

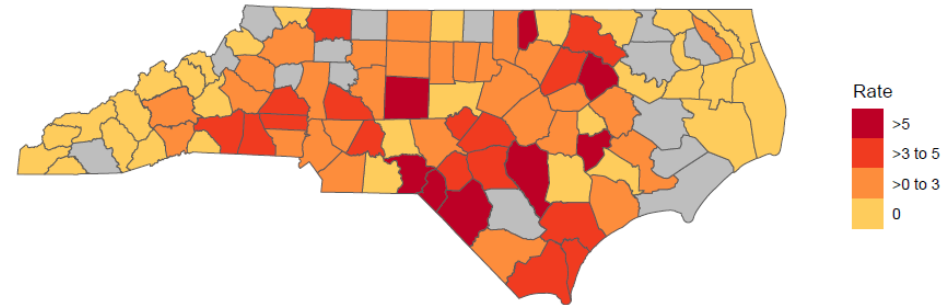
Statewide Key Messages

The average weekly rate of heat-related illness (HRI) emergency department (ED) visits **this season to date is 2.2 per 100,000 population.**

This week (August 25-31, 2024):

- There were **290*** HRI ED visits (0.29% of total ED visits), with a **rate of 2.5 per 100,000 population.**
- The rate was highest among **males aged 20-24 years (6.2 per 100,000 population).** (Figure 1)
- The rate of HRI ED visits was highest in the **Fayetteville Area) (4.1 per 100,000 population).** (Figure 2; NC DETECT Region 3)
- The most frequent heat related diagnosis code was **heat exhaustion (n =95).** (Table 1)
- The maximum heat index ranged from **84.7 to 107.8°F** at Raleigh-Durham International Airport. (Figure 3)
- There were **4** days when the minimum temperature did not drop below 70°F.

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.

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

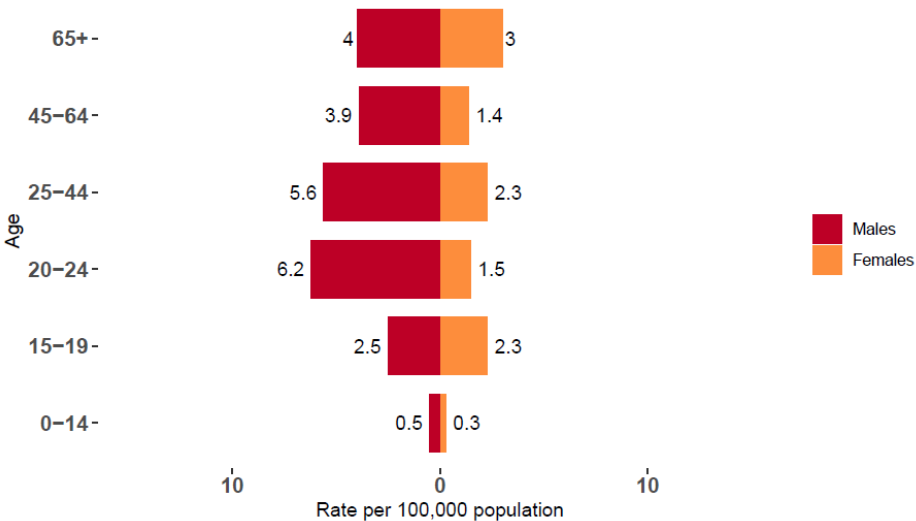


Table 1. Heat-related illness ED visits by Severity

Severity [§]	Number (N =174 [‡])	Percent [†]
Heat Cramps	6	3.4
Heat Exhaustion	95	54.6
Heat Stroke	4	2.3
Heat Syncope	30	17.2
Other Effects	39	22.4

§ Definitions of heat-related illness severity categories:

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

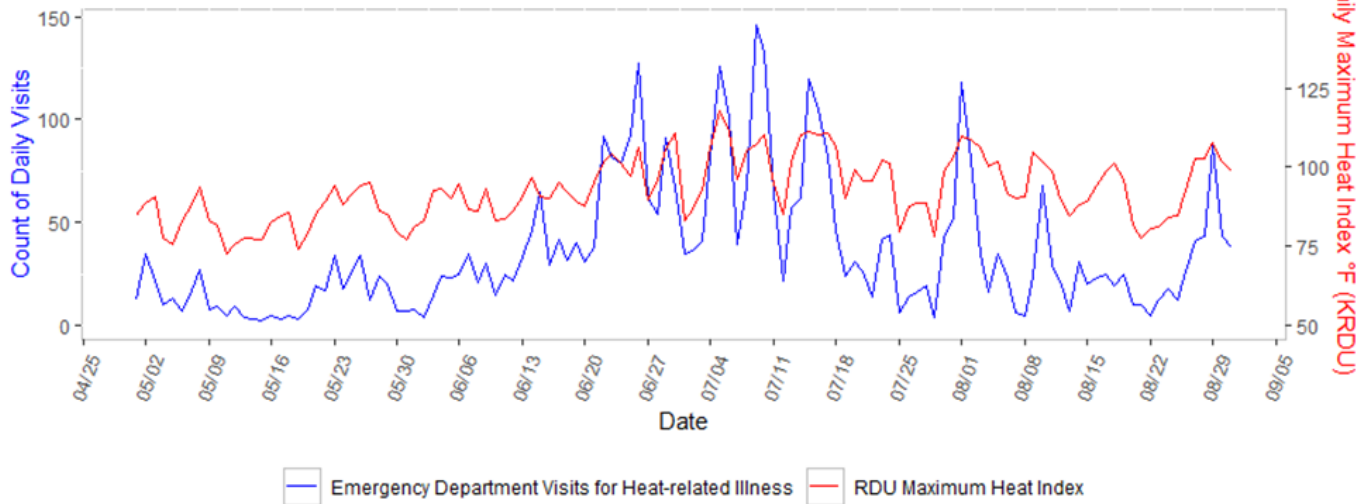
‡ Missing severity data = 116

† May not total 100 due to rounding

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

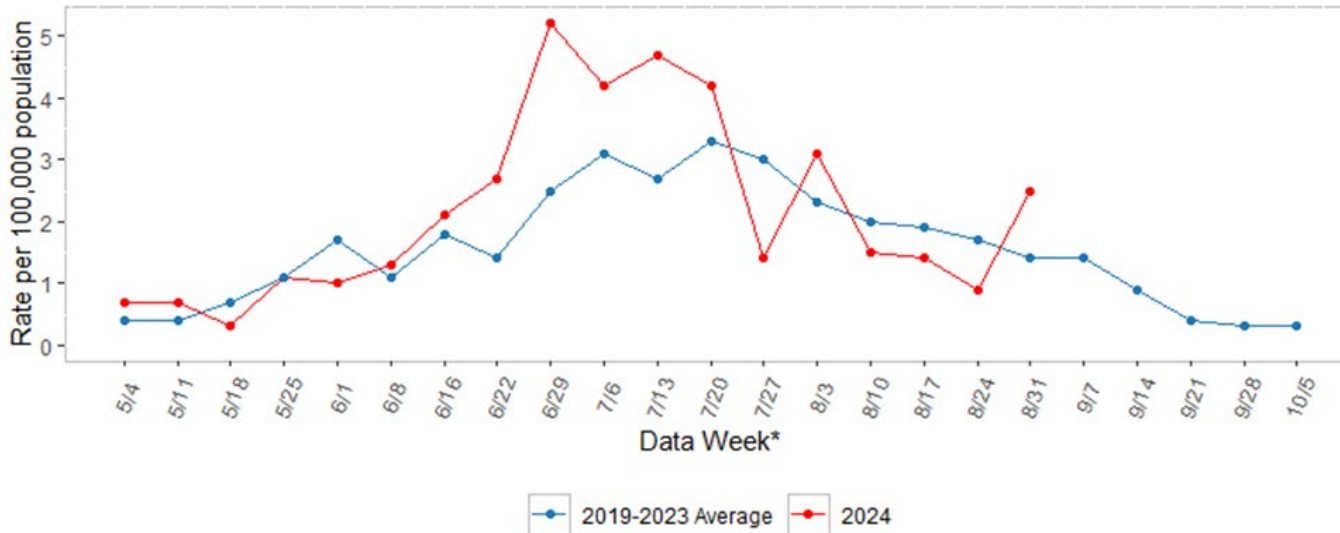
*The 290 total HRI ED visits includes 30 visits that were missing county of residence and are excluded from the regional reports.

**Figure 3. Count of Emergency Department Visits for Heat-related Illness and Max Heat Index
North Carolina: May 1 - August 31, 2024**



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: 2024 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-2022-2023.pdf>.

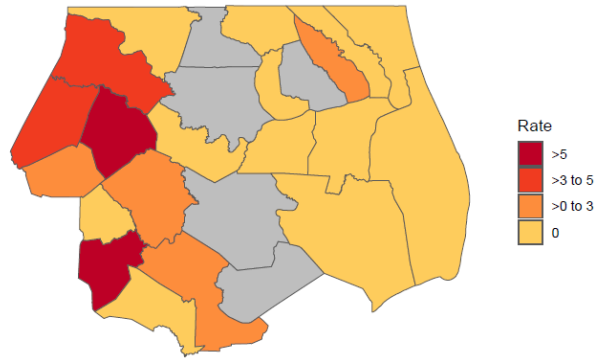
Northeastern NC (NC DETECT Region 1) Key Messages

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

This week (August 25-31, 2024):

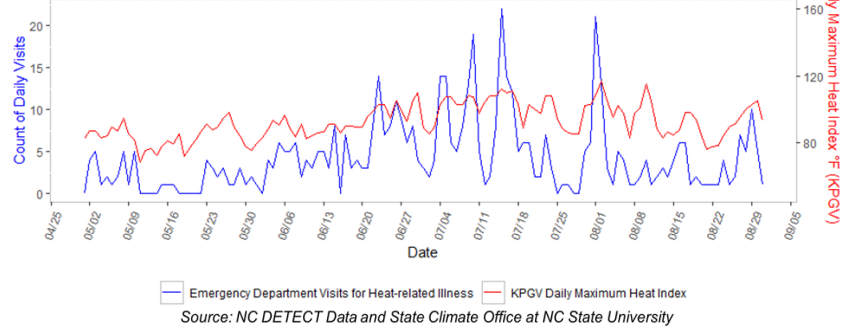
- There were **31 HRI ED visits** (0.3% of total ED visits), with a rate of **3.3 per 100,000 population**.
- The rate was highest among **females aged 20-24 years (9.3 HRI ED visits per 100,000 population)**. (Figure 1)
- The rate of HRI ED visits was highest in **Edgecombe County (8.2 per 100,000 population)**. (Figure 2)
- The most frequent heat related diagnosis code was **heat syncope (n =5)** and **other effects (n =5)**. (Table 1)
- The maximum heat index ranged from **89.4 to 105.1°F** at Pitt-Greenville Airport. (Figure 3)
- There were **4 days** when the minimum temperature did not drop below 70°F.

