

Statewide Key Messages

The average weekly rate of heat-related illness (HRI) emergency department (ED) visits **this season to date** is **0.6 per 100,000 population**.

This week (May 25-31, 2025):

- There were **36 HRI ED visits** (0.04% of total ED visits), with a **rate of 0.3 per 100,000 population**
- The rate was highest among **males aged 45-64 years (0.9 per 100,000 population)** (Figure 1)
- The rate of HRI ED visits was highest in the **Foothills (1.1 per 100,000 population)**. (Figure 2; Region 6)
- The most frequent heat related diagnosis code was **heat syncope (n = 5; 45.5%)** (Table 1)
- The maximum daily heat index ranged from **65.2 to 85.5°F** at Raleigh-Durham 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

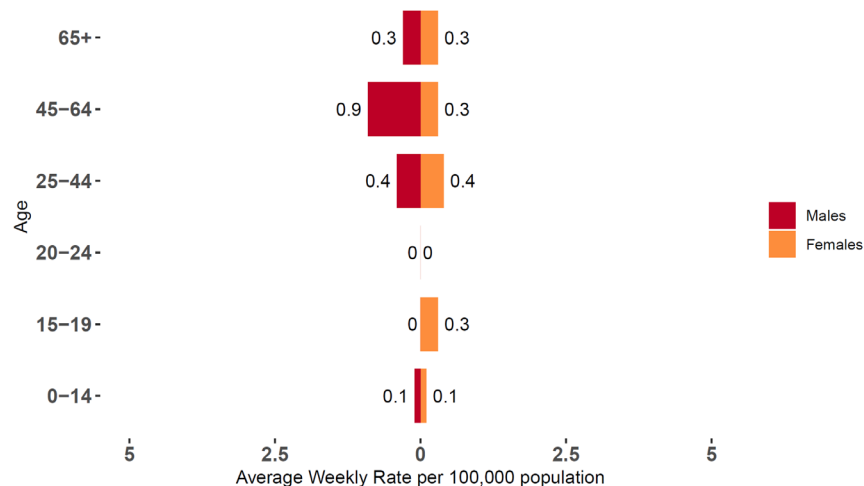
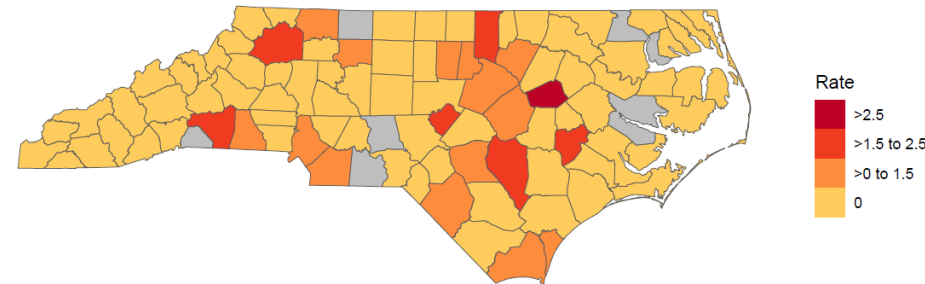


Figure 2. Rate of Heat-related Illness Emergency Department Visits per 100,000 Population



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 =11 [‡])	Percent [†]
Heat Exhaustion	1	9.1
Heat Stroke	4	36.4
Heat Syncope	5	45.5
Other Effects	1	9.1

§ Definitions of heat-related illness severity categories:

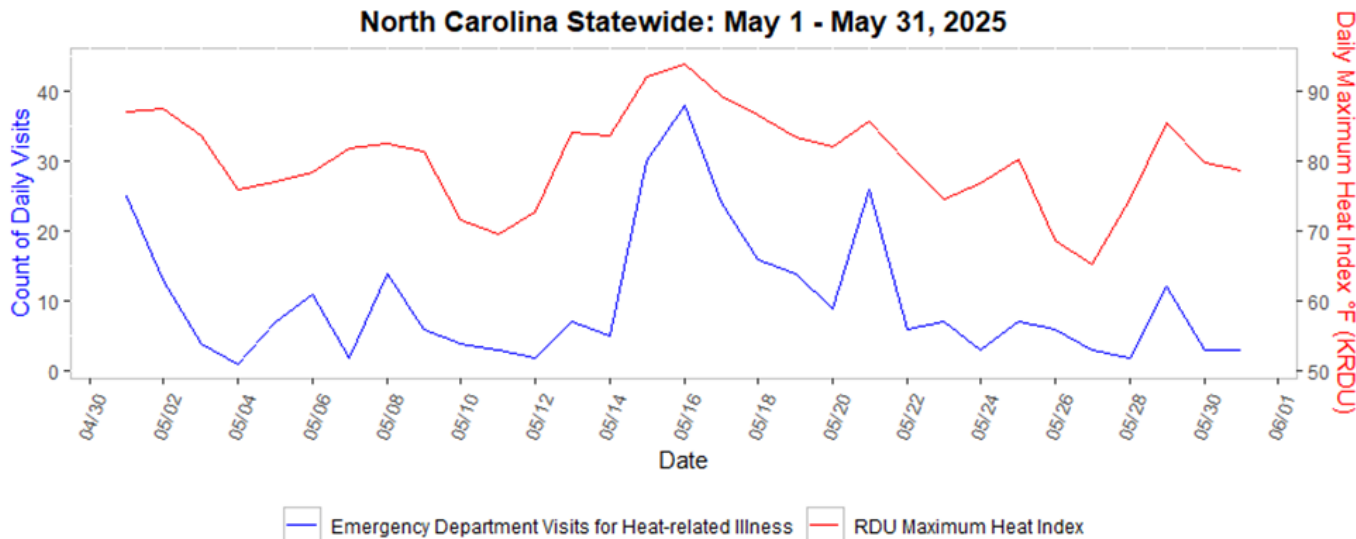
<https://www.cdc.gov/niosh/topics/heatstress/heatrelillness.html>

‡ Missing severity data = 25

† May not total 100 due to rounding

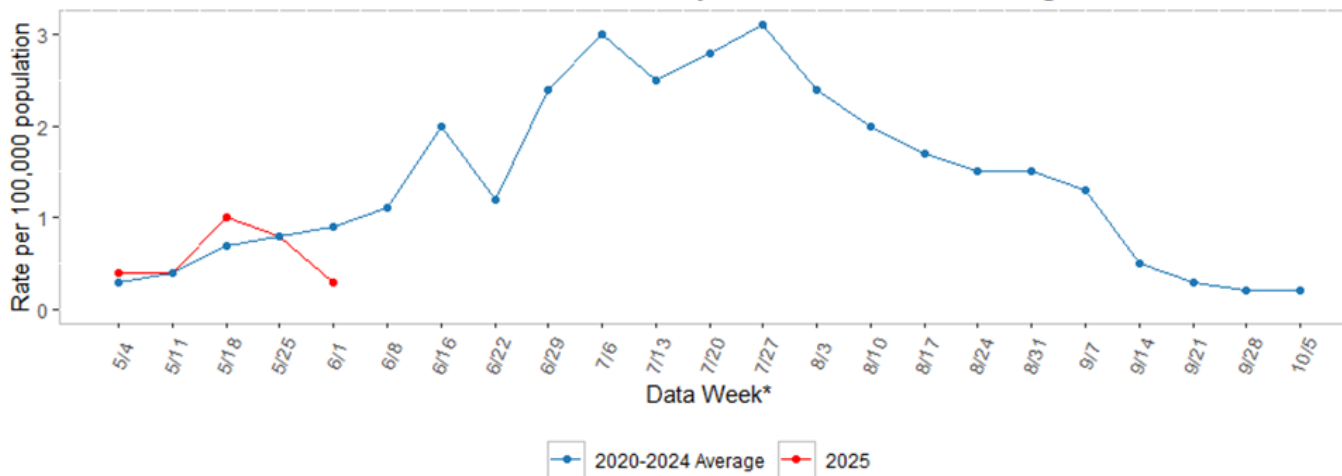
|| other effects include heat fatigue, heat edema, other effects of heat and light, and other effects unspecified

Figure 3. Emergency Department Visits for Heat-related Illness and Max Heat Index
North Carolina Statewide: May 1 - May 31, 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-Week-Log-2023-2024.pdf>.

