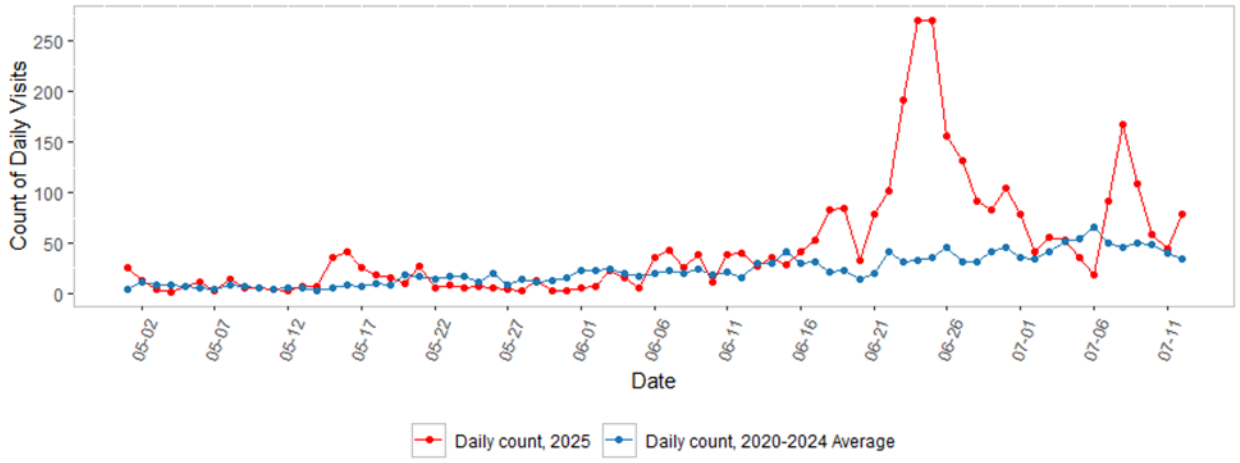
NCDHHS Mid-Season Heat-related Illness Surveillance Report: May 1 – July 12, 2025

Summer 2025 has been a dangerous heat season across North Carolina so far, and we are only halfway through. From May 1 – July 12, 2025, NCDHHS documented **3,327 emergency department (ED) visits for heat-related illness** with an average weekly rate of **2.9 ED visits per 100,000 people**. This is much higher than for the same period during the past five years (2020 – 2024), when there was an average count of 1,675 HRI ED visits, with an average weekly rate of 1.4 ED visits per 100,000 people. All data come from the North Carolina Disease Event Tracking and Epidemiologic Collection Tool (NC DETECT).

Heat-related illness spiked in 2025 during the first major heat wave at the end of June (Figure 1). We saw 1,215 heat-related illness ED visits in one week from June 22 – 28, the highest weekly rate so far this season (11.5 per 100,000 people).

Figure 1. Daily Counts of Emergency Department Visits for Heat-related Illness North Carolina: 2025 Compared to 2020-2024 Average



Figures 2a and 2b show the average weekly rates of heat-related illness by county for the current year compared to the same period in 2020 – 2024. From May 1 – July 12, 2025, 63 counties had an average weekly rate of heat-related illness above 2.5 ED visits per 100,000 people, compared to 9 counties for the same period in 2020 – 2024. We typically see the highest rates of heat-related illness in eastern North Carolina.

Figure 2a. Average Weekly Rate of Heat−related Illness Emergency Department Visits per 100,000 Population May 1−July 12 (2025)

