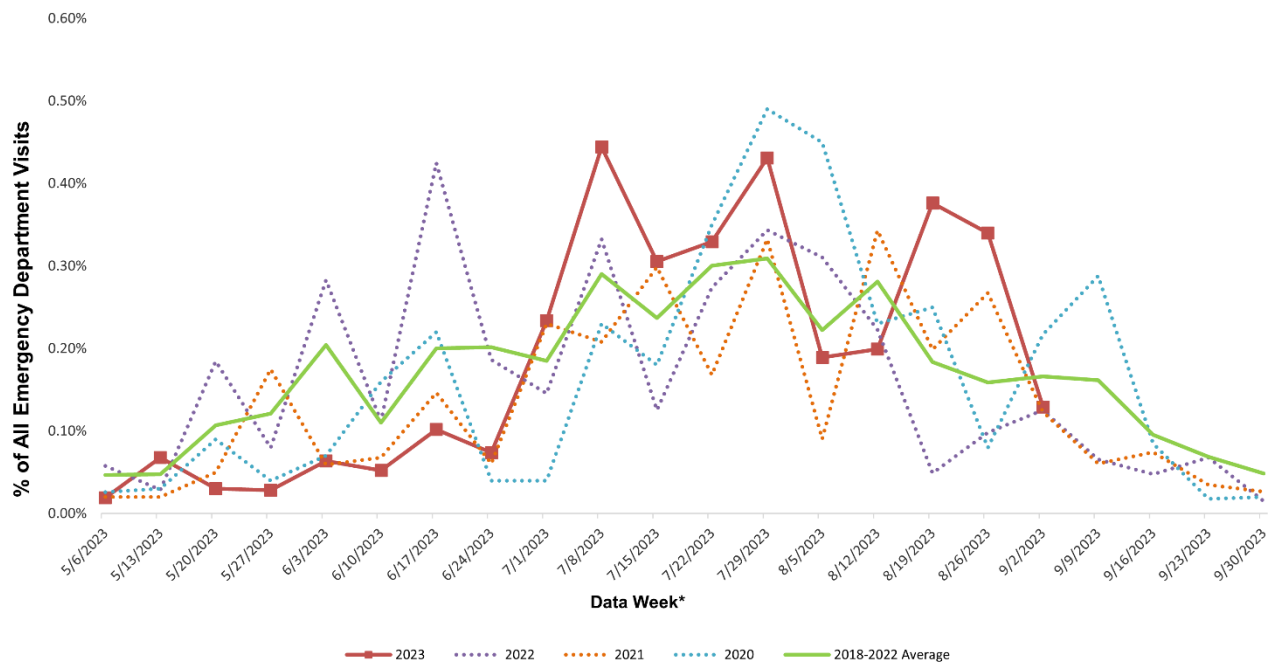
NOTE: Emergency department visit records and maximum heat indices were obtained from NC DETECT and the State Climate Office at NC State University, respectively. Heat-related illness is captured through a near real-time keyword search for 'heat', 'hot', 'hyperthermia', 'heat cramp', 'heat exhaustion', 'heat stroke', and 'sun stroke' in chief complaint or triage notes of emergency department records or a diagnosis code for heat-related illness. These figures present an estimate of the number of emergency department visits for heat-related illness. Please contact autumn.locklear@dhhs.nc.gov for more information.

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Table 2. Visits by severity – August 27- September 2, 2023

| | N=68‡ | (%)† |
|------------------|-------|------|
| Severity§ | | |
| Heat Cramp | 3 | (4) |
| Heat Exhaustion | 36 | (53) |
| Heat Stroke | 2 | (3) |
| Heat Syncope | 9 | (13) |
| Other Effects | 18 | (26) |

Figure 2. Percent of Total Emergency Department Visits for Heat-Related Illness -- North Carolina, 2023 Compared to Historical Average



*Week ending dates may vary by a few days for earlier years. For data week definitions see <https://ndc.services.cdc.gov/wp-content/uploads/MMWR-Week-Log-2022-2023.pdf>. Hospitals transitioned from the ICD-9-CM diagnosis code standard to ICD-10-CM in 2015. This transition may impact the number of emergency department visits with a heat related illness diagnosis. Source: NC DETECT

Disclaimer: The North Carolina Disease Event Tracking and Epidemiologic Collection Tool (NC DETECT) is an advanced, statewide public health surveillance system. NC DETECT is funded with federal funds by North Carolina Division of Public Health (NC DPH), Public Health Emergency Preparedness Grant (PHEP), and managed through a collaboration between NC DPH and the University of North Carolina at Chapel Hill Department of Emergency Medicine's Carolina Center for Health Informatics (UNC CCHI). The NC DETECT Data Oversight Committee does not take responsibility for the scientific validity or accuracy of methodology, results, statistical analyses, or conclusions presented. The NC DETECT Data Oversight Committee (DOC) includes representatives from the NC DPH, UNC NC DETECT Team and NC Hospital Association.