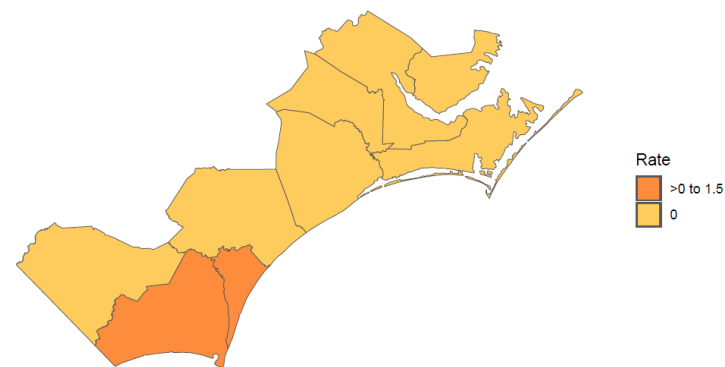
Southeast NC (Region 1) Key Messages

The average weekly rate of heat-related illness emergency department visits **this season to date** is **1.1 per 100,000 population**.

This week (May 25-31, 2025):

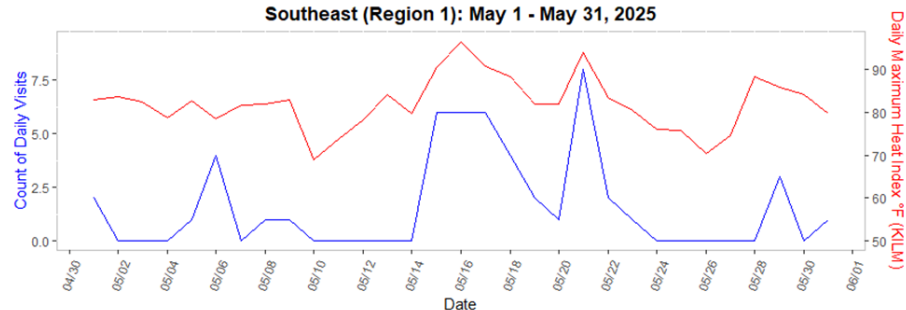
- There were **4 HRI ED visits** (0.05% of total ED visits), with a rate of **0.4 per 100,000 population**
- The rate was highest among **males aged 45-64 years (2 HRI ED visits per 100,000 population)** (Figure 1)
- The rate of HRI ED visits was highest in **Brunswick County (1.4 per 100,000 population)** (Figure 2)
- The most frequent heat related diagnosis code was **heat exhaustion (n = 1; 100%)** (Table 1)
- The maximum daily heat index ranged from **70.3 to 88.4°F** at Wilmington International Airport (Figure 3)
- There was **1 day** when the minimum temperature was above 70°F

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 - May 31, 2025



Emergency Department Visits for Heat-related Illness KILM Daily Maximum Heat Index
Source: NC DETECT Data and State Climate Office at NC State University

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

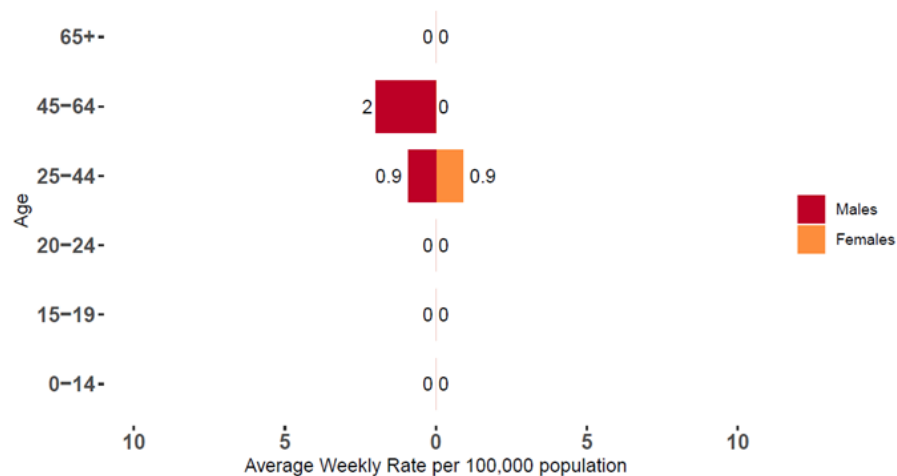


Table 1. Heat-related illness ED visits by Severity

Severity [§]	Number (N = 1 [†])	Percent [†]
Heat Exhaustion	1	100

§ Definitions of heat-related illness severity categories:

<https://www.cdc.gov/niosh/topics/heatstress/heatrelillness.html>

‡ Missing severity data = 3

† May not total 100 due to rounding

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

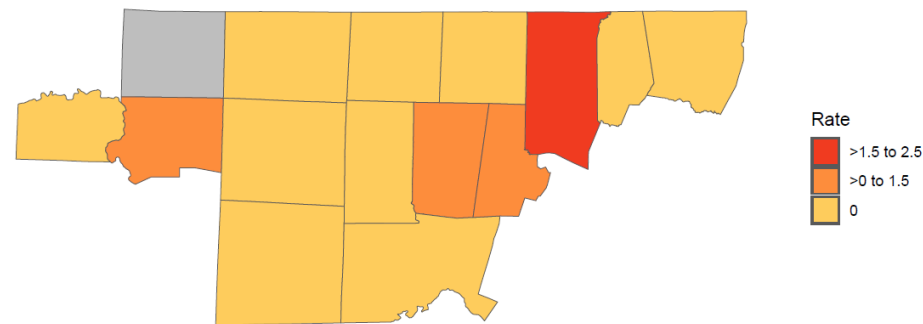
North Central NC (Region 2) Key Messages

The average weekly rate of heat-related illness emergency department visits **this season to date** is **0.6 per 100,000 population**.

This week (May 25-31, 2025):

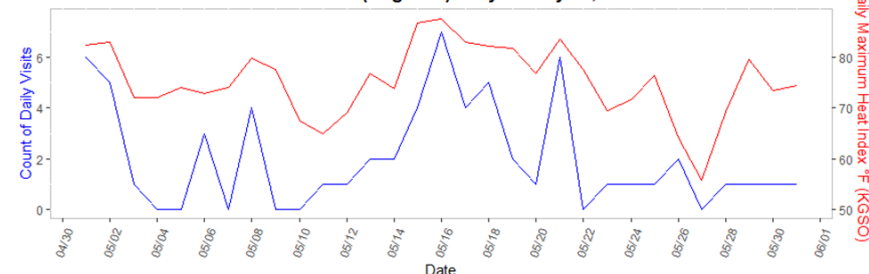
- There were **7 HRI ED visits** (0.04% of total ED visits), with a rate of **0.3 per 100,000 population**
- The rate was highest among **males aged 45-64 years (1.1 HRI ED visits per 100,000 population)** (Figure 1)
- The rate of HRI ED visits was highest in **Granville County (1.6 per 100,000 population)** (Figure 2)
- The most frequent heat related diagnosis code was **heat exhaustion (n = 2; 66.7%)** (Table 1)
- The maximum daily heat index ranged from **55.8 to 79.6°F** at Piedmont Triad International 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 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 - May 31, 2025



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

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

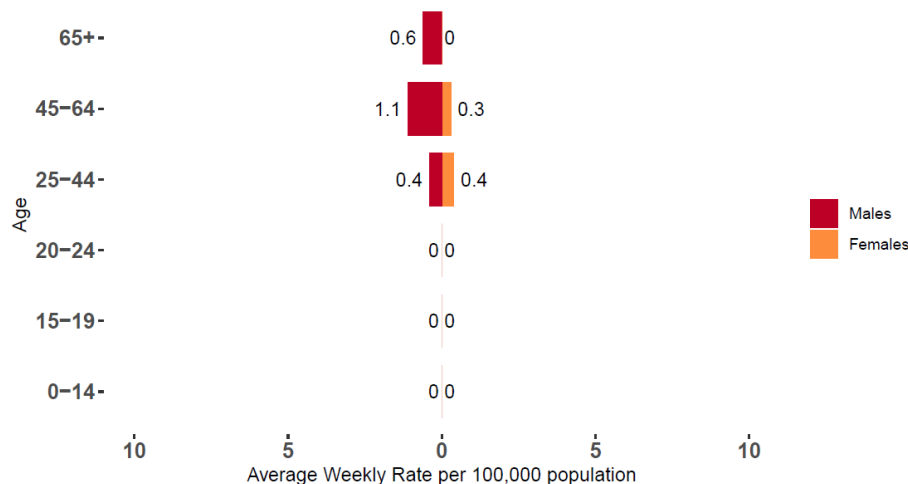


Table 1. Heat-related illness ED visits by Severity

Severity [§]	Number (N = 3 [‡])	Percent [†]
Heat Exhaustion	2	66.7
Heat Syncope	1	33.3

§ Definitions of heat-related illness severity categories:

<https://www.cdc.gov/niosh/topics/heatstress/heatrelillness.html>

‡ Missing severity data = 4

† May not total 100 due to rounding

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

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

South Central NC (Region 4) Key Messages

The average weekly rate of heat-related illness emergency department visits this season to date is **0.4 per 100,000 population**

