

Statewide Key Messages

The average weekly rate of heat-related illness (HRI) emergency department (ED) visits **this season to date is 3.1 per 100,000 population.**

This week (August 10-16, 2025):

- There were **184*** HRI ED visits (0.2% of total ED visits), with a **rate of 1.7 per 100,000 population**
- The rate was highest among **males aged 20-24 years (4.6 per 100,000 population)** (Figure 1)
- The rate of HRI ED visits was highest in the **Foothills (2.5 per 100,000 population)**, (Figure 2; Region 6)
- The most frequent heat related diagnosis code was **heat exhaustion (n = 55; 61.1%)** (Table 1)
- The maximum daily heat index ranged from **86.8 to 99.1°F** at Raleigh-Durham International Airport (Figure 3)
- There were **6 days** when the minimum temperature was above 70°F.

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

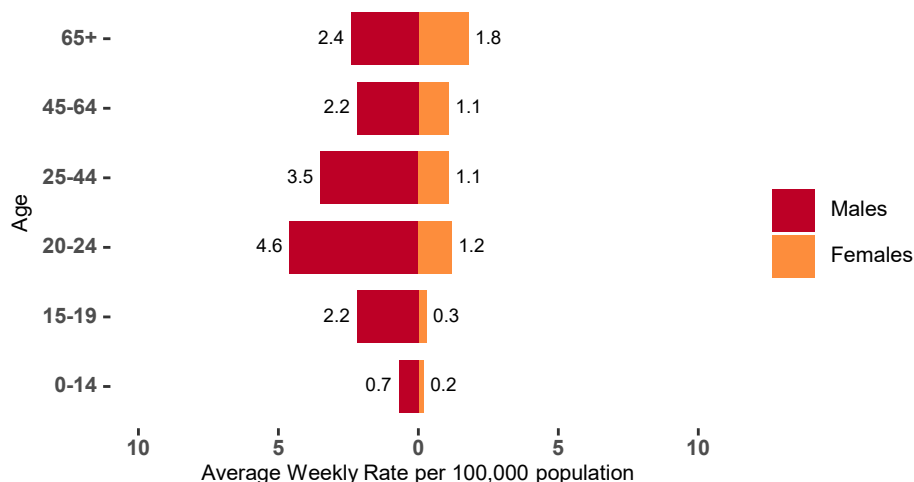
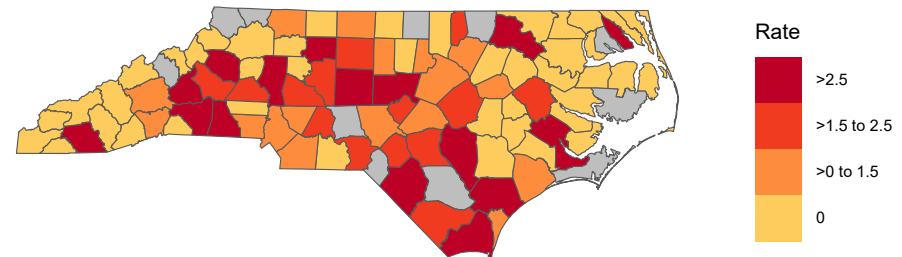


Figure 2. Rate of Heat-related Illness Emergency Department Visits per 100,000 Population



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 = 90 [‡])	Percent [†]
Heat Stroke	1	1.1
Heat Exhaustion	55	61.1
Heat Syncope	11	12.2
Heat Cramps	5	5.6
Other Effects	18	20.0

§ Definitions of heat-related illness severity categories:

<https://www.cdc.gov/niosh/heat-stress/about/illnesses.html>

‡ Missing severity data = 94

† 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 184 total HRI ED visits includes 11 visits that were missing county of residence. These 11 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 - August 16, 2025

