

Statewide Key Messages

The average weekly rate of heat-related illness (HRI) emergency department (ED) visits **this season to date is 3.4 per 100,000 population.**

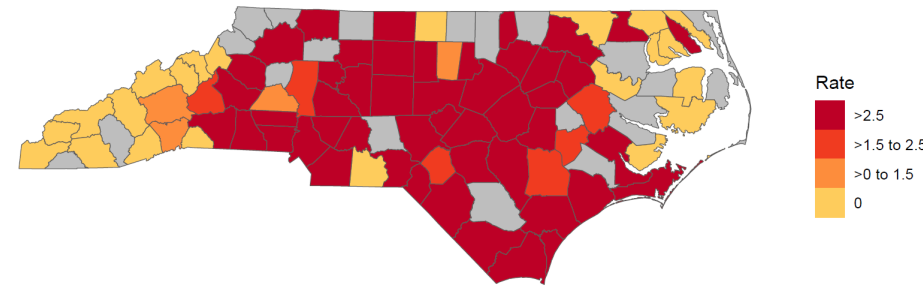
This week (July 27-August 2, 2025)

- There were **560*** HRI ED visits (0.6% of total ED visits), with a **rate of 5.3 per 100,000 population**
- The rate was highest among **males aged 45-64 years (10.4 per 100,000 population)** (Figure 1)
- The rate of HRI ED visits was highest in the **Northeast (8.7 per 100,000 population)**. (Figure 2; Region 3)
- The most frequent heat related diagnosis code was **heat exhaustion (n = 199; 55.6%)** (Table 1)
- The maximum daily heat index ranged from **79.6 to 108.7°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 = 358 [†])	Percent [†]
Heat Stroke	8	2.2
Heat Exhaustion	199	55.6
Heat Syncope	28	7.8
Heat Cramps	7	2
Other Effects	116	32.4

§ Definitions of heat-related illness severity categories:
<https://www.cdc.gov/niosh/heat-stress/about/illnesses.html>