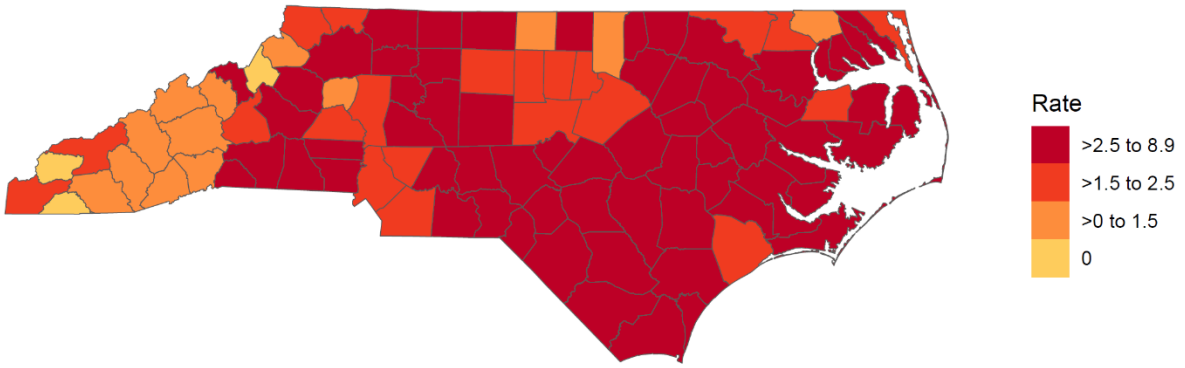
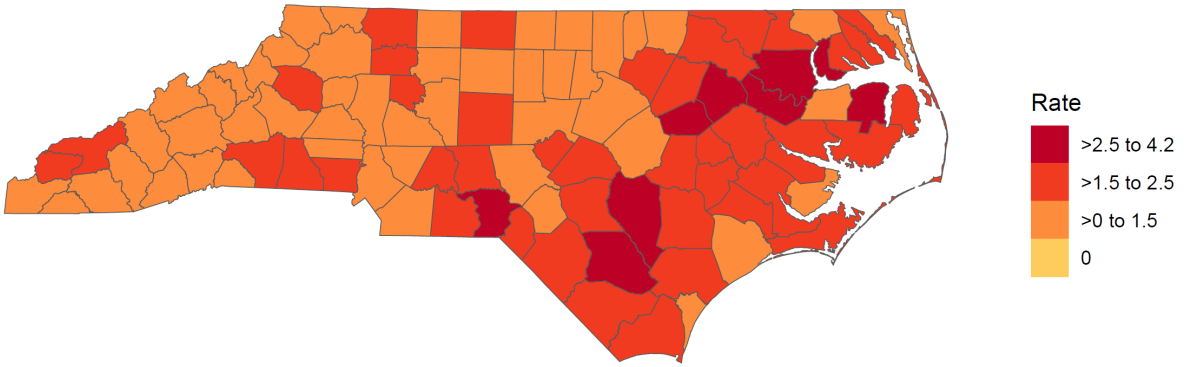


Figure 2b. Average Weekly Rate of Heat−related Illness Emergency Department Visits per 100,000 Population May 1−July 12 (2020−2024)



Workers in some settings and occupations are at higher risk of experiencing heat-related illness. There have been at least **594 ED visits for workplace heat-related illness** (17.9% of total heat-related illness ED visits) this season to date. During the week of June 22 – 28 alone, there were at least 232 heat-related illness ED visits for work-related exposures (19.1% of total heat-related illness ED visits that week). These are likely undercounts since occupational data is not regularly collected or available in ED records. Occupations with higher heat exposures can be both outdoor (such as farmworkers, construction, or landscaping) and indoor (such as kitchens, or manufacturing).

The percentage of people experiencing more severe heat-related illness has also been higher so far in 2025 compared with the previous 5 years. The percentage of ED visits for heat stroke, a severe and life-threatening form of heat-related illness, was 3.6% thus far in 2025 compared

with 2.5% of total ED visits with known severity data during the same period in 2020 – 2024 (Table 1).

Table 1. Heat-related illness ED visits by Severity

	May 1-July 12, 2025		May 1-July 12, 2020-2024	
Severity[§]	**(N = 1,999[‡])**	**Percent 2025[†]**	**(N = 8,375[‡])**	**Percent 2020-2024[†]**
Heat Stroke	71	3.6	127	2.5
Heat Exhaustion	1,097	54.9	3,079	60.8
Heat Syncope	233	11.7	634	12.5
Heat Cramps	47	2.4	184	3.6
Other Effects[‖]	551	27.6	1,038	20.5

§ Definitions of heat-related illness severity categories: https://www.cdc.gov/niosh/heat-stress/about/illnesses.html?CDC_AAref_Val=https://www.cdc.gov/niosh/topics/heatstress/heatrelillness.html

‡ Missing severity data in 2025 = 1,328; Missing severity data 2020-2024 = 3,313

† May not total 100 due to rounding

‖ other effects include heat fatigue, heat edema, other effects of heat and light, and other effects unspecified

To help prevent heat-related illness, the NCDHHS Heat Health Alert System sends out heat alerts via email, when the forecast is projected to reach unhealthy levels.

From May 1, 2025 – July 18, 2025, there were **908 county-level alerts distributed across NC.** Heat Health Alerts are sent in English and Spanish to almost 800 total subscribers across the state, an increase of over 200 subscribers since the 2024 heat season. Many subscribers are organizations that then amplify the alerts to their members via email or text.

We include communications materials in alerts so they can be broadly shared. Visit the NCDHHS Climate and Health webpage to sign up for heat alerts or for more information about heat-related illness and how to prevent it.