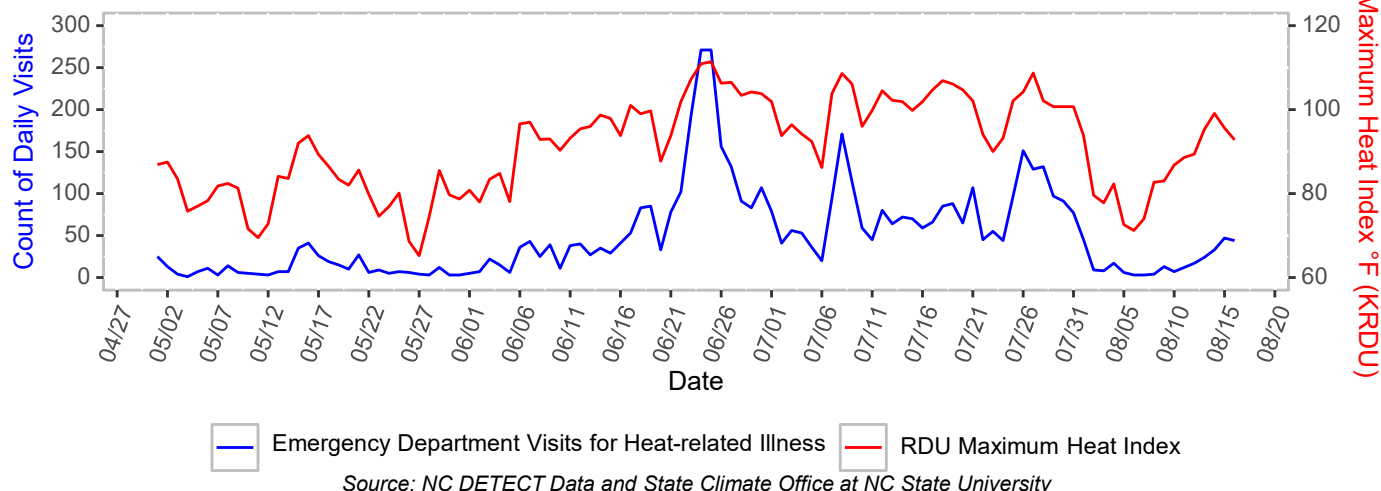
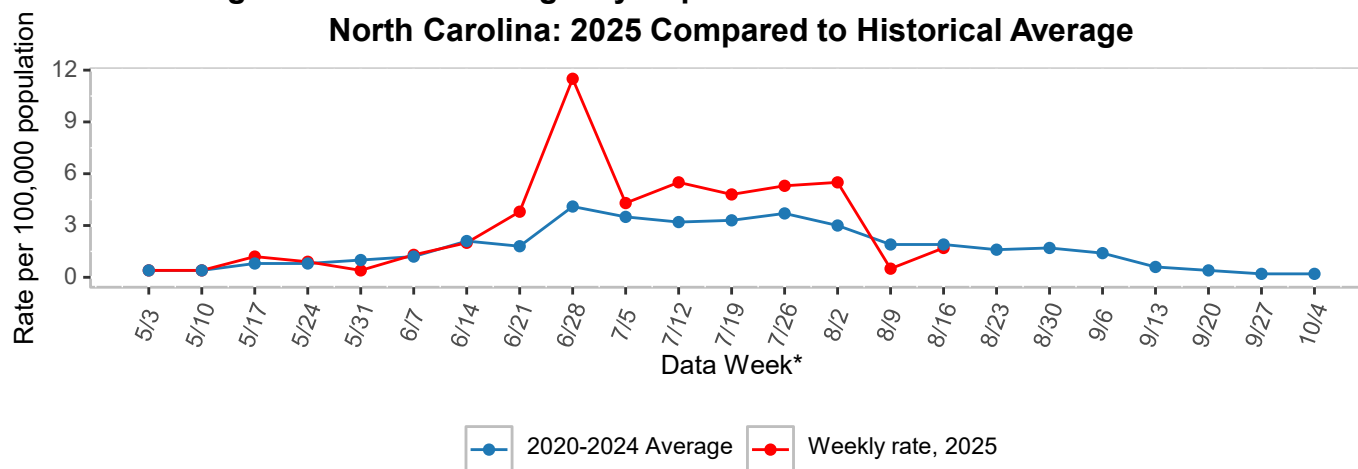


Figure 4. Rate of Emergency Department Visits for Heat-related Illness
North Carolina: 2025 Compared to Historical Average



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

Southeast (Region 1) Key Messages

The average weekly rate of heat-related illness emergency department visits **this season to date** is **3.8 per 100,000 population**.

This week (August 10-16, 2025):

- There were **19 HRI ED visits** (0.2% of total ED visits), with a rate of **2.1 per 100,000 population**
- The rate was highest among **males aged 25-44 years (7.2 HRI ED visits per 100,000 population)** (Figure 1)
- The rate of HRI ED visits was highest in **Brunswick County (4.8 per 100,000 population)** (Figure 2)
- The most frequent heat related diagnosis code was **heat exhaustion (n = 5; 55.6%)** (Table 1)
- The maximum daily heat index ranged from **85.8 to 99.1°F** at Wilmington International Airport (Figure 3)
- There were **7 days** when the minimum temperature was above 70°F.

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

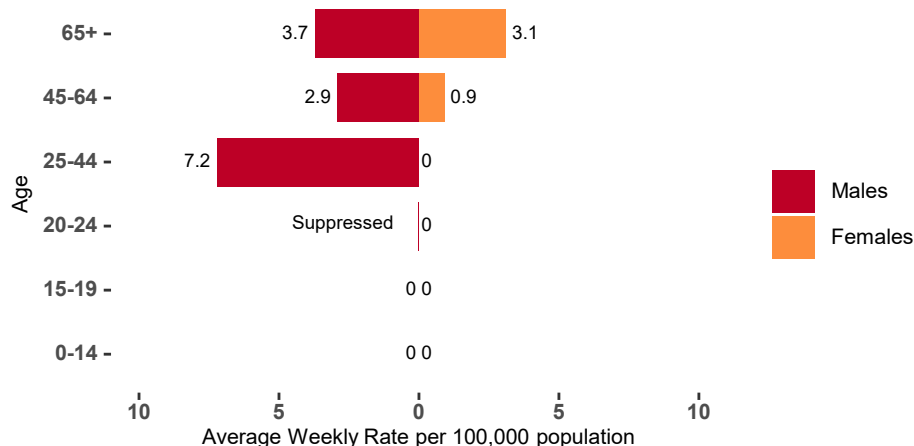
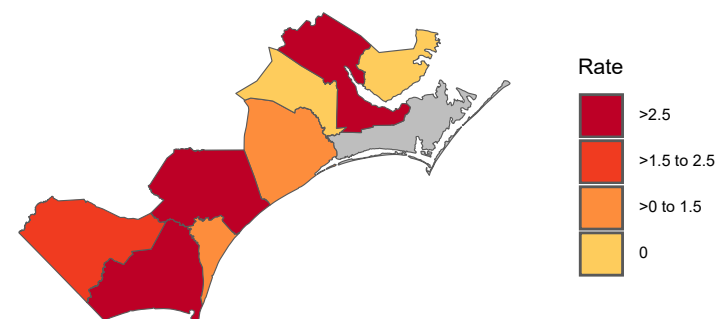


