# North Carolina Statewide Weekly Heat-related Illness Surveillance Report
## May 18-24, 2025



### 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 18-24, 2025):**

- There were **79 HRI ED visits** (0.08% of total ED visits), with a **rate of 0.7 per 100,000 population**
- The rate was highest among **males** aged **65+ years (1.6 per 100,000 population**) (Figure 1)
- The rate of HRI ED visits was highest in the **Southeast** (**2 per 100,000 population**). (Figure 2; Region 1)
- The most frequent heat related diagnosis code was **heat exhaustion (n =18; 52.9%)** (Table 1)
- The maximum daily heat index ranged from **74.6** to **86.5°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**

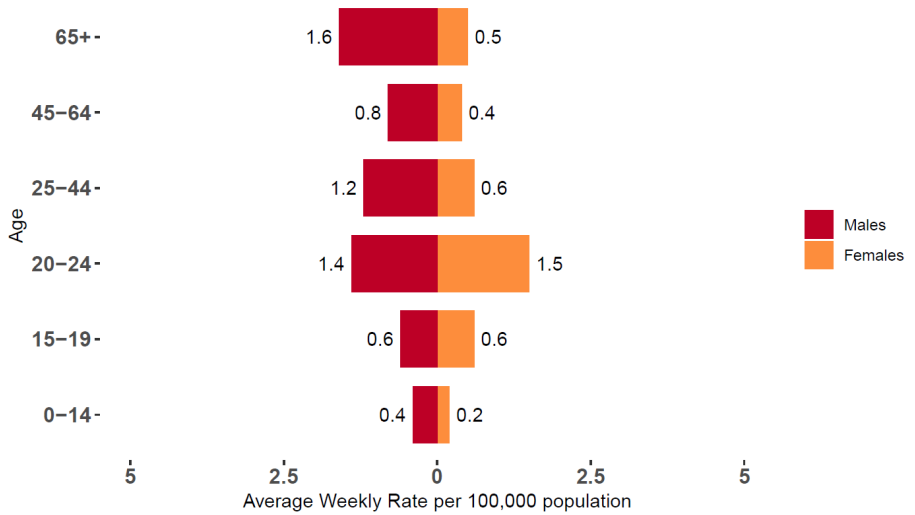
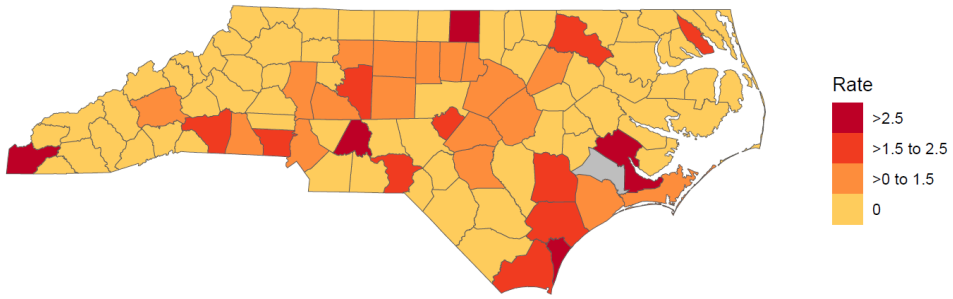



**Figure 2. Rate of Heat−related Illness Emergency Department Visits per 100,000 Population**




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 =34‡) | Percent† |
|---|---|---|
| **Heat Exhaustion** | 18 | 52.9 |
| **Heat Stroke** | 1 | 2.9 |
| **Heat Syncope** | 6 | 17.6 |
| **Other Effects‖** | 9 | 26.5 |