Figure 2. Rate of Heat-Related Illness Emergency Department Visits per 100,000 Population Northeastern NC (NC DETECT 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. Count of Emergency Department Visits for Heat-related Illness and Maximum Heat Index Northeastern NC (NC DETECT Region 1): May 1 - August 31, 2024



Legend: Emergency Department Visits for Heat-related Illness (blue line), KPGV Daily Maximum Heat Index (red line)
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 Northeastern NC (NC DETECT Region 1)

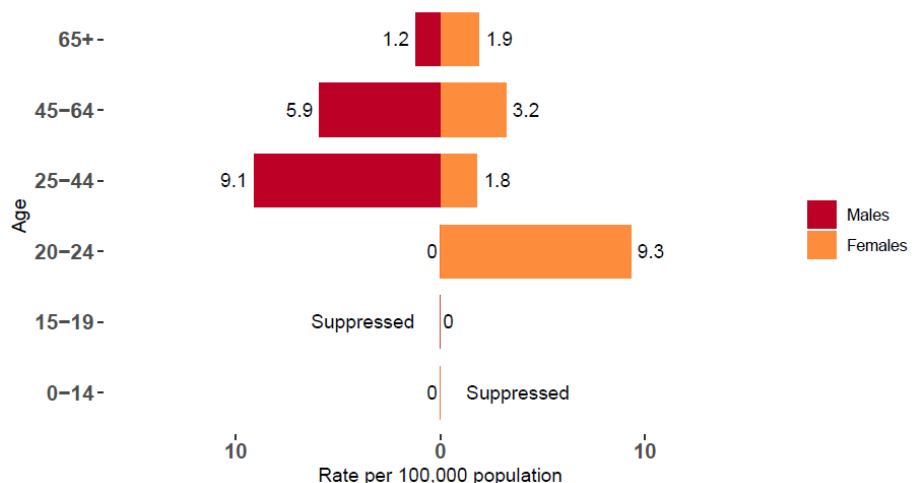


Table 1. Heat-related illness ED visits by Severity

Severity [§]	Number (N = 14 [‡])	Percent [†]
Heat Exhaustion	4	28.6
Heat Syncope	5	35.7
Other Effects	5	35.7

§ Definitions of heat-related illness severity categories:

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

‡ Missing severity data = 17

† May not total 100 due to rounding

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

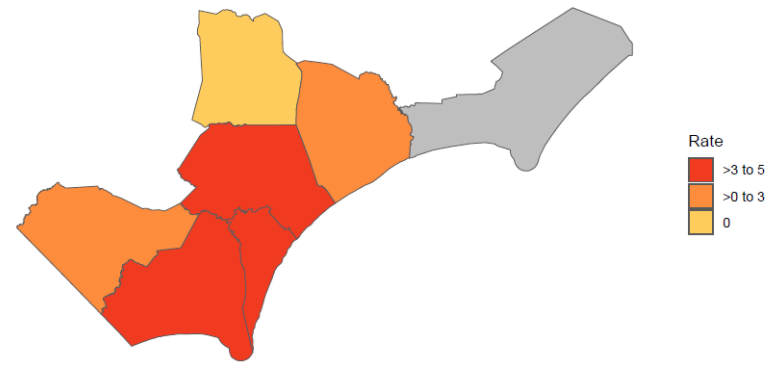
Southeastern NC (NC DETECT Region 2) Key Messages

The average weekly rate of heat-related illness emergency department visits this season to date is 2.5 per 100,000 population.

This week (August 25-31, 2024):

- There were **20** HRI ED visits (0.3% of total ED visits), with a rate of **2.5 per 100,000 population**.
- The rate was highest among **males aged 65+ years (8.5 HRI ED visits per 100,000 population)**. (Figure 1)
- The rate of HRI ED visits was highest in **Brunswick County (4.3 per 100,000 population)**. (Figure 2)
- The most frequent heat related diagnosis code was **heat exhaustion (n =7)**. (Table 1)
- The maximum heat index ranged from **92.8 to 104.6°F** at Wilmington International Airport. (Figure 3)
- There were **6** days when the minimum temperature did not drop below 70°F.

Figure 2. Rate of Heat-Related Illness Emergency Department Visits per 100,000 Population Southeastern NC (NC DETECT 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. Count of Emergency Department Visits for Heat-related Illness and Maximum Heat Index Southeastern NC (NC DETECT Region 2): May 1 - August 31, 2024

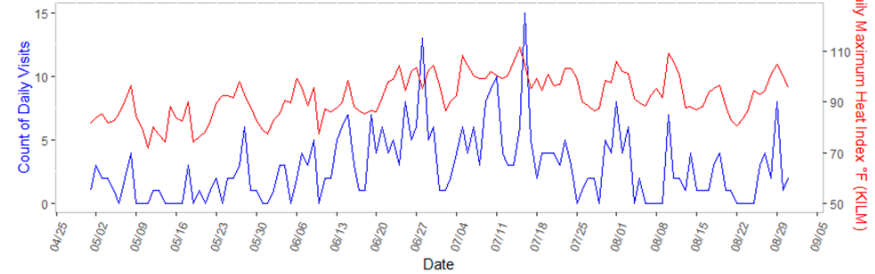


Figure 1. Rate of Heat-Related Illness Emergency Department Visits by Sex and Age Southeastern NC (NC DETECT Region 2)

