North Carolina Statewide Weekly Heat-related Illness Surveillance Report
May 11-17, 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 11-17, 2025):

- There were **104 HRI ED visits** (0.1% of total ED visits), with a **rate of 1 per 100,000 population**
- The rate was highest among **males** aged **45-64 years (1.7 per 100,000 population**) (Figure 1)
- The rate of HRI ED visits was highest in **Southeast NC** and the **Sandhills** (**1.9 per 100,000 population**). (Figure 2; Region 1)
- The most frequent heat related diagnosis code was **heat exhaustion (n =28; 52.8%**) (Table 1)
- The maximum daily heat index ranged from **69.5** to **93.8°F** at Raleigh-Durham 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

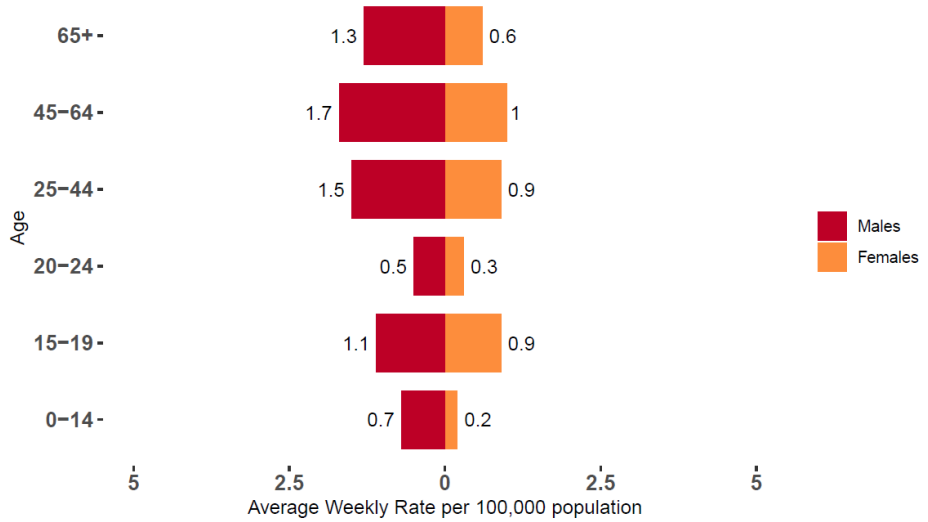
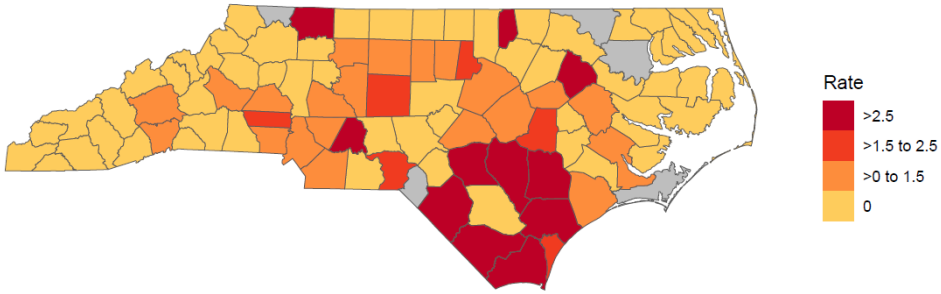


Figure 2. Rate of Heat−related Illness Emergency Department Visits per 100,000 Population



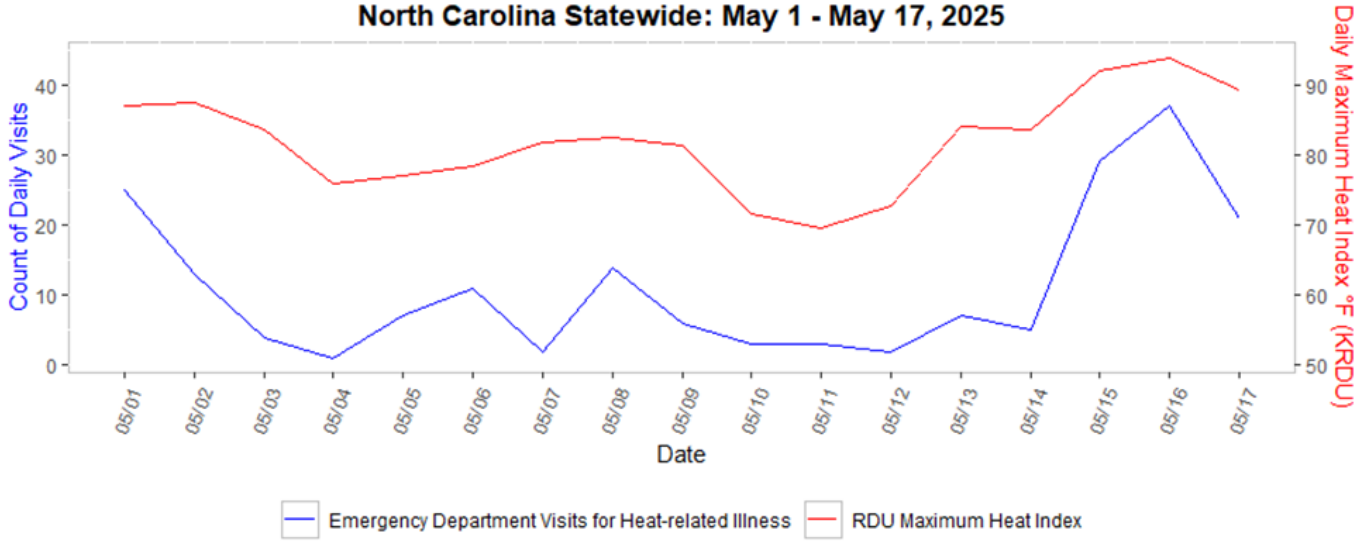
Rates based on counts between 1−4 are suppressed for counties with less than 500 total ED visits, as shown in gray.