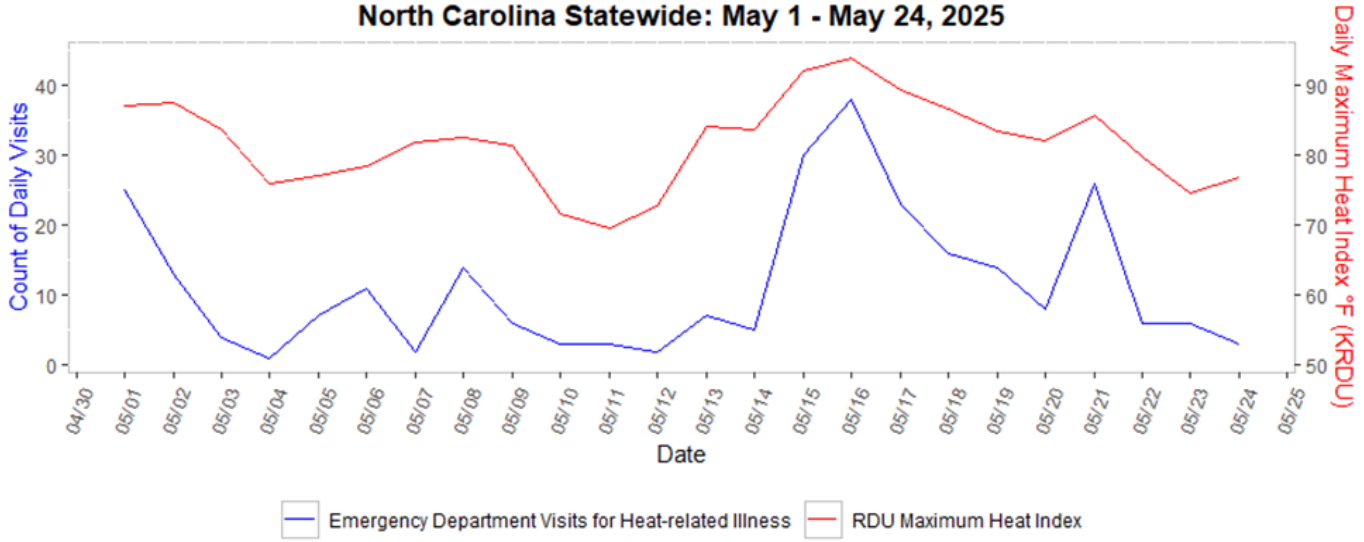
§ Definitions of heat-related illness severity categories: https://www.cdc.gov/niosh/topics/heatstress/heatrelillness.html

‡ Missing severity data = 45

† May not total 100 due to rounding

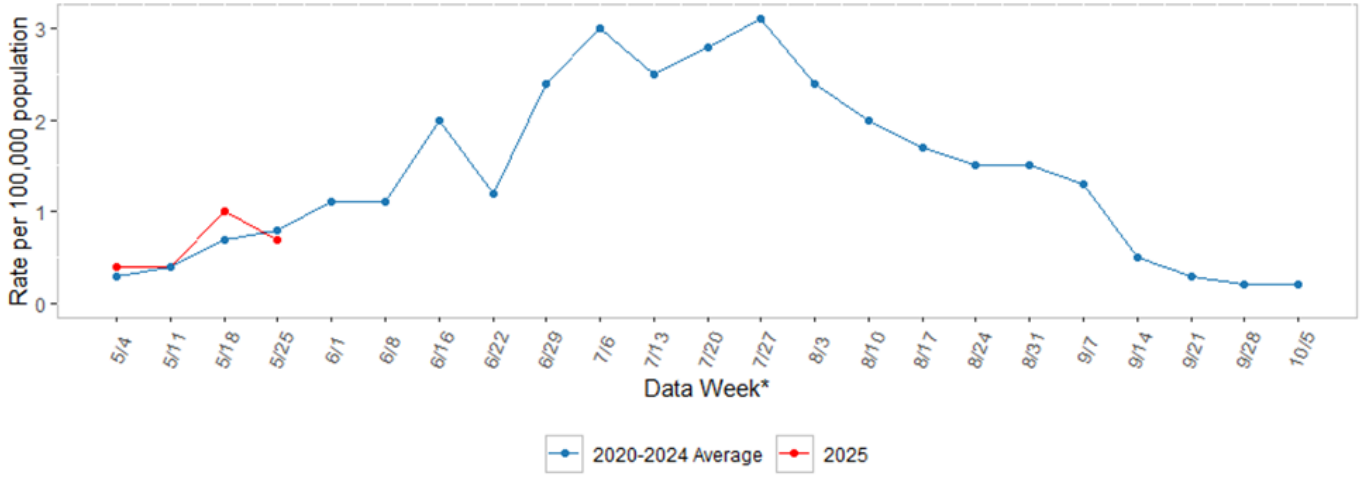
‖ other effects include heat fatigue, heat edema, other effects of heat and light, and other effects unspecified

## Figure 3. Emergency Department Visits for Heat-related Illness and Max Heat Index
## North Carolina Statewide: May 1 - May 24, 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.

