

Statewide Key Messages

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

This week (September 8-14, 2024):

- There were **25*** HRI ED visits (0.02% of total ED visits), with a **rate of 0.2 per 100,000 population** (Figure 3).
- The rate was highest among **males aged 20-24 years (0.8 per 100,000 population)**. (Figure 1)
- The rate of HRI ED visits was highest in the **Fayetteville Area) (0.5 per 100,000 population)**.
- The most frequent heat related diagnosis code was **heat syncope (n =5)**. (Table 1)
- The maximum heat index ranged from **77.1 to 84.1°F** at Raleigh-Durham International Airport. (Figure 3)
- There was **1** day when the minimum temperature did not drop below 70°F.

Figure 2 is not provided this week due to small numbers.

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

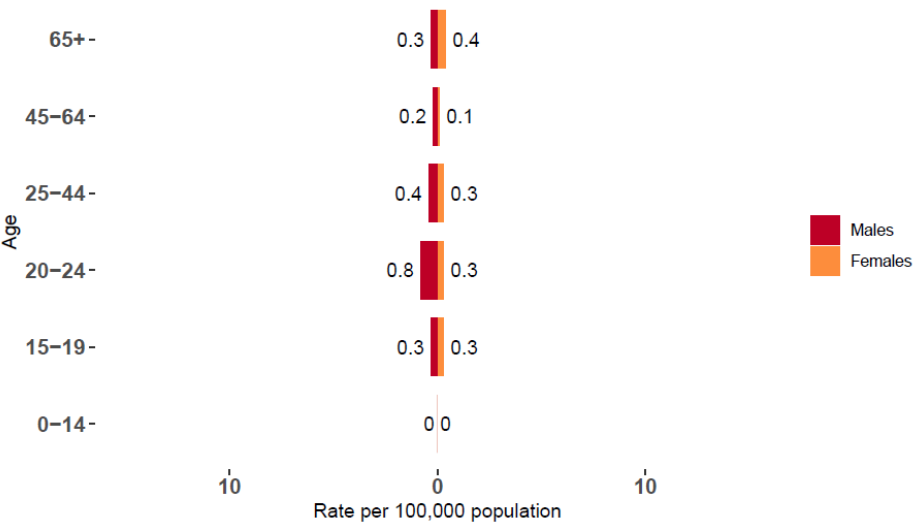


Table 1. Heat-related illness ED visits by Severity

Severity [§]	Number (N =13 [‡])	Percent [†]
Heat Cramps	2	15.4
Heat Exhaustion	4	30.8
Heat Syncope	5	38.5
Other Effects	2	15.4

§ Definitions of heat-related illness severity categories:

