North Carolina Statewide Annual Heat-related Illness Surveillance Report

May 1-September 30, 2025

NCDHHS Climate and Health Team

NC DEPARTMENT OF HEALTH AND HUMAN SERVICES
Division of Public Health

NC DETECT

Statewide Key Messages

There were **5,748* emergency department (ED) visits for heat-related illness (HRI) in the summer of 2025** with an average weekly rate of **2.4 visits per 100,000 people**. This is much higher than the five previous summers (2020 - 2024), when there was an average count of **3,798 HRI ED visits**, with an average weekly rate of **1.6 ED visits per 100,000 people.**

- The most frequent heat-related diagnosis code was **heat exhaustion (n = 1,932; 55.6%)** (Table 1)
- Heat stroke, the most severe diagnosis code for HRI, was **3.2%** of all visits with known severity in 2025 compared to **2.2%** of all visits from 2020-2024 (Table 1)
- There were at least **1,003 ED visits for workplace heat-related illness,** (17.4% of total heat-related illness ED visits)(Figure 1)
- The average weekly rate was highest among **males** aged **25-44 years** and **65+ years (4.3 per 100,000 population); males had a higher rate than females in all age groups** (Figure 2)
- The average weekly rate was highest among the **Black race category** at **3.4 per 100,000 population** (Figure 5)
- The average weekly rate by ethnicity was highest among **non-Hispanic people** at **2.4 per 100,000 population** (Figure 6)
- The average weekly rate of HRI ED visits was highest in the **Northeast** (**3.2 per 100,000 population**) (Figure 7a; Region 3)

*The 5,748 total HRI ED visits includes 361 visits that were missing county of residence. These visits are excluded from the regional reports.

Table 1. Heat-related illness ED visits by Severity

Severity[§]	2025 Number (N=3,475[‡])	2025 Percent[†]	2020-2024 Number (N=11,533[‡])	2020-2024 Percent[†]
Heat Stroke	112	3.2	255	2.2
Heat Exhaustion	1,932	55.6	7,048	61.1
Heat Syncope	396	11.4	1,394	12.1
Heat Cramps	86	2.5	475	4.1
Other Effects[‖]	949	27.3	2,361	20.5

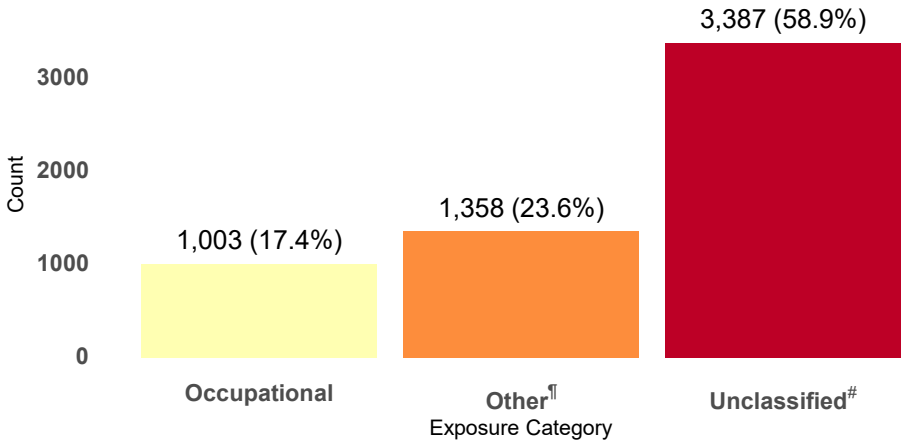
§ Definitions of heat-related illness severity categories: https://www.cdc.gov/niosh/heat-stress/about/illnesses.html

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

‡ Missing severity data 2025 = 2,273. Missing severity data 2020-2024 = 7,459

† May not total 100 due to rounding

Figure 1. Count of Heat-related Illness Emergency Department Visits by Exposure Category



¶ Other exposure categories include recreation, home maintenance, substance use, mental health crises, and hot vehicles or hot homes.

Unclassified visits were missing sufficient line listing data to classify the visit as occupational or any other exposure category.

Figure 2. Average Weekly Rate of Heat-Related Illness Emergency Department Visits by Sex and Age

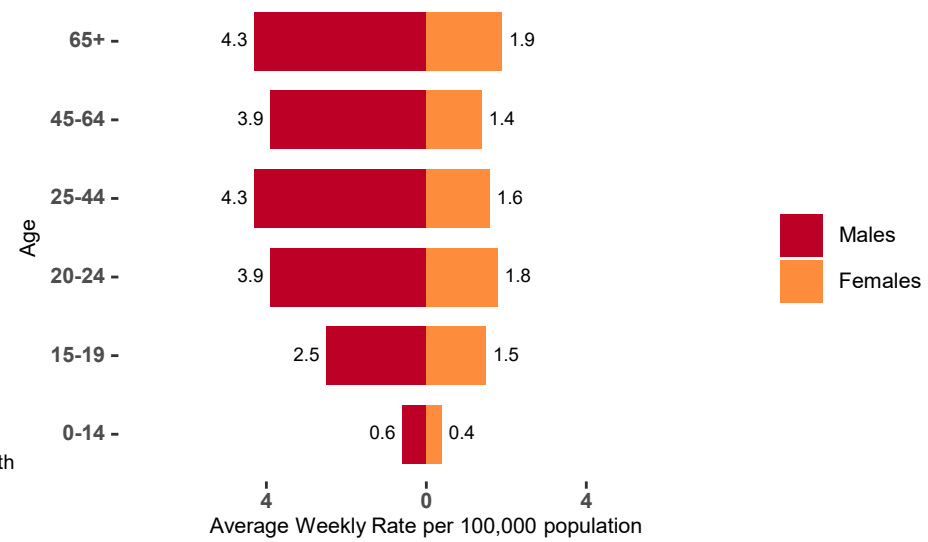
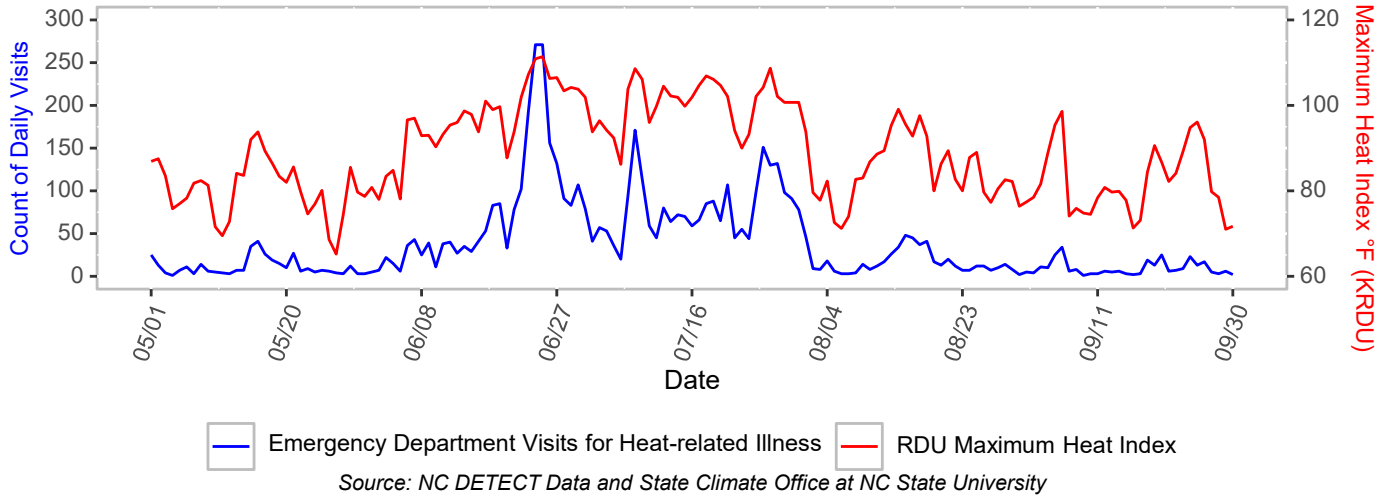
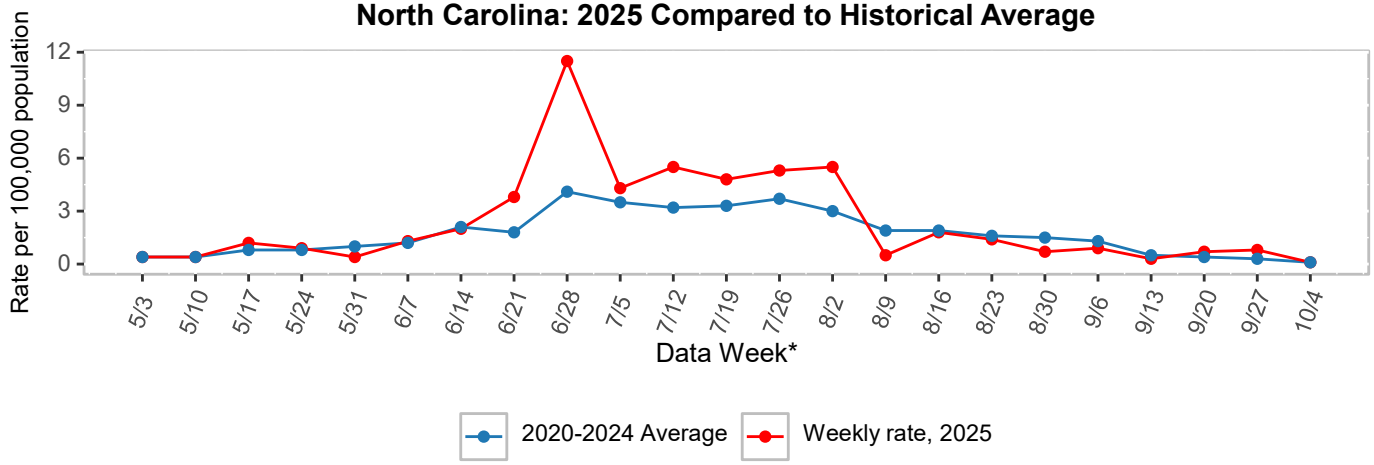


Figure 3. Emergency Department Visits for Heat-related Illness and Maximum Heat Index
North Carolina Statewide: 2025



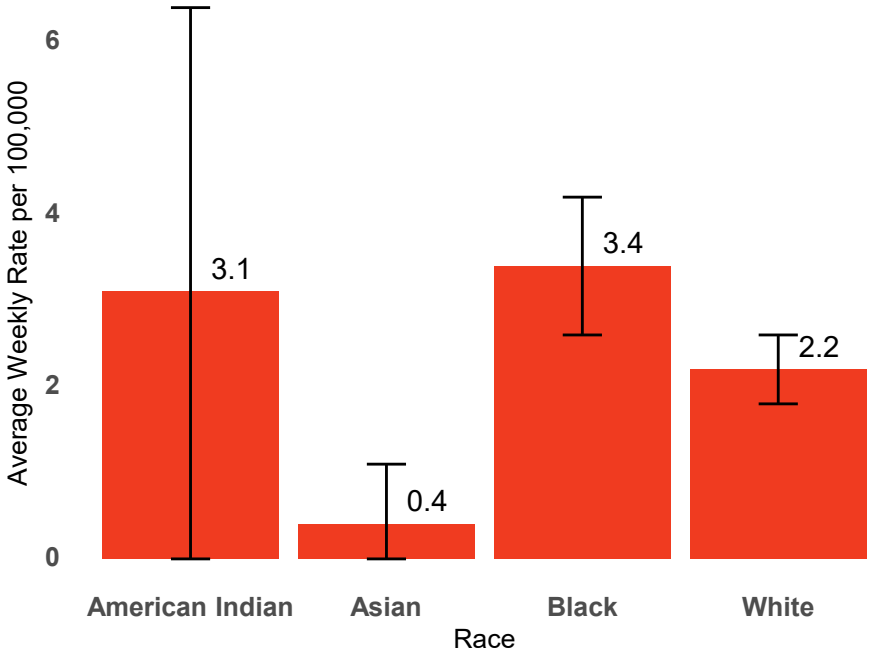
Source: NC DETECT Data and State Climate Office at NC State University