# North Carolina Weekly Heat-related Illness Surveillance Report: Southeast (Region 1)
## May 18-24, 2025



## Southeast (Region 1) Key Messages

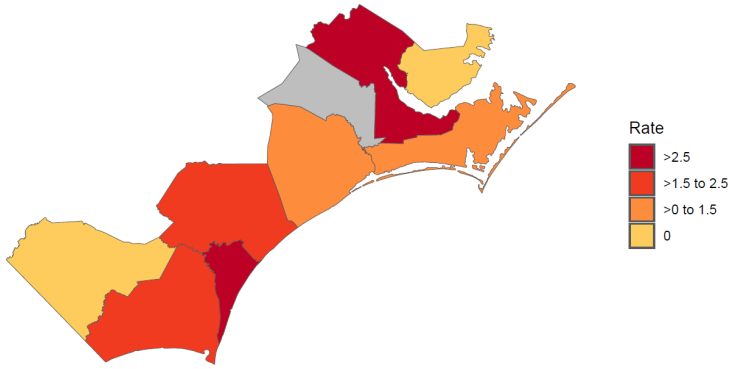
The average weekly rate of heat-related illness emergency department visits **this season to date is 1.2 per 100,000 population.**

**This week (May 18-24, 2025):**

- There were **18** HRI ED visits (0.2% of total ED visits), with a rate of **2 per 100,000 population**
- The rate was highest among **males aged 20-24 years (6.1 HRI ED visits per 100,000 population)** (Figure 1)
- The rate of HRI ED visits was highest in **Craven County (4 per 100,000 population)** (Figure 2)
- The most frequent heat related diagnosis code was **heat exhaustion (n =6; 75%)** (Table 1)
- The maximum daily heat index ranged from **76.1 to 94.1°F** at Wilmington International Airport (Figure 3)
- There were **2** days when the minimum temperature was above 70°F

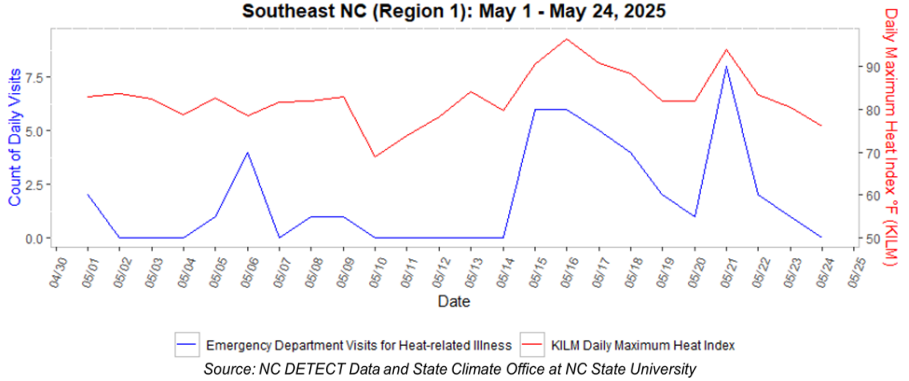
**Figure 1. Rate of Heat−Related Illness Emergency Department Visits by Sex and Age Southeast NC (Region 1)**


**Figure 2. Average Weekly Rate of Heat−Related Illness Emergency Department Visits per 100,000 Population Southeast NC (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 NC (Region 1): May 1 - May 24, 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 Exhaustion** | 6 | 75 |
| **Other Effects‖** | 2 | 25 |

§ Definitions of heat-related illness severity categories: https://www.cdc.gov/niosh/topics/heatstress/heatrelillness.html

‡ Missing severity data = 10

† 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 (Region 2) Key Messages

The average weekly rate of heat-related illness emergency department visits **this season to date is 0.7 per 100,000 population.**

**This week (May 18-24, 2025):**

- There were **15** HRI ED visits (0.08% of total ED visits), with a rate of **0.7 per 100,000 population**
- The rate was highest among **males aged 65+ years (2.5 HRI ED visits per 100,000 population)** (Figure 1)
- The rate of HRI ED visits was highest in **Person County (2.6 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 **69.4 to 83.6°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 NC (Region 2)**