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

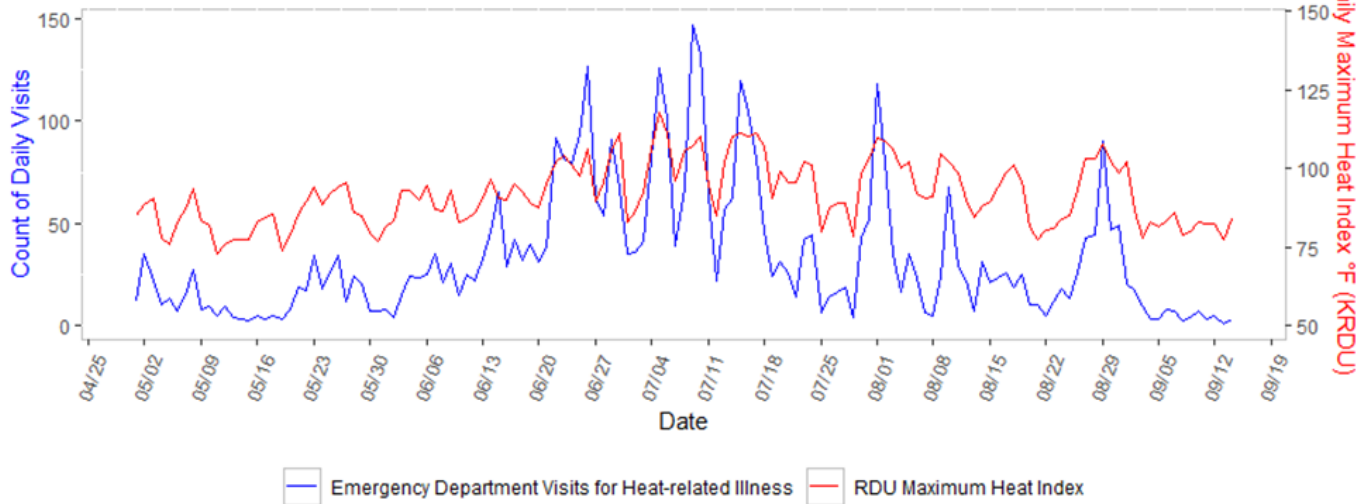
‡ Missing severity data = 12

† May not total 100 due to rounding

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

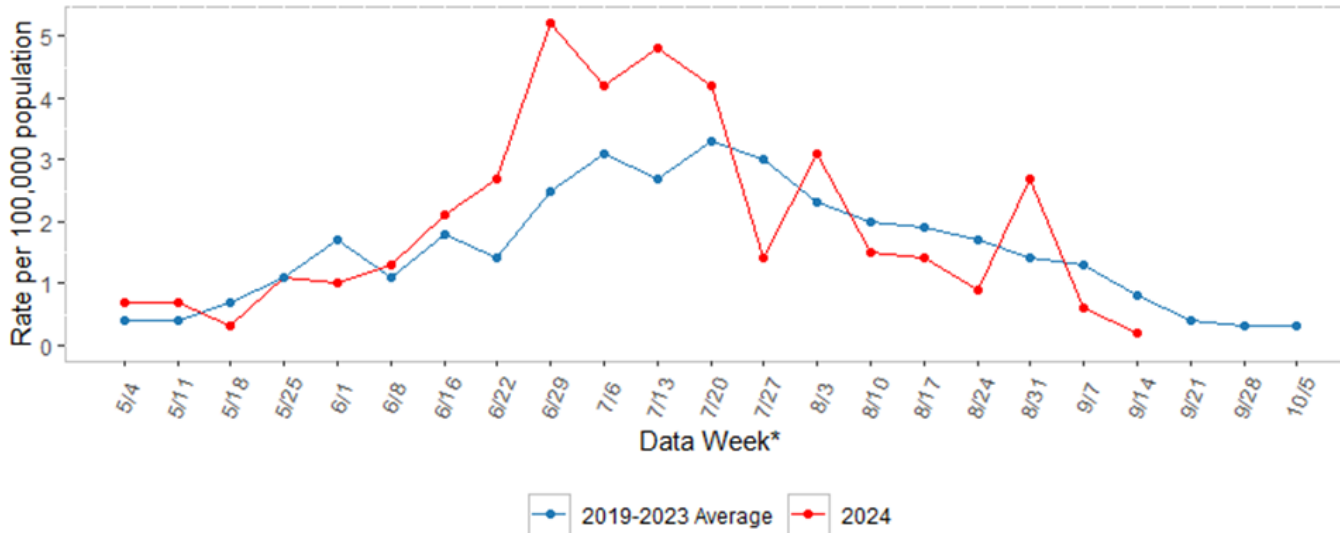
*The 25 total HRI ED visits includes 5 visits that were missing county of residence and are excluded from the regional reports.

**Figure 3. Count of Emergency Department Visits for Heat-related Illness and Max Heat Index
North Carolina: May 1 - September 14th, 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 **2.9 per 100,000 population**.

