Statewide Key Messages

The average weekly rate of heat-related illness (HRI) emergency department (ED) visits **this season to date is 2.8 per 100,000 population.**

This week (August 31-Spetember 6, 2025):

- There were **86* HRI ED visits (**0.1% of total ED visits), with a **rate of 0.8 per 100,000 population**
- The rate was highest among **females** aged **20-24 years (2.1 per 100,000 population)** (Figure 1)
- The rate of HRI ED visits was highest in the **Sandhills** (**1.3 per 100,000 population**), (Figure 2; Region 7)
- The most frequent heat related diagnosis code was **heat exhaustion (n = 16; 39%)** (Table 1)
- The maximum daily heat index ranged from **76.4** to **98.6°F** at Raleigh-Durham International Airport (Figure 3)
- There was **1** day when the minimum temperature was above 70°F.

Figure 1. Rate of Heat-Related Illness Emergency Department Visits by Sex and Age

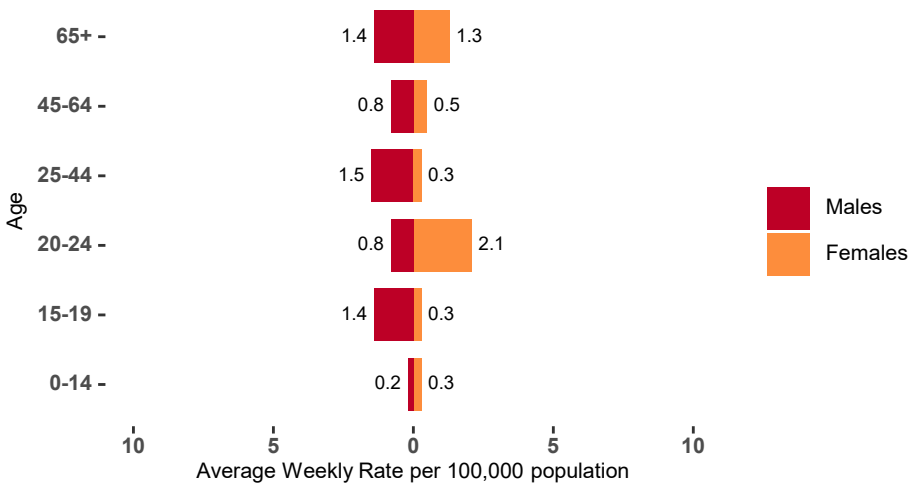
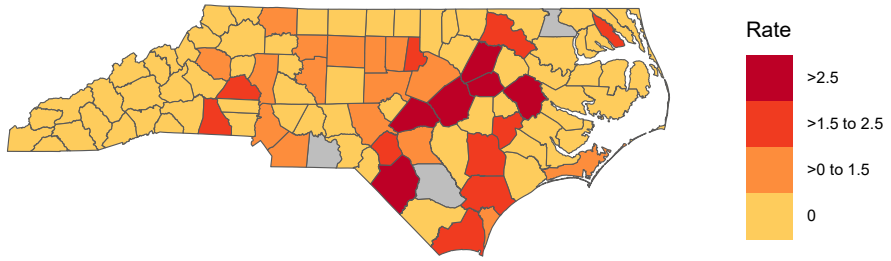


Figure 2. Rate of Heat-related Illness Emergency Department Visits per 100,000 Population



Rates based on counts between 1-4 are suppressed for counties with less than 500 total ED visits, as shown in gray.

Table 1. Heat-related illness ED visits by Severity

Severity[§]	Number (N=41[‡])	Percent[†]
Heat Stroke	0	0.0
Heat Exhaustion	16	39.0
Heat Syncope	13	31.7
Heat Cramps	2	4.9
Other Effects[‖]	10	24.4

§ Definitions of heat-related illness severity categories: https://www.cdc.gov/niosh/heat-stress/about/illnesses.html

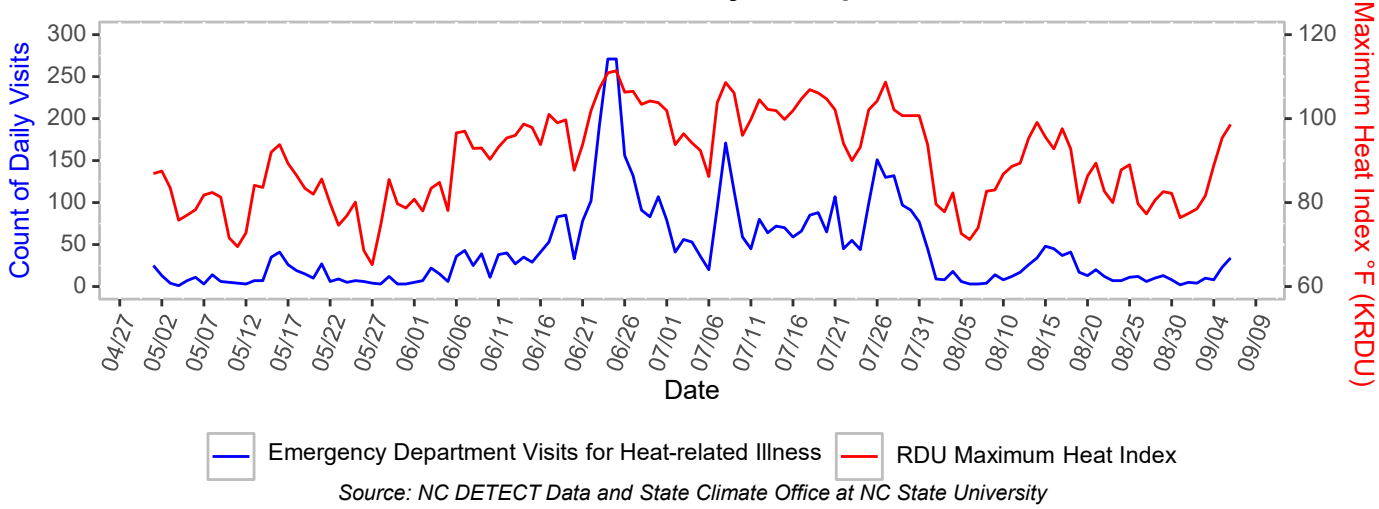
‖ other effects include heat fatigue, heat edema, other effects of heat and light, and other effects unspecified