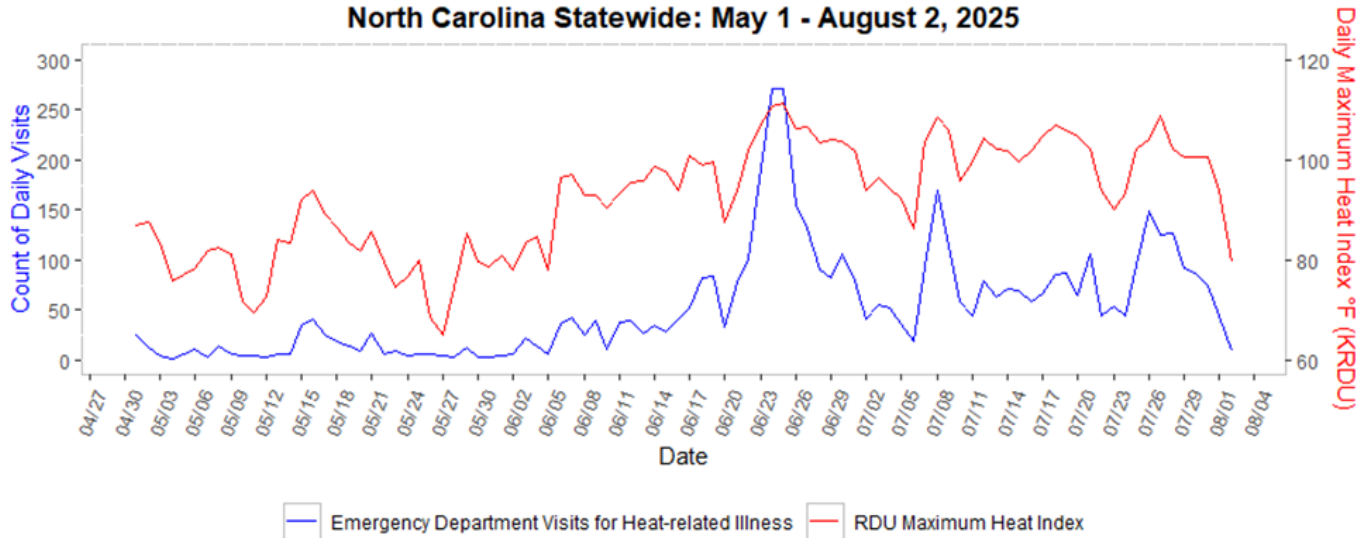
‡ Missing severity data = 202

† May not total 100 due to rounding

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

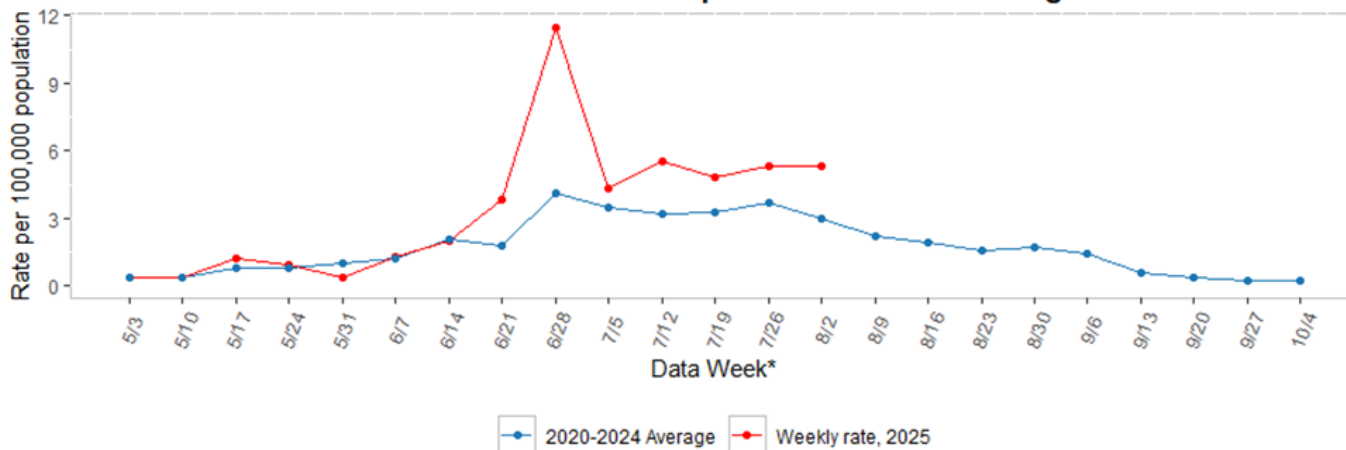
*The 560 total HRI ED visits includes 33 visits that were missing county of residence. These 33 visits are excluded from the regional reports.

**Figure 3. Emergency Department Visits for Heat-related Illness and Max Heat Index
North Carolina Statewide: May 1 - August 2, 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-Weeks-Calendar_2024-2025.pdf

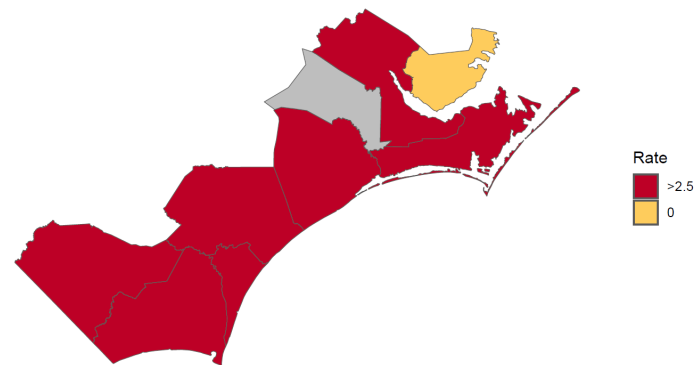
Southeast NC (Region 1) Key Messages

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

This week (July 27-August 2, 2025):

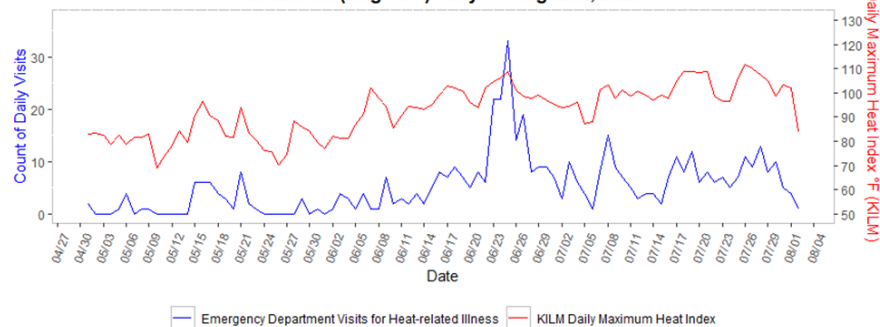
- There were **50 HRI ED visits** (0.6% of total ED visits), with a rate of **5.6 per 100,000 population**
- The rate was highest among **males aged 25-44 years (14.4 HRI ED visits per 100,000 population)** (Figure 1)
- The rate of HRI ED visits was highest in **Carteret County (10.2 per 100,000 population)** (Figure 2)
- The most frequent heat related diagnosis code was **heat exhaustion (n = 18; 62.1%)** (Table 1)
- The maximum daily heat index ranged from **83.8 to 110.2°F** at Wilmington 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 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 2, 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 = 29 [‡])	Percent [†]
Heat Stroke	1	3.4
Heat Exhaustion	18	62.1
Heat Syncope	4	13.8
Other Effects	6	20.7

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

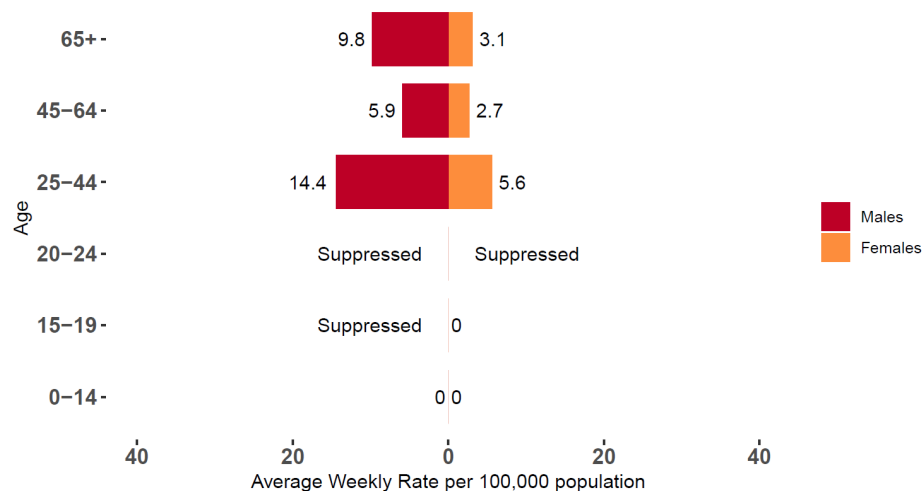
<https://www.cdc.gov/niosh/heat-stress/about/illnesses.html>