This week (September 8-14, 2024):

- There were **2 HRI ED visits** (0.02% of total ED visits), with a rate of **0.2 per 100,000 population**.
- The rate was highest among **females aged 25-44 years (0.9 HRI ED visits per 100,000 population)**. (Figure 1)
- The rate of HRI ED visits was highest in **Nash County (1.1 per 100,000 population)**.
- The most frequent heat related diagnosis code was **heat syncope (n =1)**. (Table 1)
- The maximum heat index ranged from **72.6 to 85.4°F** at Pitt-Greenville Airport. (Figure 3)
- There were **0** days when the minimum temperature did not drop below 70°F.

Figure 2 is not provided for Northeastern NC this week due to small numbers.

Figure 3. Count of Emergency Department Visits for Heat-related Illness and Maximum Heat Index Northeastern NC (NC DETECT Region 1): May 1 - September 14th, 2024

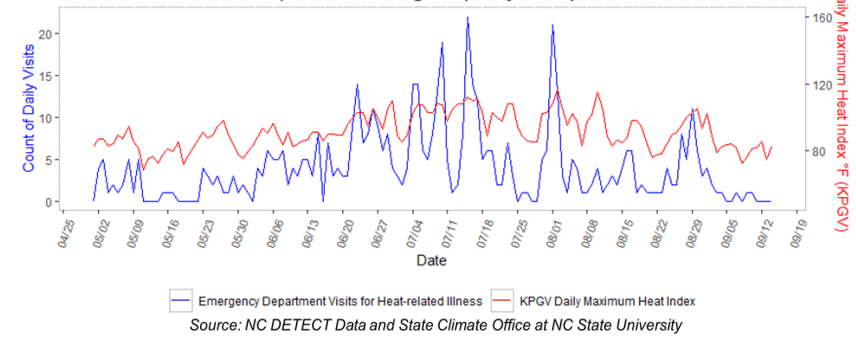


Figure 1. Rate of Heat-Related Illness Emergency Department Visits by Sex and Age Northeastern NC (NC DETECT Region 1)

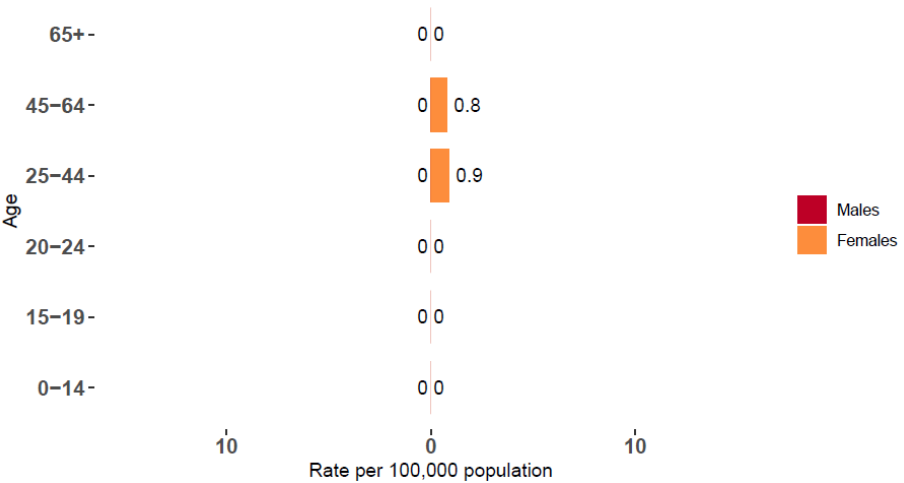


Table 1. Heat-related illness ED visits by Severity

Severity [§]	Number (N = 1 [†])	Percent [‡]
Heat Syncope	1	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

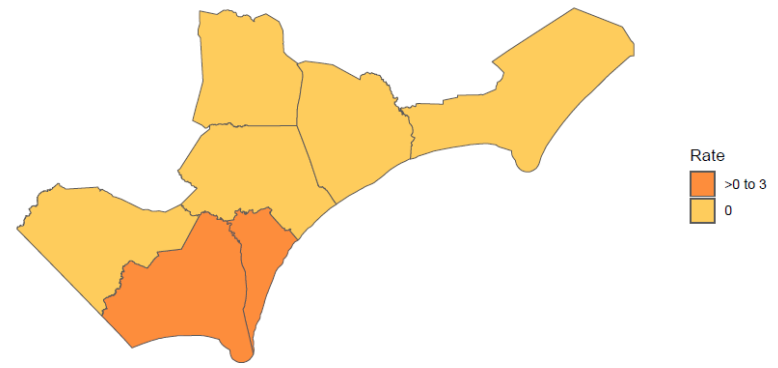
Southeastern NC (NC DETECT Region 2) Key Messages