Table 1. Heat-related illness ED visits by Severity

Severity[§]	Number (N =53[‡])	Percent[†]
Heat Cramps	1	1.9
Heat Exhaustion	28	52.8
Heat Stroke	1	1.9
Heat Syncope	12	22.6
Other Effects[‖]	11	20.8

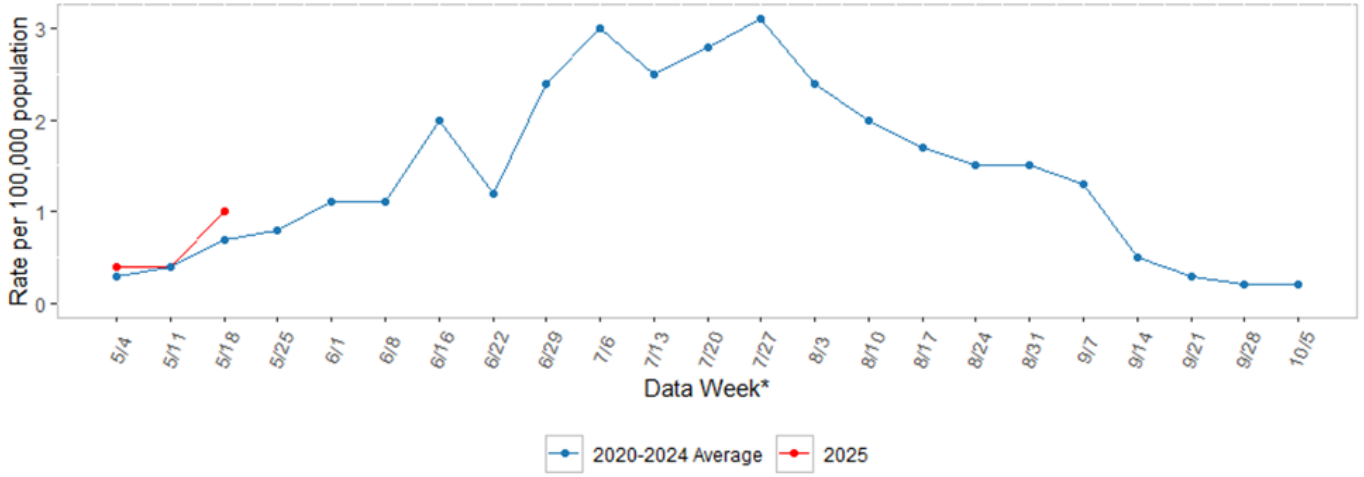
§ Definitions of heat-related illness severity categories: https://www.cdc.gov/niosh/topics/heatstress/heatrelillness.html
‡ Missing severity data = 51
† May not total 100 due to rounding
‖ other effects include heat fatigue, heat edema, other effects of heat and light, and other effects unspecified

Figure 3. Emergency Department Visits for Heat-related Illness and Max Heat Index
North Carolina Statewide: May 1 - May 17, 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 per 100,000 population.**

This week (May 11-17, 2025):

- There were **17** HRI ED visits (0.2% of total ED visits), with a rate of **1.9 per 100,000 population**
- The rate was highest among **males aged 45-64 years (4.9 HRI ED visits per 100,000 population)** (Figure 1)
- The rate of HRI ED visits was highest in **Columbus County (4 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 **73.8 to 96.5°F** at Wilmington International Airport (Figure 3)
- There were **3** 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)