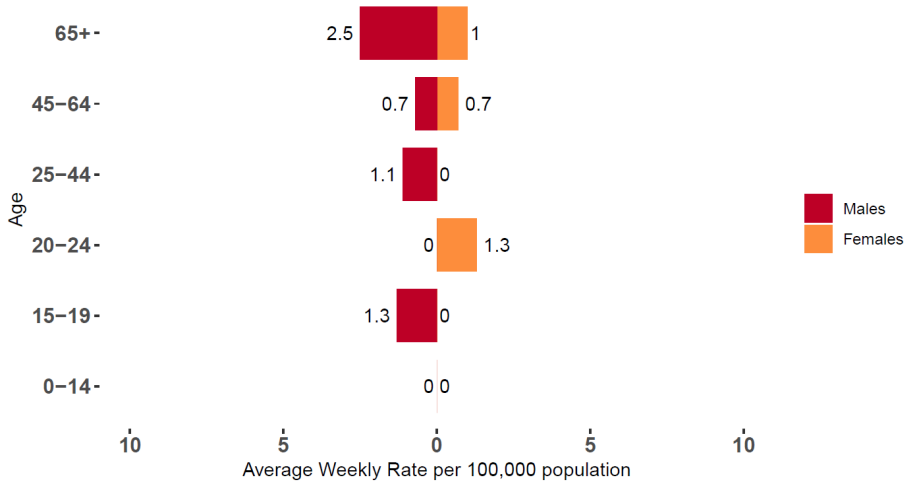
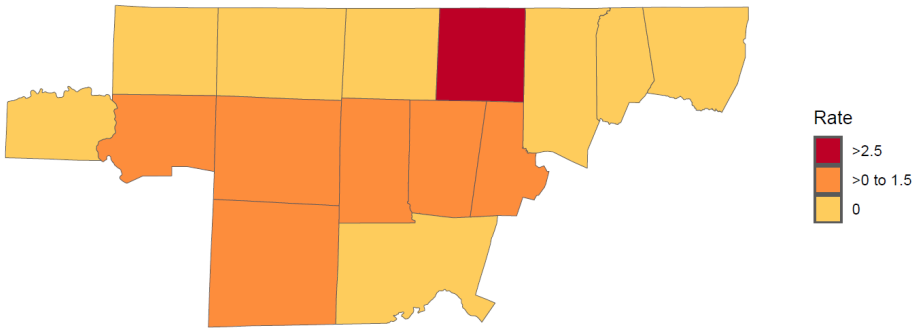
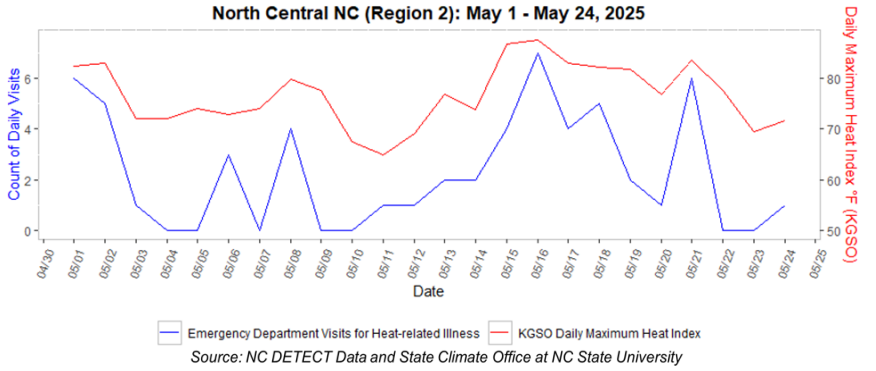



**Figure 2. Average Weekly Rate of Heat−Related Illness Emergency Department Visits per 100,000 Population**
**North Central NC (Region 2)**




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 NC (Region 2): May 1 - May 24, 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 Exhaustion** | 1 | 25 |
| **Heat Syncope** | 2 | 50 |
| **Other Effects‖** | 1 | 25 |

§ Definitions of heat-related illness severity categories: https://www.cdc.gov/niosh/topics/heatstress/heatrelillness.html

‡ Missing severity data = 11

† 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 Carolina Weekly Heat-related Illness Surveillance Report: Northeast (Region 3)
## May 18-24, 2025



The regional report for the Northeast is not provided 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)
## May 18-24, 2025



## South Central (Region 4) 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 18-24, 2025):**

- There were **17** HRI ED visits (0.06% of total ED visits), with a rate of **0.7 per 100,000 population**
- The rate was highest among **males aged 25-44 years (1.4 HRI ED visits per 100,000 population)** (Figure 1)
- The rate of HRI ED visits was highest in **Stanly County (4.7 per 100,000 population)** (Figure 2)
- The most frequent heat related diagnosis code was **heat exhaustion (n =5; 62.5%)** (Table 1)
- The maximum heat daily index ranged from **72.9 to 86.8°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 NC (Region 4)**