The average weekly rate of heat-related illness emergency department visits this season to date is **2.3 per 100,000 population**.

This week (September 8-14, 2024):

- There were **2 HRI ED visits** (0.03% of total ED visits), with a rate of **0.2 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 **Brunswick County (0.7 per 100,000 population)**. (Figure 2)
- The most frequent heat related diagnosis code was **heat syncope (n =1)**. (Table 1)
- The maximum heat index ranged from **69.5 to 86.8°F** at Wilmington International Airport. (Figure 3)
- There were **2 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 - September 14th, 2024

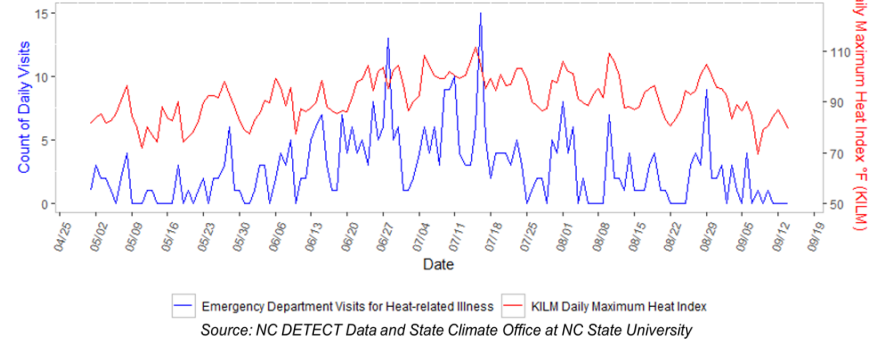


Figure 1. Rate of Heat-Related Illness Emergency Department Visits by Sex and Age Southeastern NC (NC DETECT Region 2)

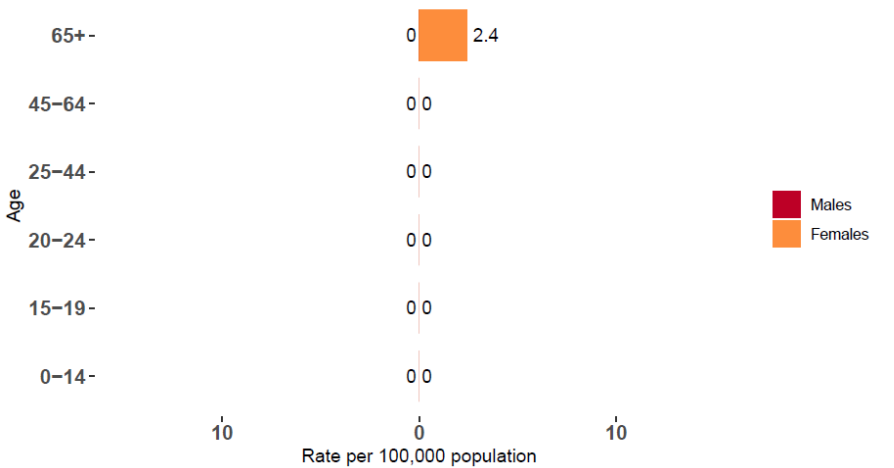


Table 1. Heat-related illness ED visits by Severity

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

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

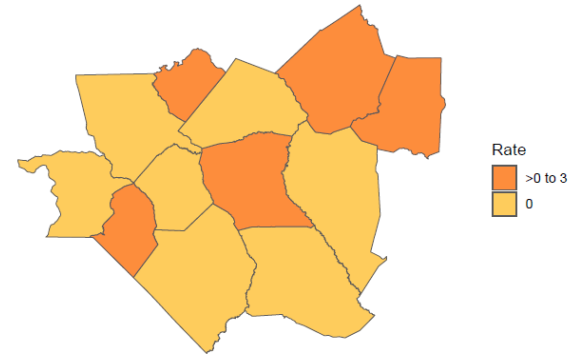
Fayetteville Area (NC DETECT Region 3) Key Messages

The average weekly rate of heat-related illness emergency department visits this season to date is 3 per 100,000 population.