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



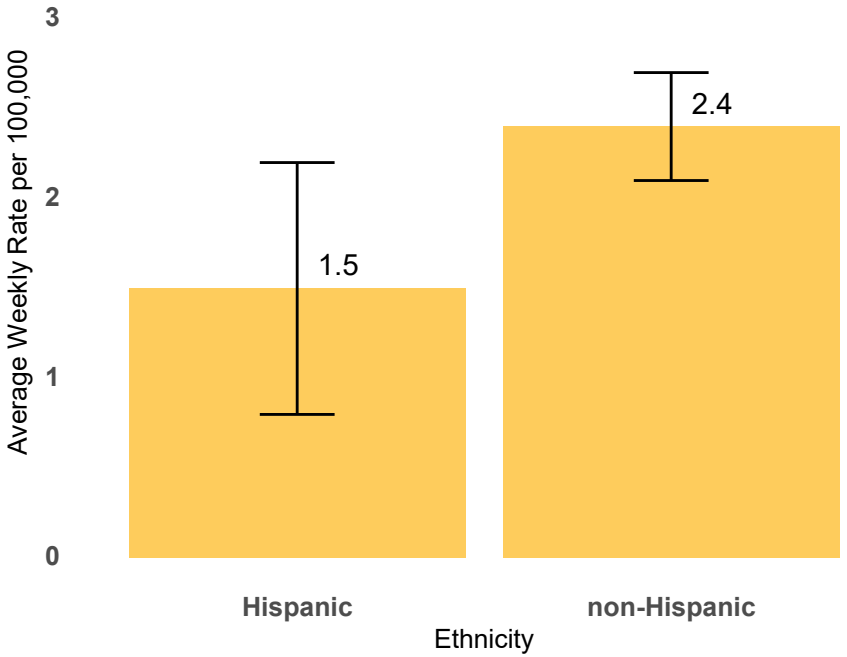
Week ending dates may vary by a few days for earlier years. For data week definitions see https://ndc.services.cdc.gov/wp-content/uploads/MMWR-Weeks-Calendar_2024-2025.pdf

Figure 5. Average Weekly Rate of Heat-related Illness ED Visits by Race per 100,000 Population



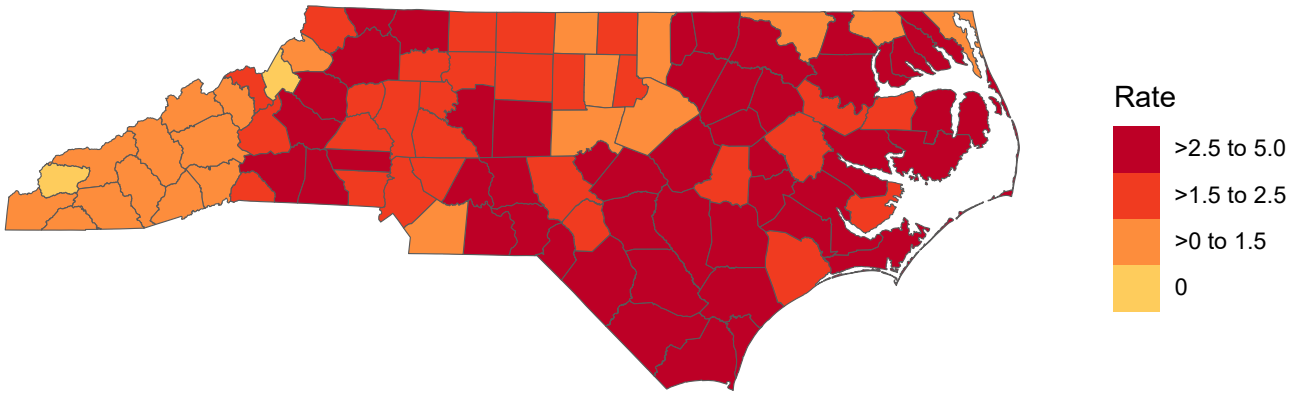
Error bars represent 95% confidence intervals. Wider confidence intervals represent less precise estimates.
The Pacific Islander race category has been removed due to lack of precision in the rates.
The 5,748 total HRI ED visits includes 118 visits that were missing race and are excluded from the rates by race.

Figure 6. Average Weekly Rate of Heat-related Illness ED Visits by Ethnicity per 100,000 Population



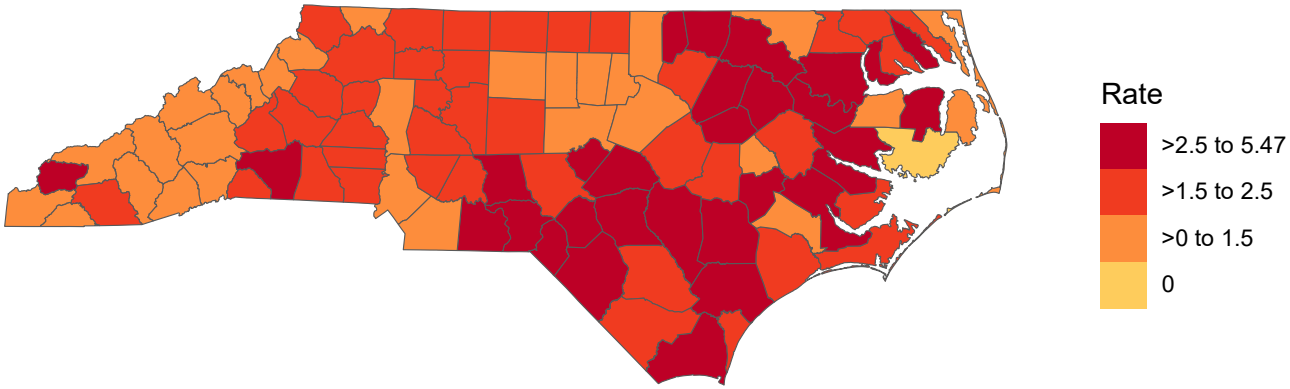
Error bars represent 95% confidence intervals. Wider confidence intervals represent less precise estimates.
The 5,748 total HRI ED visits includes 33 visits that were missing ethnicity and are excluded from the rates by ethnicity.

Figure 7a. Average Weekly Rate of Heat-related Illness Emergency Department Visits per 100,000 Population 2025



This summer, there were **51 counties** with an average weekly rate of HRI **above 2.5 ED visits per 100,000 people**, compared to **29 counties** from the previous summer.

Figure 7b. Average Weekly Rate of Heat-related Illness Emergency Department Visits per 100,000 Population 2024



North Carolina Annual Heat-related Illness Surveillance Report: Southeast (Region 1)

May 1-September 30, 2025

NC DEPARTMENT OF HEALTH AND HUMAN SERVICES
Division of Public Health

NCDETECT

Southeast (Region 1) Key Messages

There were **585 emergency department (ED) visits for heat-related illness (HRI) in the summer of 2025** with an average weekly rate of **2.9 visits per 100,000 people**. This is much higher than the five previous summers (2020-2024), when there was an average count of **383 HRI ED visits**, with an average weekly rate of **1.8 ED visits per 100,000 people**.

- The most frequent heat-related diagnosis code was **heat exhaustion (n = 190; 54.1%)** (Table 1)
- Heat stroke, the most severe diagnosis code for HRI, was **2.6%** of all visits with known severity in 2025 compared to **1.3%** of all visits from 2020–2024 (Table 1)
- The average weekly rate was highest among **males** aged **25-44 years (5.4 HRI ED visits per 100,000 population**) (Figure 1)
- The average weekly rate of HRI ED visits was highest in **Jones County (4.7 per 100,000 population**) (Figure 2)
- The maximum daily heat index ranged from **68.9 to 111.6°F** at Wilmington International Airport (Figure 3)
- There were **88** days when the minimum temperature was above 70°F.
- The average weekly rate was highest among the **Black race category** at **4.3 per 100,000 population** (Figure 5).
- The average weekly rate was highest among **non-Hispanic people** at **NA per 100,000 population** (Figure 5).

Table 1. Heat-related illness ED visits by Severity

Severity§	2025		2020-2024	
	Number (N=351‡)	Percent†	Number (N=1,197‡)	Percent†
Heat Stroke	9	2.6	16	1.3
Heat Exhaustion	190	54.1	745	62.2
Heat Syncope	41	11.7	104	8.7
Heat Cramps	8	2.3	42	3.5
Other Effects‖	103	29.3	290	24.2

§ Definitions of heat-related illness severity categories: https://www.cdc.gov/niosh/heat-stress/about/illnesses.html
‖ other effects include heat fatigue, heat edema, other effects of heat and light, and other effects unspecified
‡ Missing severity data 2025 = 234. Missing severity data 2020–2024 = 719
† May not total 100 due to rounding

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

Southeast (Region 1)

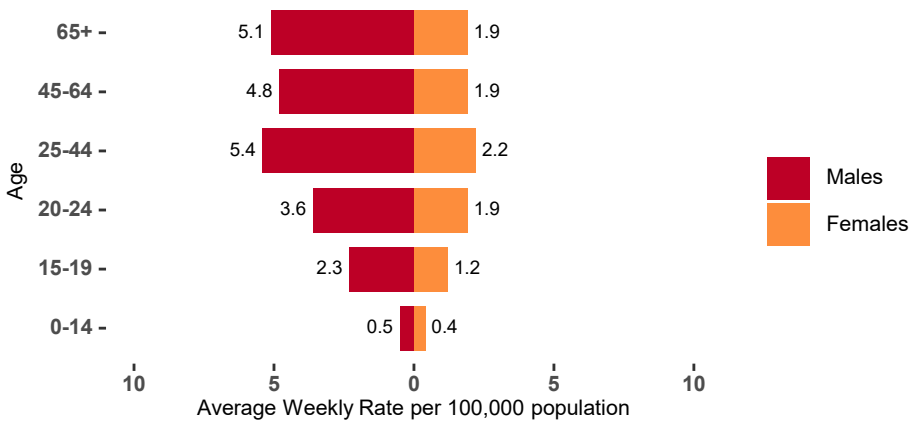


Figure 2. Average Weekly Rate of Heat-Related Illness Emergency Department Visits per 100,000 Population

Southeast (Region 1)

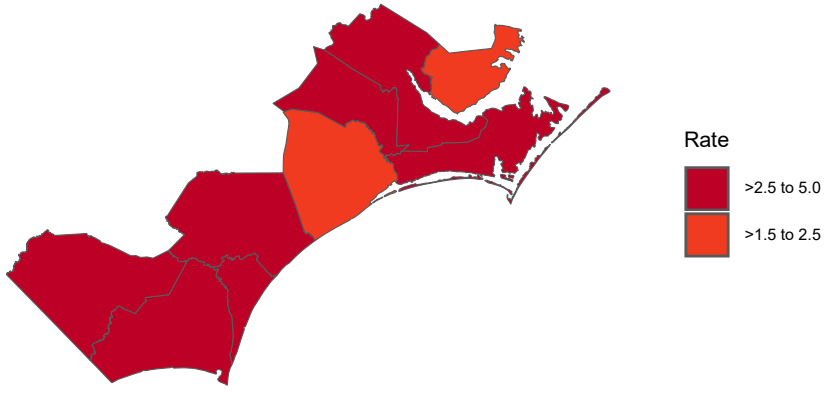
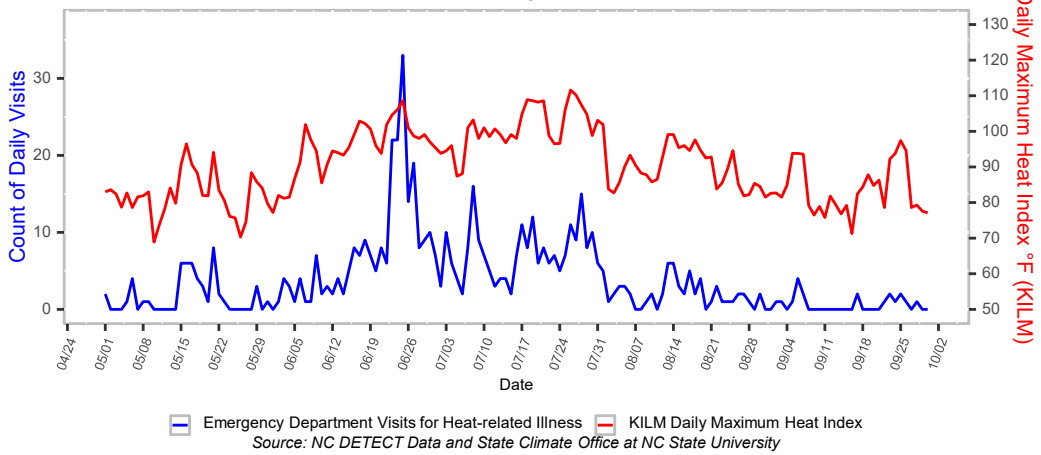
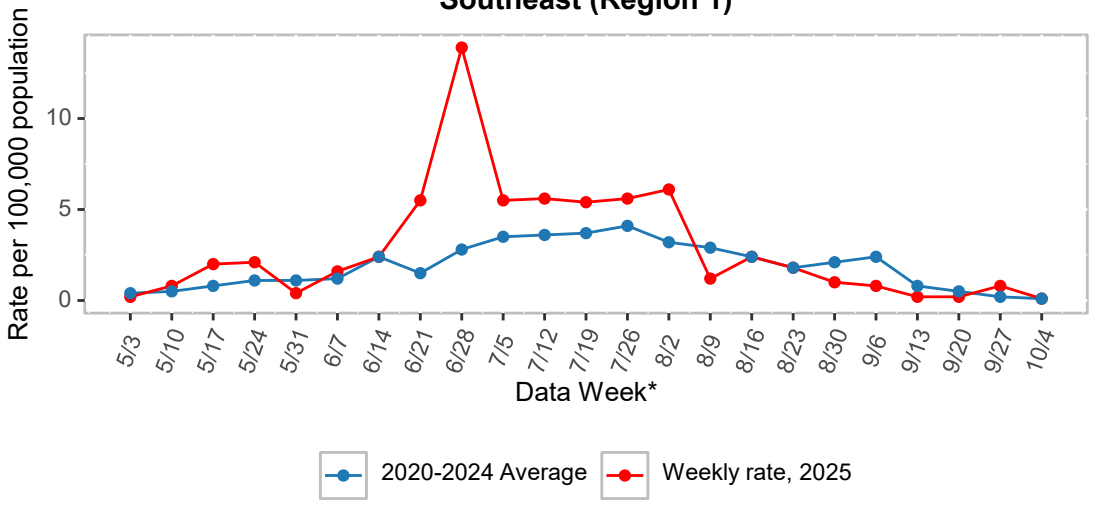


