North Carolina Heat Report

July 9–July 15, 2023

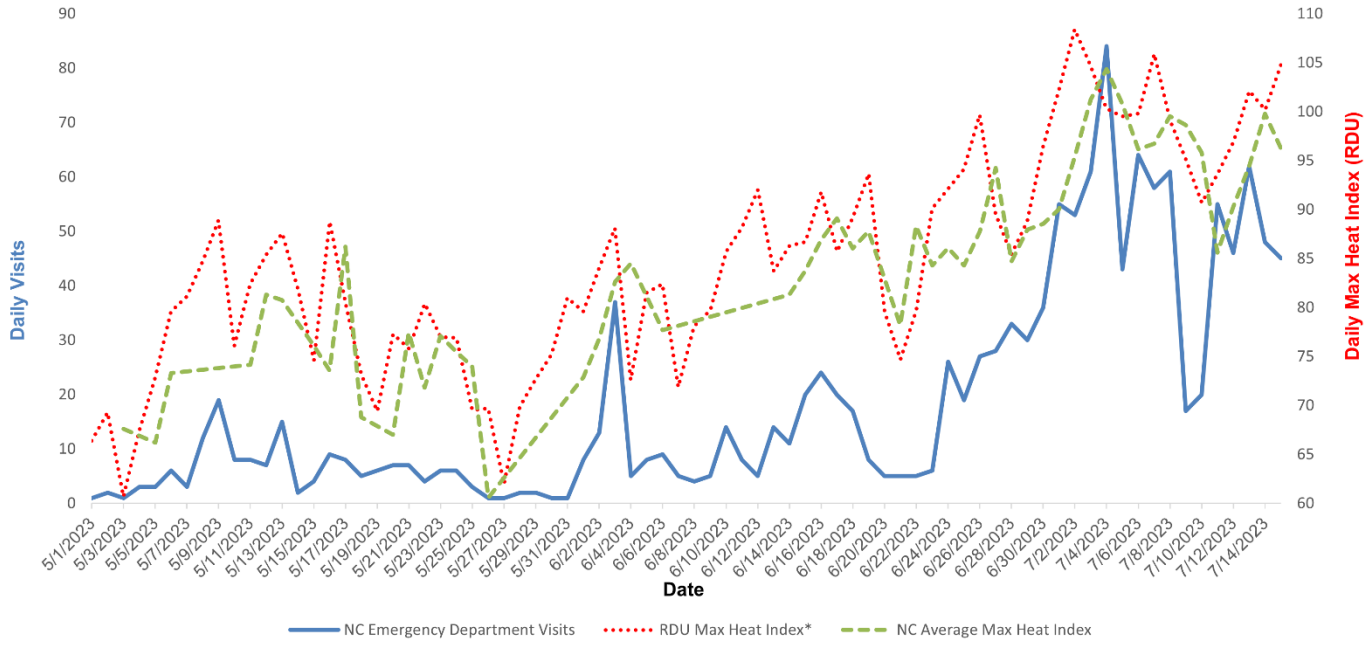
This Week

- Daily maximum heat indices ranged from 90°F to 105°F (median = 97°F) at Raleigh-Durham International Airport (RDU)
- 293 emergency department visits for heat-related illness were identified (Figure 1)
    - 70% of visits were among males (Table 1)
    - Most visits were among patients aged 25-44 years (28%) and 45-64 years (34%) (Table 1)
    - The most frequent heat related diagnosis code was Heat Exhaustion (Table 2)
    - Most visits occurred in hospitals in the Piedmont (67%) and Coastal (30%) regions
    - 14% of visits occurred in hospitals in the Sandhills sub-region[1]
- During July 9–July 15, the proportion of emergency department visits for heat-related illness was 0.31%, similar to the 2018-2022 average (Figure 2)

Season to Date (July 15, 2023)

- 1,384 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 - July 15, 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.

[1]The 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 - July 9-July 15, 2023

	N=293	(%)†
Sex		
Male	205	(70)
Female	88	(30)
Age		
0-14	13	(4)
15-18	20	(7)
19-24	29	(10)
25-44	82	(28)
45-64	101	(34)
65+	48	(16)

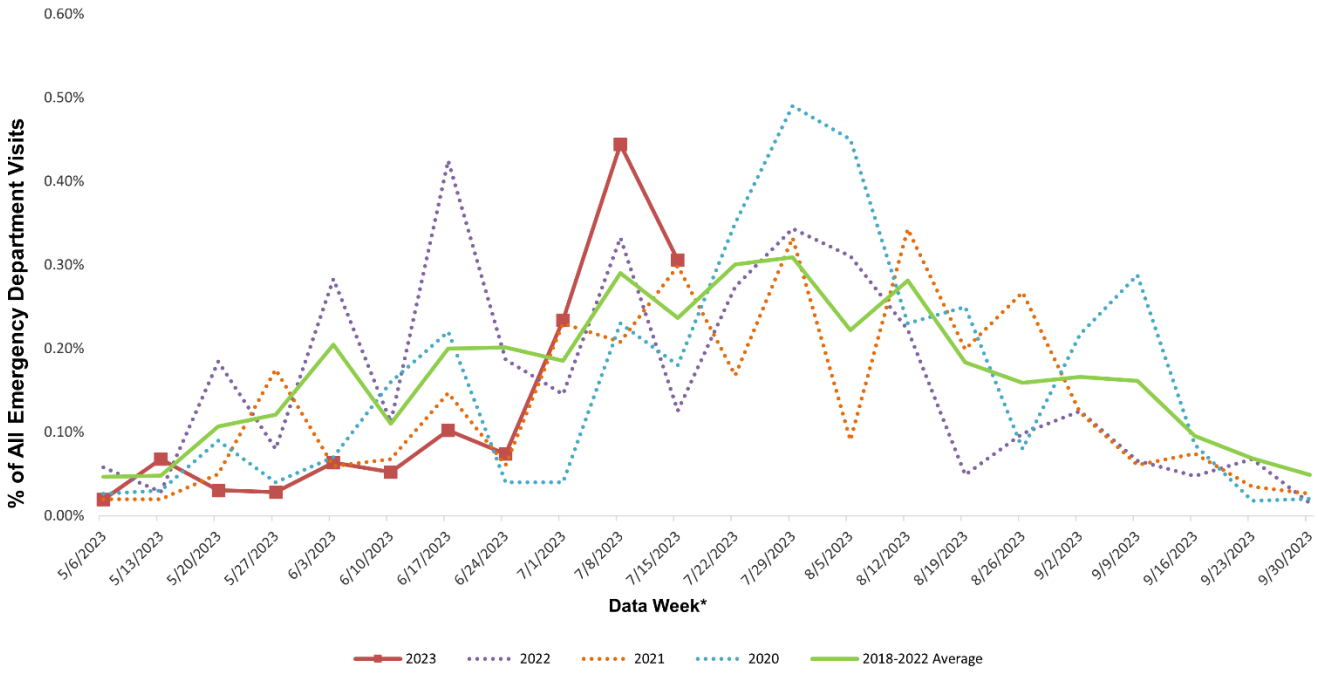
Table 2. Visits by severity – July 9-July 15, 2023

	N=156‡	(%)†
Severity§		
Heat Cramp	3	(2)
Heat Exhaustion	95	(61)
Heat Stroke	4	(3)
Heat Syncope	21	(13)
Other Effects‖	33	(21)

† may not total 100 due to rounding ‡ missing severity data = 137 § definitions of heat related illness categories: https://www.cdc.gov/niosh/topics/heatstress/heatrelillness.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.

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