‡ Missing severity data = 45

† May not total 100 due to rounding

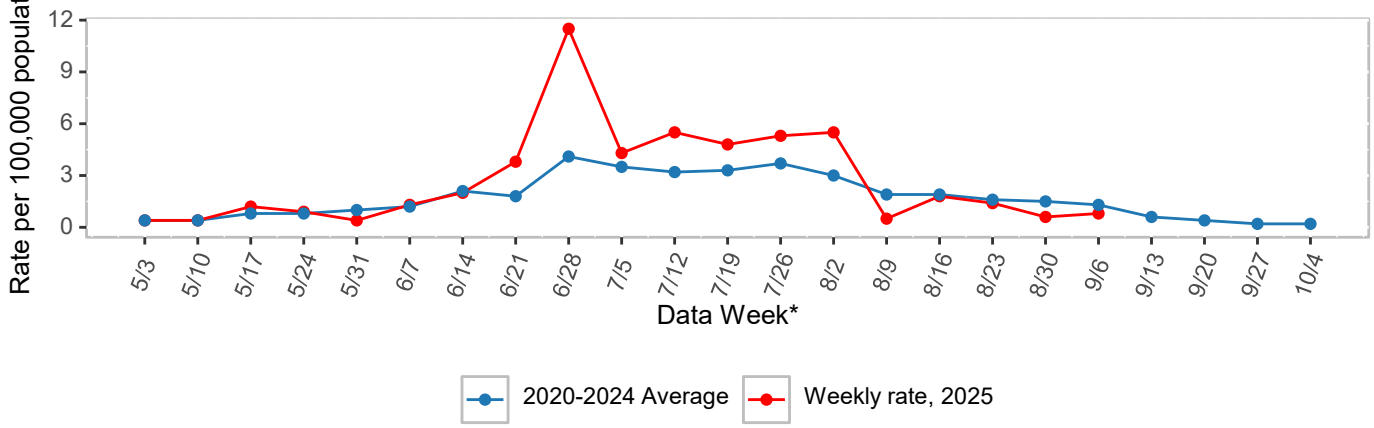
*The 86 total HRI ED visits includes 7 visits that were missing county of residence. These 7 visits are excluded from the regional reports.

Figure 3. Emergency Department Visits for Heat-related Illness and Max Heat Index
North Carolina Statewide: May 1 - September 06, 2025



Source: NC DETECT Data and State Climate Office at NC State University

Figure 4. Rate of Emergency Department Visits for Heat-related Illness
North Carolina: 2025 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-Weeks-Calendar_2024-2025.pdf

North Carolina Weekly Heat-related Illness Surveillance Report: Southeast (Region 1)

August 31-September 6, 2025

Southeast (Region 1) Key Messages

The average weekly rate of heat-related illness emergency department visits **this season to date is 3.4 per 100,000 population.**

This week (August 31-Spetember 6, 2025):

- There were **7** HRI ED visits (0.08% of total ED visits), with a rate of **0.8 per 100,000 population**
- The rate was highest among **males** aged **25-44 years (3.6 HRI ED visits per 100,000 population**) (Figure 1)
- The rate of HRI ED visits was highest in **Brunswick County (2.1 per 100,000 population**) (Figure 2)
- The most frequent heat related diagnosis code was **heat syncope (n = 2; 50%)** (Table 1)
- The maximum daily heat index ranged from **81.5 to 93.8°F** at Wilmington International Airport (Figure 3)
- The daily minimum temperature was below 70 °F on all **7** days this week.

Figure 1. Rate of Heat-Related Illness Emergency Department Visits by Sex and Age
Southeast (Region 1)

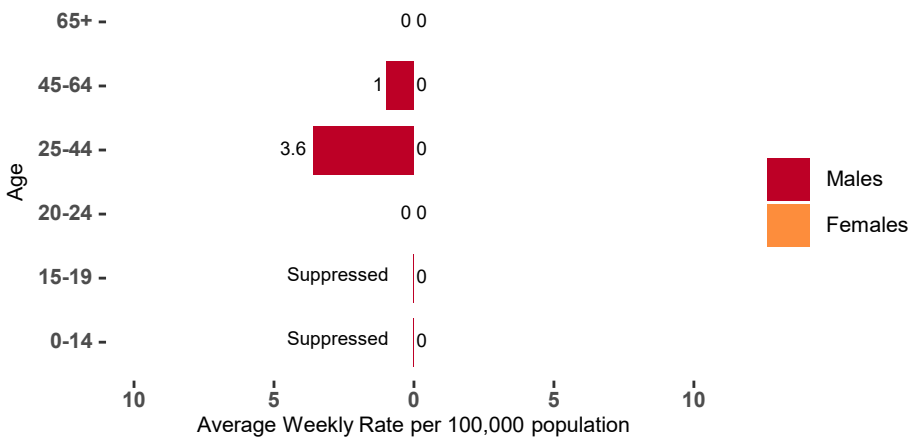
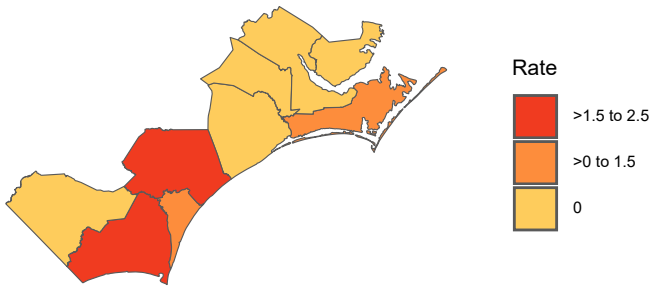
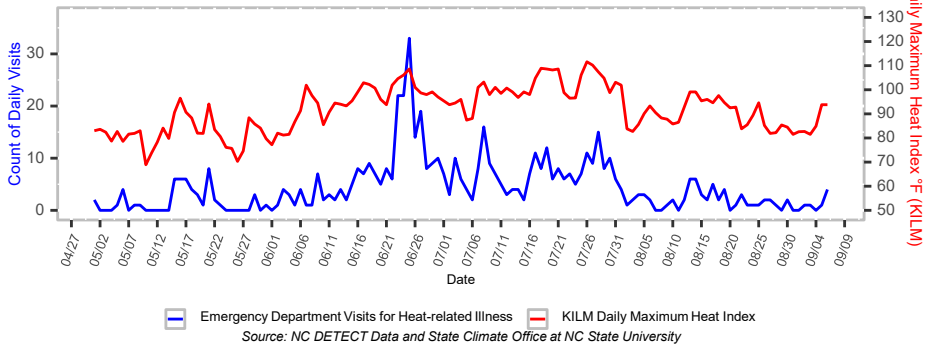