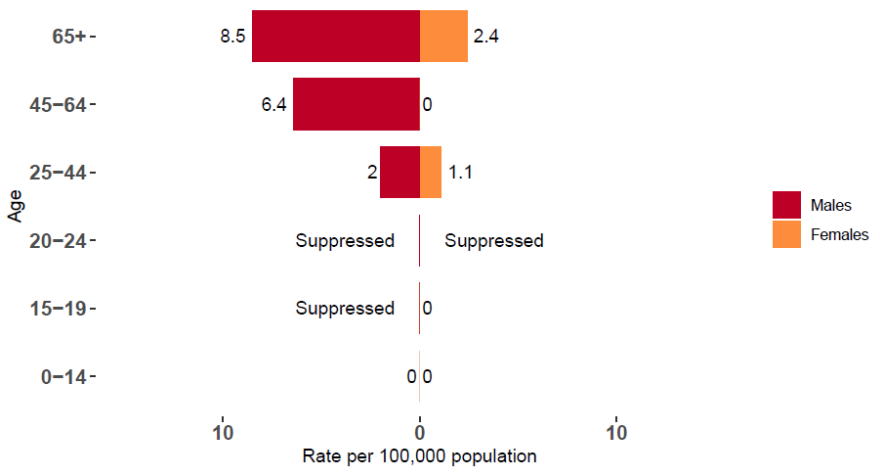


Table 1. Heat-related illness ED visits by Severity

Severity [§]	Number (N = 12 [†])	Percent [†]
Heat Exhaustion	7	58.3
Heat Syncope	5	41.7

§ Definitions of heat-related illness severity categories:

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

‡ Missing severity data = 8

† May not total 100 due to rounding

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

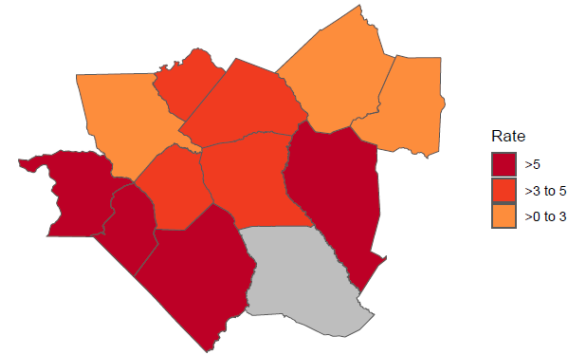
Fayetteville Area (NC DETECT Region 3) Key Messages

The average weekly rate of heat-related illness emergency department visits this season to date is **3.2 per 100,000 population**.

This week (August 25-31, 2024):

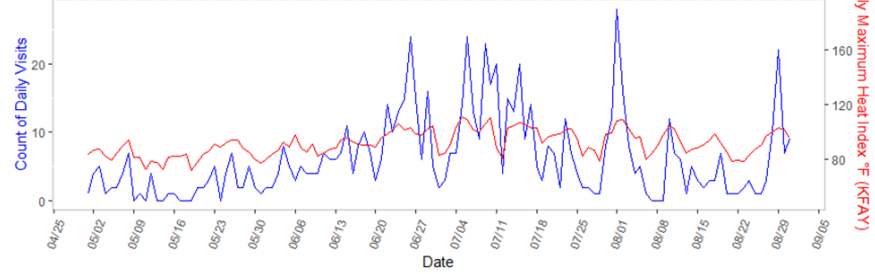
- There were **53 HRI ED visits** (0.4% of total ED visits), with a rate of **4.1 per 100,000 population**.
- The rate was highest among **males aged 25-44 years (9.1 HRI ED visits per 100,000 population)**. (Figure 1)
- The rate of HRI ED visits was highest in **Scotland County (8.8 per 100,000 population)**. (Figure 2)
- The most frequent heat related diagnosis code was **heat exhaustion (n =14)**. (Table 1)
- The maximum heat index ranged from **88.1 to 103.2°F** at Fayetteville Regional Airport. (Figure 3)
- There were **4 days** when the minimum temperature did not drop below 70°F.

Figure 2. Rate of Heat-Related Illness Emergency Department Visits per 100,000 Population Fayetteville Area (NC DETECT 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. Count of Emergency Department Visits for Heat-related Illness and Maximum Heat Index Fayetteville Area (NC DETECT Region 3): May 1 - August 31, 2024



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 Fayetteville Area (NC DETECT Region 3)