[‡] Missing severity data = 21

[†] 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 Southeast (Region 1)



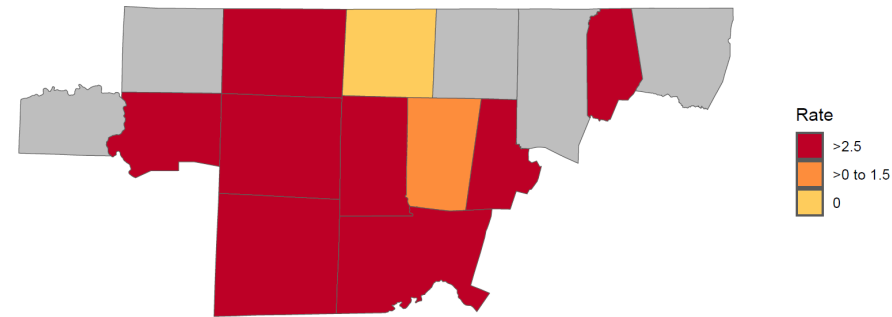
North Central NC (Region 2) Key Messages

The average weekly rate of heat-related illness emergency department visits **this season to date** is **2.8 per 100,000 population**.

This week (July 27-August 2, 2025):

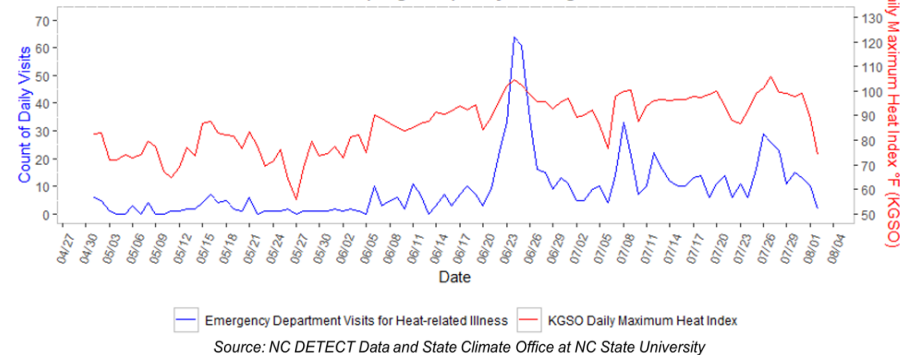
- There were **100 HRI ED visits** (0.6% of total ED visits), with a rate of **4.6 per 100,000 population**
- The rate was highest among **males aged 65+ years (10.6 HRI ED visits per 100,000 population)** (Figure 1)
- The rate of HRI ED visits was highest in **Vance County (18.9 per 100,000 population)** (Figure 2)
- The most frequent heat related diagnosis code was **heat exhaustion (n = 34; 51.5%)** (Table 1)
- The maximum daily heat index ranged from **74.3 to 105.9°F** at Piedmont Triad International Airport (Figure 3)
- There were **5 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 2, 2025



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 North Central (Region 2)

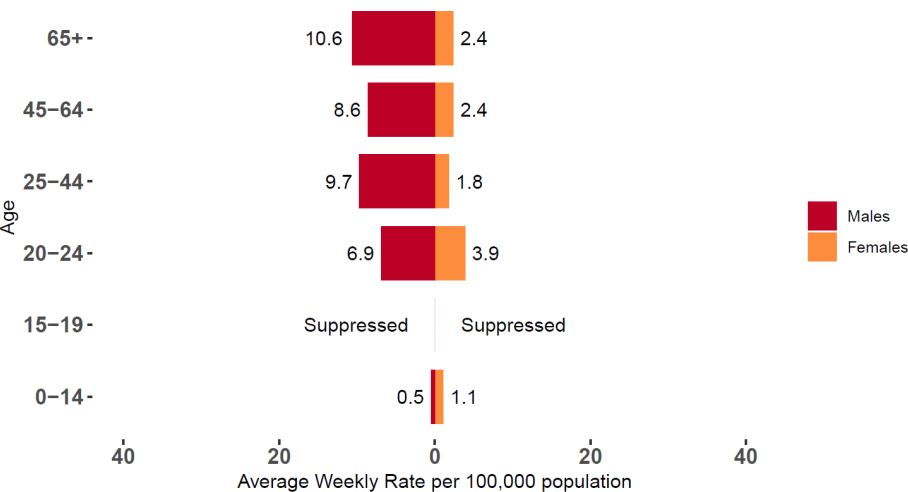


Table 1. Heat-related illness ED visits by Severity

Severity [§]	Number (N = 66 [†])	Percent [†]
Heat Stroke	1	1.5
Heat Exhaustion	34	51.5
Heat Syncope	7	10.6
Heat Cramps	1	1.5
Other Effects	23	34.8