Figure 2. Average Weekly Rate of Heat-Related Illness Emergency Department Visits per 100,000 Population
Southeast (Region 1)



Rates based on counts between 1-4 are suppressed for counties with less than 500 total ED visits, as shown in gray.

Figure 3. Emergency Department Visits for Heat-related Illness and Maximum Heat Index
Southeast (Region 1): May 1 - September 06, 2025



Source: NC DETECT Data and State Climate Office at NC State University

Table 1. Heat-related illness ED visits by Severity

Severity[§]	Number (N=4[‡])	Percent[†]
Heat Stroke	0	0.0
Heat Exhaustion	1	25.0
Heat Syncope	2	50.0
Heat Cramps	1	25.0
Other Effects[‖]	0	0.0

§ Definitions of heat-related illness severity categories: https://www.cdc.gov/niosh/heat-stress/about/illnesses.html

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

‡ Missing severity data = 3

† May not total 100 due to rounding

North Carolina Weekly Heat-related Illness Surveillance Report: North Central (Region 2)

August 31-September 6, 2025

North Central (Region 2) Key Messages

The average weekly rate of heat-related illness emergency department visits **this season to date is 2.3 per 100,000 population.**

This week (August 31-Spetember 6, 2025):

- There were **11** HRI ED visits (0.06% of total ED visits), with a rate of **0.5 per 100,000 population**
- The rate was highest among **females** aged **20-24 years (1.3 HRI ED visits per 100,000 population**) (Figure 1)
- The rate of HRI ED visits was highest in **Durham County (1.5 per 100,000 population**) (Figure 2)
- The most frequent heat related diagnosis codes were **heat exhaustion** and **heat syncope (n = 3; 37.5%)** (Table 1)
- The maximum daily heat index ranged from **75.5 to 90.7°F** at Piedmont Triad International Airport (Figure 3)
- The daily minimum temperature was below 70 °F on all **7** days this week.

Figure 1. Rate of Heat-Related Illness Emergency Department Visits by Sex and Age
North Central (Region 2)

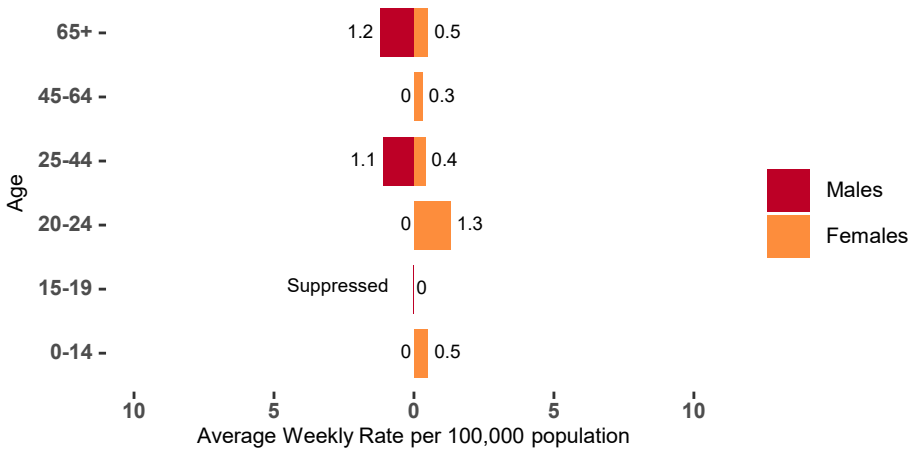
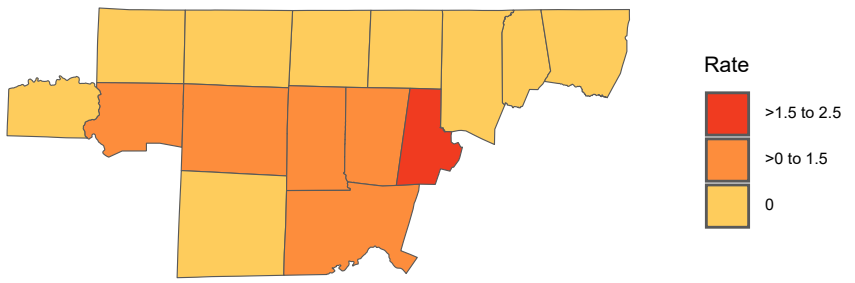
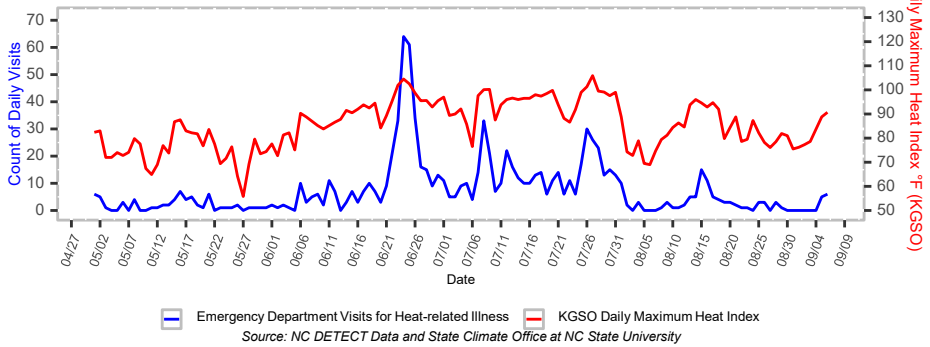