Figure 3. Emergency Department Visits for Heat-related Illness and Maximum Heat Index Southeast (Region 1): 2025



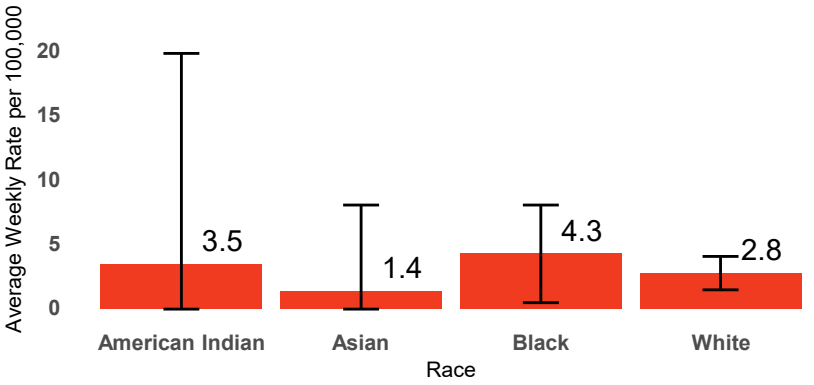
Source: NC DETECT Data and State Climate Office at NC State University

Figure 4. Rate of Emergency Department Visits for Heat-related Illness Southeast (Region 1)



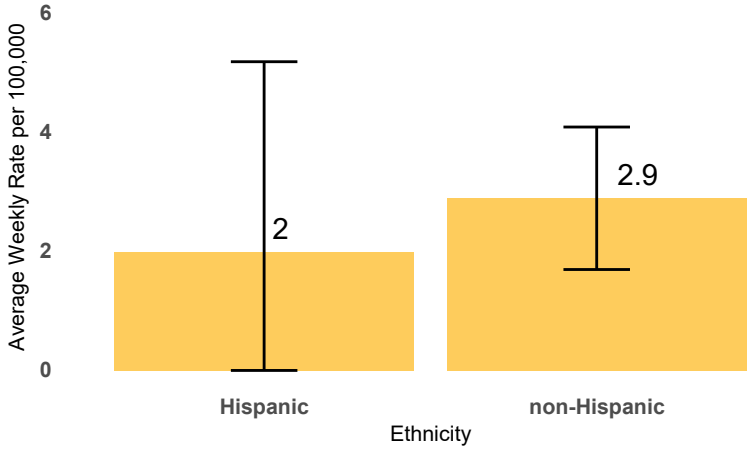
Week ending dates may vary by a few days for earlier years. For data week definitions see https://ndc.services.cdc.gov/wp-content/uploads/MMWR-Weeks-Calendar_2024-2025.pdf

Figure 5. Average Weekly Rate of Heat-related Illness ED Visits by Race per 100,000 Population Southeast (NC DETECT Region 1)



Error bars represent 95% confidence intervals. Wider confidence intervals represent less precise estimates.
The Pacific Islander race category has been removed due to lack of precision in the rates.

Figure 6. Average Weekly Rate of Heat-related Illness ED Visits by Ethnicity per 100,000 Population Southeast (NC DETECT Region 1)



Error bars represent 95% confidence intervals. Wider confidence intervals represent less precise estimates.

North Carolina Annual Heat-related Illness Surveillance Report: North Central (Region 2)

May 1-September 30, 2025

North Central (Region 2) Key Messages

There were **972 emergency department (ED) visits for heat-related illness (HRI) in the summer of 2025** with an average weekly rate of **2 visits per 100,000 people**. This is much higher than the five previous summers (2020-2024), when there was an average count of **566 HRI ED visits**, with an average weekly rate of **1.1 ED visits per 100,000 people**.

- The most frequent heat-related diagnosis code was **heat exhaustion (n = 332; 55.1%)** (Table 1)
- Heat stroke, the most severe diagnosis code for HRI, was **3.5%** of all visits with known severity in 2025 compared to **2.3%** of all visits from 2020–2024 (Table 1)
- The average weekly rate was highest among **males** aged **65+ years (4.1 HRI ED visits per 100,000 population**) (Figure 1)
- The average weekly rate of HRI ED visits was highest in **Vance County (3.7 per 100,000 population**) (Figure 2)
- The maximum daily heat index ranged from **55.8 to 105.9°F** at Piedmont Triad International Airport (Figure 3)
- There were **49** days when the minimum temperature was above 70°F.
- The average weekly rate was highest among the **Black race category** at **2.6 per 100,000 population** (Figure 5).
- The average weekly rate was highest among **non-Hispanic people** at **NA per 100,000 population** (Figure 5).

Table 1. Heat-related illness ED visits by Severity

Severity§	2025 Number (N=602‡)	2025 Percent†	2020-2024 Number (N=1,710‡)	2020-2024 Percent†
Heat Stroke	21	3.5	40	2.3
Heat Exhaustion	332	55.1	1,040	60.8
Heat Syncope	86	14.3	244	14.3
Heat Cramps	18	3.0	68	4.0
Other Effects‖	145	24.1	318	18.6

§ Definitions of heat-related illness severity categories: https://www.cdc.gov/niosh/heat-stress/about/illnesses.html
‖ other effects include heat fatigue, heat edema, other effects of heat and light, and other effects unspecified
‡ Missing severity data 2025 = 370. Missing severity data 2020–2024 = 1122
† May not total 100 due to rounding

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

North Central (Region 2)

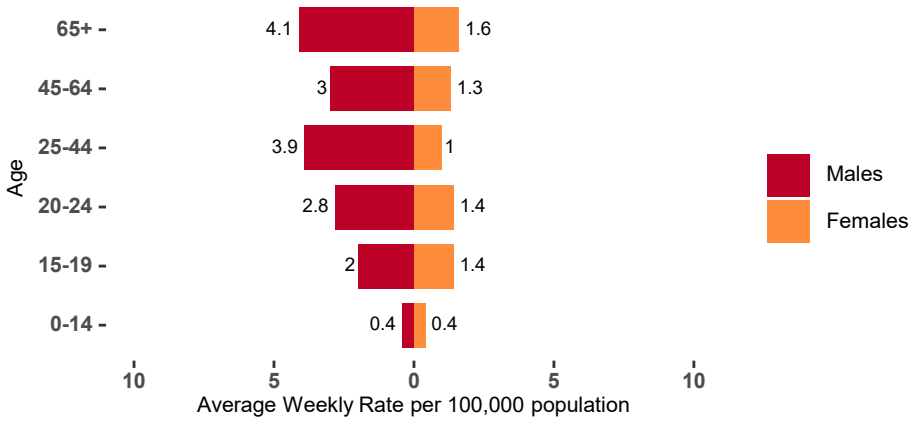


Figure 2. Average Weekly Rate of Heat-Related Illness Emergency Department Visits per 100,000 Population

North Central (Region 2)

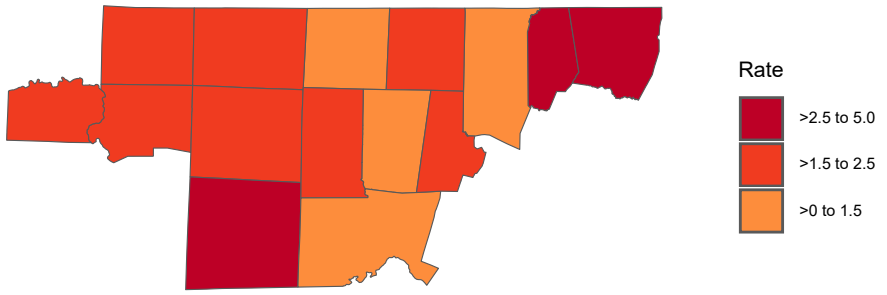
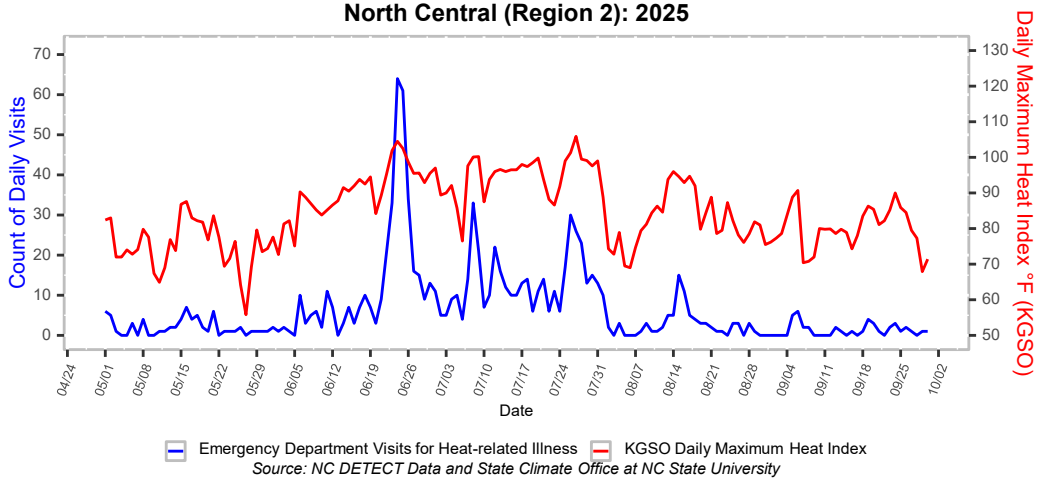
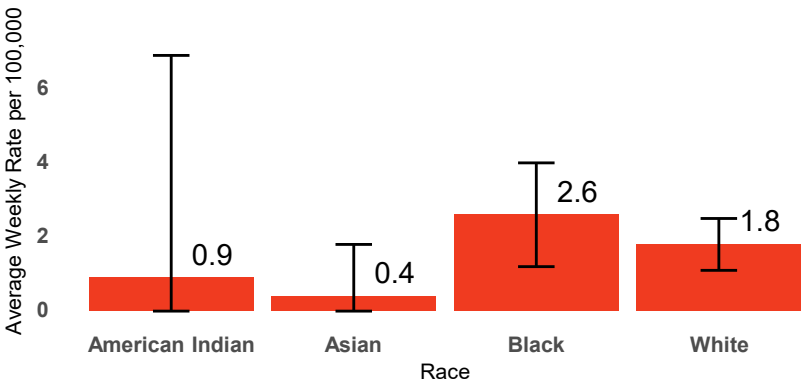


Figure 3. Emergency Department Visits for Heat-related Illness and Maximum Heat Index
North Central (Region 2): 2025



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

Figure 5. Average Weekly Rate of Heat-related Illness ED Visits by Race per 100,000 Population
North Central (NC DETECT Region 2)



Error bars represent 95% confidence intervals. Wider confidence intervals represent less precise estimates.
The Pacific Islander race category has been removed due to lack of precision in the rates.