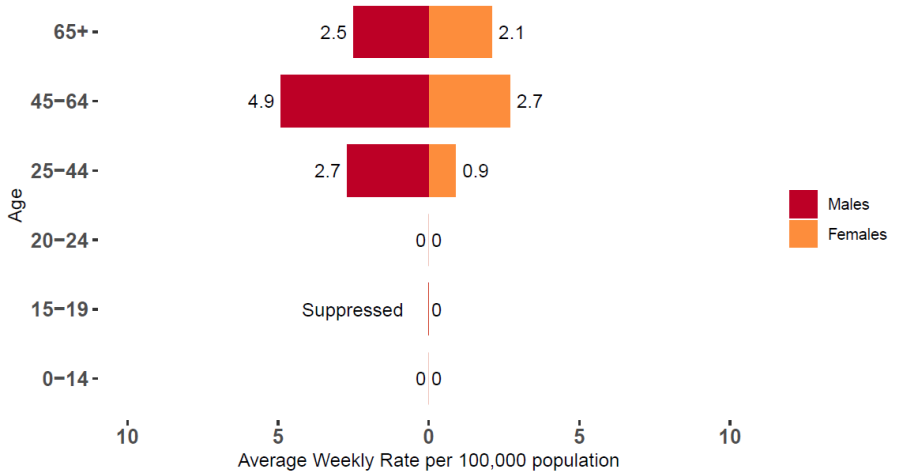
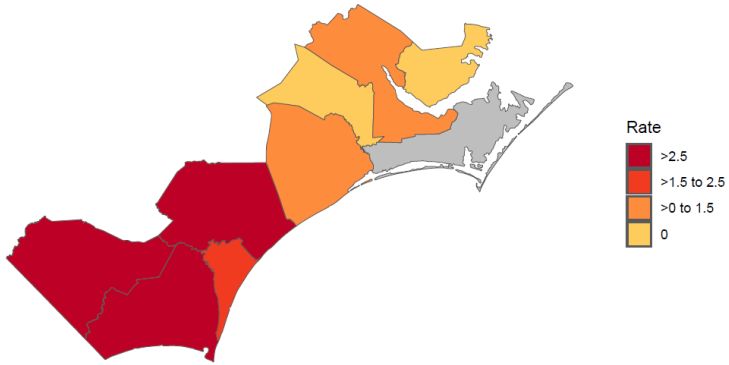
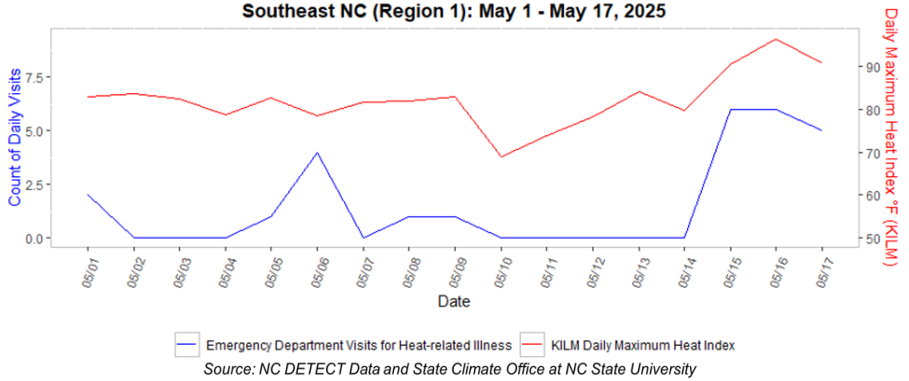


Figure 2. Average Weekly Rate of Heat−Related Illness Emergency Department Visits per 100,000 Population Southeast NC (Region 1)



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 17, 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 Cramps	1	14.3
Heat Exhaustion	3	42.9
Heat Syncope	2	28.6
Other Effects[‖]	1	14.3

§ 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 Carolina Weekly Heat-related Illness Surveillance Report: North Central NC (Region 2)
May 11-17, 2025

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 11-17, 2025):

- There were **18** HRI ED visits (0.1% of total ED visits), with a rate of **0.8 per 100,000 population**
- The rate was highest among **males aged 25-44 years and males aged 45-64 (1.9 HRI ED visits per 100,000 population)** (Figure 1)
- The rate of HRI ED visits was highest in **Vance County (4.7 per 100,000 population)** (Figure 2)
- The most frequent heat related diagnosis code was **heat exhaustion (n =4; 50%**) (Table 1)
- The maximum daily heat index ranged from **64.9 to 87.6°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)