This week (September 8-14, 2024):

- There were 6 HRI ED visits (0.04% of total ED visits), with a rate of **0.5 per 100,000 population**.
- The rate was highest among **males aged 45-64 years (1.3 HRI ED visits per 100,000 population)**. (Figure 1)
- The rate of HRI ED visits was highest in **Scotland County (2.9 per 100,000 population)**. (Figure 2)
- The most frequent heat related diagnosis code was **heat exhaustion (n =2)**. (Table 1)
- The maximum heat index ranged from **74.8 to 84°F** at Fayetteville Regional Airport. (Figure 3)
- There was **1** day 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 - September 14th, 2024

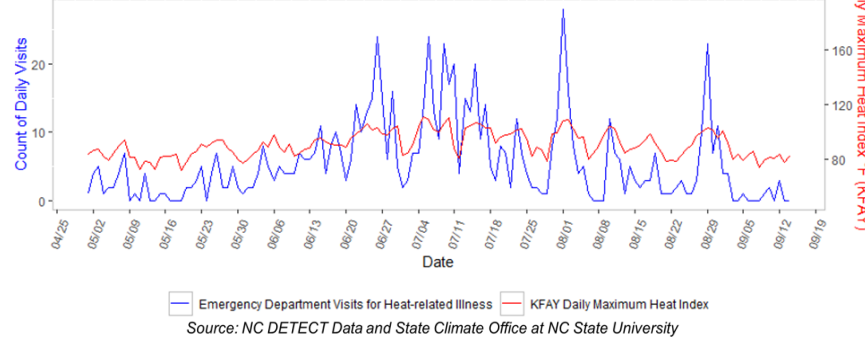


Figure 1. Rate of Heat-Related Illness Emergency Department Visits by Sex and Age Fayetteville Area (NC DETECT Region 3)

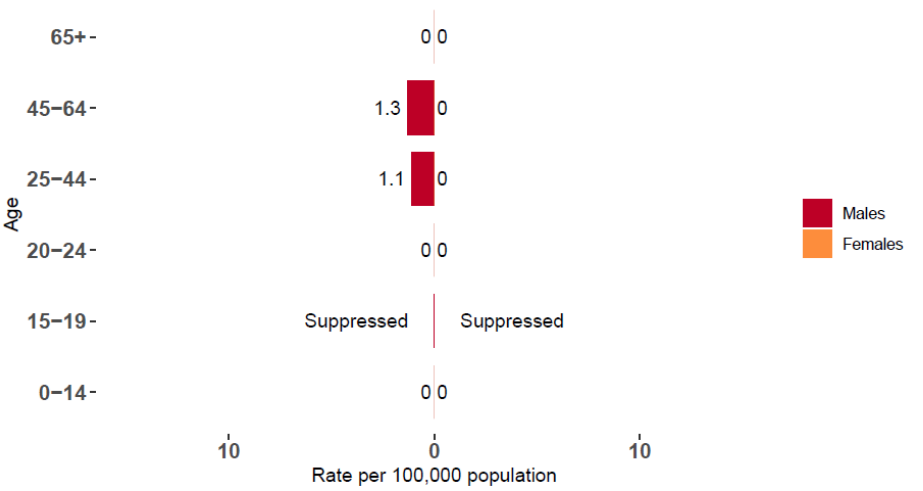


Table 1. Heat-related illness ED visits by Severity

Severity [§]	Number (N = 4 [‡])	Percent [†]
Heat Exhaustion	2	50
Heat Syncope	1	25
Other Effects	1	25