Figure 2. Average Weekly Rate of Heat-Related Illness Emergency Department Visits per 100,000 Population
North Central (Region 2)



Rates based on counts between 1-4 are suppressed for counties with less than 500 total ED visits, as shown in gray.

Figure 3. Emergency Department Visits for Heat-related Illness and Maximum Heat Index
North Central (Region 2): May 1 - September 06, 2025



Source: NC DETECT Data and State Climate Office at NC State University

Table 1. Heat-related illness ED visits by Severity

Severity[§]	Number (N=8[‡])	Percent[†]
Heat Stroke	0	0.0
Heat Exhaustion	3	37.5
Heat Syncope	3	37.5
Heat Cramps	0	0.0
Other Effects[‖]	2	25.0

§ Definitions of heat-related illness severity categories: https://www.cdc.gov/niosh/heat-stress/about/illnesses.html

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

‡ Missing severity data = 3

† May not total 100 due to rounding

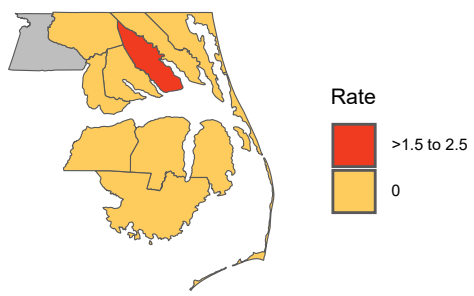
Northeast (Region 3) Key Messages

The average weekly rate of heat-related illness emergency department visits **this season to date is 3.7 per 100,000 population.**

This week (August 31-Spetember 6, 2025):

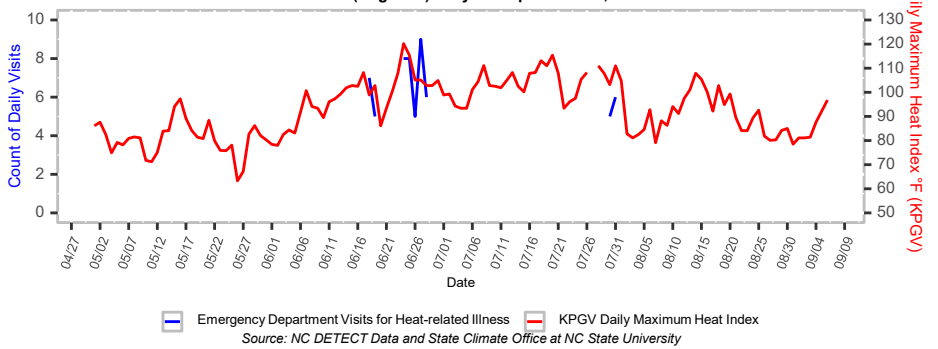
- There were **2** HRI ED visits (0.09% of total ED visits), with a rate of **1 per 100,000 population**
- The rate of HRI ED visits was highest in **Pasquotank County (2.5 per 100,000 population**) (Figure 2)
- The maximum daily heat index ranged from **78.5 to 96.8°F** at Pitt-Greenville Airport (Figure 3)
- The daily minimum temperature was below 70 °F on all **7** days this week.

Figure 2. Average Weekly Rate of Heat-Related Illness Emergency Department Visits per 100,000 Population
Northeast (Region 3)



Rates based on counts between 1-4 are suppressed for counties with less than 500 total ED visits, as shown in gray.

Figure 3. Emergency Department Visits for Heat-related Illness and Maximum Heat Index
Northeast (Region 3): May 1 - September 06, 2025



Source: NC DETECT Data and State Climate Office at NC State University

Figure 1 is not provided for the Northeast this week due to the small number of ED visits for heat-related illnesses.

Table 1 is not provided for the Northeast this week due to the small number of ED visits for heat-related illnesses.

North Carolina Weekly Heat-related Illness Surveillance Report: South Central (Region 4)

August 31-September 6, 2025

South Central (Region 4) Key Messages

The average weekly rate of heat-related illness emergency department visits **this season to date is 2.4 per 100,000 population.**

This week (August 31-Spetember 6, 2025):

- There were **15** HRI ED visits (0.05% of total ED visits), with a rate of **0.6 per 100,000 population**
- The rate was highest among **females** aged **65+ years (1.4 HRI ED visits per 100,000 population**) (Figure 1)
- The rate of HRI ED visits was highest in **Cleveland County (2.1 per 100,000 population**) (Figure 2)
- The most frequent heat related diagnosis codes were **heat syncope** and **other effects (n = 3; 42.9%)** (Table 1)
- The maximum daily heat index ranged from **78.9 to 94.6°F** at Charlotte/Douglas International Airport (Figure 3)
- There was **1** day when the minimum temperature was above 70°F.