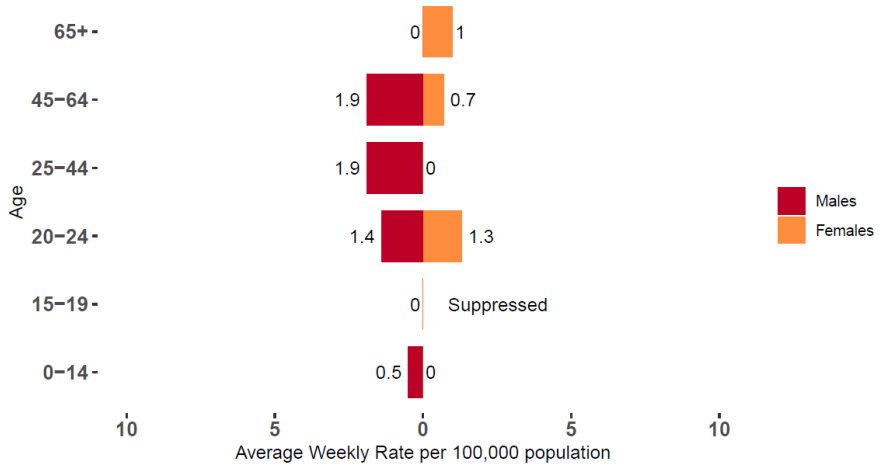
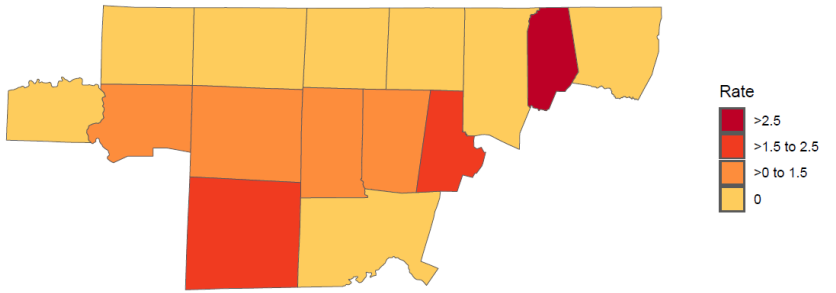
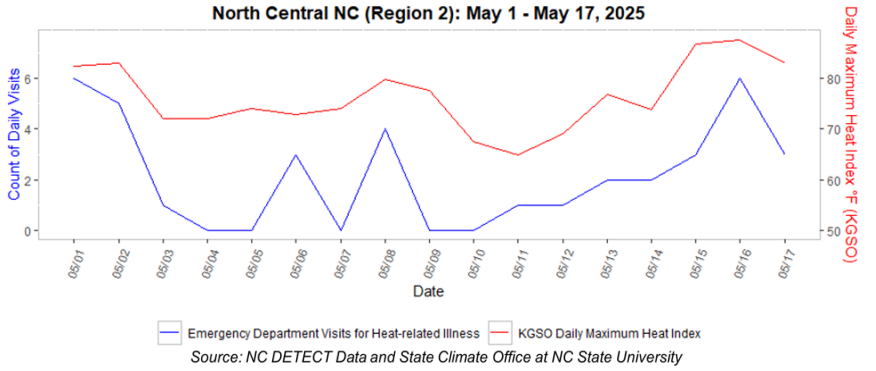


Figure 2. Average Weekly Rate of Heat−Related Illness Emergency Department Visits per 100,000 Population
North Central NC (Region 2)



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 17, 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	4	50
Heat Syncope	3	37.5
Other Effects‖	1	12.5

§ 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 Carolina Weekly Heat-related Illness Surveillance Report: Northeast NC (Region 3)
May 11-17, 2025

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

North Carolina Weekly Heat-related Illness Surveillance Report: South Central NC (Region 4)
May 11-17, 2025

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 11-17, 2025):

- There were **20** 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 45-64 years, males aged 0-14,** and **males aged 65+ (1.2 HRI ED visits per 100,000 population)** (Figure 1)
- The rate of HRI ED visits was highest in **Stanly County (3.2 per 100,000 population)** (Figure 2)
- The most frequent heat related diagnosis code was **other effects (n =6, 54.5%**) (Table 1)
- The maximum heat daily index ranged from **68.1 to 89°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 NC (Region 4)