This week (May 25-31, 2025):

- There were **5 HRI ED visits** (0.02% of total ED visits), with a rate of **0.2 per 100,000 population**
- The rate was highest among **males aged 45-64 years (0.6 HRI ED visits per 100,000 population)** (Figure 1)
- The rate of HRI ED visits was highest in **Cleveland County (1 per 100,000 population)** (Figure 2)
- The most frequent heat related diagnosis code was **other effects (n = 1; 100%)** (Table 1)
- The maximum heat daily index ranged from **59.5 to 85.1°F** at Charlotte/Douglas 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 South Central (Region 4)

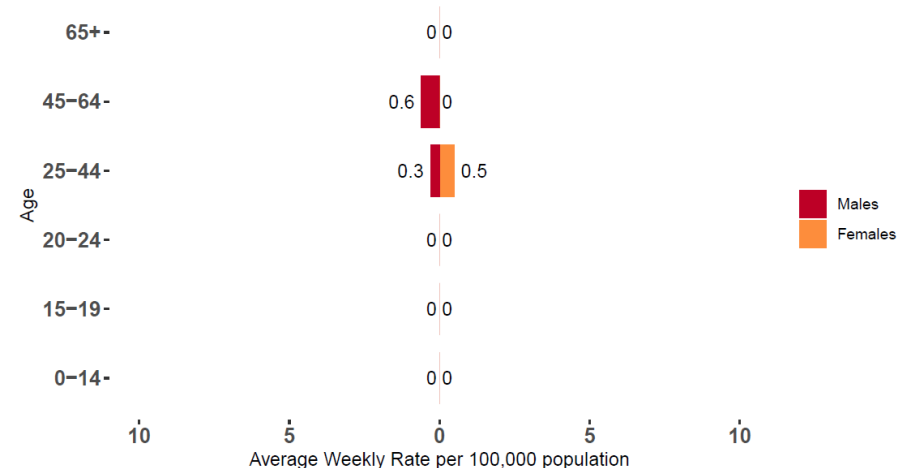
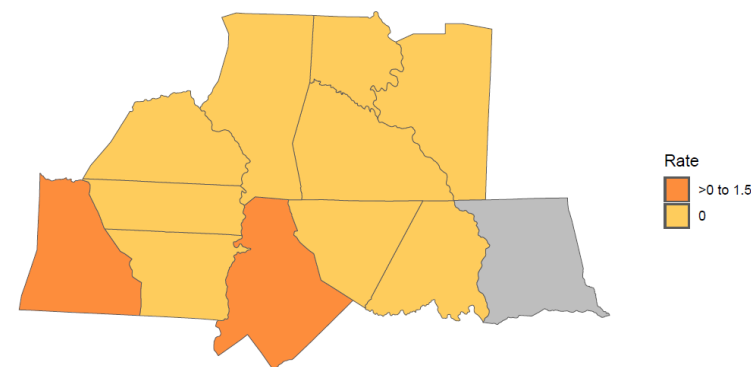


Figure 2. Average Weekly Rate of Heat-Related Illness Emergency Department Visits per 100,000 Population South Central (Region 4)



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 - May 31, 2025

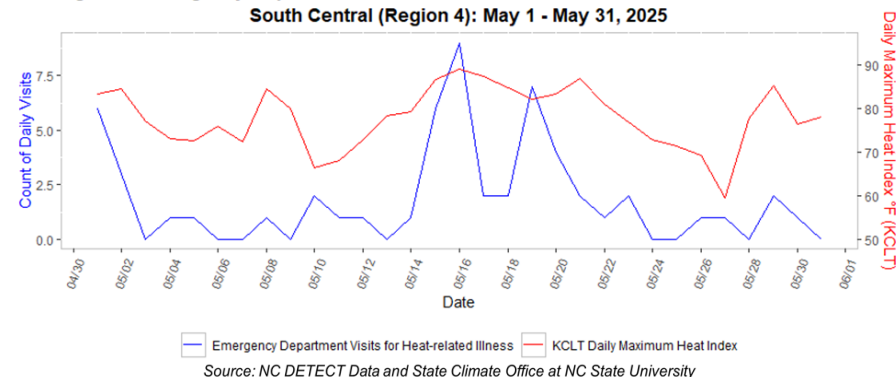


Table 1. Heat-related illness ED visits by Severity

Severity [§]	Number (N = 1 [†])	Percent [†]
Other Effects	1	100

§ Definitions of heat-related illness severity categories:

<https://www.cdc.gov/niosh/topics/heatstress/heatrelillness.html>

‡ Missing severity data = 4

† May not total 100 due to rounding

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

North Coastal Plain Area (Region 5) Key Messages

The average weekly rate of heat-related illness emergency department visits this season to date is **0.5 per 100,000 population**.