Figure 1. Rate of Heat-Related Illness Emergency Department Visits by Sex and Age
South Central (Region 4)

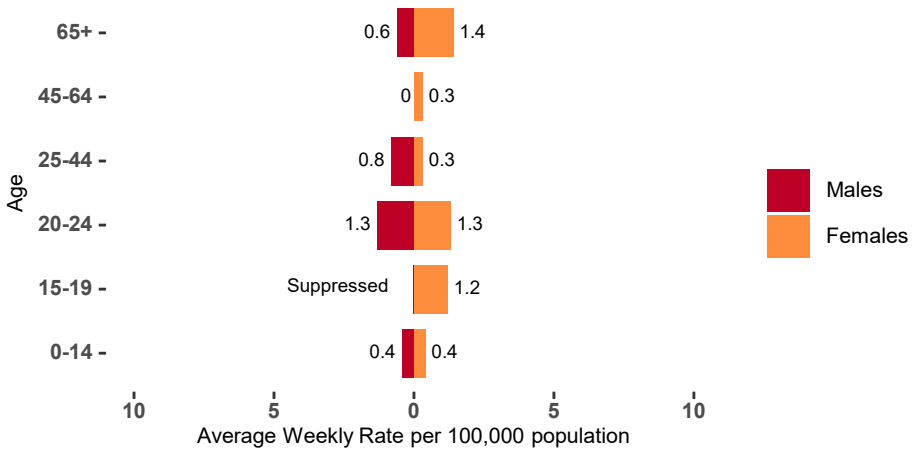
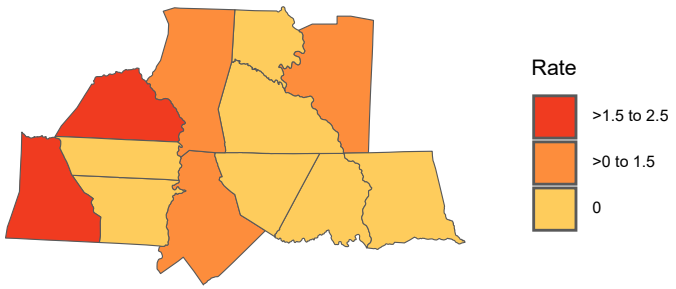
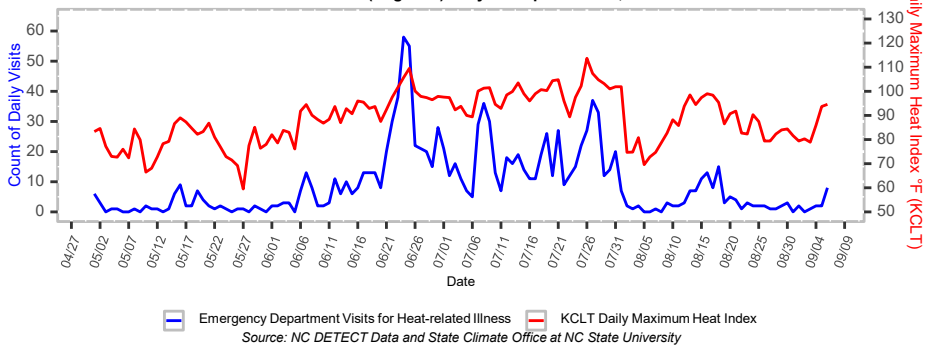


Figure 2. Average Weekly Rate of Heat-Related Illness Emergency Department Visits per 100,000 Population
South Central (Region 4)



Rates based on counts between 1-4 are suppressed for counties with less than 500 total ED visits, as shown in gray.

Figure 3. Emergency Department Visits for Heat-related Illness and Maximum Heat Index
South Central (Region 4): May 1 - September 06, 2025



Source: NC DETECT Data and State Climate Office at NC State University

Table 1. Heat-related illness ED visits by Severity

Severity§	Number (N=7‡)	Percent†
Heat Stroke	0	0.0
Heat Exhaustion	1	14.3
Heat Syncope	3	42.9
Heat Cramps	0	0.0
Other Effects‖	3	42.9

§ Definitions of heat-related illness severity categories: https://www.cdc.gov/niosh/heat-stress/about/illnesses.html

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

‡ Missing severity data = 8

† May not total 100 due to rounding

North Carolina Weekly Heat-related Illness Surveillance Report: North Coastal Plain (Region 5)

August 31-September 6, 2025

North Coastal Plain (Region 5) Key Messages

The average weekly rate of heat-related illness emergency department visits **this season to date is 2.6 per 100,000 population.**

This week (August 31-Spetember 6, 2025):

- There were **25** HRI ED visits (0.1% of total ED visits), with a rate of **1.1 per 100,000 population**
- The rate was highest among **females** aged **20-24 years (2.8 HRI ED visits per 100,000 population**) (Figure 1)
- The rate of HRI ED visits was highest in **Nash County (4.2 per 100,000 population**) (Figure 2)
- The most frequent heat related diagnosis code was **heat exhaustion (n = 5; 41.7%)** (Table 1)
- The maximum daily heat index ranged from **78.6 to 95.5°F** at Rocky Mount-Wilson Regional Airport (Figure 3)
- The daily minimum temperature was below 70 °F on all **7** days this week.