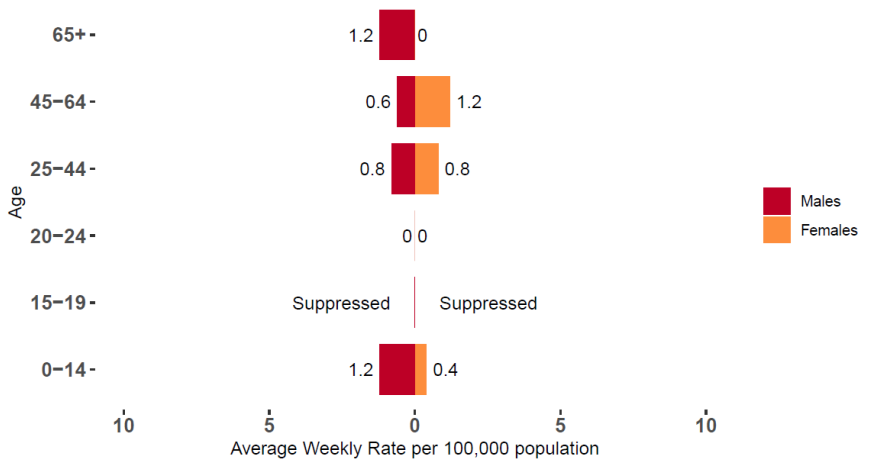
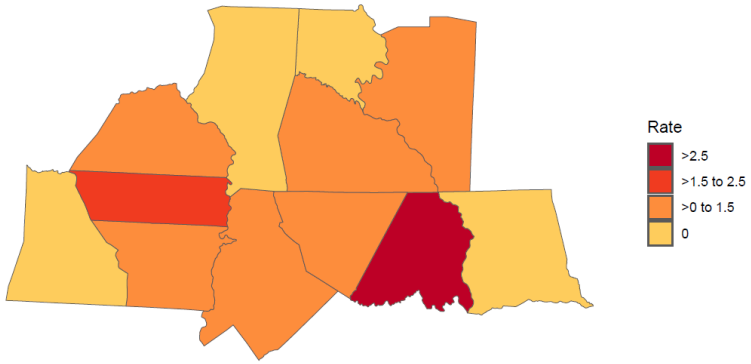
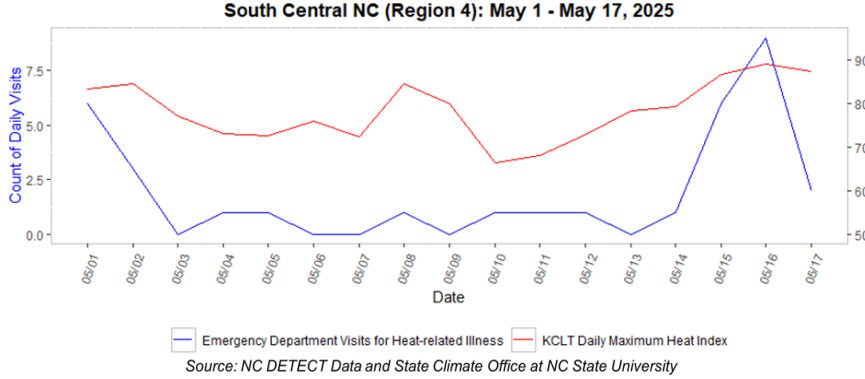


Figure 2. Average Weekly Rate of Heat−Related Illness Emergency Department Visits per 100,000 Population
South Central NC (Region 4)



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 17, 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 = 11‡)	Percent†
Heat Exhaustion	4	36.4
Heat Syncope	1	9.1
Other Effects‖	6	54.5

§ 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 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 11-17, 2025):

- There were **18** HRI ED visits (0.1% of total ED visits), with a rate of **0.8 per 100,000 population**
- The rate was highest among **males aged 65+ years (2.1 HRI ED visits per 100,000 population)** (Figure 1)
- The rate of HRI ED visits was highest in **Edgecombe County (4.1 per 100,000 population)** (Figure 2)
- The most frequent heat related diagnosis code was **heat syncope (n =3; 50%**) (Table 1)
- The maximum daily heat index ranged from **70.5 to 92.5°F** at Rocky Mount-Wilson Regional 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
North Coastal Plain (Region 5)