This week (May 25-31, 2025):

- There were **7 HRI ED visits** (0.04% of total ED visits), with a rate of **0.3 per 100,000 population**
- The rate was highest among **females aged 65+ years (1.1 HRI ED visits per 100,000 population)** (Figure 1)
- The rate of HRI ED visits was highest in **Wilson County (2.5 per 100,000 population)** (Figure 2)
- The most frequent heat related diagnosis code was **heat syncope (n = 2; 66.7%)** (Table 1)
- The maximum daily heat index ranged from **64.5 to 82.3°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)

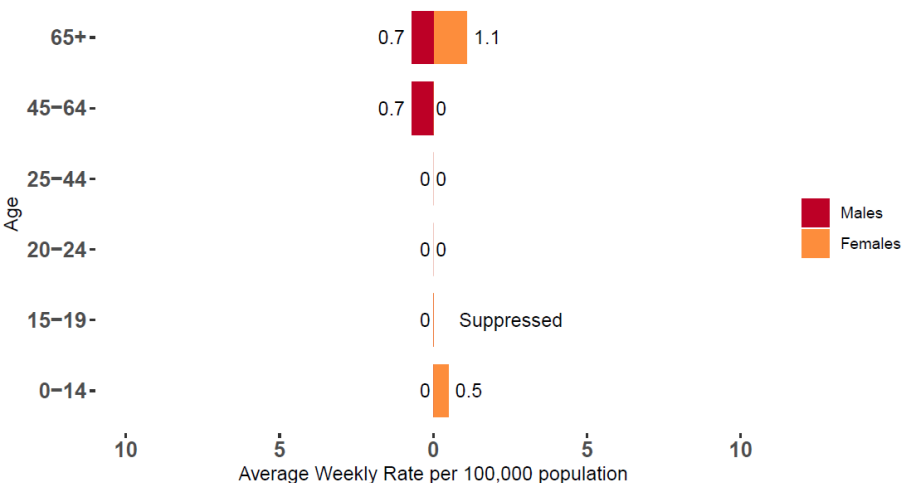
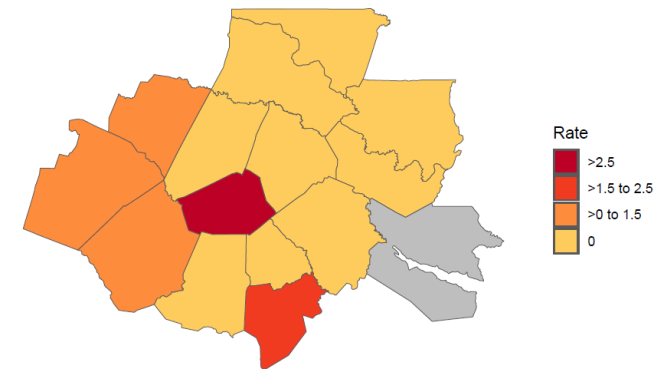


Figure 2. Average Weekly Rate of Heat-Related Illness Emergency Department Visits per 100,000 Population North Coastal Plain (Region 5)



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 - May 31, 2025

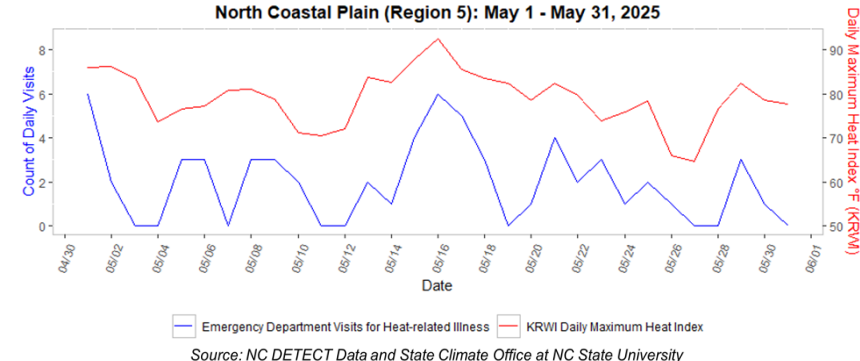


Table 1. Heat-related illness ED visits by Severity

Severity [§]	Number (N = 3 [‡])	Percent [†]
Heat Exhaustion	1	33.3
Heat Syncope	2	66.7