§ Definitions of heat-related illness severity categories:

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

† Missing severity data = 34

† May not total 100 due to rounding

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

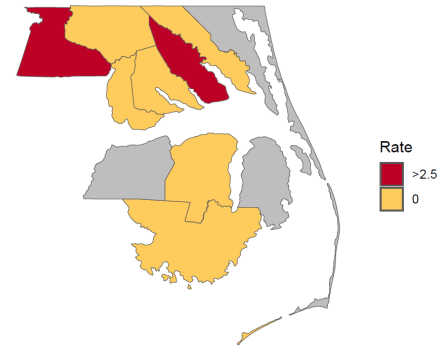
Northeastern NC (Region 3) Key Messages

The average weekly rate of heat-related illness emergency department visits this season to date is **4.6 per 100,000 population**

This week (July 27-August 2, 2025):

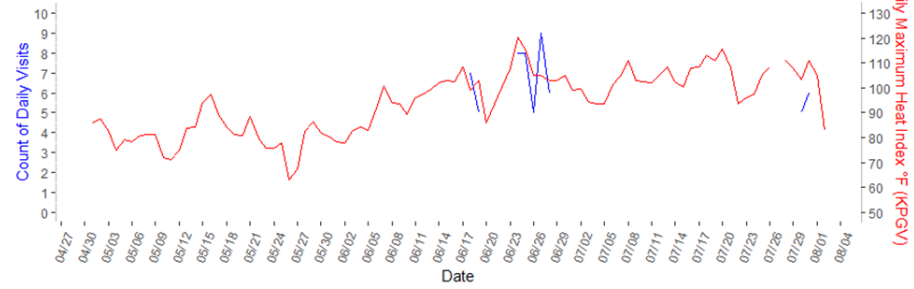
- There were **17 HRI ED visits** (0.8% of total ED visits), with a rate of **8.7 per 100,000 population**
- The rate of HRI ED visits was highest in **Hertford County (29.3 per 100,000 population)** (Figure 2)
- The most frequent heat related diagnosis code was **heat exhaustion (n = 5; 41.7%)** (Table 1)
- The maximum daily heat index ranged from **82.8 to 111°F** at Pitt-Greenville Airport (Figure 3)
- There were **5 days** when the minimum temperature was above 70°F (The Pitt-Greenville Airport weather station was missing climate data on 7/27)

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 2, 2025



Emergency Department Visits for Heat-related Illness KPGV Daily Maximum Heat Index
Source: NC DETECT Data and State Climate Office at NC State University

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

Table 1. Heat-related illness ED visits by Severity

Severity [§]	Number (N = 12 [‡])	Percent [†]
Heat Stroke	1	8.3
Heat Exhaustion	5	41.7
Heat Syncope	1	8.3
Heat Cramps	1	8.3
Other Effects	4	33.3

§ 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

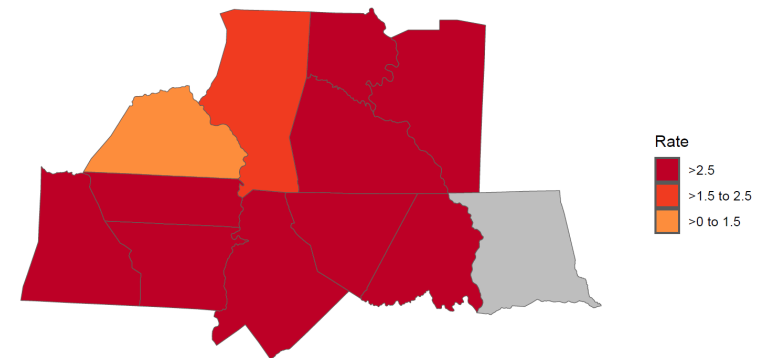
South Central NC (Region 4) Key Messages

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

This week (July 27-August 2, 2025):

- There were **121 HRI ED visits** (0.5% of total ED visits), with a rate of **4.7 per 100,000 population**
- The rate was highest among **males aged 20-24 years (10.2 HRI ED visits per 100,000 population)** (Figure 1)
- The rate of HRI ED visits was highest in **Davie County (13.8 per 100,000 population)** (Figure 2)
- The most frequent heat related diagnosis code was **heat exhaustion (n = 43; 59.7%)** (Table 1)
- The maximum heat daily index ranged from **74.7 to 107.4°F** at Charlotte/Douglas 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 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 2, 2025

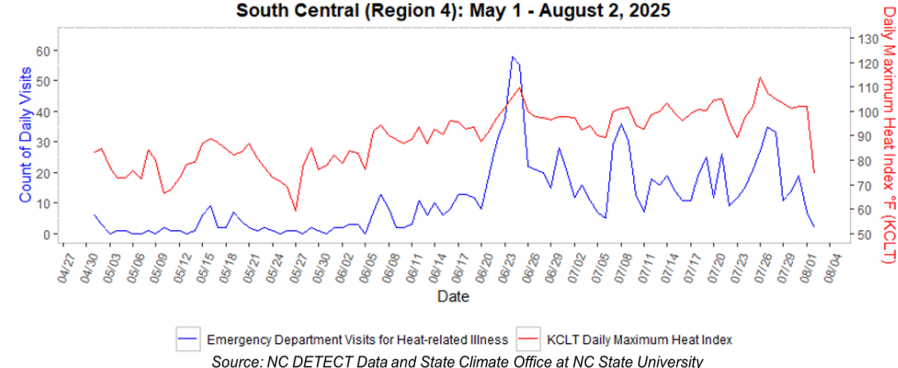


Figure 1. Rate of Heat-Related Illness Emergency Department Visits by Sex and Age South Central (Region 4)