Figure 2. Average Weekly Rate of Heat-Related Illness Emergency Department Visits per 100,000 Population Southeast (Region 1)



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 - August 16, 2025

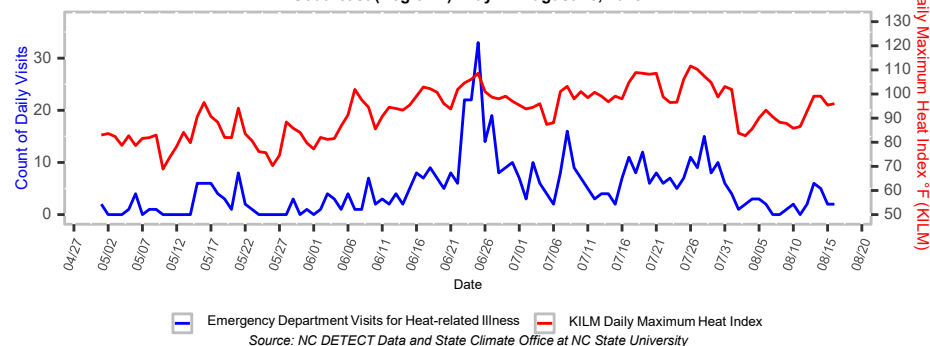


Table 1. Heat-related illness ED visits by Severity

Severity [§]	Number (N = 9 [‡])	Percent [†]
Heat Exhaustion	5	55.6
Heat Syncope	2	22.2
Other Effects	2	22.2

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

<https://www.cdc.gov/niosh/heat-stress/about/illnesses.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

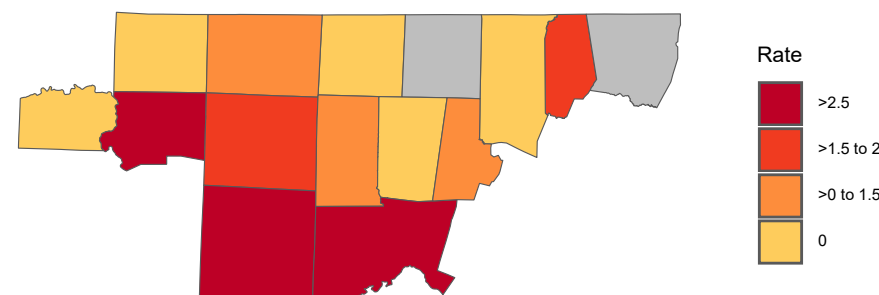
North Central (Region 2) Key Messages

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

This week (August 10-16, 2025):

- There were **40 HRI ED visits** (0.2% of total ED visits), with a rate of **1.8 per 100,000 population**
- The rate was highest among **males aged 20-24 years (4.1 HRI ED visits per 100,000 population)** (Figure 1)
- The rate of HRI ED visits was highest in **Randolph County (3.4 per 100,000 population)** (Figure 2)
- The most frequent heat related diagnosis code was **heat exhaustion (n = 13; 65%)** (Table 1)
- The maximum daily heat index ranged from **84.4 to 96°F** at Piedmont Triad International Airport (Figure 3)
- There were **6 days** when the minimum temperature was above 70°F.

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 - August 16, 2025

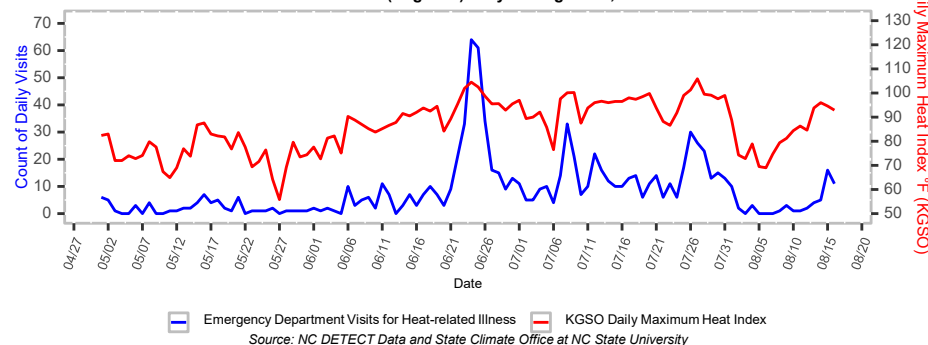


Figure 1. Rate of Heat-Related Illness Emergency Department Visits by Sex and Age North Central (Region 2)