Figure 1. Rate of Heat-Related Illness Emergency Department Visits by Sex and Age
North Coastal Plain (Region 5)

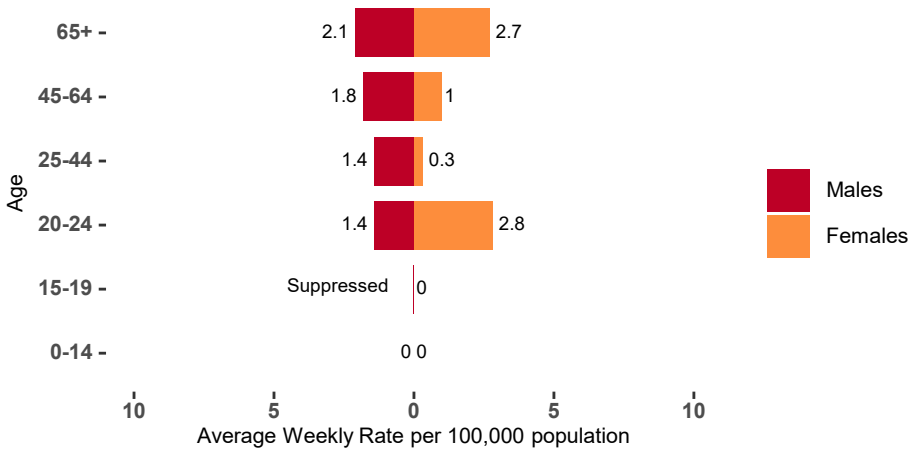
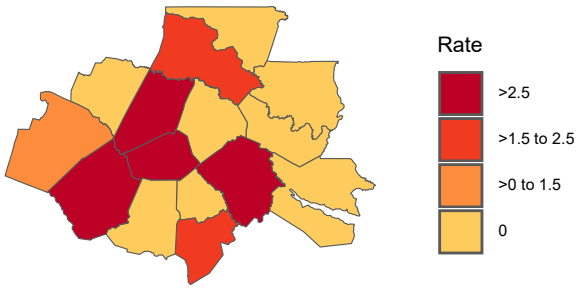
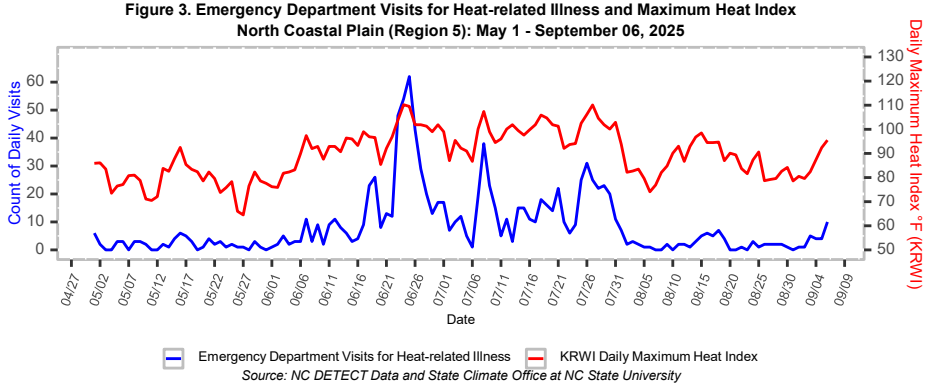


Figure 2. Average Weekly Rate of Heat-Related Illness Emergency Department Visits per 100,000 Population
North Coastal Plain (Region 5)



Rates based on counts between 1-4 are suppressed for counties with less than 500 total ED visits, as shown in gray.

Figure 3. Emergency Department Visits for Heat-related Illness and Maximum Heat Index
North Coastal Plain (Region 5): May 1 - September 06, 2025



Source: NC DETECT Data and State Climate Office at NC State University

Table 1. Heat-related illness ED visits by Severity

Severity[§]	Number (N=12[‡])	Percent[†]
Heat Stroke	0	0.0
Heat Exhaustion	5	41.7
Heat Syncope	3	25.0
Heat Cramps	0	0.0
Other Effects[‖]	4	33.3

§ Definitions of heat-related illness severity categories: https://www.cdc.gov/niosh/heat-stress/about/illnesses.html

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

‡ Missing severity data = 13

† May not total 100 due to rounding

North Carolina Weekly Heat-related Illness Surveillance Report: Foothills (Region 6)

August 31-September 6, 2025

Foothills (Region 6) Key Messages

The average weekly rate of heat-related illness emergency department visits **this season to date is 3.6 per 100,000 population.**

This week (August 31-Spetember 6, 2025):

- There were **2** HRI ED visits (0.04% of total ED visits), with a rate of **0.4 per 100,000 population**
- The rate was highest among **males** aged **25-44 years (1.9 HRI ED visits per 100,000 population**) (Figure 1)
- The rate of HRI ED visits was highest in **Surry County (1.4 per 100,000 population**) (Figure 2)
- The maximum daily heat index ranged from **76 to 92.4°F** at Morganton-Lenoir Airport (Figure 3)
- The daily minimum temperature was below 70 °F on all **7** days this week.

Figure 1. Rate of Heat-Related Illness Emergency Department Visits by Sex and Age
Foothills (Region 6)