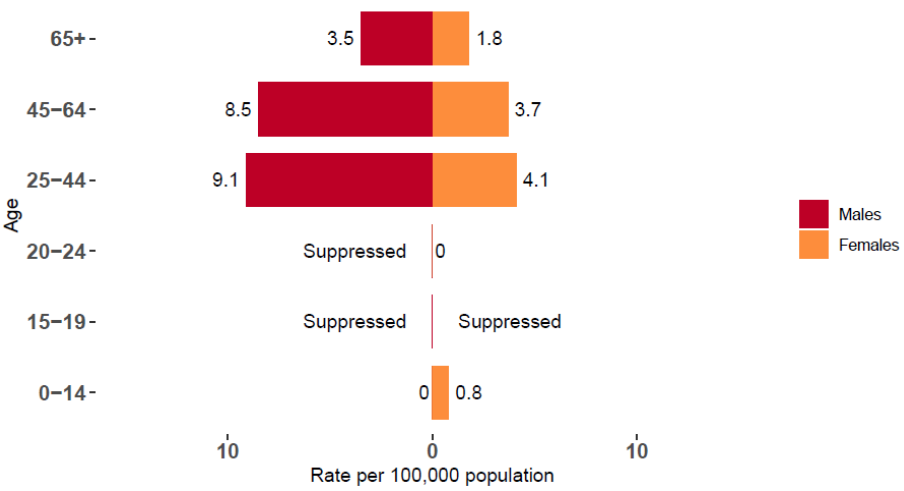


Table 1. Heat-related illness ED visits by Severity

Severity [§]	Number (N = 30 [‡])	Percent [†]
Heat Cramps	3	10
Heat Exhaustion	14	46.7
Heat Syncope	4	13.3
Other Effects	9	30

§ Definitions of heat-related illness severity categories:

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

‡ Missing severity data = 23

† May not total 100 due to rounding

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

RTP Area (NC DETECT Region 4) Key Messages

The average weekly rate of heat-related illness emergency department visits this season to date is **1.6 per 100,000 population**.

This week (August 25-31, 2024):

- There were **42 HRI ED visits** (0.3% of total ED visits), with a rate of **2 per 100,000 population**.
- The rate was highest among **males aged 20-24 years (7.2 HRI ED visits per 100,000 population)**. (Figure 1)
- The rate of HRI ED visits was highest in **Vance County (11.8 per 100,000 population)**. (Figure 2)
- The most frequent heat related diagnosis code was **heat exhaustion (n =20)**. (Table 1)
- The maximum heat index ranged from **84.7 to 107.8°F** at Raleigh-Durham International Airport. (Figure 3)
- There were **4 days** when the minimum temperature did not drop below 70°F.

Figure 2. Rate of Heat-Related Illness Emergency Department Visits per 100,000 Population RTP Area (NC DETECT Region 4)

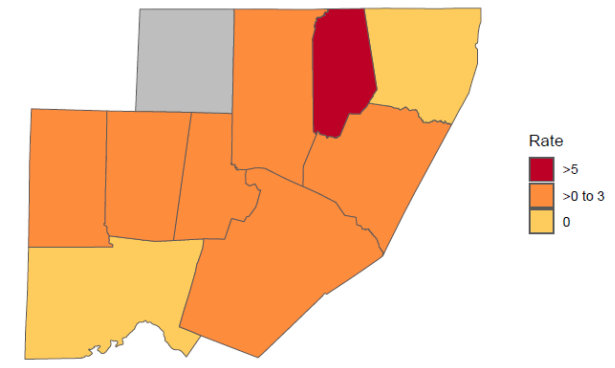


Figure 3. Count of Emergency Department Visits for Heat-related illness and Maximum Heat Index RTP Area (NC DETECT Region 4): May 1 - August 31, 2024

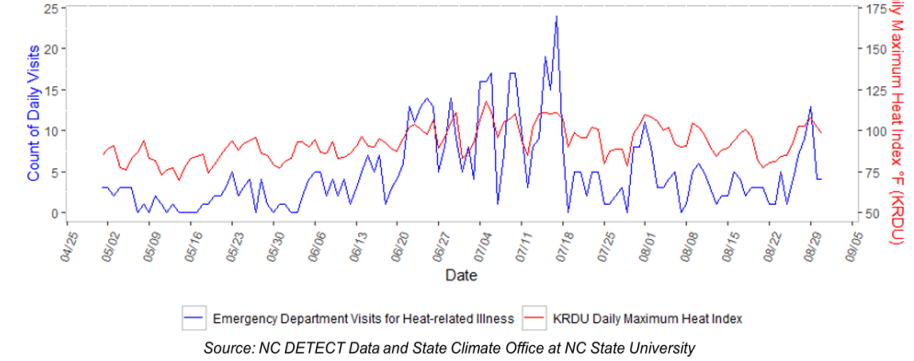


Figure 1. Rate of Heat-Related Illness Emergency Department Visits by Sex and Age RTP Area (NC DETECT Region 4)

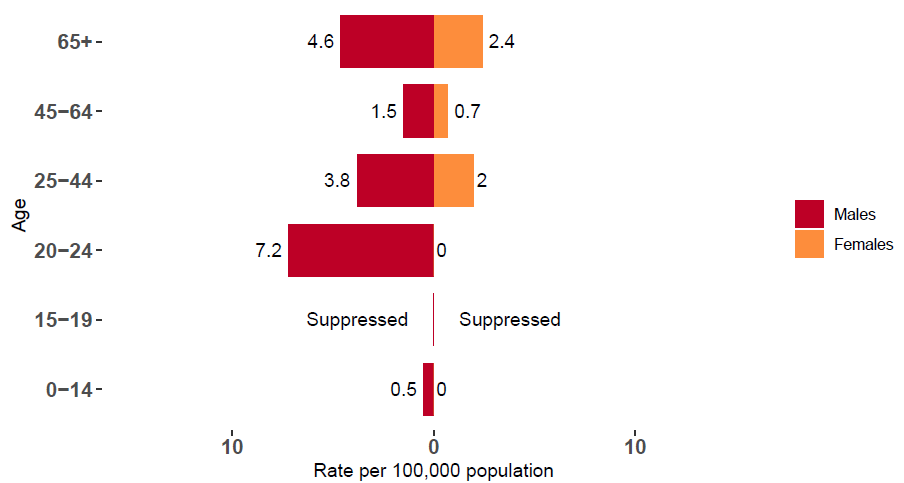


Table 1. Heat-related illness ED visits by Severity

Severity [§]	Number (N = 33 [‡])	Percent [†]
Heat Cramps	3	9.1
Heat Exhaustion	20	60.6
Heat Syncope	4	12.1
Other Effects	6	18.2

§ 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

Triad Area (NC DETECT Region 5) Key Messages

The average weekly rate of heat-related illness emergency department visits this season to date is **2.1 per 100,000 population**.