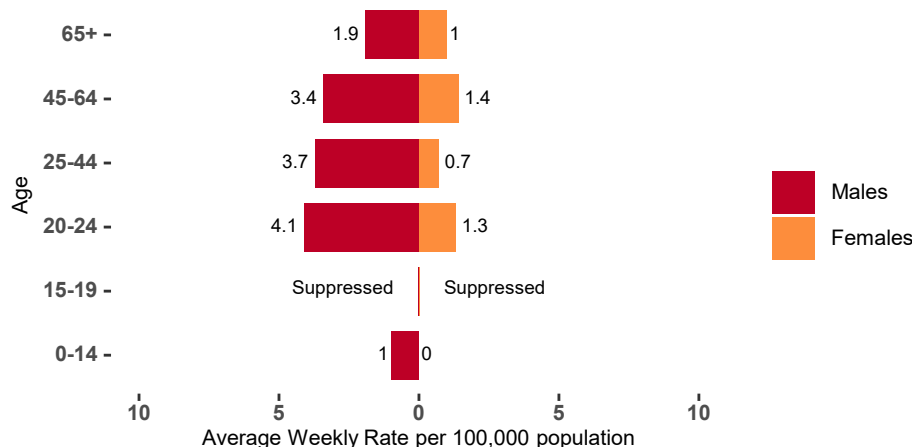


Table 1. Heat-related illness ED visits by Severity

Severity [§]	Number (N = 20 [‡])	Percent [†]
Heat Exhaustion	13	65
Heat Syncope	2	10
Heat Cramps	2	10
Other Effects	3	15

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

<https://www.cdc.gov/niosh/heat-stress/about/illnesses.html>

[‡] Missing severity data = 20

[†] May not total 100 due to rounding

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

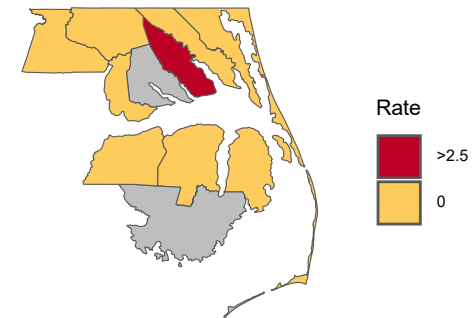
Northeast (Region 3) Key Messages

The average weekly rate of heat-related illness emergency department visits **this season to date** is **4.2 per 100,000 population**.

This week (August 10-16, 2025):

- There were **4 HRI ED visits** (0.2% of total ED visits), with a rate of **2 per 100,000 population**
- The rate of HRI ED visits was highest in **Pasquotank County (4.9 per 100,000 population)** (Figure 2)
- The most frequent heat related diagnosis code was **other effects (n = 2; 100%)** (Table 1)
- The maximum daily heat index ranged from **91.2 to 107.9°F** at Pitt-Greenville Airport (Figure 3)
- There were **6 days** when the minimum temperature was above 70°F.

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 - August 16, 2025

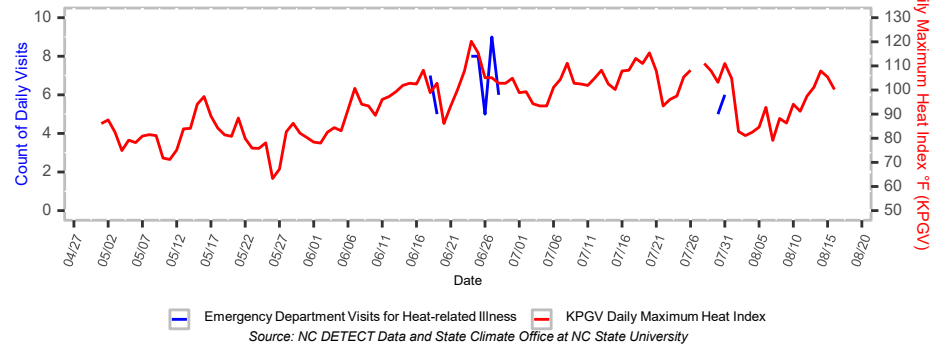


Table 1. Heat-related illness ED visits by Severity

Severity [§]	Number (N = 2 [‡])	Percent [†]
Other Effects	2	100

§ Definitions of heat-related illness severity categories:

<https://www.cdc.gov/niosh/heat-stress/about/illnesses.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

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

South Central (Region 4) Key Messages

The average weekly rate of heat-related illness emergency department visits **this season to date** is **2.7 per 100,000 population**.

This week (August 10-16, 2025):

- There were **43 HRI ED visits** (0.2% of total ED visits), with a rate of **1.7 per 100,000 population**
- The rate was highest among **males aged 20-24 years (6.3 HRI ED visits per 100,000 population)** (Figure 1)
- The rate of HRI ED visits was highest in **Cleveland County (3 per 100,000 population)** (Figure 2)
- The most frequent heat related diagnosis code was **heat exhaustion (n = 14; 56%)** (Table 1)
- The maximum daily heat index ranged from **85.8 to 99°F** at Charlotte/Douglas International Airport (Figure 3)
- There were **6 days** 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)