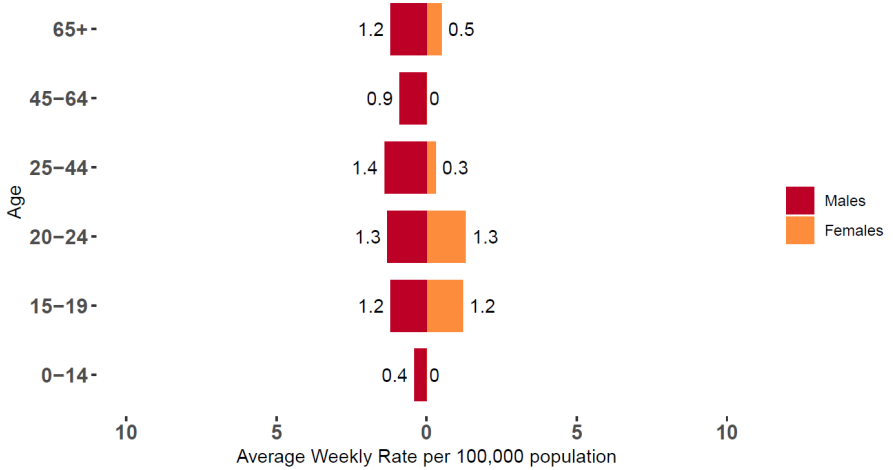
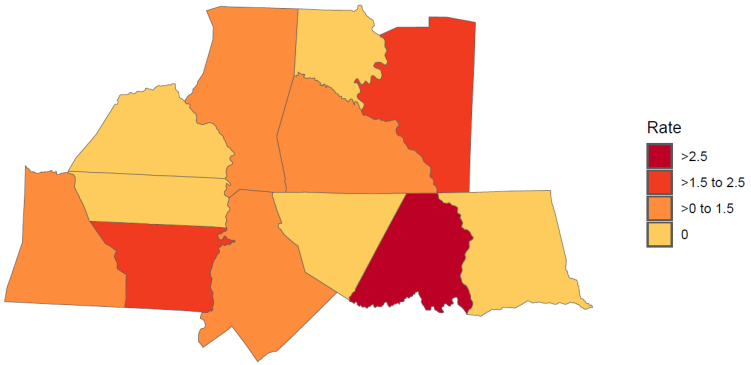
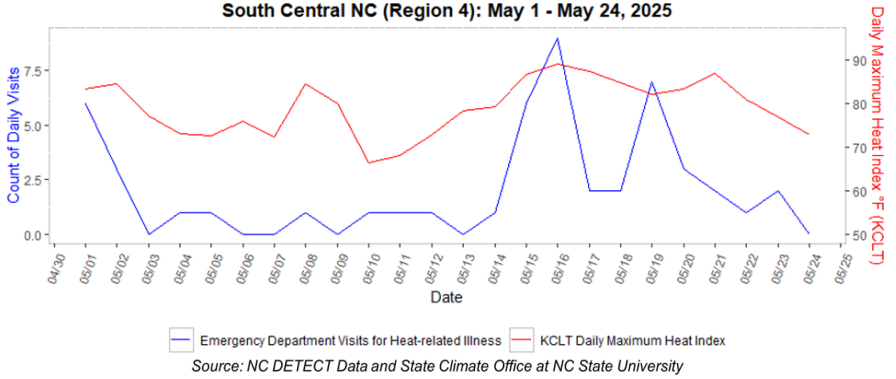



**Figure 2. Average Weekly Rate of Heat−Related Illness Emergency Department Visits per 100,000 Population**
**South Central NC (Region 4)**




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 NC (Region 4): May 1 - May 24, 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 Exhaustion** | 5 | 62.5 |
| **Heat Syncope** | 1 | 12.5 |
| **Other Effects[‖]** | 2 | 25 |

§ Definitions of heat-related illness severity categories: https://www.cdc.gov/niosh/topics/heatstress/heatrelillness.html
‡ Missing severity data = 9
† 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 Carolina Weekly Heat-Illness Surveillance Report: North Coastal Plain (Region 5)
## May 18-24, 2025