This week (August 25-31, 2024):

- There were **43 HRI ED visits** (0.3% of total ED visits), with a rate of **2.5 per 100,000 population**.
- The rate was highest among **males aged 25-44 years (6.4 HRI ED visits per 100,000 population)**. (Figure 1)
- The rate of HRI ED visits was highest in **Randolph County (5.5 per 100,000 population)**. (Figure 2)
- The most frequent heat related diagnosis code was **heat exhaustion (n =13)**. (Table 1)
- The maximum heat index ranged from **85.2 to 99.7°F** at Smith Reynolds Airport. (Figure 3)
- There were **3 days** when the minimum temperature did not drop below 70°F.

Figure 1. Rate of Heat-Related Illness Emergency Department Visits by Sex and Age Triad Area (NC DETECT Region 5)

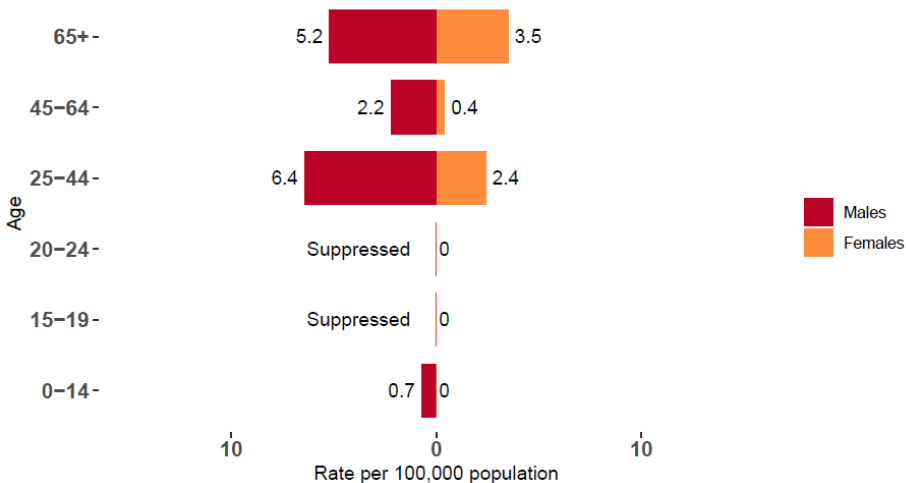
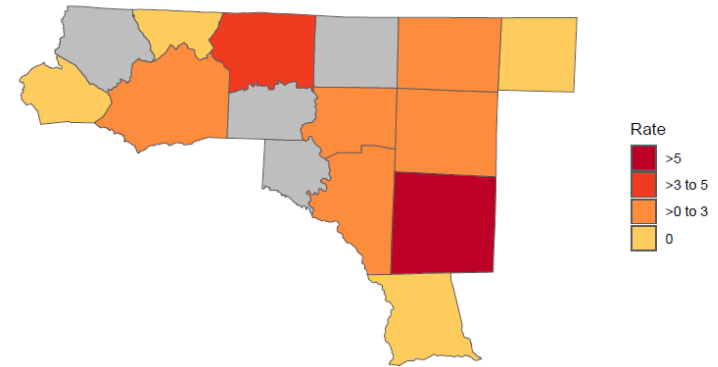


Figure 2. Rate of Heat-Related Illness Emergency Department Visits per 100,000 Population Triad Area (NC DETECT Region 5)



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

Figure 3. Count of Emergency Department Visits for Heat-related Illness and Maximum Heat Index Triad Area (NC DETECT Region 5): May 1 - August 31, 2024

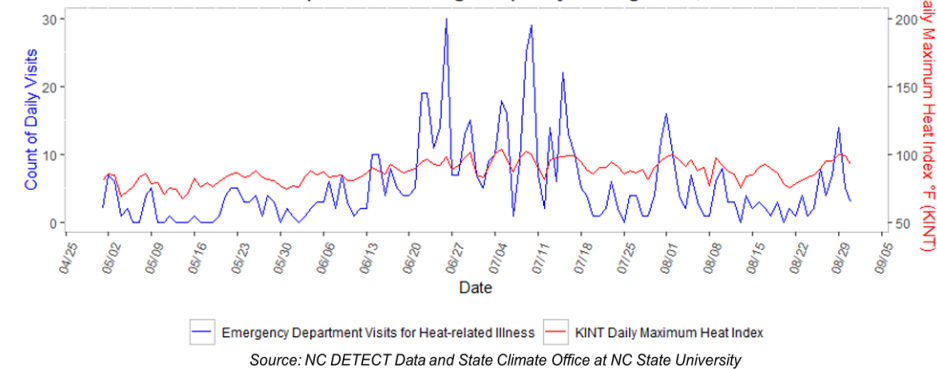


Table 1. Heat-related illness ED visits by Severity

Severity [§]	Number (N = 23 [‡])	Percent [†]
Heat Exhaustion	13	56.5
Heat Syncope	3	13
Other Effects	7	30.4