[§] Definitions of heat-related illness severity categories:

<https://www.cdc.gov/niosh/topics/heatstress/heatrelillness.html>

[‡] Missing severity data = 4

[†] May not total 100 due to rounding

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

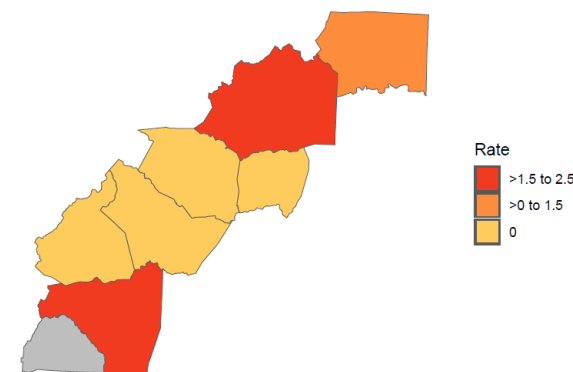
Foothills Area (Region 6) Key Messages

The average weekly rate of heat-related illness emergency department visits **this season to date** is **0.6 per 100,000 population**.

This week (May 25-31, 2025):

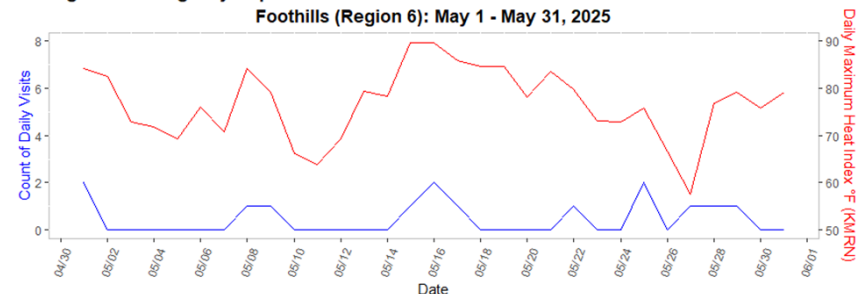
- There were **5 HRI ED visits** (0.1% of total ED visits), with a rate of **1.1 per 100,000 population**
- The rate was highest among **males aged 45-64 years (3 HRI ED visits per 100,000 population)** (Figure 1)
- The rate of HRI ED visits was highest in **Rutherford County (1.5 per 100,000 population)** (Figure 2)
- The maximum daily heat index ranged from **57.6 to 79.2°F** at Morganton-Lenoir 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 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 - May 31, 2025



Emergency Department Visits for Heat-related Illness KMRN Daily Maximum Heat Index

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

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

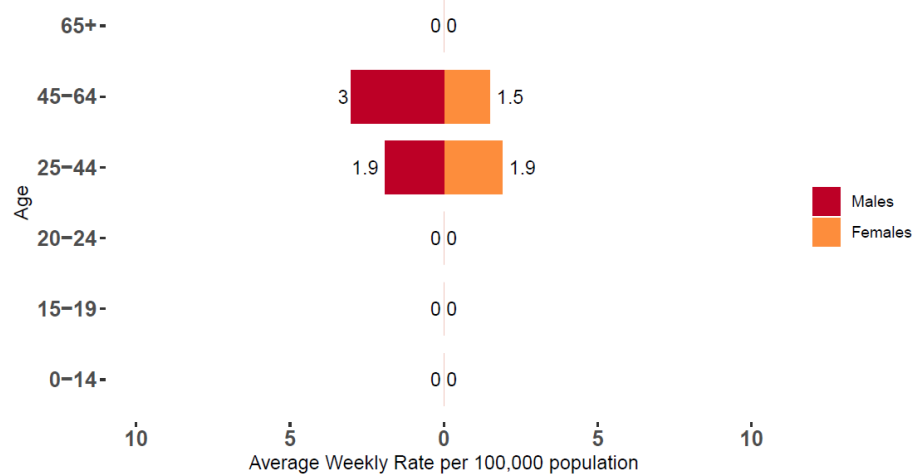


Table 1 is not provided for the Foothills this week due to the small number of ED visits for heat-related illnesses.