Figure 4. Rate of Emergency Department Visits for Heat-related Illness
North Central (Region 2)

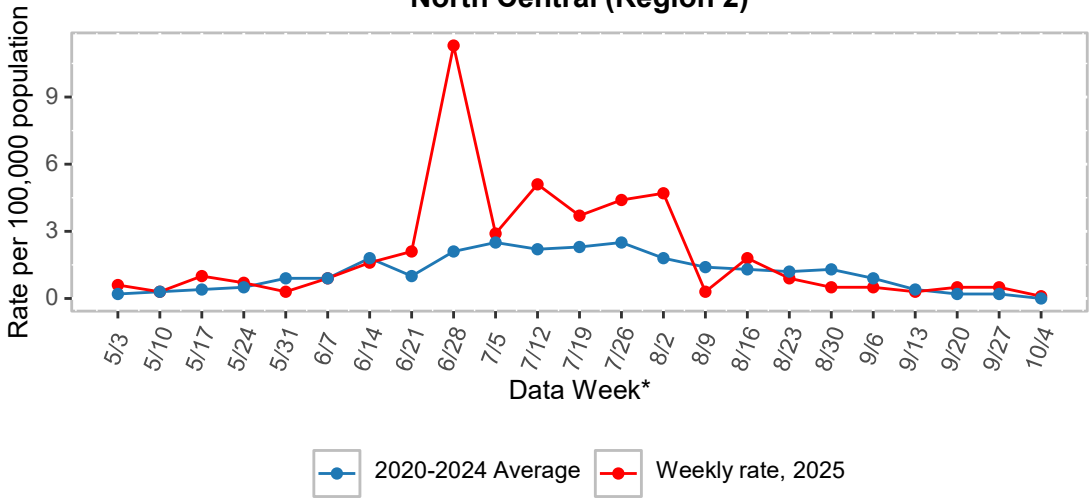


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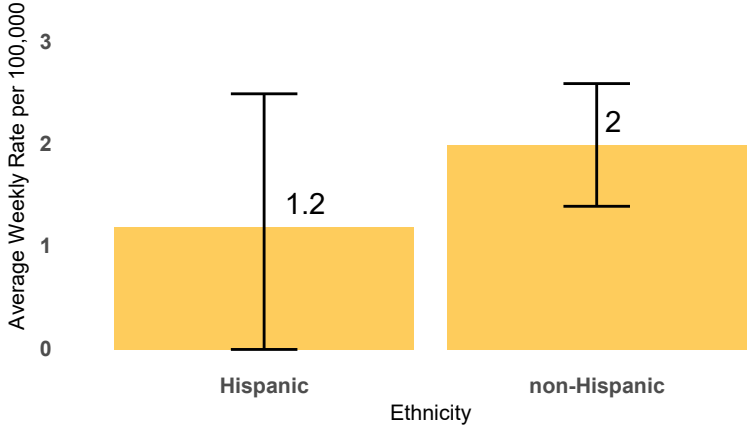
Figure 6. Average Weekly Rate of Heat-related Illness ED Visits by Ethnicity per 100,000 Population
North Central (NC DETECT Region 2)



Error bars represent 95% confidence intervals. Wider confidence intervals represent less precise estimates.

North Carolina Annual Heat-related Illness Surveillance Report: Northeast (Region 3)

May 1-September 30, 2025

NC DEPARTMENT OF HEALTH AND HUMAN SERVICES
Division of Public Health

NCDETECT

Northeast (Region 3) Key Messages

There were **142 emergency department (ED) visits for heat-related illness (HRI) in the summer of 2025** with an average weekly rate of **3.2 visits per 100,000 people**. This is much higher than the five previous summers (2020-2024), when there was an average count of **98 HRI ED visits**, with an average weekly rate of **2.1 ED visits per 100,000 people**.

- The most frequent heat-related diagnosis code was **heat exhaustion (n = 42; 46.2%)** (Table 1)
- Heat stroke, the most severe diagnosis code for HRI, was **6.6%** of all visits with known severity in 2025 compared to **1%** of all visits from 2020–2024 (Table 1)
- The average weekly rate was highest among **males** aged **20-24 years (7.3 HRI ED visits per 100,000 population**) (Figure 1)
- The average weekly rate of HRI ED visits was highest in **Pasquotank County (5 per 100,000 population**) (Figure 2)
- The maximum daily heat index ranged from **63.3 to 120.2°F** at Pitt-Greenville Airport (Figure 3)
- There were **60** days when the minimum temperature was above 70°F.
- The average weekly rate was highest among the **Pacific Islander race category** at **23.6 per 100,000 population** (Figure 5).
- The average weekly rate was highest among **non-Hispanic people** at **NA per 100,000 population** (Figure 5).

Table 1. Heat-related illness ED visits by Severity

Severity[§]	2025		2020-2024	
	Number (N=91[‡])	Percent[†]	Number (N=300[‡])	Percent[†]
Heat Stroke	6	6.6	3	1.0
Heat Exhaustion	42	46.2	197	65.7
Heat Syncope	9	9.9	33	11.0
Heat Cramps	4	4.4	7	2.3
Other Effects[‖]	30	33.0	60	20.0

§ Definitions of heat-related illness severity categories: https://www.cdc.gov/niosh/heat-stress/about/illnesses.html
‖ other effects include heat fatigue, heat edema, other effects of heat and light, and other effects unspecified
‡ Missing severity data 2025 = 51. Missing severity data 2020–2024 = 192
† May not total 100 due to rounding

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

Northeast (Region 3)

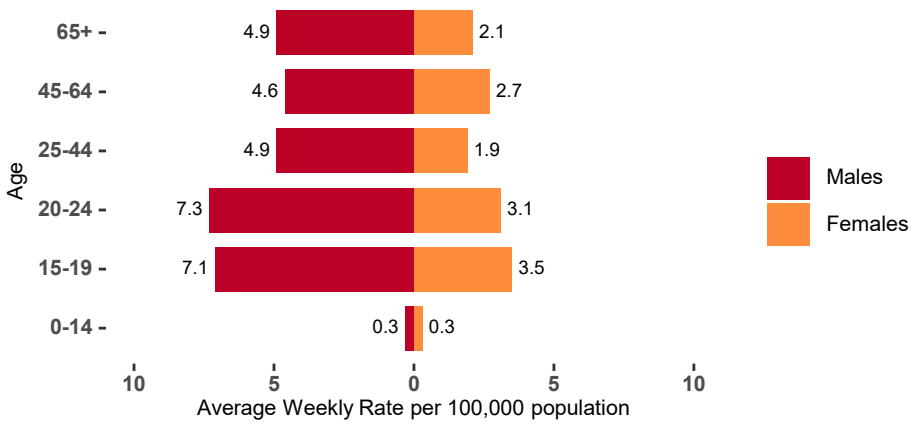


Figure 2. Average Weekly Rate of Heat-Related Illness Emergency Department Visit per 100,000 Population

Northeast (Region 3)

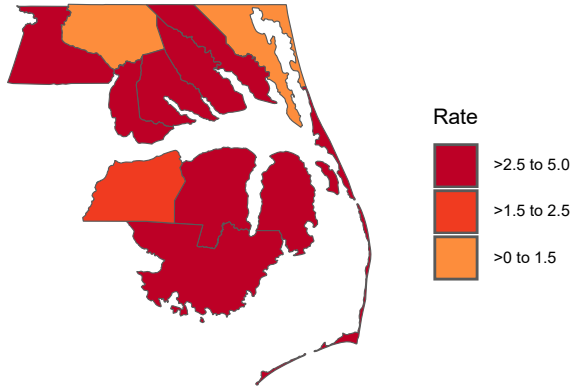
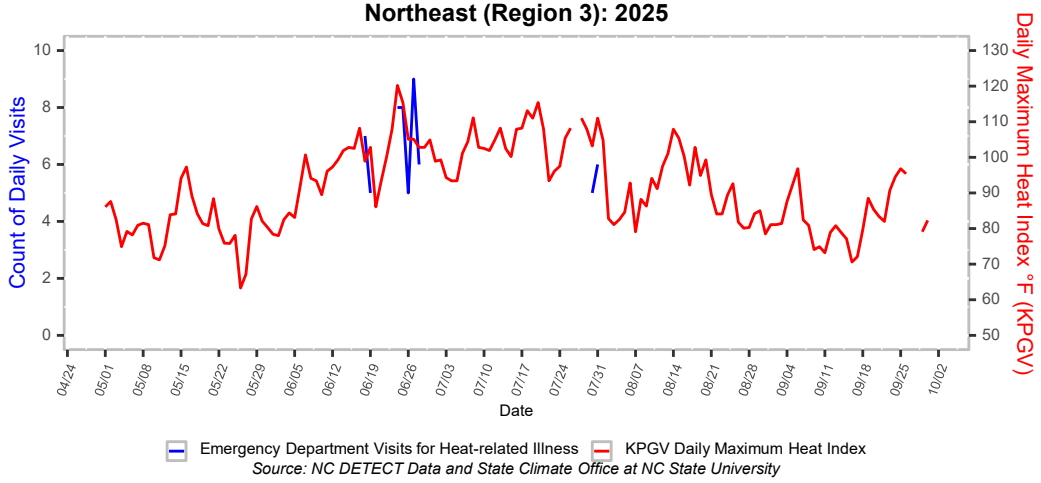
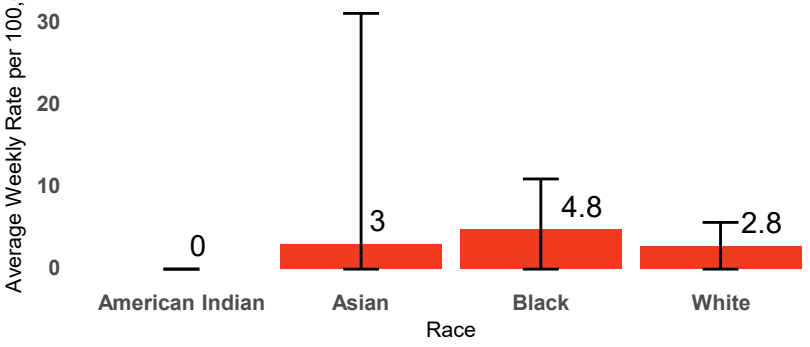


Figure 3. Emergency Department Visits for Heat-related Illness and Maximum Heat Index
Northeast (Region 3): 2025



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

Figure 5. Average Weekly Rate of Heat-related Illness ED Visits by Race per 100,000 Population
Northeast (NC DETECT Region 3)



Error bars represent 95% confidence intervals. Wider confidence intervals represent less precise estimates.
The Pacific Islander race category has been removed due to lack of precision in the rates.