## North Coastal Plain Area (Region 5) Key Messages

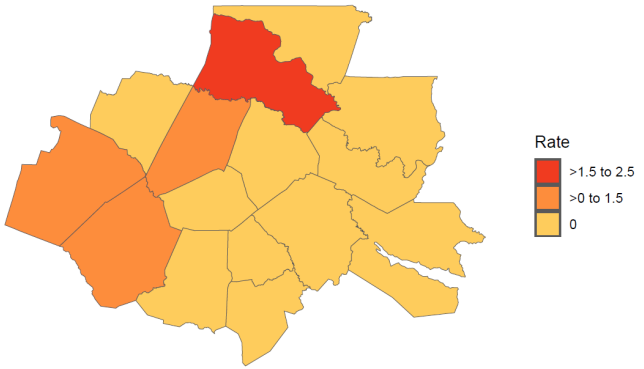
The average weekly rate of heat-related illness emergency department visits **this season to date is 0.6 per 100,000 population.**

**This week (May 18-24, 2025):**

- There were **14** HRI ED visits (0.07% of total ED visits), with a rate of **0.6 per 100,000 population**
- The rate was highest among **males aged 65+ years (2.8 HRI ED visits per 100,000 population)** (Figure 1)
- The rate of HRI ED visits was highest in **Halifax County (2.1 per 100,000 population)** (Figure 2)
- The most frequent heat related diagnosis codes were **heat exhaustion and heat syncope (n =3; 33.3%**) (Table 1)
- The maximum daily heat index ranged from **73.8 to 83.4°F** at Rocky Mount-Wilson Regional Airport (Figure 3)
- The daily minimum temperature was below 70 °F on all **7** days this week

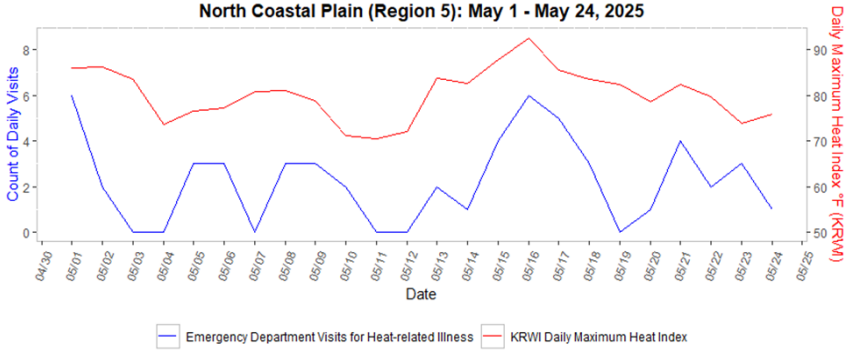
**Figure 1. Rate of Heat−Related Illness Emergency Department Visits by Sex and Age**
**North Coastal Plain (Region 5)**


**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 24, 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 = 9‡) | Percent† |
|---|---|---|
| **Heat Exhaustion** | 3 | 33.3 |
| **Heat Stroke** | 1 | 11.1 |
| **Heat Syncope** | 3 | 33.3 |
| **Other Effects‖** | 2 | 22.2 |

§ Definitions of heat-related illness severity categories: https://www.cdc.gov/niosh/topics/heatstress/heatrelillness.html
‡ Missing severity data = 5
† 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 Carolina Weekly Heat-related Illness Surveillance Report: Foothills (Region 6)

**May 18-24, 2025**



The regional report the Foothills is not provided 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)
## May 18-24, 2025



## Sandhills Area (Region 7) Key Messages

The average weekly rate of heat-related illness emergency department visits **this season to date is 1 per 100,000 population.**

**This week (May 18-24, 2025):**

- There were **10** HRI ED visits (0.08% of total ED visits), with a rate of **0.8 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 **Richmond County (2.3 per 100,000 population)** (Figure 2)
- The most frequent heat related diagnosis code was **other effects (n =2; 66.7%)** (Table 1)
- The maximum daily heat index ranged from **77.8 to 90°F** at Fayetteville Regional/Grannis Field 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 Sandhills (Region 7)**