Sandhills Area (Region 7) Key Messages

The average weekly rate of heat-related illness emergency department visits this season to date is **0.9 per 100,000 population**.

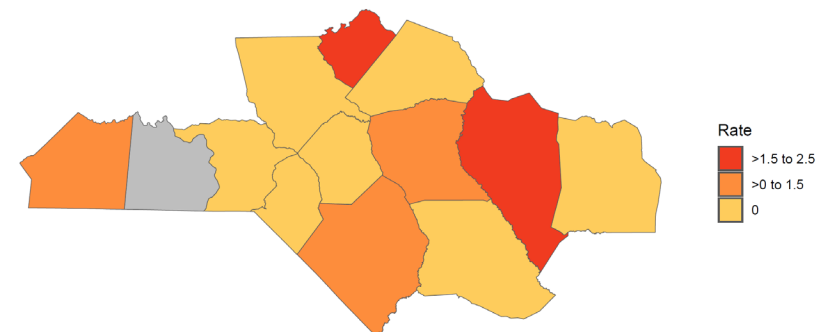
This week (May 25-31, 2025):

- There were **6 HRI ED visits** (0.05% of total ED visits), with a rate of **0.5 per 100,000 population**
- The rate was highest among **females aged 45-64 years (1.2 HRI ED visits per 100,000 population)** (Figure 1)
- The rate of HRI ED visits was highest in **Sampson County (1.7 per 100,000 population)** (Figure 2)
- The most frequent heat related diagnosis code was **heat syncope (n = 2; 66.7%)** (Table 1)
- The maximum daily heat index ranged from **64.7 to 87.3°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)

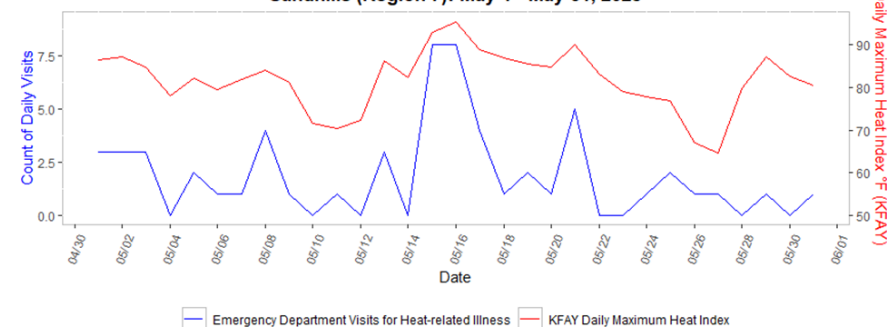


Figure 2. Average Weekly Rate of Heat-Related Illness Emergency Department Visits per 100,000 Population Sandhills (Region 7)



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 - May 31, 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 = 3 [‡])	Percent [†]
Heat Cramps	1	33.3
Heat Syncope	2	66.7

§ Definitions of heat-related illness severity categories:

<https://www.cdc.gov/niosh/topics/heatstress/heatrelillness.html>

‡ Missing severity data = 3

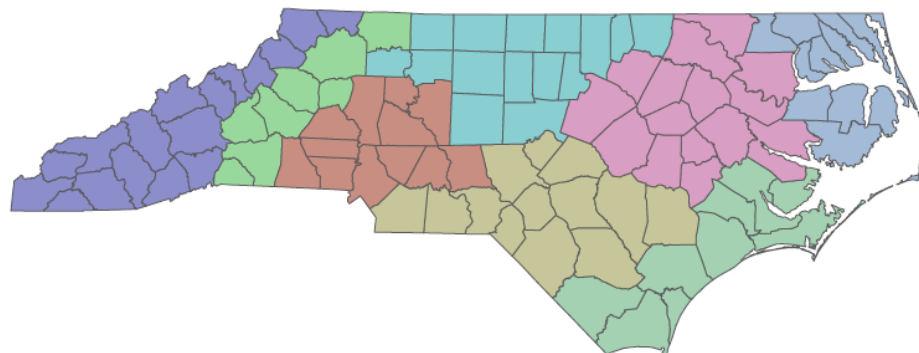
† May not total 100 due to rounding

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

The regional report for the Mountains is not provided this week due to the small number of 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 NC (Region 2), Pitt-Greenville Airport (PGV) – Northeast (Region 3), Charlotte/Douglas International Airport (CLT) – South Central NC (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)

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).