Figure 4. Rate of Emergency Department Visits for Heat-related Illness
Northeast (Region 3)

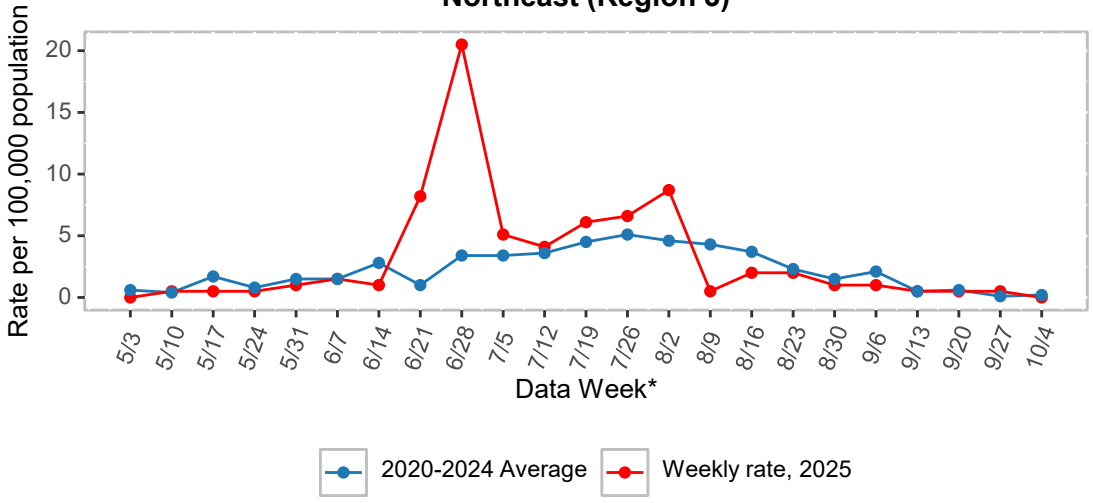


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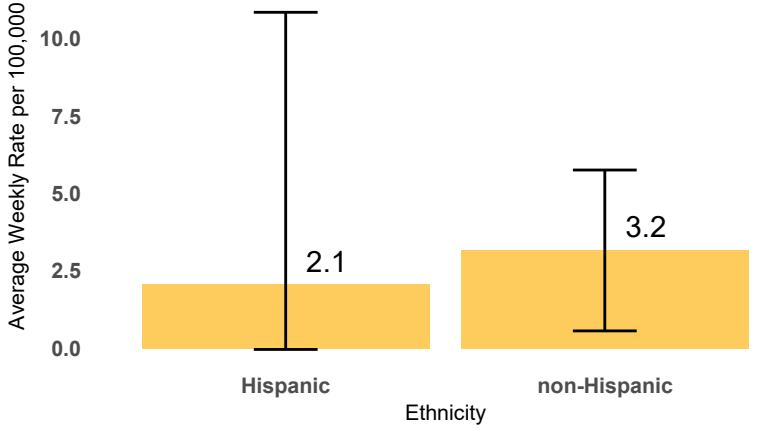
Figure 6. Average Weekly Rate of Heat-related Illness ED Visits by Ethnicity per 100,000 Population
Northeast (NC DETECT Region 3)



Error bars represent 95% confidence intervals. Wider confidence intervals represe
less precise estimates.

North Carolina Annual Heat-related Illness Surveillance Report: South Central (Region 4)

May 1-September 30, 2025

NC DEPARTMENT OF HEALTH AND HUMAN SERVICES
Division of Public Health

NC DETECT

South Central (Region 4) Key Messages

There were **1,238 emergency department (ED) visits for heat-related illness (HRI) in the summer of 2025** with an average weekly rate of **2.1 visits per 100,000 people**. This is much higher than the five previous summers (2020-2024), when there was an average count of **744 HRI ED visits**, with an average weekly rate of **1.2 ED visits per 100,000 people**.

- The most frequent heat-related diagnosis code was **heat exhaustion (n = 410; 53.5%)** (Table 1)
- Heat stroke, the most severe diagnosis code for HRI, was **3%** of all visits with known severity in 2025 compared to **2.3%** of all visits from 2020–2024 (Table 1)
- The average weekly rate was highest among **males** aged **20-24 years (4.2 HRI ED visits per 100,000 population**) (Figure 1)
- The average weekly rate of HRI ED visits was highest in **Cleveland County (3.2 per 100,000 population**) (Figure 2)
- The maximum daily heat index ranged from **59.5 to 113.7°F** at Charlotte/Douglas International Airport (Figure 3)
- There were **67** days when the minimum temperature was above 70°F.
- The average weekly rate was highest among the **American Indian race category** at **7.4 per 100,000 population** (Figure 5).
- The average weekly rate was highest among **non-Hispanic people** at **NA per 100,000 population** (Figure 5).

Table 1. Heat-related illness ED visits by Severity

Severity§	2025 Number (N=767‡)	2025 Percent†	2020-2024 Number (N=2,307‡)	2020-2024 Percent†
Heat Stroke	23	3.0	54	2.3
Heat Exhaustion	410	53.5	1,345	58.3
Heat Syncope	76	9.9	261	11.3
Heat Cramps	24	3.1	74	3.2
Other Effects‖	234	30.5	573	24.8

§ Definitions of heat-related illness severity categories: https://www.cdc.gov/niosh/heat-stress/about/illnesses.html
‖ other effects include heat fatigue, heat edema, other effects of heat and light, and other effects unspecified
‡ Missing severity data 2025 = 471. Missing severity data 2020–2024 = 1413
† May not total 100 due to rounding

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

South Central (Region 4)

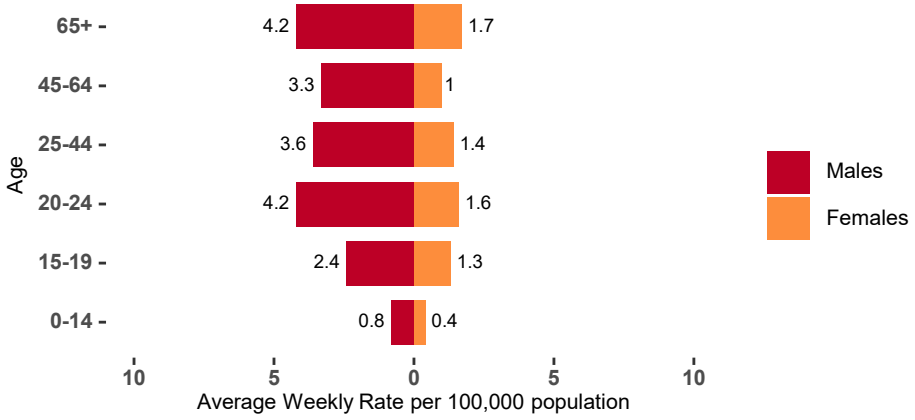


Figure 2. Average Weekly Rate of Heat-Related Illness Emergency Department Visits per 100,000 Population

South Central (Region 4)

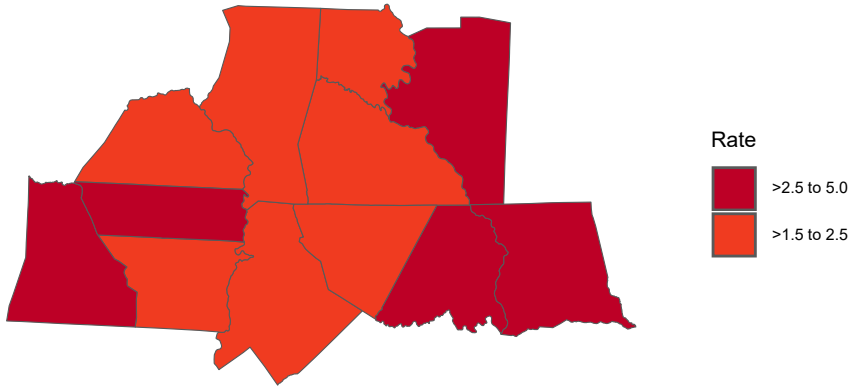
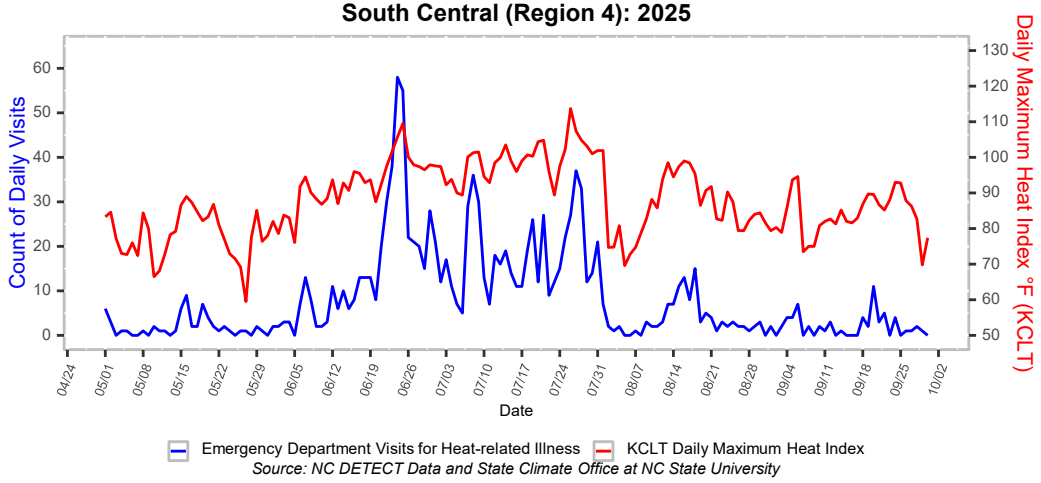


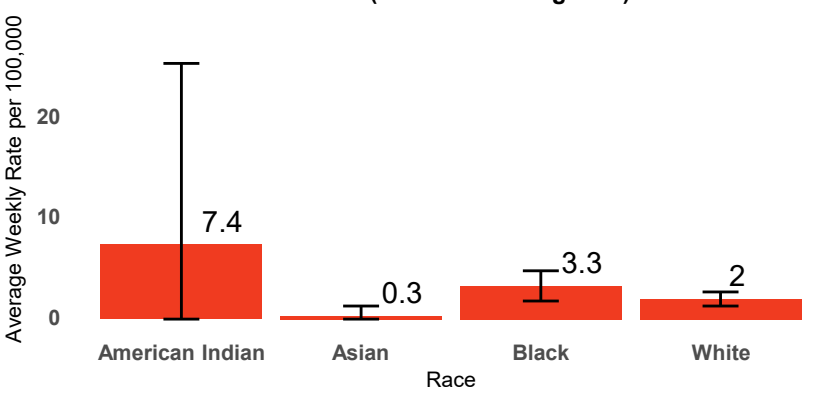
Figure 3. Emergency Department Visits for Heat-related Illness and Maximum Heat Index South Central (Region 4): 2025



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

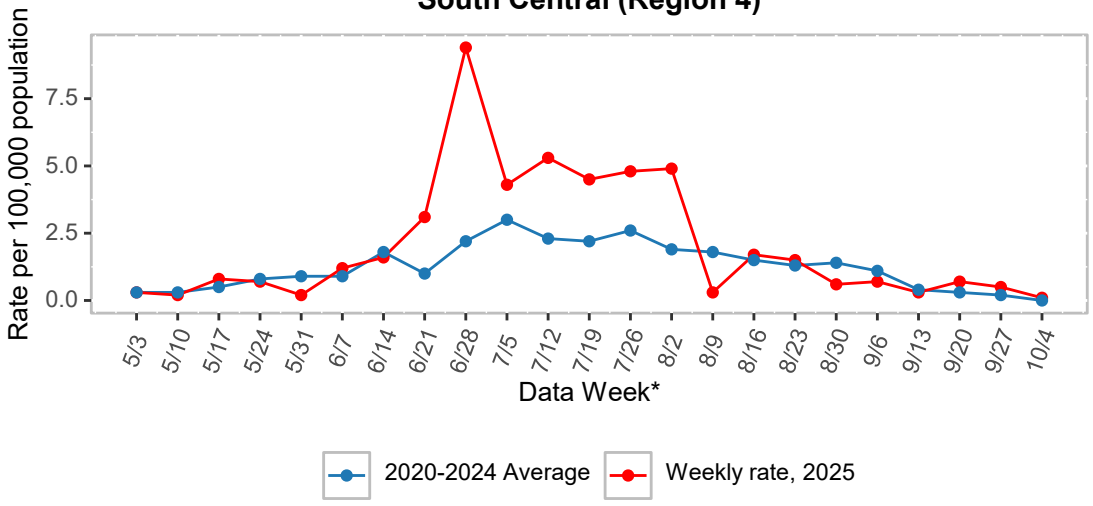
Figure 5. Average Weekly Rate of Heat-related Illness ED Visits by Race per 100,000 Population

South Central (NC DETECT Region 4)



Error bars represent 95% confidence intervals. Wider confidence intervals represent less precise estimates.
The Pacific Islander race category has been removed due to lack of precision in the rates.