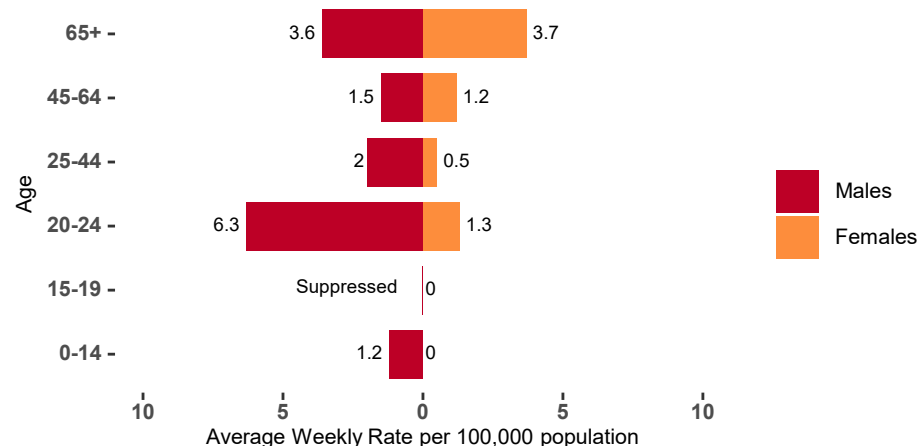
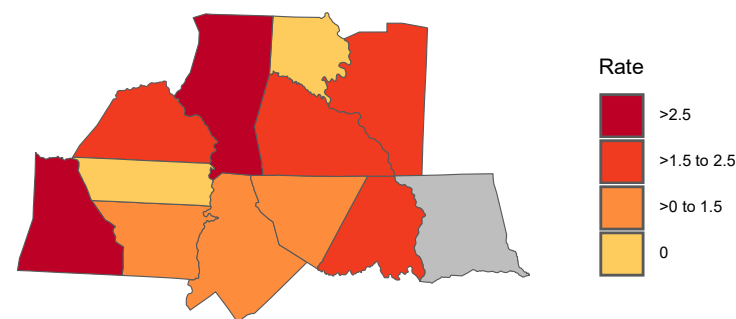


Figure 2. Average Weekly Rate of Heat-Related Illness Emergency Department Visits per 100,000 Population
South Central (Region 4)



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 - August 16, 2025

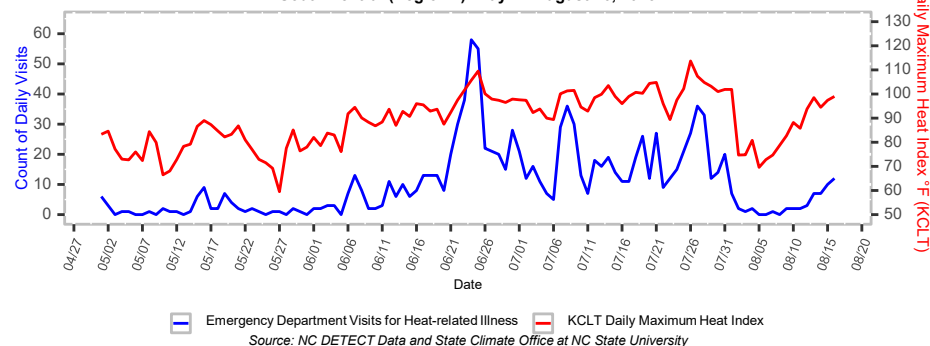


Table 1. Heat-related illness ED visits by Severity

Severity [§]	Number (N = 25 [‡])	Percent [†]
Heat Exhaustion	14	56
Heat Syncope	4	16
Heat Cramps	1	4
Other Effects	6	24

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

<https://www.cdc.gov/niosh/heat-stress/about/illnesses.html>

[‡] Missing severity data = 18

[†] 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 (Region 5) Key Messages

The average weekly rate of heat-related illness emergency department visits **this season to date** is **2.9 per 100,000 population**.

This week (August 10-16, 2025):

- There were **19 HRI ED visits** (0.1% of total ED visits), with a rate of **0.9 per 100,000 population**
- The rate was highest among **males aged 20-24 years (2.8 HRI ED visits per 100,000 population)** (Figure 1)
- The rate of HRI ED visits was highest in **Halifax County (4.2 per 100,000 population)** (Figure 2)
- The most frequent heat related diagnosis code was **heat exhaustion (n = 5; 83.3%)** (Table 1)
- The maximum daily heat index ranged from **86.7 to 98.5°F** at Rocky Mount-Wilson Regional Airport (Figure 3)
- There were **6 days** when the minimum temperature was above 70°F.

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

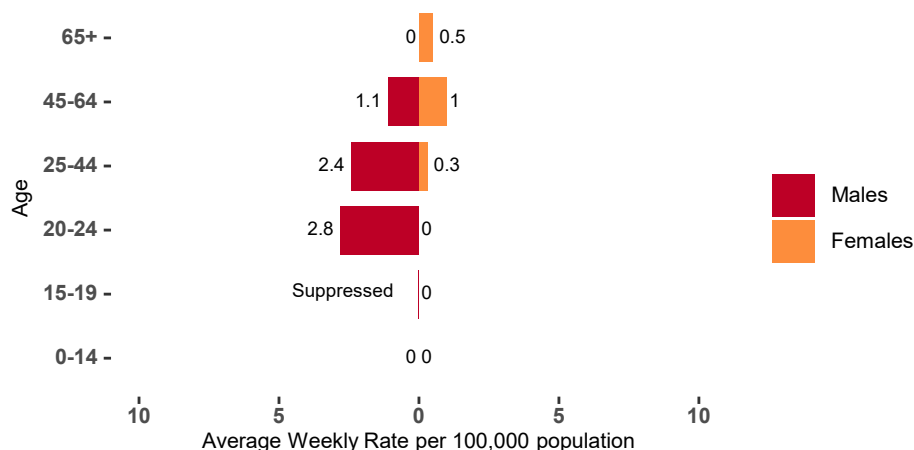
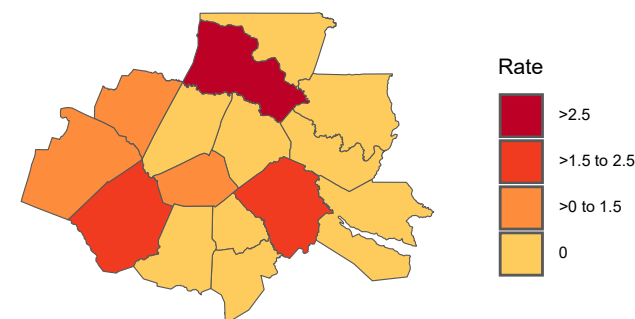