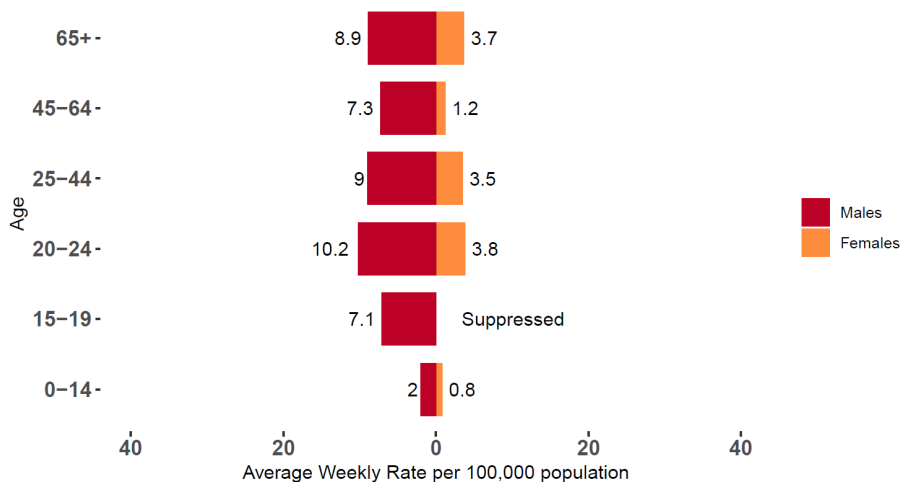


Table 1. Heat-related illness ED visits by Severity

Severity [§]	Number (N = 72 [‡])	Percent [†]
Heat Exhaustion	43	59.7
Heat Syncope	5	6.9
Heat Cramps	2	2.8
Other Effects	22	30.6

§ Definitions of heat-related illness severity categories:

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

‡ Missing severity data = 49

† May not total 100 due to rounding

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

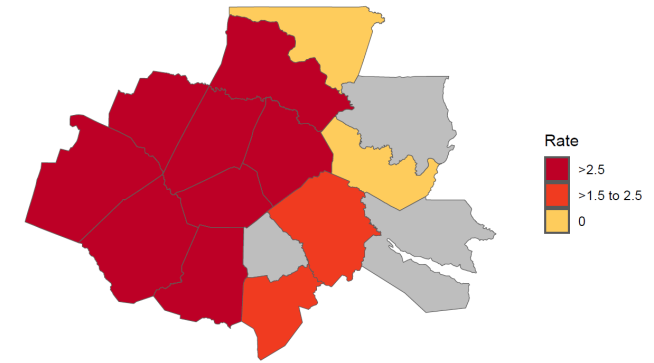
North Coastal Plain Area (Region 5) Key Messages

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

This week (July 27-August 2, 2025):

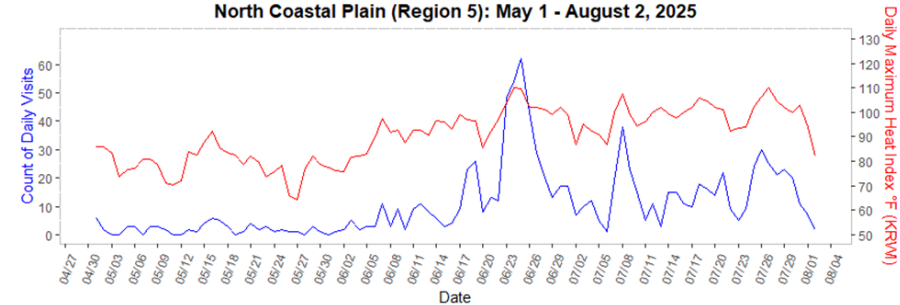
- There were **109 HRI ED visits** (0.6% of total ED visits), with a rate of **5 per 100,000 population**
- The rate was highest among **males aged 65+ years (14.0 HRI ED visits per 100,000 population)** (Figure 1)
- The rate of HRI ED visits was highest in **Franklin County (16.7 per 100,000 population)** (Figure 2)
- The most frequent heat related diagnosis code was **heat exhaustion (n = 47; 62.7%)** (Table 1)
- The maximum daily heat index ranged from **82.2 to 110.1°F** at Rocky Mount-Wilson Regional 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 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 2, 2025



Emergency Department Visits for Heat-related Illness KRWI 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 North Coastal Plain (Region 5)