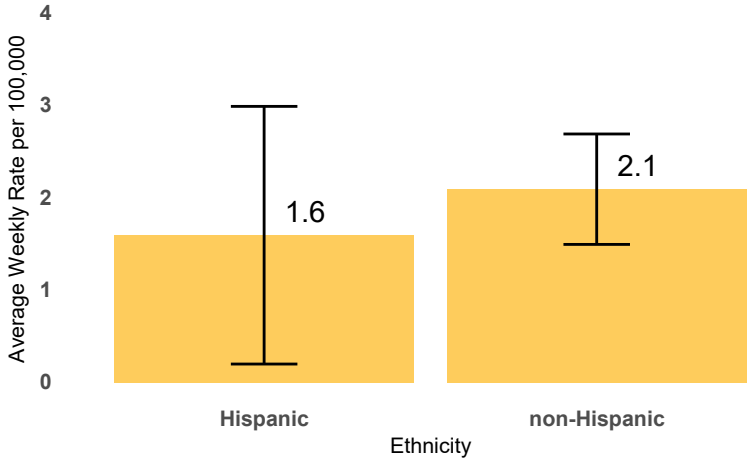
Figure 4. Rate of Emergency Department Visits for Heat-related Illness South Central (Region 4)



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

Figure 6. Average Weekly Rate of Heat-related Illness ED Visits by Ethnicity per 100,000 Population

South Central (NC DETECT Region 4)



Error bars represent 95% confidence intervals. Wider confidence intervals represent less precise estimates.

North Carolina Annual Heat-related Illness Surveillance Report: North Coastal Plain (Region 5)

May 1-September 30, 2025

North Coastal Plain (Region 5) Key Messages

There were **1,125 emergency department (ED) visits for heat-related illness (HRI) in the summer of 2025** with an average weekly rate of **2.2 visits per 100,000 people**. This is much higher than the five previous summers (2020-2024), when there was an average count of **809 HRI ED visits**, with an average weekly rate of **1.5 ED visits per 100,000 people**.

- The most frequent heat-related diagnosis code was **heat exhaustion (n = 374; 55.3%)** (Table 1)
- Heat stroke, the most severe diagnosis code for HRI, was **2.1%** of all visits with known severity in 2025 compared to **1.8%** of all visits from 2020–2024 (Table 1)
- The average weekly rate was highest among **males** aged **65+ years (4.5 HRI ED visits per 100,000 population**) (Figure 1)
- The average weekly rate of HRI ED visits was highest in **Wilson County (4.9 per 100,000 population**) (Figure 2)
- The maximum daily heat index ranged from **64.5 to 110.2°F** at Rocky Mount-Wilson Regional Airport (Figure 3)
- There were **61** days when the minimum temperature was above 70°F.
- The average weekly rate was highest among the **Pacific Islander race category** at **5 per 100,000 population** (Figure 5).
- The average weekly rate was highest among **non-Hispanic people** at **NA per 100,000 population** (Figure 5).

Table 1. Heat-related illness ED visits by Severity

Severity§	2025		2020-2024	
	Number (N=676‡)	Percent†	Number (N=2,283‡)	Percent†
Heat Stroke	14	2.1	42	1.8
Heat Exhaustion	374	55.3	1,401	61.4
Heat Syncope	77	11.4	282	12.4
Heat Cramps	17	2.5	132	5.8
Other Effects‖	194	28.7	426	18.7

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

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

‡ Missing severity data 2025 = 449. Missing severity data 2020–2024 = 1764

† May not total 100 due to rounding

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

North Coastal Plain (Region 5)

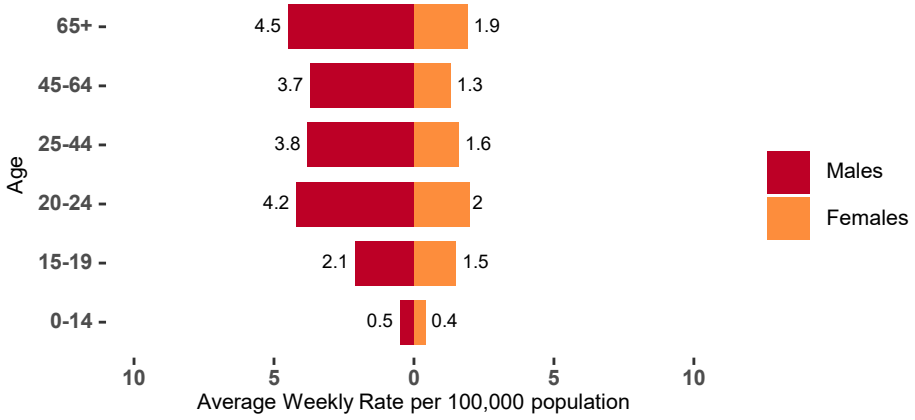
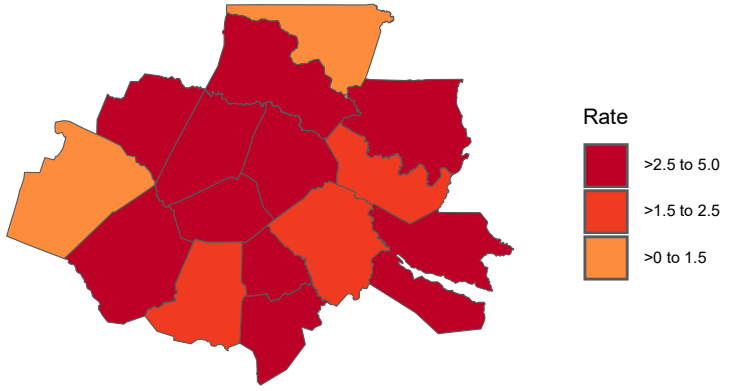


Figure 2. Average Weekly Rate of Heat-Related Illness Emergency Department Visits per 100,000 Population

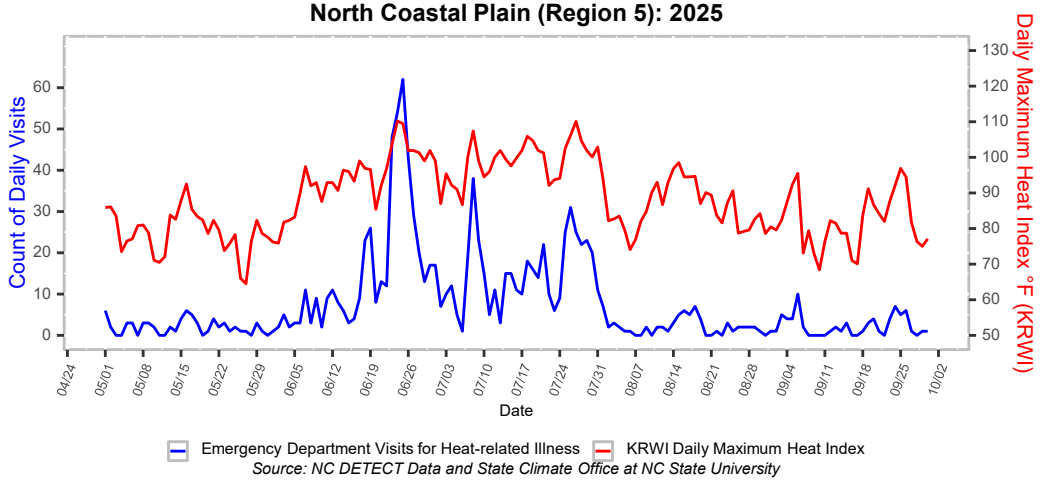
North Coastal Plain (Region 5)



North Carolina Annual Heat-related Illness Surveillance Report: North Coastal Plain (Region 5)

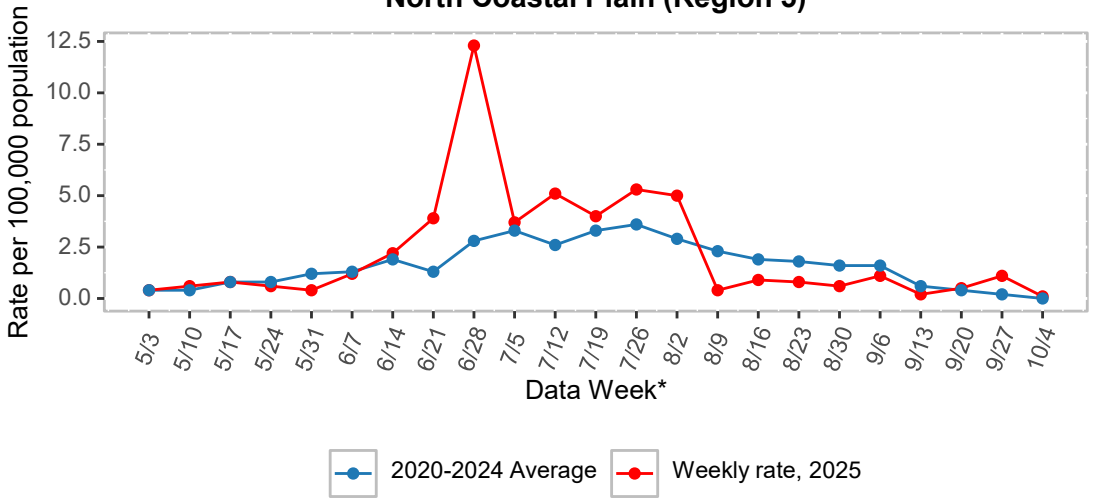
May 1-September 30, 2025

Figure 3. Emergency Department Visits for Heat-related Illness and Maximum Heat Index
North Coastal Plain (Region 5): 2025



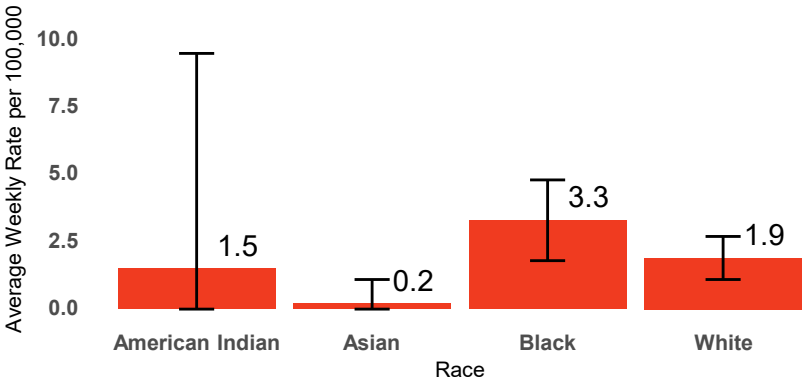
Source: NC DETECT Data and State Climate Office at NC State University

Figure 4. Rate of Emergency Department Visits for Heat-related Illness
North Coastal Plain (Region 5)



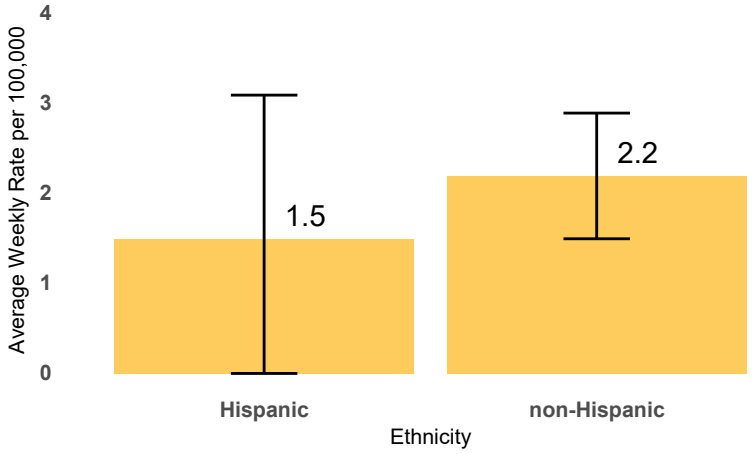
Week ending dates may vary by a few days for earlier years. For data week definitions see https://ndc.services.cdc.gov/wp-content/uploads/MMWR-Weeks-Calendar_2024-2025.pdf

Figure 5. Average Weekly Rate of Heat-related Illness ED Visits by Race per 100,000 Population
North Coastal Plain (NC DETECT Region 5)



Error bars represent 95% confidence intervals. Wider confidence intervals represent less precise estimates.
The Pacific Islander race category has been removed due to lack of precision in the rates.

Figure 6. Average Weekly Rate of Heat-related Illness ED Visits by Ethnicity per 100,000 Population
North Coastal Plain (NC DETECT Region 5)



Error bars represent 95% confidence intervals. Wider confidence intervals represent less precise estimates.

North Carolina Annual Heat-related Illness Surveillance Report: Foothills (Region 6)

May 1-September 30, 2025

Foothills (Region 6) Key Messages

There were **334 emergency department (ED) visits for heat-related illness (HRI) in the summer of 2025** with an average weekly rate of **3.1 visits per 100,000 people**. This is much higher than the five previous summers (2020-2024), when there was an average count of **161 HRI ED visits**, with an average weekly rate of **1.4 ED visits per 100,000 people**.