Figure 2. Average Weekly Rate of Heat-Related Illness Emergency Department Visits per 100,000 Population
North Coastal Plain (Region 5)



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 - August 16, 2025

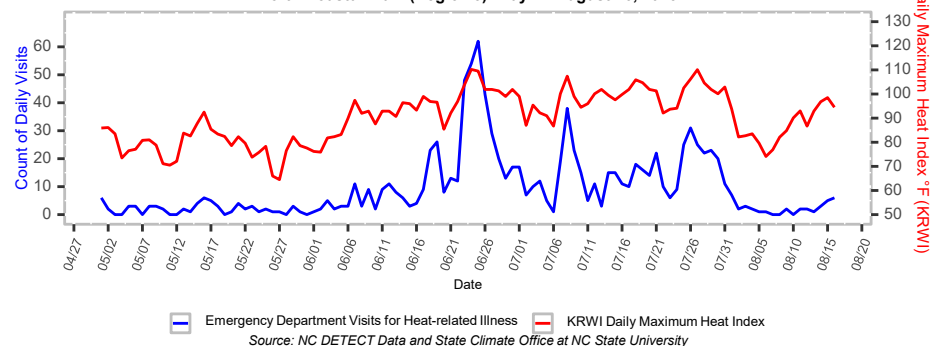


Table 1. Heat-related illness ED visits by Severity

Severity [§]	Number (N = 6 [†])	Percent [†]
Heat Exhaustion	5	83.3
Heat Cramps	1	16.7

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

<https://www.cdc.gov/niosh/heat-stress/about/illnesses.html>

[‡] Missing severity data = 13

[†] 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 (Region 6) Key Messages

The average weekly rate of heat-related illness emergency department visits **this season to date is 4 per 100,000 population.**

This week (August 10-16, 2025):

- There were **12 HRI ED visits** (0.2% of total ED visits), with a rate of **2.5 per 100,000 population**
- The rate was highest among **males aged 65+ years (6.4 HRI ED visits per 100,000 population)** (Figure 1)
- The rate of HRI ED visits was highest in **Caldwell County (5 per 100,000 population)** (Figure 2)
- The most frequent heat related diagnosis codes were **heat exhaustion and other effects (n = 1; 50%)** (Table 1)
- The maximum daily heat index ranged from **79.1 to 99.9°F** at Morganton-Lenoir Airport (Figure 3)
- There were **4 days** when the minimum temperature was above 70°F.

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

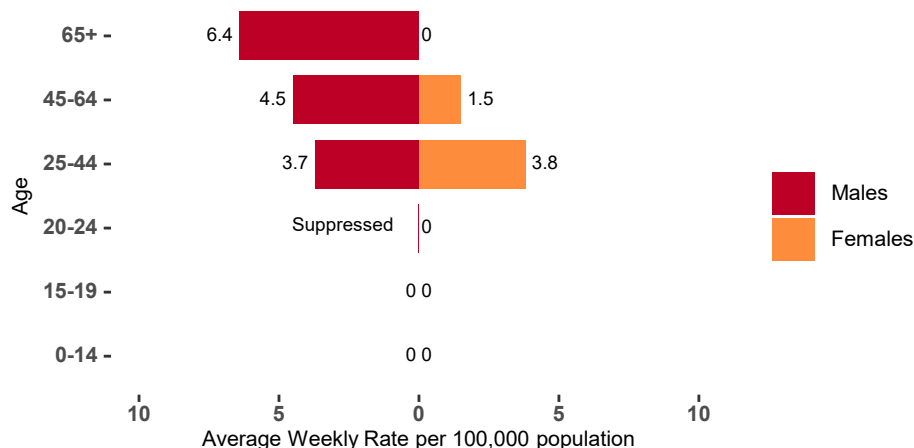
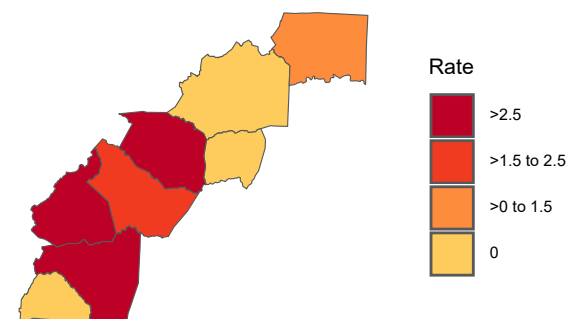


Figure 2. Average Weekly Rate of Heat-Related Illness Emergency Department Visits per 100,000 Population
Foothills (Region 6)



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 - August 16, 2025

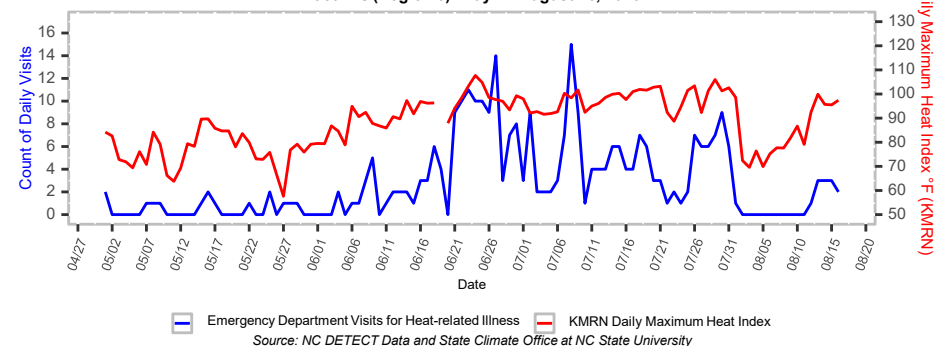


Table 1. Heat-related illness ED visits by Severity

Severity [§]	Number (N = 2 [†])	Percent [†]
Heat Exhaustion	1	50
Other Effects	1	50