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

RTP Area (NC DETECT Region 4) Key Messages

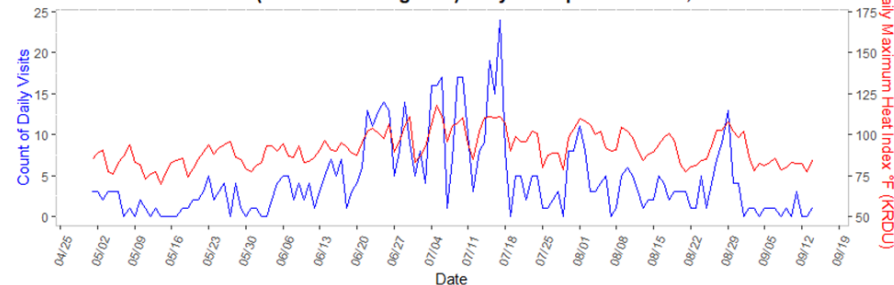
The average weekly rate of heat-related illness emergency department visits **this season to date** is **1.5 per 100,000 population**.

This week (September 8-14, 2024):

- There were **5 HRI ED visits** (0.03% of total ED visits), with a rate of **0.2 per 100,000 population**.
- The rate was highest among **females aged 20-24 years (1.4 HRI ED visits per 100,000 population)**. (Figure 1)
- The rate of HRI ED visits was highest in **Orange County (0.7 per 100,000 population)**.
- The most frequent heat related diagnosis code was **heat exhaustion (n=1)**. (Table 1)
- The maximum heat index ranged from **77.1 to 84.1°F** at Raleigh-Durham International Airport. (Figure 3)
- There was **1 day** when the minimum temperature did not drop below 70°F.

Figure 2 is not provided for the RTP area this week due to small numbers.

Figure 3. Count of Emergency Department Visits for Heat-related Illness and Maximum Heat Index RTP Area (NC DETECT Region 4): May 1 - September 14th, 2024



Emergency Department Visits for Heat-related Illness | KRDU 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 RTP Area (NC DETECT Region 4)

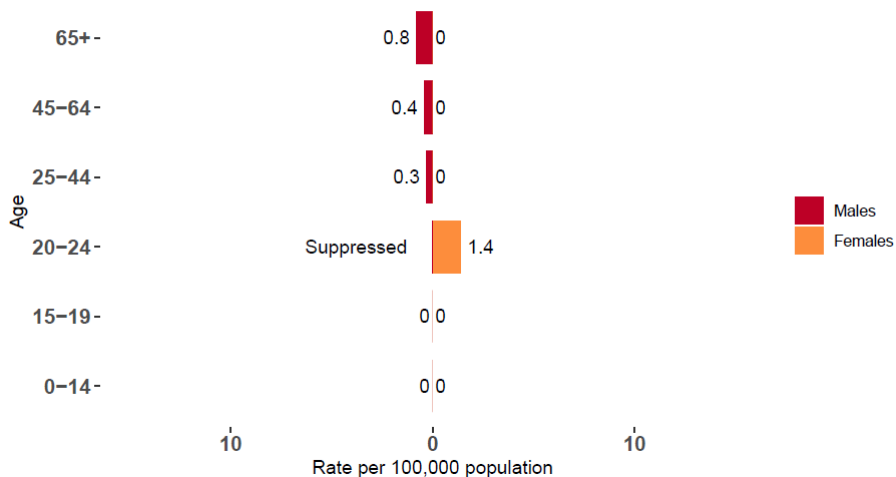


Table 1. Heat-related illness ED visits by Severity

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/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

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 per 100,000 population**.