- The most frequent heat-related diagnosis code was **heat exhaustion (n = 125; 70.2%)** (Table 1)
- Heat stroke, the most severe diagnosis code for HRI, was **4.5%** of all visits with known severity in 2025 compared to **2.8%** of all visits from 2020–2024 (Table 1)
- The average weekly rate was highest among **males** aged **45-64 years (6.5 HRI ED visits per 100,000 population**) (Figure 1)
- The average weekly rate of HRI ED visits was highest in **Rutherford County (4.8 per 100,000 population**) (Figure 2)
- The maximum daily heat index ranged from **57.6 to 107.7°F** at Morganton-Lenoir Airport (Figure 3)
- There were **26** days when the minimum temperature was above 70°F.
- The average weekly rate was highest among the **Black race category** at **6 per 100,000 population** (Figure 5).
- The average weekly rate was highest among **non-Hispanic people** at **NA per 100,000 population** (Figure 5).

Table 1. Heat-related illness ED visits by Severity

Severity[§]	2025		2020-2024	
	Number (N=178[‡])	Percent[†]	Number (N=529[‡])	Percent[†]
Heat Stroke	8	4.5	15	2.8
Heat Exhaustion	125	70.2	378	71.5
Heat Syncope	9	5.1	40	7.6
Heat Cramps	1	0.6	15	2.8
Other Effects[‖]	35	19.7	81	15.3

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

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

‡ Missing severity data 2025 = 156. Missing severity data 2020–2024 = 275

† May not total 100 due to rounding

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

Foothills (Region 6)

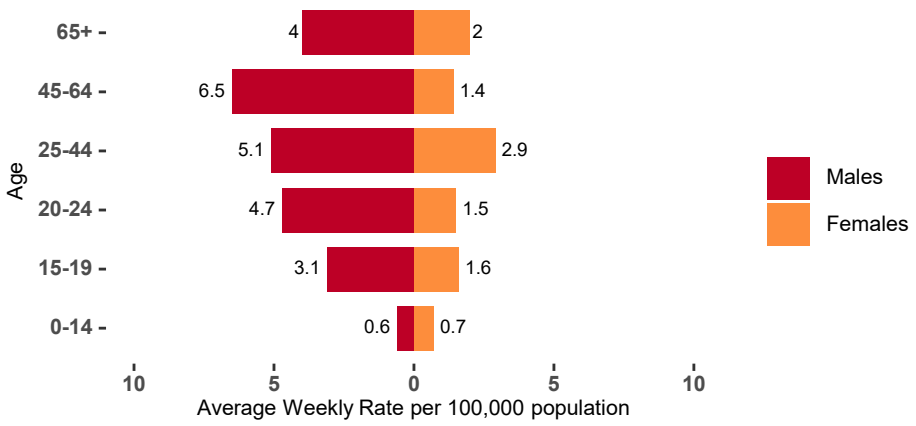


Figure 2. Average Weekly Rate of Heat-Related Illness Emergency Department Visits per 100,000 Population

Foothills (Region 6)

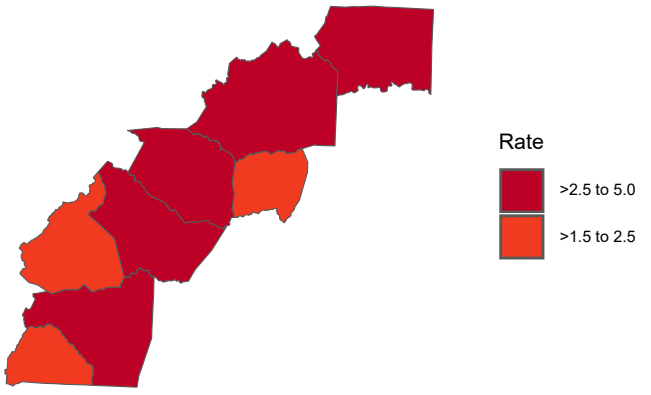
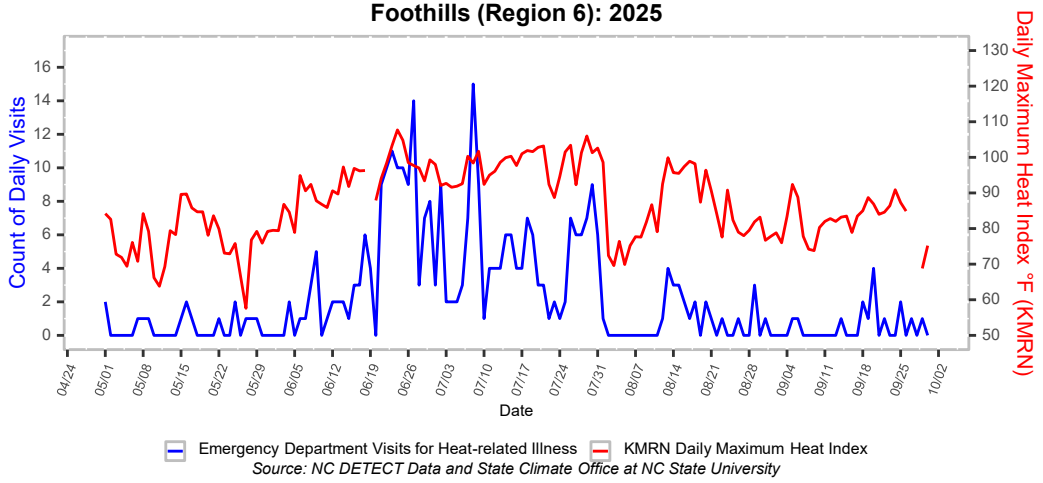
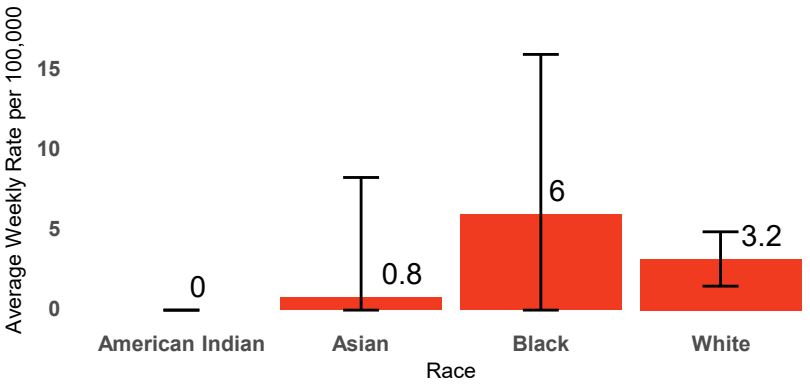


Figure 3. Emergency Department Visits for Heat-related Illness and Maximum Heat Index
Foothills (Region 6): 2025



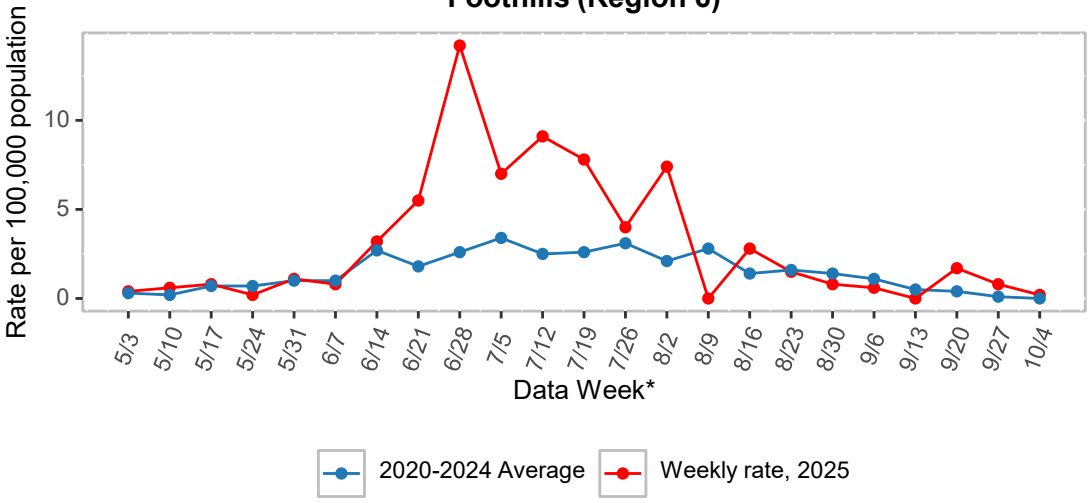
Source: NC DETECT Data and State Climate Office at NC State University

Figure 5. Average Weekly Rate of Heat-related Illness ED Visits by Race per 100,000 Population
Foothills (NC DETECT Region 6)



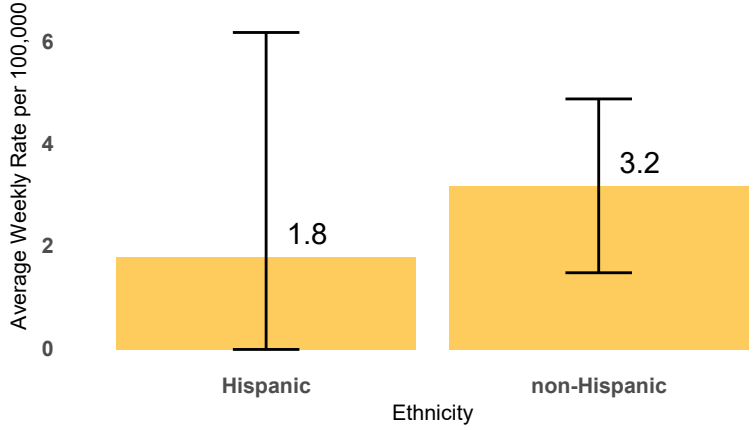
Error bars represent 95% confidence intervals. Wider confidence intervals represent less precise estimates.
The Pacific Islander race category has been removed due to lack of precision in the rates.

Figure 4. Rate of Emergency Department Visits for Heat-related Illness
Foothills (Region 6)



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

Figure 6. Average Weekly Rate of Heat-related Illness ED Visits by Ethnicity per 100,000 Population
Foothills (NC DETECT Region 6)



Error bars represent 95% confidence intervals. Wider confidence intervals represent less precise estimates.

North Carolina Weekly Heat-related Illness Surveillance Report: Sandhills (Region 7)

May 1-September 30, 2025

Sandhills (Region 7) Key Messages

There were **837 emergency department (ED) visits for heat-related illness (HRI) in the summer of 2025** with an average weekly rate of **2.8 visits per 100,000 people**. This is much higher than the five previous summers (2020-2024), when there was an average count of **619 HRI ED visits**, with an average weekly rate of **2 ED visits per 100,000 people**.

- The most frequent heat-related diagnosis code was **heat exhaustion (n = 268; 54%)** (Table 1)
- Heat stroke, the most severe diagnosis code for HRI, was **3.6%** of all visits with known severity in 2025 compared to **2.6%** of all visits from 2020–2024 (Table 1)
- The average weekly rate was highest among **males** aged **45-64 years (5.3 HRI ED visits per 100,000 population**) (Figure 1)
- The average weekly rate of HRI ED visits was highest in **Anson County (4.4 per 100,000 population**) (Figure 2)
- The maximum daily heat index ranged from **64.7 to 115.5°F** at Fayetteville Regional/Grannis Field Airport (Figure 3)
- There were **75** days when the minimum temperature was above 70°F.
- The average weekly rate was highest among the **Pacific Islander race category** at **16.3 per 100,000 population** (Figure 5).
- The average weekly rate was highest among **non-Hispanic people** at **NA per 100,000 population** (Figure 5).