§ Definitions of heat-related illness severity categories:

<https://www.cdc.gov/niosh/topics/heatstress/heatreillness.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

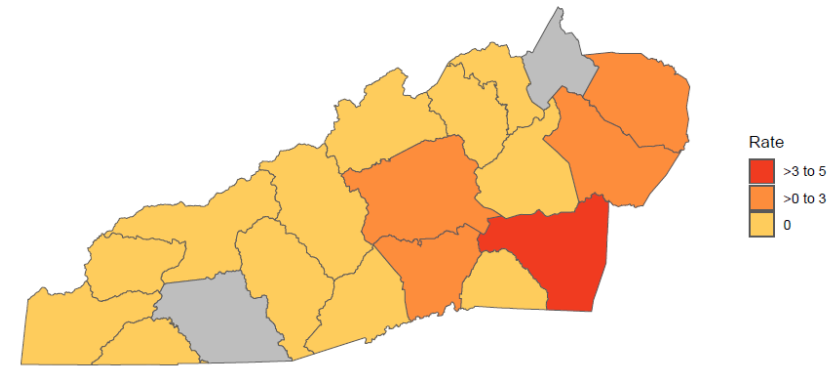
Western NC (NC DETECT Region 6) Key Messages

The average weekly rate of heat-related illness emergency department visits this season to date is **1.4 per 100,000 population**.

This week (August 25-31, 2024):

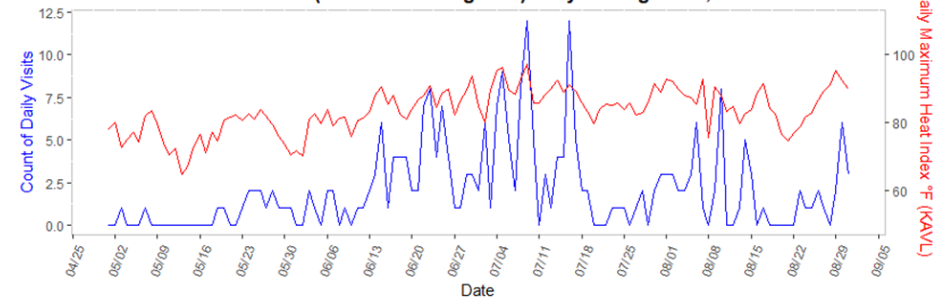
- There were **15 HRI ED visits** (0.2% of total ED visits), with a rate of **1.5 per 100,000 population**.
- The rate was highest among **females aged 65+ years (2.4 HRI ED visits per 100,000 population)**. (Figure 1)
- The rate of HRI ED visits was highest in **Rutherford County (3.1 per 100,000 population)**. (Figure 2)
- The most frequent heat related diagnosis code was **heat exhaustion (n =6)**. (Table 1)
- The maximum heat index ranged from **83 to 95.4°F** at Asheville Regional Airport. (Figure 3)
- There were **0 days** when the minimum temperature did not drop below 70°F.

Figure 2. Rate of Heat-Related Illness Emergency Department Visits per 100,000 Population Western NC (NC DETECT 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. Count of Emergency Department Visits for Heat-related Illness and Maximum Heat Index Western NC (NC DETECT Region 6): May 1 - August 31, 2024



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

Table 1. Heat-related illness ED visits by Severity

Severity [§]	Number (N = 10 [†])	Percent [†]
Heat Exhaustion	6	60
Heat Syncope	1	10
Other Effects	3	30

§ Definitions of heat-related illness severity categories:

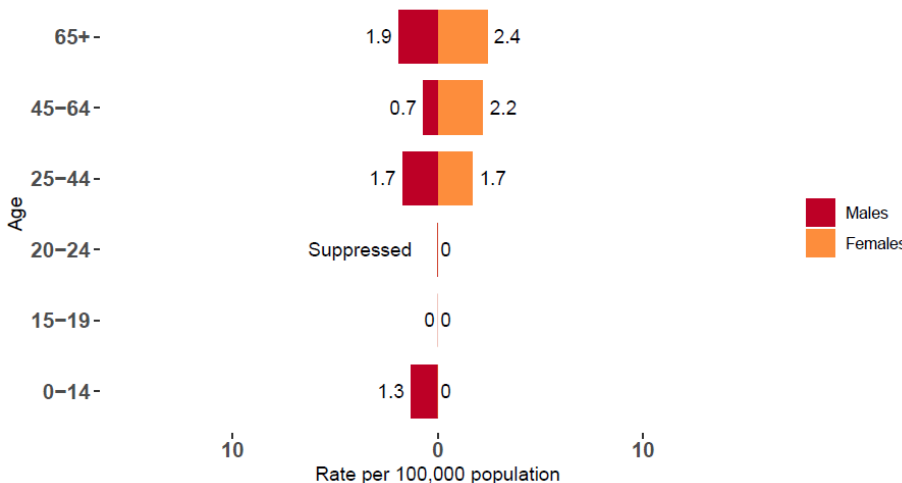
<https://www.cdc.gov/niosh/topics/heatstress/heatrelillness.html>

‡ 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

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



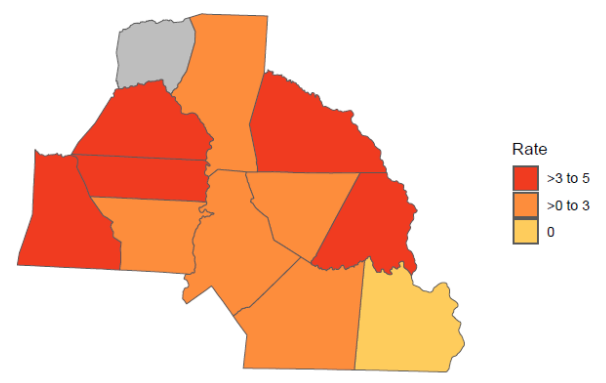
Charlotte Area (NC DETECT Region 7) Key Messages

The average weekly rate of heat-related illness emergency department visits **this season to date** is **1.9 per 100,000 population**.