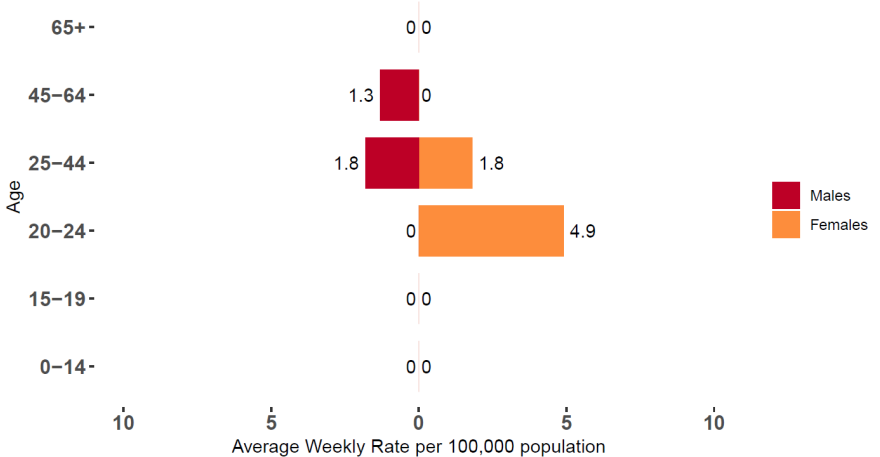
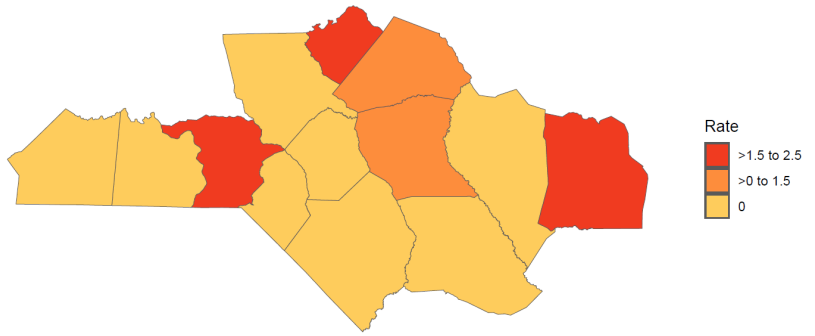
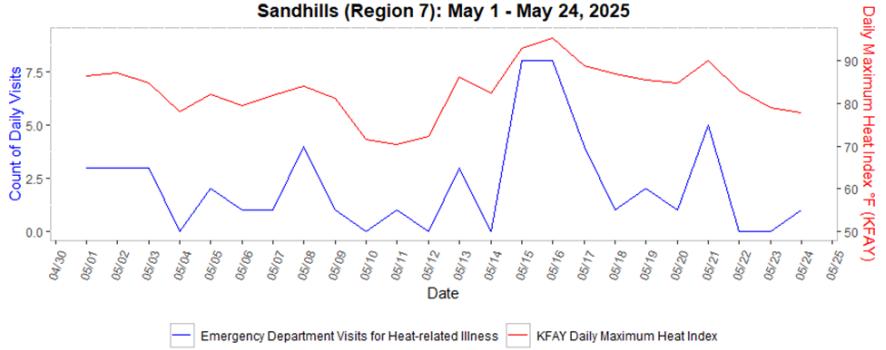



**Figure 2. Average Weekly Rate of Heat−Related Illness Emergency Department Visits per 100,000 Population Sandhills (Region 7)**




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 24, 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 Exhaustion** | 1 | 33.3 |
| **Other Effects‖** | 2 | 66.7 |

§ Definitions of heat-related illness severity categories: https://www.cdc.gov/niosh/topics/heatstress/heatrelillness.html

‡ Missing severity data = 7

† 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 Carolina Weekly Heat-related Illness Surveillance Report: Mountains (Region 8)
## May 18-24, 2025



## Mountain Area (Region 8) Key Messages

The average weekly rate of heat-related illness emergency department visits **this season to date is 0.2 per 100,000 population.**

**This week (May 18-24, 2025):**

- There were **3** HRI ED visits (0.04% of total ED visits), with a rate of **0.4 per 100,000 population**
- The rate was highest among **females aged 0-14 years (1.8 HRI ED visits per 100,000 population)** (Figure 1)
- The rate of HRI ED visits was highest in **Cherokee County (3.43 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 **67.1 to 81.5°F** at Asheville 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**
**Mountains (Region 8)**