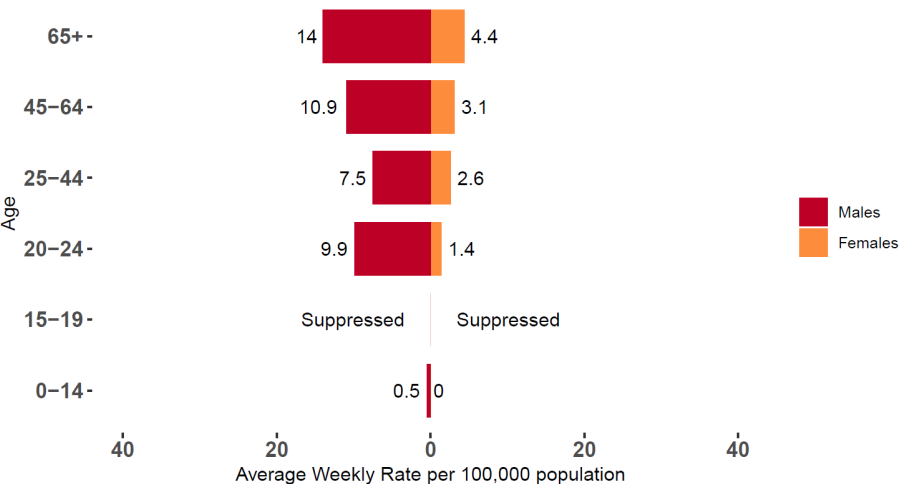


Table 1. Heat-related illness ED visits by Severity

Severity [§]	Number (N = 75 [‡])	Percent [†]
Heat Stroke	1	1.3
Heat Exhaustion	47	62.7
Heat Syncope	4	5.3
Heat Cramps	1	1.3
Other Effects	22	29.3

§ Definitions of heat-related illness severity categories:

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

‡ Missing severity data = 34

† May not total 100 due to rounding

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

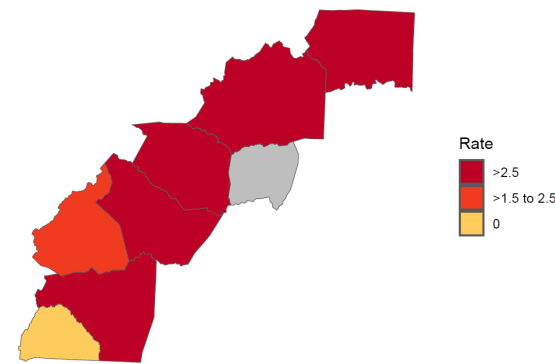
Foothills Area (Region 6) Key Messages

The average weekly rate of heat-related illness emergency department visits this season to date is 4.4 per 100,000 population.

This week (July 27-August 2, 2025):

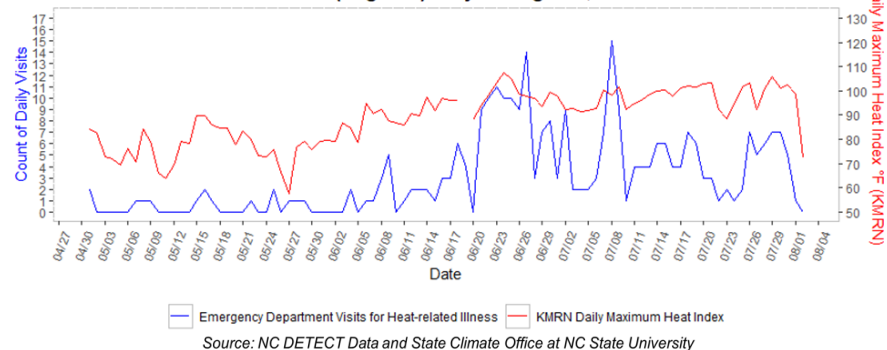
- There were **31 HRI ED visits** (0.7% of total ED visits), with a rate of **6.6 per 100,000 population**
- The rate was highest among **males aged 45-64 years (15 HRI ED visits per 100,000 population)** (Figure 1)
- The rate of HRI ED visits was highest in **Caldwell County (12.4 per 100,000 population)** (Figure 2)
- The most frequent heat related diagnosis code was **heat exhaustion (n = 11; 68.8%)** (Table 1)
- The maximum daily heat index ranged from **72.4 to 106°F** at Morganton-Lenoir 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 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 2, 2025



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 Foothills (Region 6)

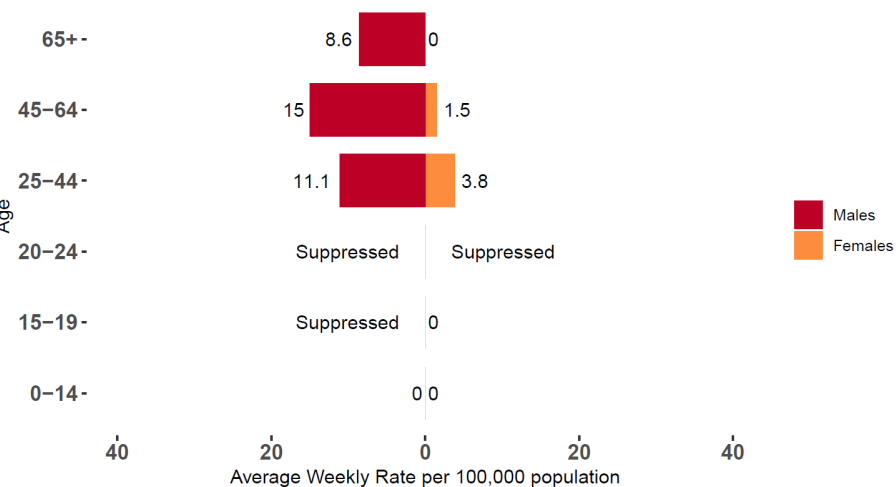


Table 1. Heat-related illness ED visits by Severity

Severity [§]	Number (N = 16 [‡])	Percent [†]
Heat Exhaustion	1	6.2
Heat Syncope	11	68.8
Other Effects	4	25