This week (August 25-31, 2024):

- There were **56 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 20-24 years (4.8 HRI ED visits per 100,000 population)**. (Figure 1)
- The rate of HRI ED visits was highest in **Stanly County (4.8 per 100,000 population)**. (Figure 2)
- The most frequent heat related diagnosis code was **heat exhaustion (n =18)**. (Table 1)
- The maximum heat index ranged from **85.9 to 100.3°F** at Charlotte/Douglas International Airport. (Figure 3)
- There were **3 days** when the minimum temperature did not drop below 70°F.

Figure 2. Rate of Heat-Related Illness Emergency Department Visits per 100,000 Population Charlotte Area (NC DETECT 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. Count of Emergency Department Visits for Heat-related Illness and Maximum Heat Index Charlotte Area (NC DETECT Region 7): May 1 - August 31, 2024

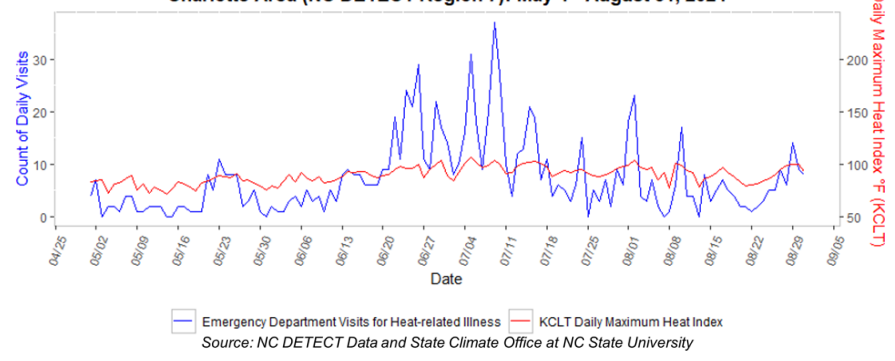


Figure 1. Rate of Heat-Related Illness Emergency Department Visits by Sex and Age Charlotte Area (NC DETECT Region 7)

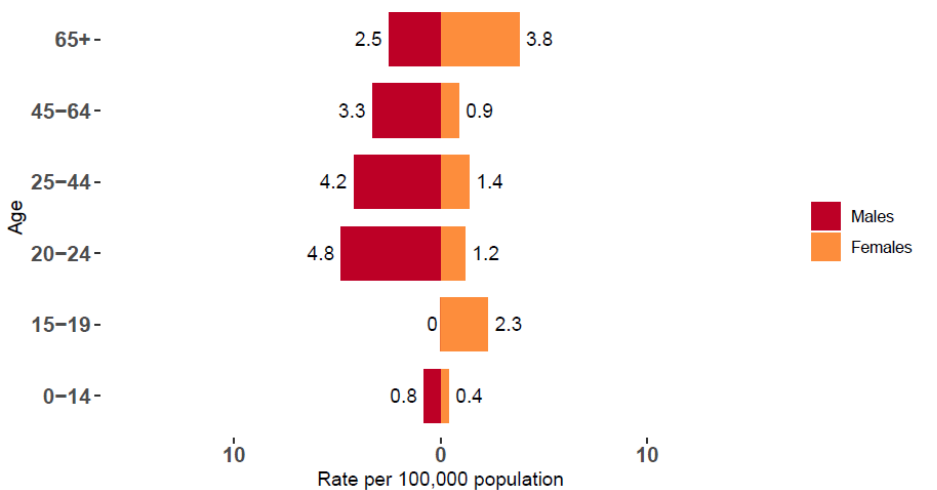


Table 1. Heat-related illness ED visits by Severity

Severity [§]	Number (N = 30 [†])	Percent [‡]
Heat Exhaustion	18	60
Heat Stroke	1	3.3
Heat Syncope	5	16.7
Other Effects	6	20

§ Definitions of heat-related illness severity categories: <https://www.cdc.gov/niosh/topics/heatstress/heatreillness.html>
[†] Missing severity data = 26
[‡] 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. One weather station from each NC DETECT region was selected to represent the climate data for each region. The weather station locations and their corresponding regions are as follows:

Pitt-Greenville Airport (PGV) – Northeastern (NC DETECT Region 1), Wilmington International Airport (ILM) – Southeastern (NC DETECT Region 2), Fayetteville Regional Airport (FAY) – Fayetteville Area (NC DETECT Region 3), Raleigh-Durham International Airport (RDU) – RTP Area (NC DETECT Region 4), Smith Reynolds Airport (INT) – Triad Area (NC DETECT Region 5), Asheville Regional Airport (AVL) – Western Area (NC DETECT Region 6), Charlotte/Douglas International Airport (CLT) – Charlotte Area (NC DETECT Region 7)

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The data in this report is summarized by NC DETECT Region.