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

<https://www.cdc.gov/niosh/heat-stress/about/illnesses.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

Sandhills (Region 7) 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 10-16, 2025):

- There were **27 HRI ED visits** (0.2% of total ED visits), with a rate of **2.1 per 100,000 population**
- The rate was highest among **males aged 25-44 years (6 HRI ED visits per 100,000 population)** (Figure 1)
- The rate of HRI ED visits was highest in **Sampson County (6.8 per 100,000 population)** (Figure 2)
- The most frequent heat related diagnosis code was **heat exhaustion (n = 13; 76.5%)** (Table 1)
- The maximum daily heat index ranged from **80 to 101°F** at Fayetteville Regional/Grannis Field Airport (Figure 3)
- There were **6 days** 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)

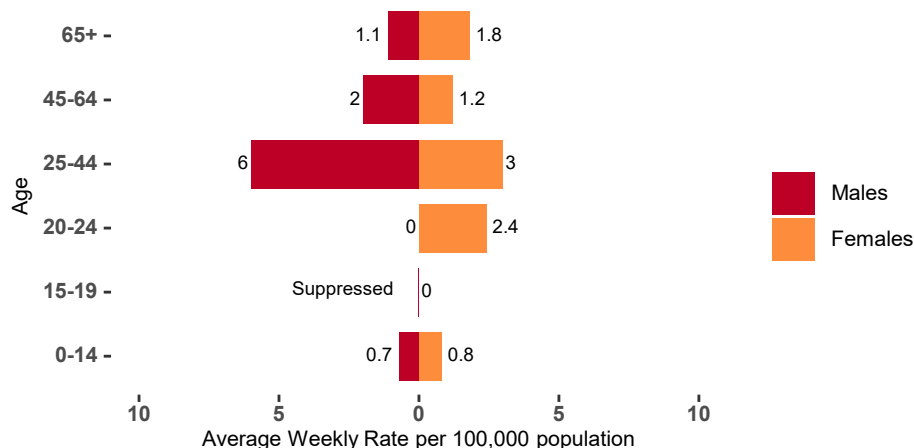
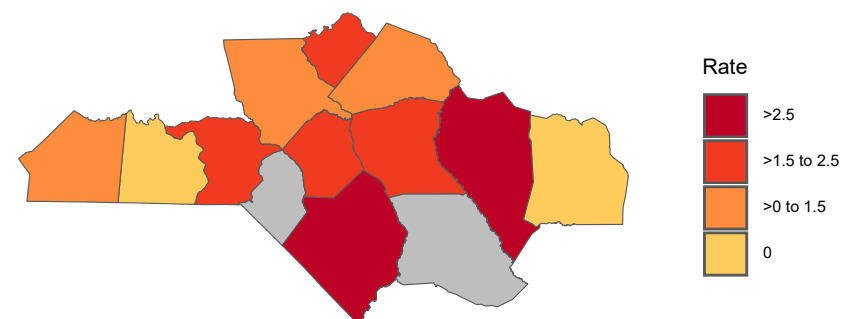


Figure 2. Average Weekly Rate of Heat-Related Illness Emergency Department Visits per 100,000 Population Sandhills (Region 7)



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 - August 16, 2025

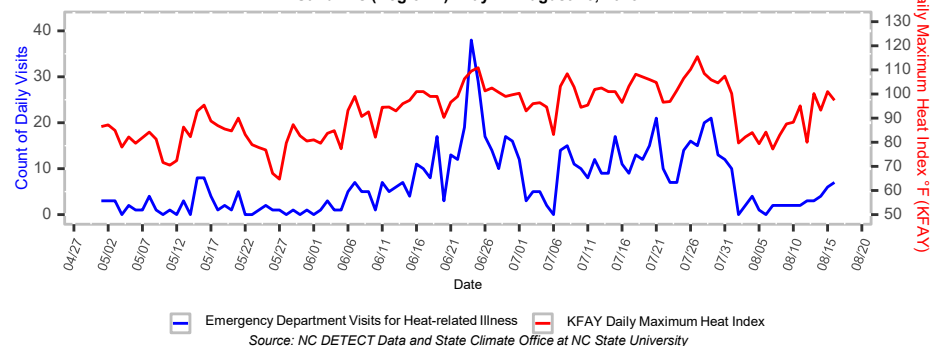


Table 1. Heat-related illness ED visits by Severity

Severity [§]	Number (N = 17 [‡])	Percent [†]
Heat Exhaustion	13	76.5
Heat Syncope	1	5.9
Other Effects	3	17.6

§ Definitions of heat-related illness severity categories:

<https://www.cdc.gov/niosh/heat-stress/about/illnesses.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