§ Definitions of heat-related illness severity categories:

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

‡ Missing severity data = 15

† May not total 100 due to rounding

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

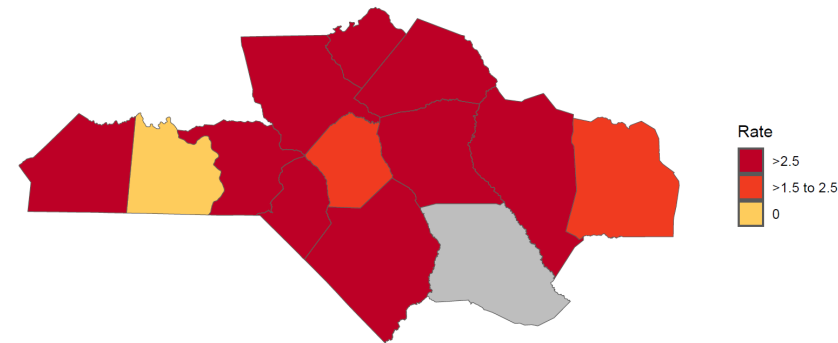
Sandhills Area (Region 7) Key Messages

The average weekly rate of heat-related illness emergency department visits **this season to date** is **3.9 per 100,000 population**.

This week (July 27-August 2, 2025):

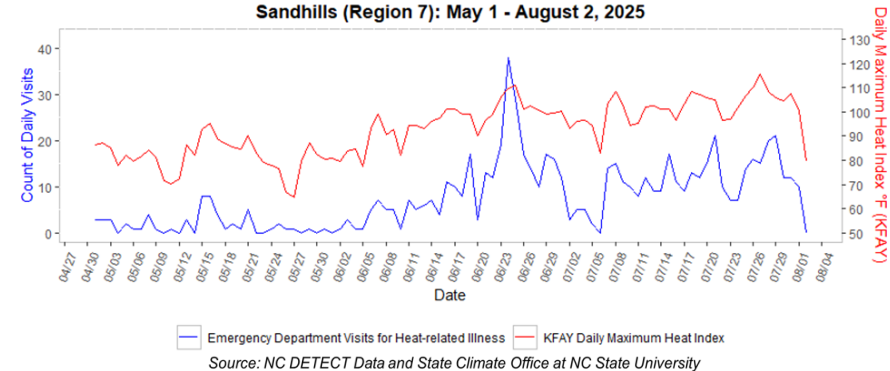
- There were **90 HRI ED visits** (0.8% of total ED visits), with a rate of **7 per 100,000 population**
- The rate was highest among **males aged 45-64 years (21.7 HRI ED visits per 100,000 population)** (Figure 1)
- The rate of HRI ED visits was highest in **Scotland County (14.6 per 100,000 population)** (Figure 2)
- The most frequent heat related diagnosis code was **other effects (n = 26; 46.4%)** (Table 1)
- The maximum daily heat index ranged from **79.7 to 115.5°F** at Fayetteville Regional/Grannis Field 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 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 2, 2025



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 Sandhills (Region 7)

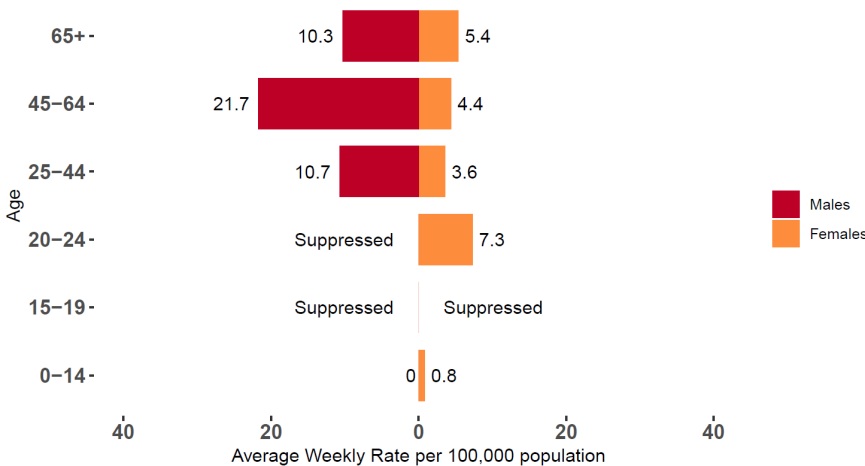


Table 1. Heat-related illness ED visits by Severity

Severity [§]	Number (N = 56 [‡])	Percent [†]
Heat Stroke	2	3.6
Heat Exhaustion	23	41.1
Heat Syncope	5	8.9
Other Effects	26	46.4