This week (September 8-14, 2024):

- There were **2 HRI ED visits** (0.01% of total ED visits), with a rate of **0.1 per 100,000 population**.
- The rate was highest among **males aged 65+ years (0.7 HRI ED visits per 100,000 population)**. (Figure 1)
- The rate of HRI ED visits was highest in **Wilkes County (1.5 per 100,000 population)**.
- The maximum heat index ranged from **74.1 to 82.2°F** at Smith Reynolds Airport. (Figure 3)
- There were **0** days when the minimum temperature did not drop below 70°F.

Figure 2 is not provided for the Triad area this week due to small numbers.

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

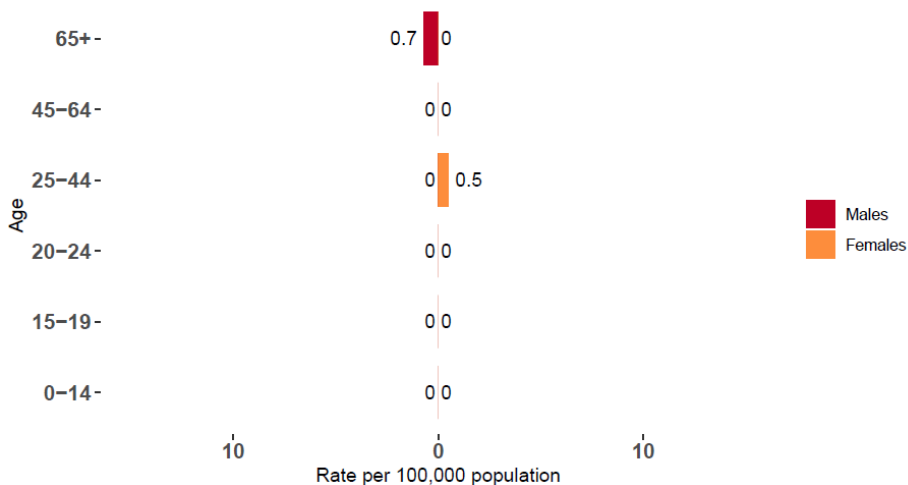


Figure 3. Count of Emergency Department Visits for Heat-related Illness and Maximum Heat Index Triad Area (NC DETECT Region 5): May 1 - September 14th, 2024

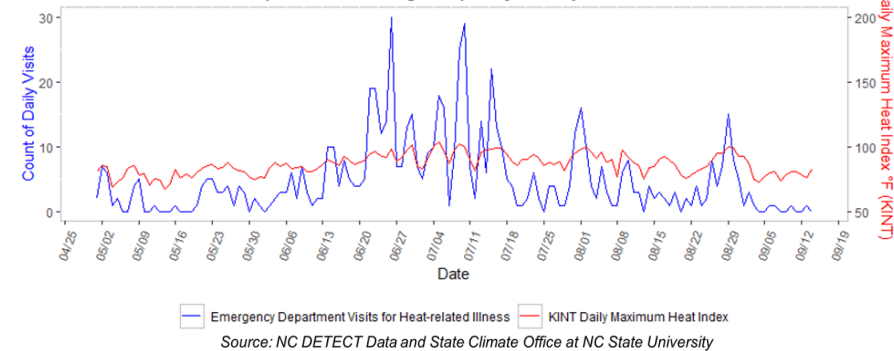


Table 1 is not provided for the Triad area this week due to small numbers.

The regional report for Western NC is not provided this week because there were no Emergency Department visits for Heat Related Illness.

Charlotte Area (NC DETECT Region 7) Key Messages

The average weekly rate of heat-related illness emergency department visits this season to date is **1.8 per 100,000 population**.