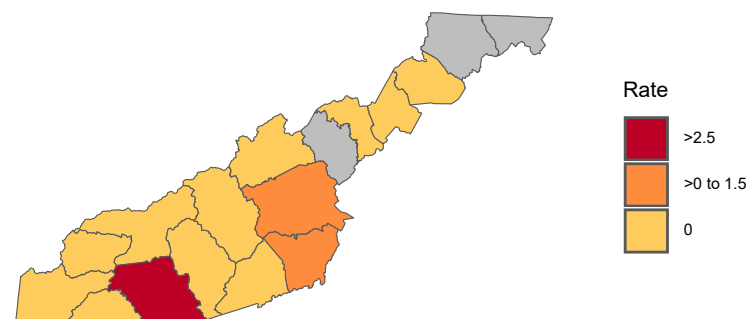
Mountains (Region 8) Key Messages

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

This week (August 10-16, 2025):

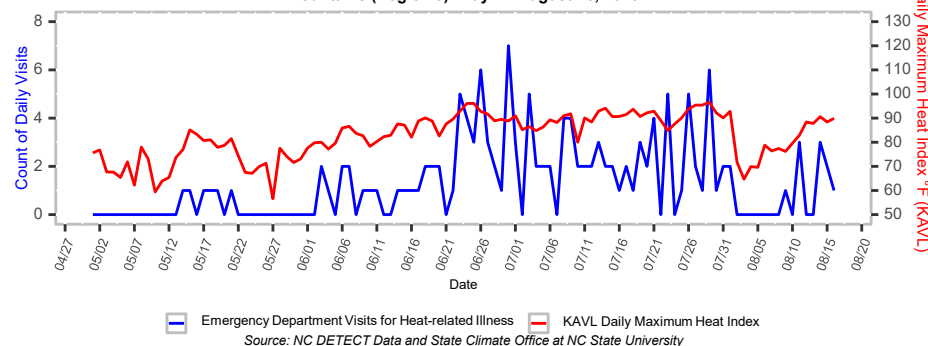
- There were **9 HRI ED visits**(0.1% of total ED visits), with a rate of **1.1per 100,000 population**
- The rate was highest among **males aged 25-44 years (3.2 HRI ED visits per 100,000 population)** (Figure 1)
- The rate of HRI ED visits was highest in **Macon County (5.3 per 100,000 population)** (Figure 2)
- The most frequent heat related diagnosis codes were **heat stroke, heat exhaustion, heat syncope, and other effects (n = 1; 25%)** (Table 1)
- The maximum daily heat index ranged from **79.6 to 90.6°F** at Asheville Regional 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
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 - August 16, 2025



Emergency Department Visits for Heat-related Illness KAVL Daily Maximum Heat Index
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	1	25
Heat Exhaustion	1	25
Heat Syncope	1	25
Other Effects	1	25

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

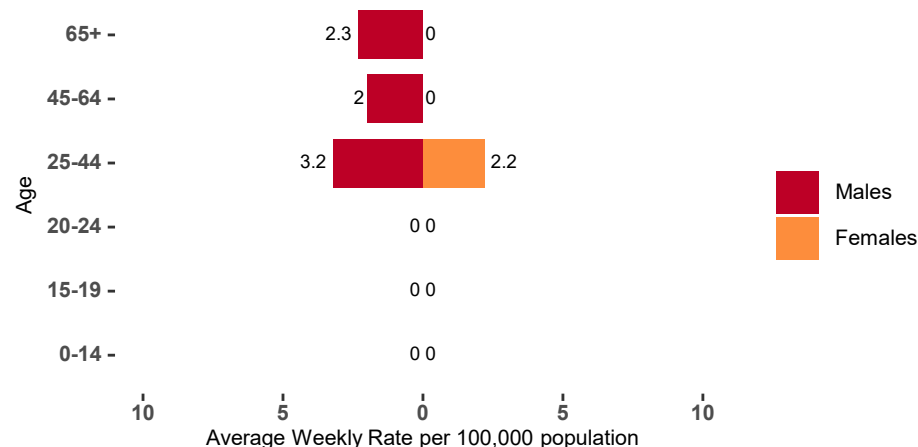
<https://www.cdc.gov/niosh/heat-stress/about/illnesses.html>

[‡] Missing severity data = 5

[†] May not total 100 due to rounding

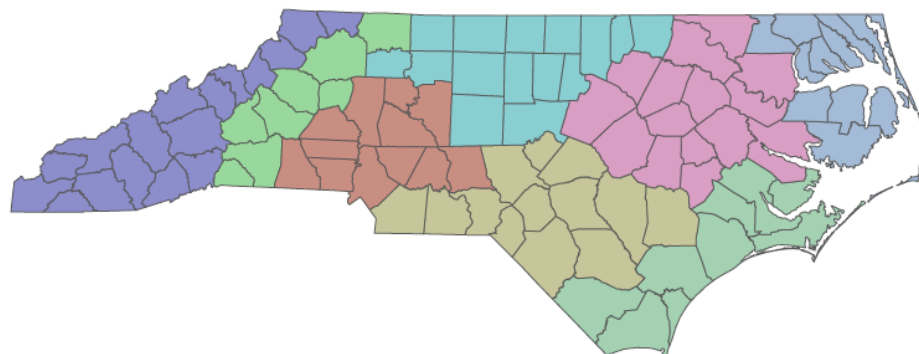
^{||} other effects include heat fatigue, heat edema, other effects of heat and light, and other effects unspecified

Figure 1. Rate of Heat-Related Illness Emergency Department Visits by Sex and Age
Mountains (Region 8)



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).

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