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

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

[‡] Missing severity data = 34

[†] May not total 100 due to rounding

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

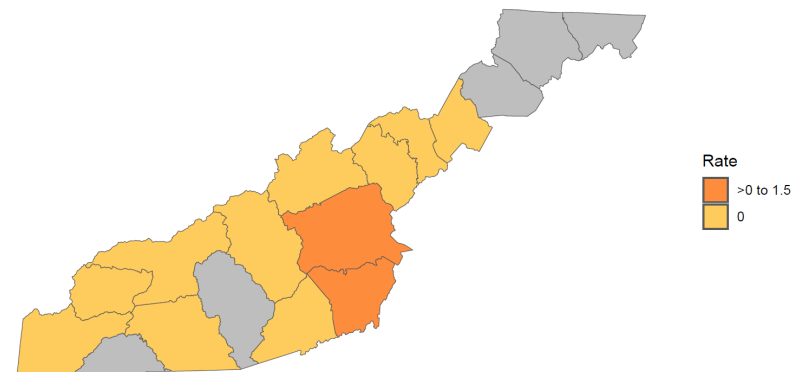
Mountain Area (Region 8) Key Messages

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

This week (July 27-August 2, 2025):

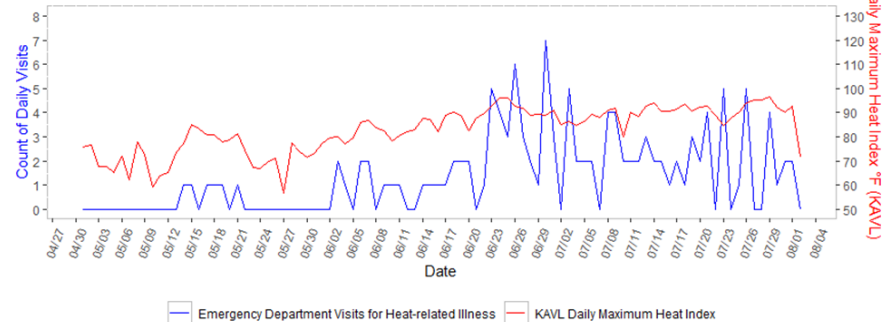
- There were **9 HRI ED visits** (0.1% of total ED visits), with a rate of **1.1 per 100,000 population**
- The rate was highest among **males aged 25-44 years (3.2 HRI ED visits per 100,000 population)** (Figure 1)
- The rate of HRI ED visits was highest in **Henderson County (0.9 per 100,000 population)** (Figure 2)
- The most frequent heat related diagnosis code was **heat exhaustion (n = 3; 60%)** (Table 1)
- The maximum daily heat index ranged from **71.7 to 96.6°F** at Asheville Regional Airport (Figure 3)
- There were **5 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 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 2, 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 = 5 [†])	Percent [†]
Heat Exhaustion	3	60
Heat Syncope	1	20
Other Effects	1	20

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

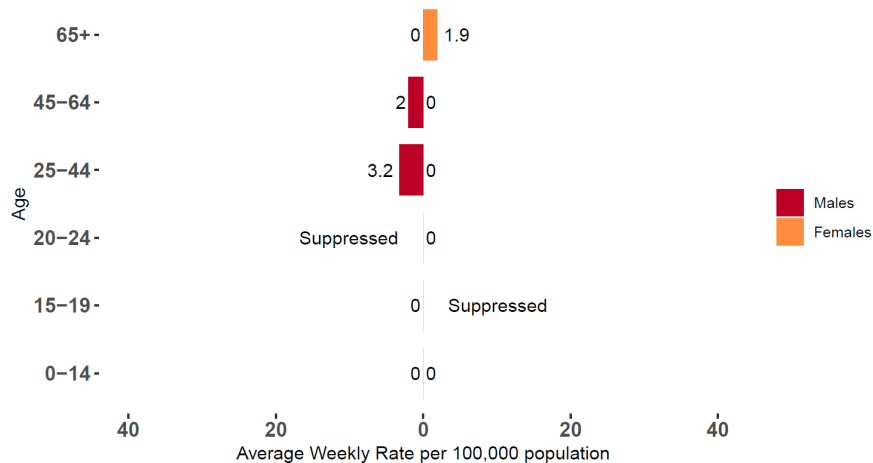
<https://www.cdc.gov/niosh/heat-stress/about/illnesses.html>

[‡] Missing severity data = 4

[†] May not total 100 due to rounding

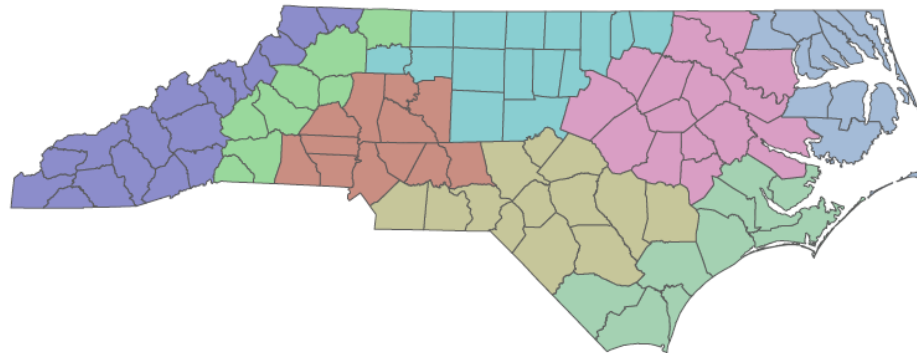
^{||} other effects include heat fatigue, heat edema, other effects of heat and light, and other effects unspecified



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).

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