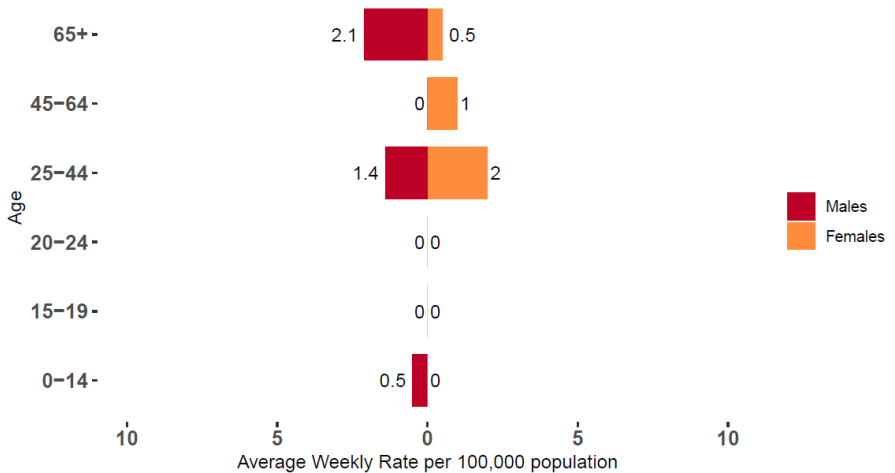
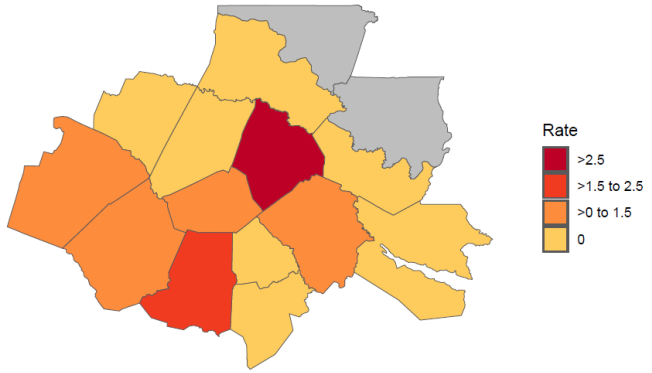
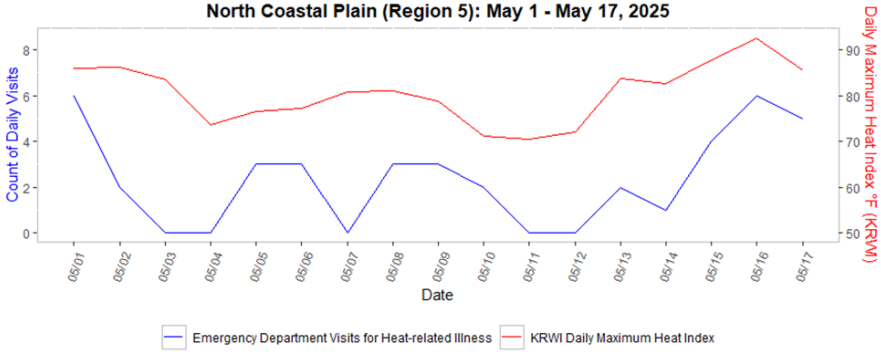


Figure 2. Average Weekly Rate of Heat−Related Illness Emergency Department Visits per 100,000 Population
North Coastal Plain (Region 5)



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 17, 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 = 6‡)	Percent†
Heat Exhaustion	2	33.3
Heat Syncope	3	50
Other Effects‖	1	16.7

§ Definitions of heat-related illness severity categories: https://www.cdc.gov/niosh/topics/heatstress/heatrelillness.html
‡ Missing severity data = 12
† 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 0.5 per 100,000 population.**

This week (May 11-17, 2025):

- There were **4** HRI ED visits (0.1% of total ED visits), with a rate of **0.8 per 100,000 population**
- The rate was highest among **males aged 45-64 years (4.5 HRI ED visits per 100,000 population)** (Figure 1)
- The rate of HRI ED visits was highest in **Surry County (4.2 per 100,000 population)** (Figure 2)
- The most frequent heat related diagnosis code was **heat exhaustion (n =3; 100%**) (Table 1)
- The maximum daily heat index ranged from **63.8 to 89.7°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)

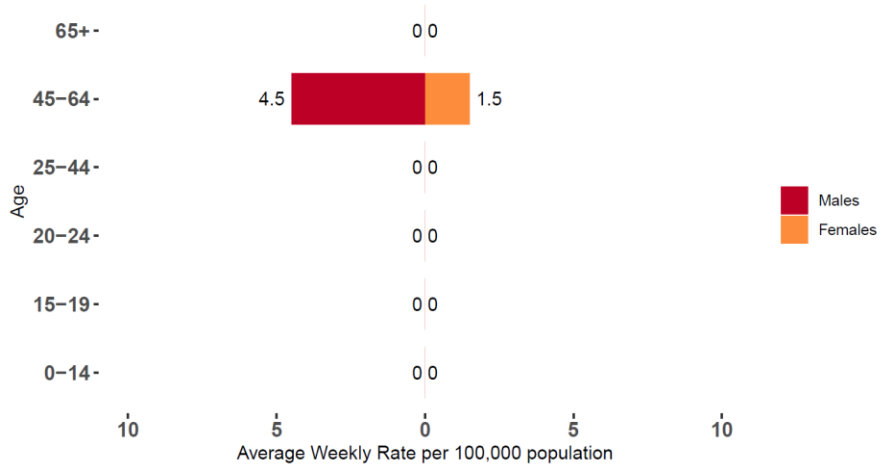
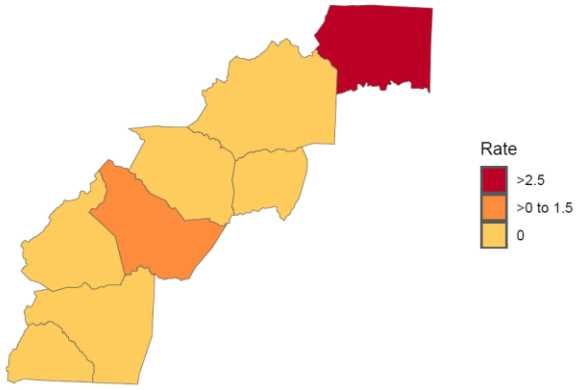
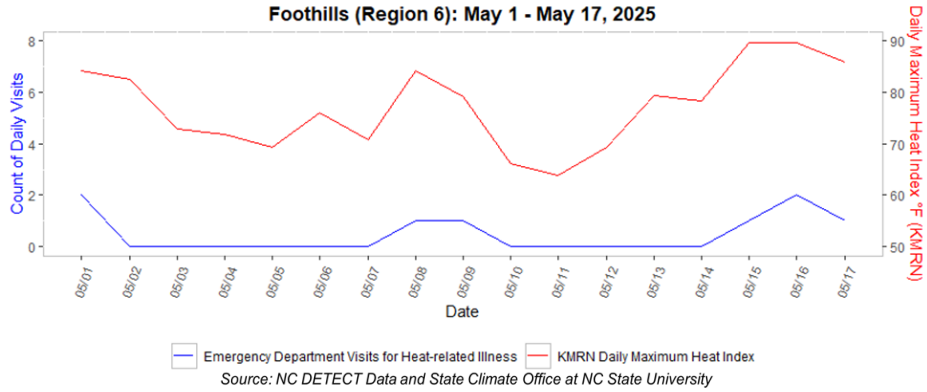