This week (September 8-14, 2024):

- There were **3 HRI ED visits** (0.01% of total ED visits), with a rate of **0.1 per 100,000 population**.
- The rate was highest among **females aged 25-44 years (0.5 HRI ED visits per 100,000 population)**. (Figure 1)
- The rate of HRI ED visits was highest in **Rowan County (0.7 per 100,000 population)**. (Figure 2)
- The most frequent heat related diagnosis code was **heat syncope (n=1)**. (Table 1)
- The maximum heat index ranged from **75.2 to 84.9°F** at Charlotte/Douglas International Airport. (Figure 3)
- There was **1 day** 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)

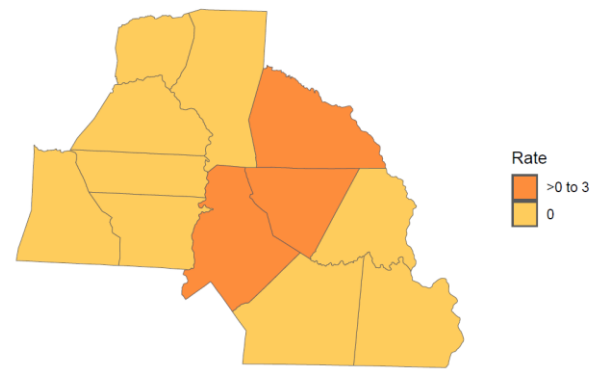


Figure 3. Count of Emergency Department Visits for Heat-related Illness and Maximum Heat Index Charlotte Area (NC DETECT Region 7): May 1 - September 14th, 2024

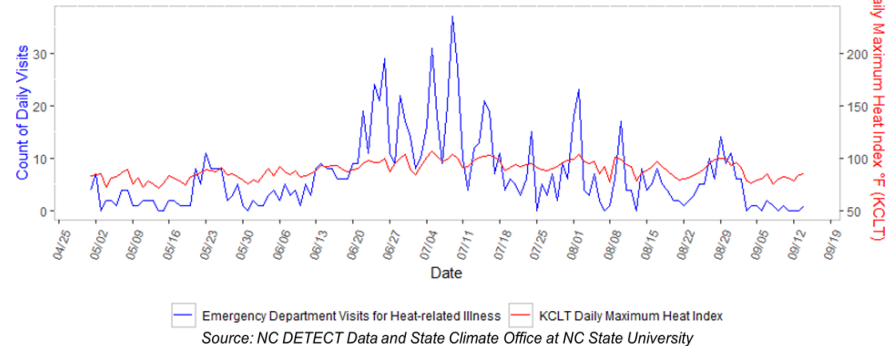


Figure 1. Rate of Heat-Related Illness Emergency Department Visits by Sex and Age Charlotte Area (NC DETECT Region 7)

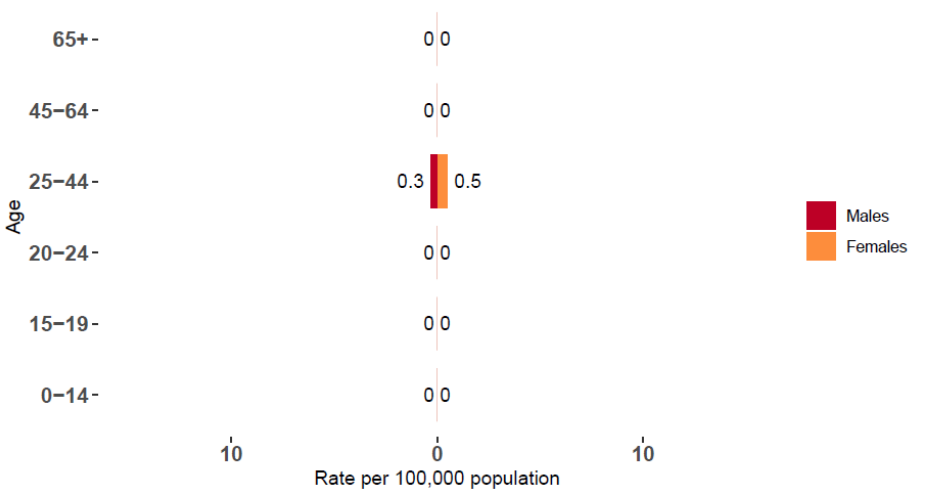


Table 1. Heat-related illness ED visits by Severity

Severity [§]	Number (N = 1 [†])	Percent [†]
Heat Syncope	1	6.8

§ 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. 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.