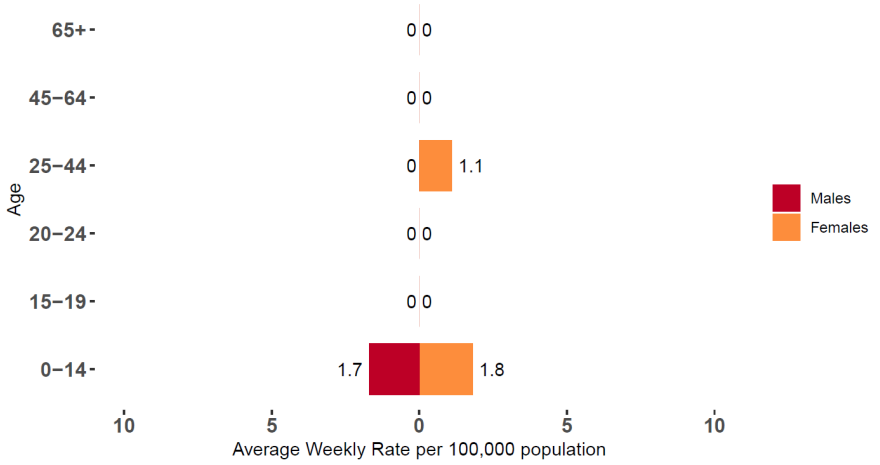
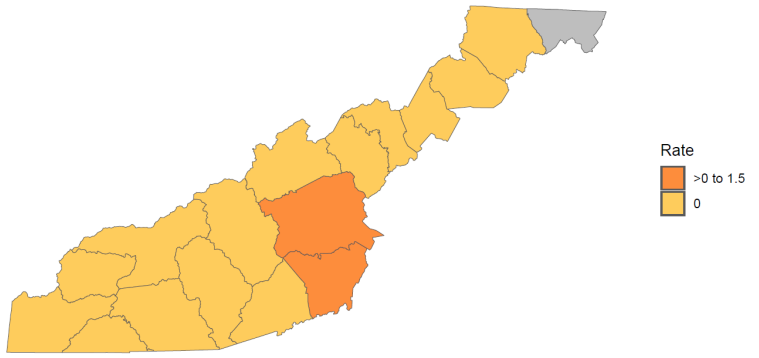
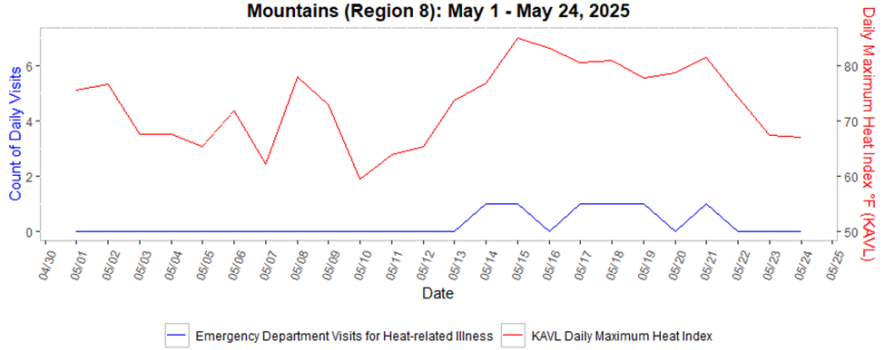



**Figure 2. Average Weekly Rate of Heat−Related Illness Emergency Department Visits per 100,000 Population**
**Mountains (Region 8)**




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**
**Mountains (Region 8): May 1 - May 24, 2025**




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

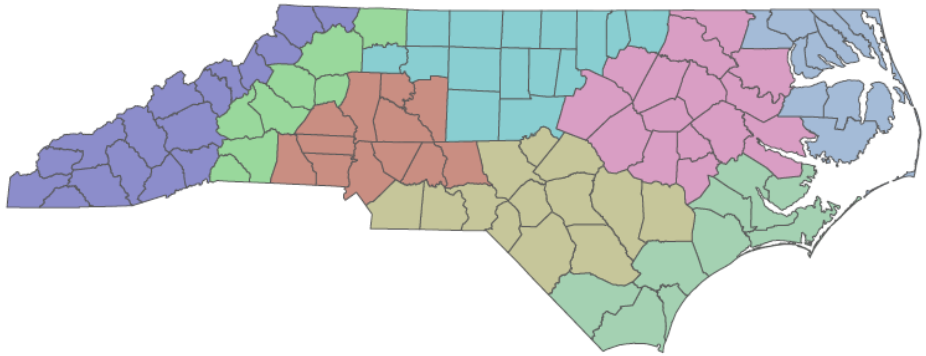
**Table 1. Heat-related illness ED visits by Severity**

| Severity§ | Number (N = 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 = 2
† 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 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)

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