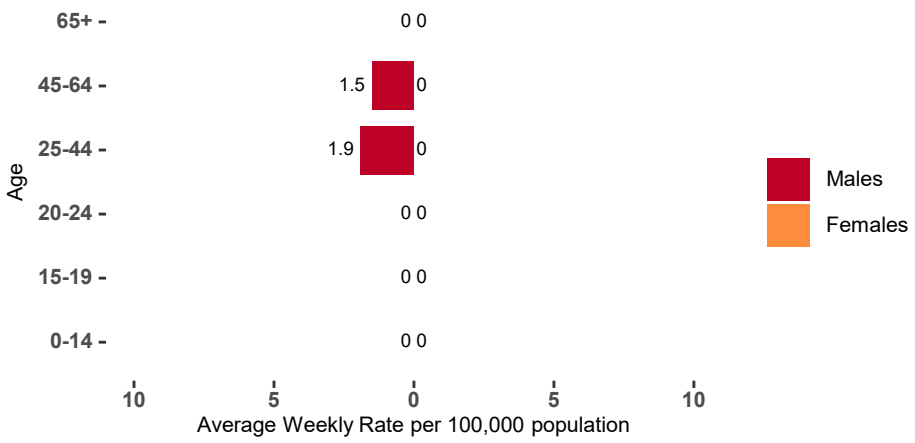
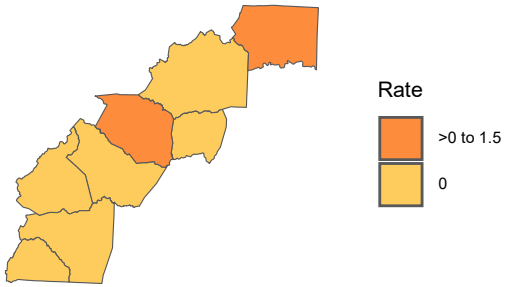
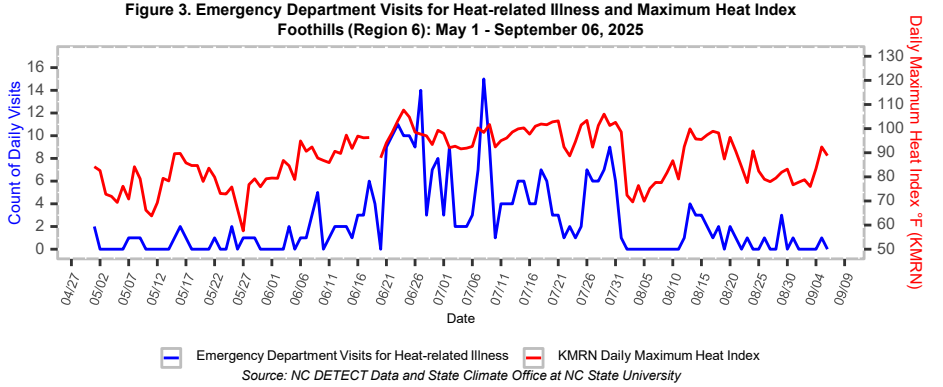


Figure 2. Average Weekly Rate of Heat-Related Illness Emergency Department Visits per 100,000 Population
Foothills (Region 6)



Rates based on counts between 1-4 are suppressed for counties with less than 500 total ED visits, as shown in gray.

Figure 3. Emergency Department Visits for Heat-related Illness and Maximum Heat Index
Foothills (Region 6): May 1 - September 06, 2025



Source: NC DETECT Data and State Climate Office at NC State University

Table 1 is not provided for the Foothills this week due to the small number of ED visits for heat-related illnesses.

North Carolina Weekly Heat-related Illness Surveillance Report: Sandhills (Region 7)

August 31-September 6, 2025

Sandhills (Region 7) Key Messages

The average weekly rate of heat-related illness emergency department visits **this season to date is 3.3 per 100,000 population.**

This week (August 31-Spetember 6, 2025):

- There were **17** HRI ED visits (0.1% of total ED visits), with a rate of **1.3 per 100,000 population**
- The rate was highest among **females** aged **20-24 years (4.9 HRI ED visits per 100,000 population**) (Figure 1)
- The rate of HRI ED visits was highest in **Harnett County (3.7 per 100,000 population**) (Figure 2)
- The most frequent heat related diagnosis code was **heat exhaustion (n = 3; 42.9%)** (Table 1)
- The maximum daily heat index ranged from **79.6 to 96.9°F** at Fayetteville Regional/Grannis Field Airport (Figure 3)
- The daily minimum temperature was below 70 °F on all **7** days this week.

Figure 1. Rate of Heat-Related Illness Emergency Department Visits by Sex and Age
Sandhills (Region 7)

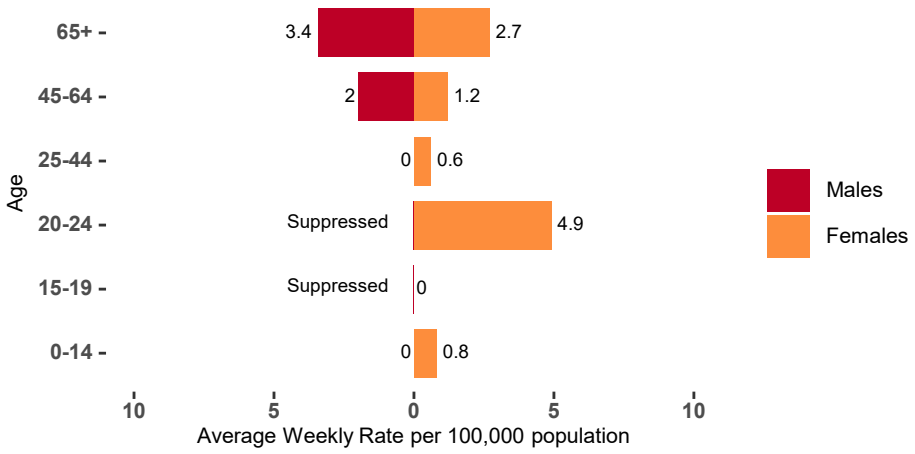
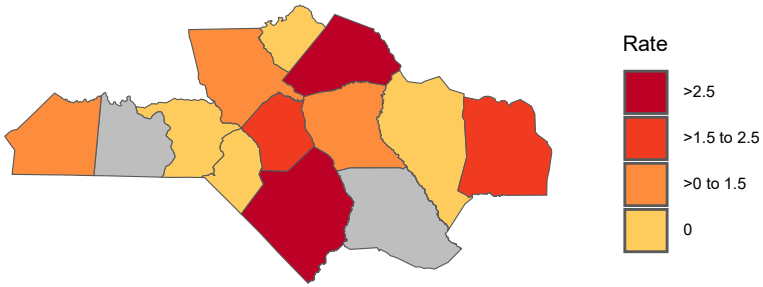
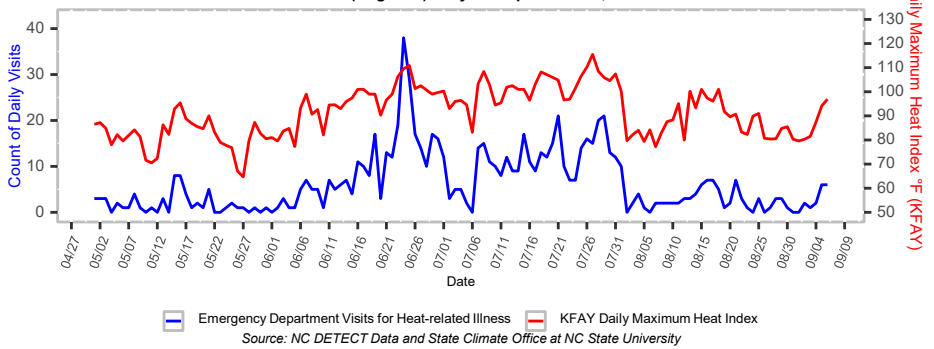