Figure 2. Average Weekly Rate of Heat−Related Illness Emergency Department Visits per 100,000 Population Foothills (Region 6)



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 - May 17, 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	3	100

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

‡ Missing severity data = 1

† 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 Area (Region 7) Key Messages

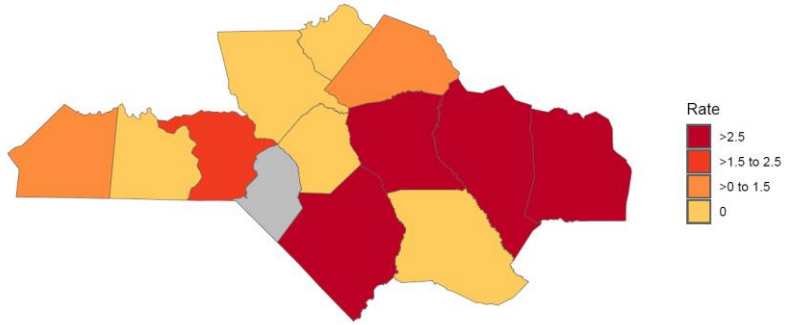
The average weekly rate of heat-related illness emergency department visits **this season to date is 1.1 per 100,000 population.**

This week (May 11-17, 2025):

- There were **24** HRI ED visits (0.2% of total ED visits), with a rate of **1.9 per 100,000 population**
- The rate was highest among **males aged 45-64 years (5.3 HRI ED visits per 100,000 population)** (Figure 1)
- The rate of HRI ED visits was highest in **Sampson County (5.1 per 100,000 population)** (Figure 2)
- The most frequent heat related diagnosis code was **heat exhaustion (n =11; 64.7%**) (Table 1)
- The maximum daily heat index ranged from **70.5 to 95.4°F** at Fayetteville Regional/Grannis Field Airport (Figure 3)
- There was **1** day when the minimum temperature was above 70°F

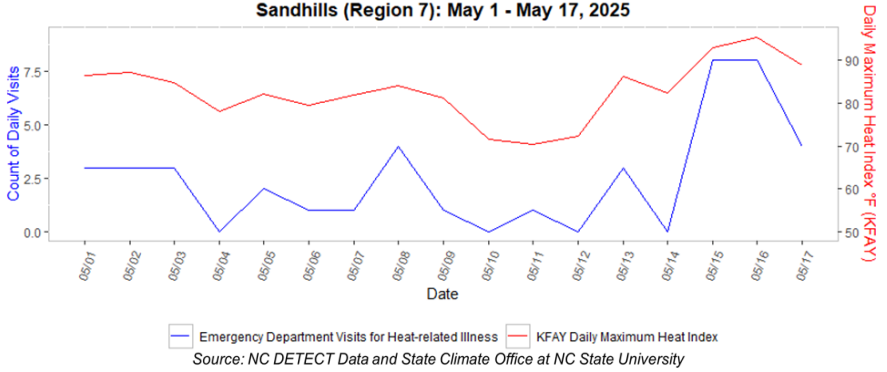
Figure 1. Rate of Heat−Related Illness Emergency Department Visits by Sex and Age Sandhills (Region 7)

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 17, 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 = 17‡)	Percent†
Heat Exhaustion	11	64.7
Heat Stroke	1	5.9
Heat Syncope	3	17.6
Other Effects‖	2	11.8