Figure 2. Average Weekly Rate of Heat-Related Illness Emergency Department Visits per 100,000 Population
Sandhills (Region 7)



Rates based on counts between 1-4 are suppressed for counties with less than 500 total ED visits, as shown in gray.

Figure 3. Emergency Department Visits for Heat-related Illness and Maximum Heat Index
Sandhills (Region 7): May 1 - September 06, 2025



Source: NC DETECT Data and State Climate Office at NC State University

Table 1. Heat-related illness ED visits by Severity

Severity[§]	Number (N=7[‡])	Percent[†]
Heat Stroke	0	0.0
Heat Exhaustion	3	42.9
Heat Syncope	2	28.6
Heat Cramps	1	14.3
Other Effects[‖]	1	14.3

§ Definitions of heat-related illness severity categories: https://www.cdc.gov/niosh/heat-stress/about/illnesses.html

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

‡ Missing severity data = 10

† May not total 100 due to rounding

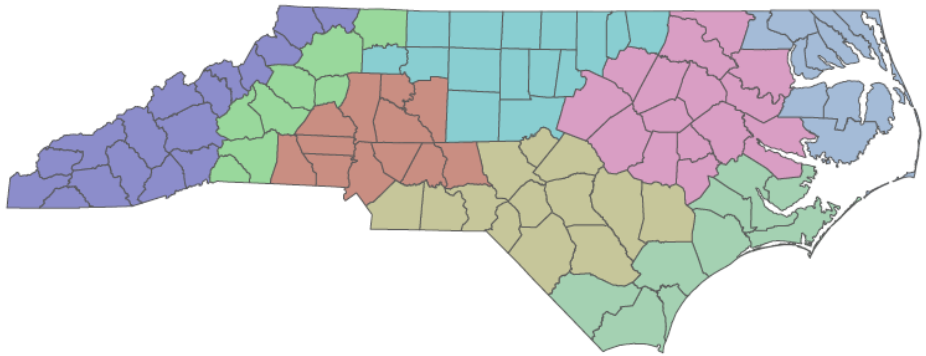
North Carolina Weekly Heat-related Illness Surveillance Report: Mountains (Region 8)

August 31-September 6, 2025

The regional report for the Mountain Area is not provided this week due to zero ED visits for heat-related illnesses.

North Carolina HRI Surveillance Regions

(updated for 2025 to match the new Heat Health Alert System regions)



1. Southeast
2. North Central
3. Northeast
4. South Central
5. North Coastal Plain
6. Foothills
7. Sandhills
8. Mountains

About the data

The heat-related illness data in the report is from NC DETECT. NC DETECT is a statewide public health syndromic surveillance system, funded by the NC Division of Public Health (NC DPH) Federal Public Health Emergency Preparedness Grant and managed through collaboration between NC DPH and the UNC-CH Department of Emergency Medicine's Carolina Center for Health Informatics. The NC DETECT Data Oversight Committee is not responsible for the scientific validity or accuracy of methodology, results, statistical analyses, or conclusions presented.

Climate data

The maximum heat index and minimum temperature data in this report are from the North Carolina State Climate Office. The Raleigh-Durham International Airport weather station (RDU) was selected to represent the climate data for the statewide report. One weather station from each region was selected to represent the climate data for each region. The weather station locations and their corresponding regions are as follows:
Wilmington International Airport (ILM) – Southeast (Region 1), Piedmont Triad Airport (GSO) – North Central (Region 2), Pitt-Greenville Airport (PGV) – Northeast (Region 3), Charlotte/Douglas International Airport (CLT) – South Central (Region 4),
Rocky Mount-Wilson Regional Airport (RWI) – North Coastal Plain (Region 5), Morganton-Lenoir Airport (MRN) – Foothills (Region 6), Fayetteville Regional/Grannis Field Airport (FAY) – Sandhills (Region 7), Asheville Regional Airport (AVL) – Mountains (Region 8). During 6/19, climate data was obtained from the NC School of Science and Math - Morganton (MORG) EcoNet weather station (Foothills, Region 6).

The NCDHHS Climate and Health Program is supported by the Centers for Disease Control and Prevention of the U.S. Department of Health and Human Services (HHS) as part of a financial assistance award totaling $500,000 annually with 100 percent funded by CDC/HHS. The contents are those of the author(s) and do not necessarily represent the official views of, nor an endorsement, by CDC/HHS, or the U.S. Government. Award No. (Award No. 6NUE1EH001449-03-02).