§ 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

Mountain Area (Region 8) Key Messages

The average weekly rate of heat-related illness emergency department visits **this season to date is 0.1 per 100,000 population.**

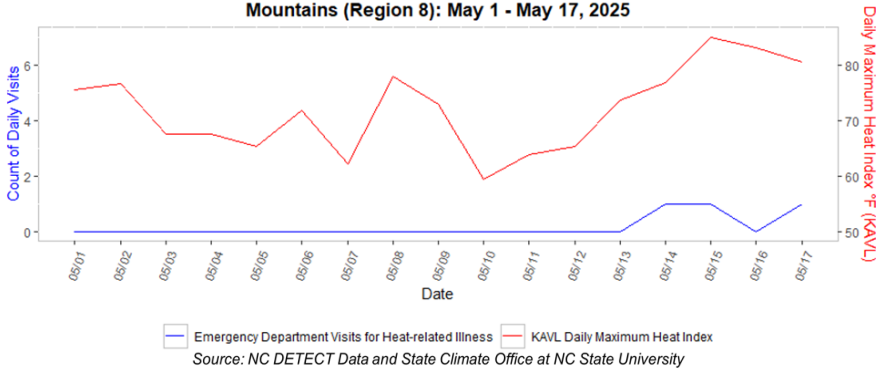
This week (May 11-17, 2025):

- There were **3** HRI ED visits (0% of total ED visits), with a rate of **0.4 per 100,000 population**
- The rate was highest among **males aged 65+ years (1.2 HRI ED visits per 100,000 population)** (Figure 1)
- The rate of HRI ED visits was highest in **Henderson County (0.9 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 **63.9 to 85.1°F** at Asheville Regional Airport (Figure 3)
- The daily minimum temperature was below 70 °F on all **7** days this week

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

Figure 2 is not provided for the Mountain Area this week due to the small number of ED visits for heat-related illness.

Figure 3. Emergency Department Visits for Heat-related Illness and Maximum Heat Index
Mountains (Region 8): May 1 - May 17, 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

About the data

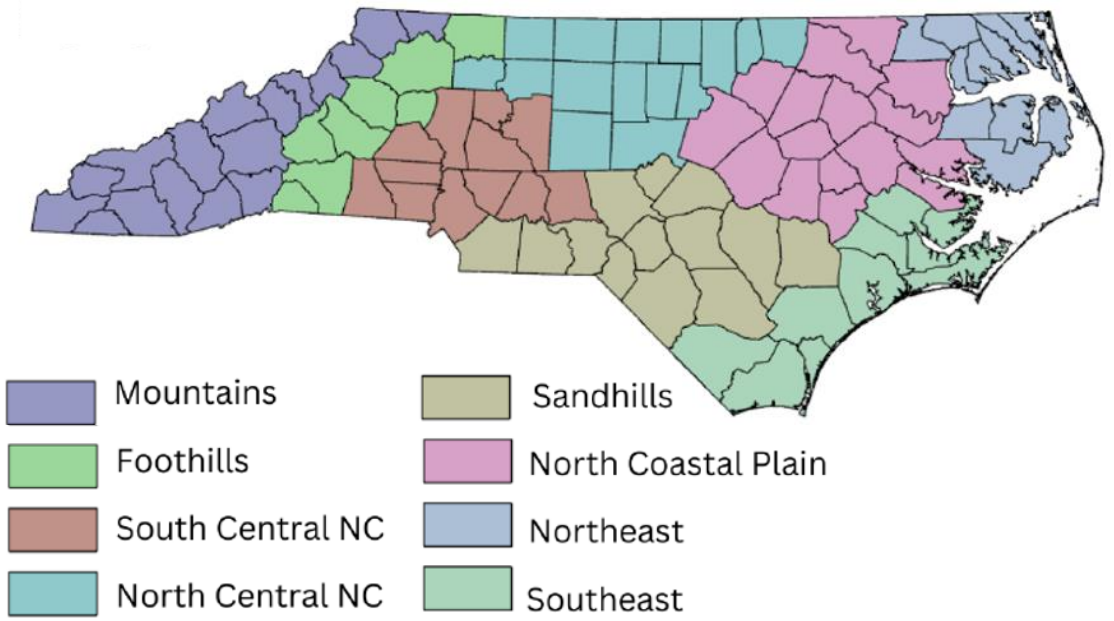
The heat-related illness data in the report is from NC DETECT. NC DETECT is a statewide public health syndromic surveillance system, funded by the NC Division of Public Health (NC DPH) Federal Public Health Emergency Preparedness Grant and managed through collaboration between NC DPH and the UNC-CH Department 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:

North Carolina HRI Surveillance Regions

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



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)

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