Table 1. Heat-related illness ED visits by Severity

Severity§	2025 Number (N=496‡)	2025 Percent†	2020-2024 Number (N=1,874‡)	2020-2024 Percent†
Heat Stroke	18	3.6	49	2.6
Heat Exhaustion	268	54.0	1,079	57.6
Heat Syncope	58	11.7	267	14.2
Heat Cramps	8	1.6	73	3.9
Other Effects‖	144	29.0	406	21.7

§ Definitions of heat-related illness severity categories: https://www.cdc.gov/niosh/heat-stress/about/illnesses.html
‖ other effects include heat fatigue, heat edema, other effects of heat and light, and other effects unspecified
‡ Missing severity data 2025 = 341. Missing severity data 2020–2024 = 1219
† May not total 100 due to rounding

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

Sandhills (Region 7)

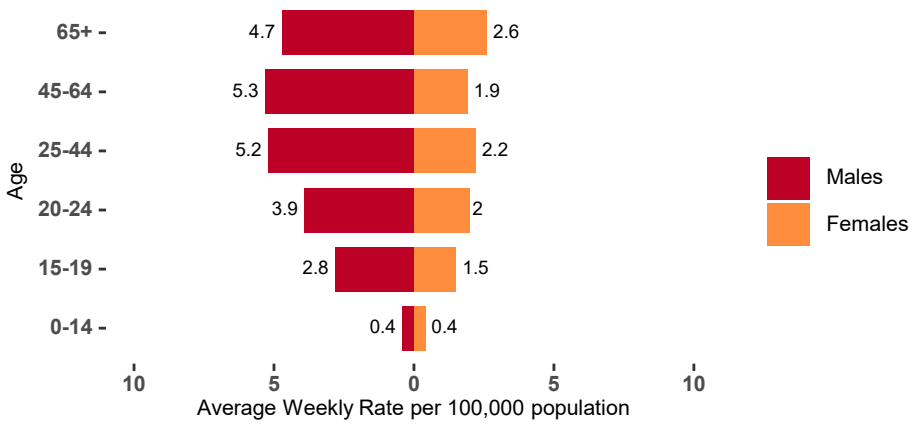


Figure 2. Average Weekly Rate of Heat-Related Illness Emergency Department Visits per 100,000 Population

Sandhills (Region 7)

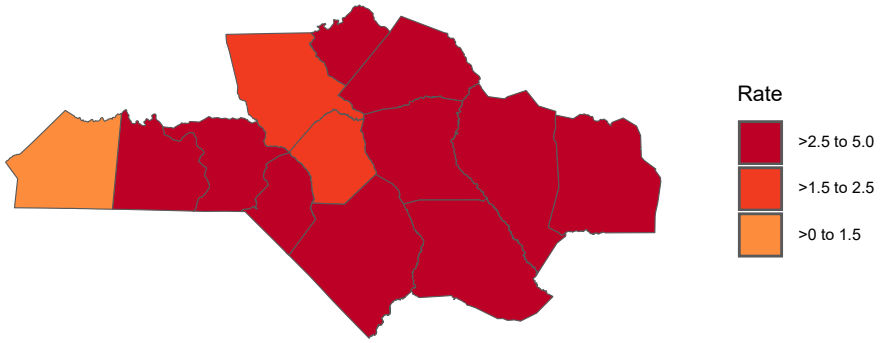
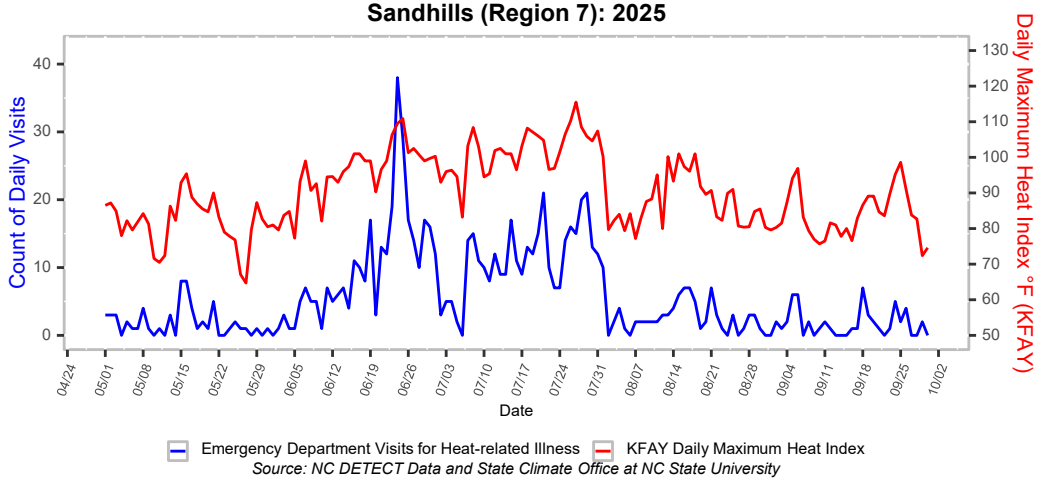
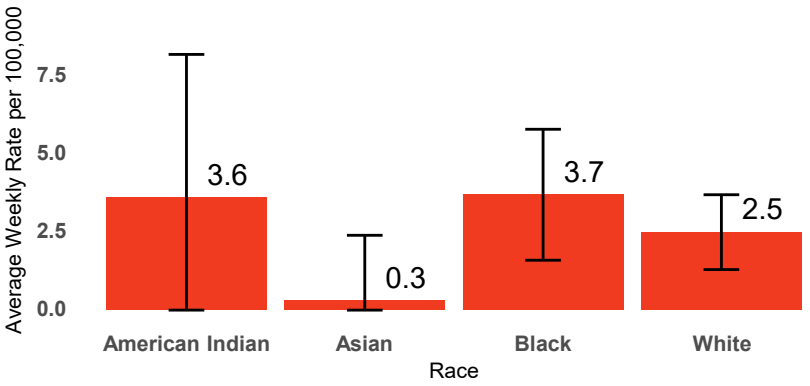


Figure 3. Emergency Department Visits for Heat-related Illness and Maximum Heat Index
Sandhills (Region 7): 2025



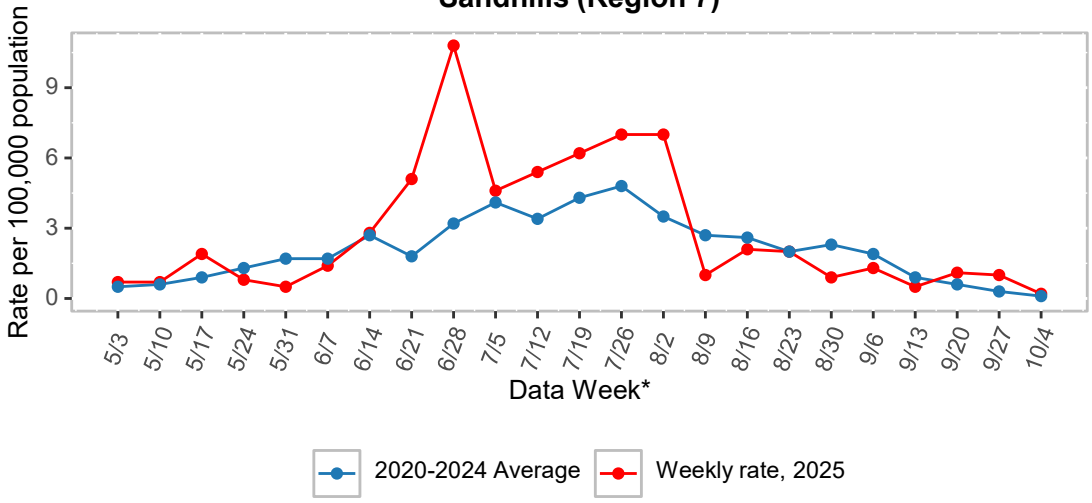
Source: NC DETECT Data and State Climate Office at NC State University

Figure 5. Average Weekly Rate of Heat-related Illness ED Visits by Race per 100,000 Population
Sandhills (NC DETECT Region 7)



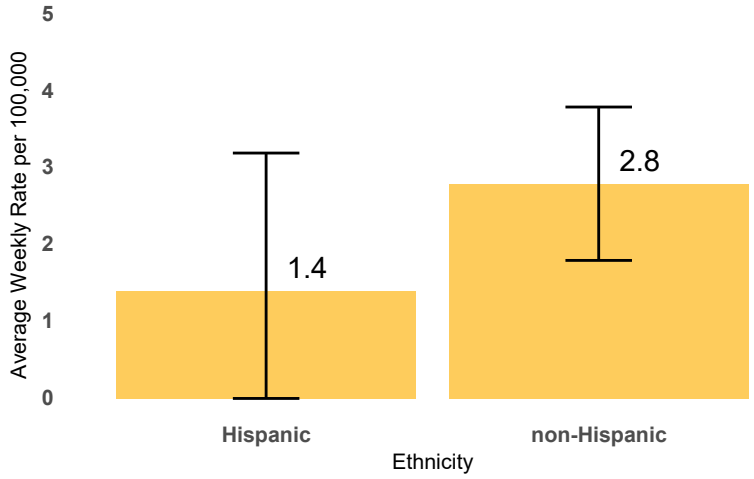
Error bars represent 95% confidence intervals. Wider confidence intervals represent less precise estimates.
The Pacific Islander race category has been removed due to lack of precision in the rates.

Figure 4. Rate of Emergency Department Visits for Heat-related Illness
Sandhills (Region 7)



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

Figure 6. Average Weekly Rate of Heat-related Illness ED Visits by Ethnicity per 100,000 Population
Sandhills (NC DETECT Region 7)



Error bars represent 95% confidence intervals. Wider confidence intervals represent less precise estimates.

North Carolina Weekly Heat-related Illness Surveillance Report: Mountains (Region 8)

May 1-September 30, 2025

Mountains (Region 8) Key Messages

There were **154 emergency department (ED) visits for heat-related illness (HRI) in the summer of 2025** with an average weekly rate of **0.8 visits per 100,000 people**. This is much higher than the five previous summers (2020-2024), when there was an average count of **104 HRI ED visits**, with an average weekly rate of **0.5 ED visits per 100,000 people**.

- The most frequent heat-related diagnosis code was **heat exhaustion (n = 68; 81%)** (Table 1)
- Heat stroke, the most severe diagnosis code for HRI, was **1.2%** of all visits with known severity in 2025 compared to **3.2%** of all visits from 2020–2024 (Table 1)
- The average weekly rate was highest among **males** aged **25-44 years (1.7 HRI ED visits per 100,000 population**) (Figure 1)
- The average weekly rate of HRI ED visits was highest in **Alleghany County (3.1 per 100,000 population**) (Figure 2)
- The maximum daily heat index ranged from **56.6 to 96.6°F** at Asheville Regional Airport (Figure 3)
- There were **12** days when the minimum temperature was above 70°F.
- The average weekly rate was highest among the **Black race category** at **1.4 per 100,000 population** (Figure 5).
- The average weekly rate was highest among **non-Hispanic people** at **NA per 100,000 population** (Figure 5).

Table 1. Heat-related illness ED visits by Severity

Severity[§]	2025		2020-2024	
	Number (N=84[‡])	Percent[†]	Number (N=343[‡])	Percent[†]
Heat Stroke	1	1.2	11	3.2
Heat Exhaustion	68	81.0	268	78.1
Heat Syncope	9	10.7	35	10.2
Heat Cramps	0	0.0	4	1.2
Other Effects[‖]	6	7.1	25	7.3

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

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

‡ Missing severity data 2025 = 70. Missing severity data 2020–2024 = 175

† May not total 100 due to rounding

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

Mountains (Region 8)

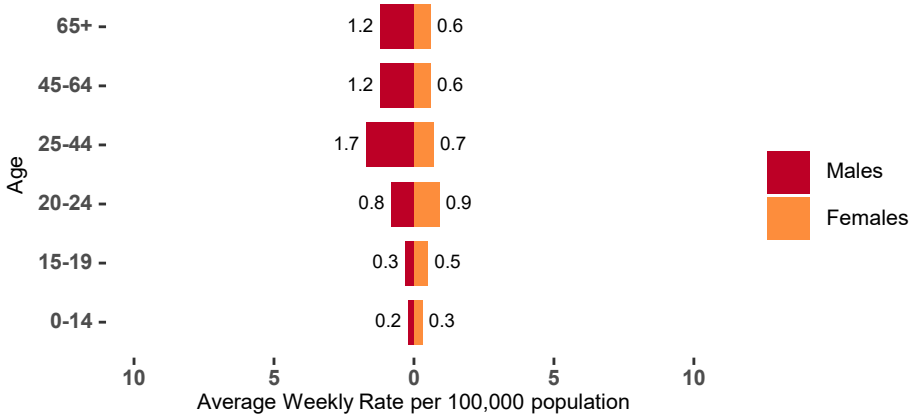


Figure 2. Average Weekly Rate of Heat-Related Illness Emergency Department Visits per 100,000 Population

Mountains (Region 8)

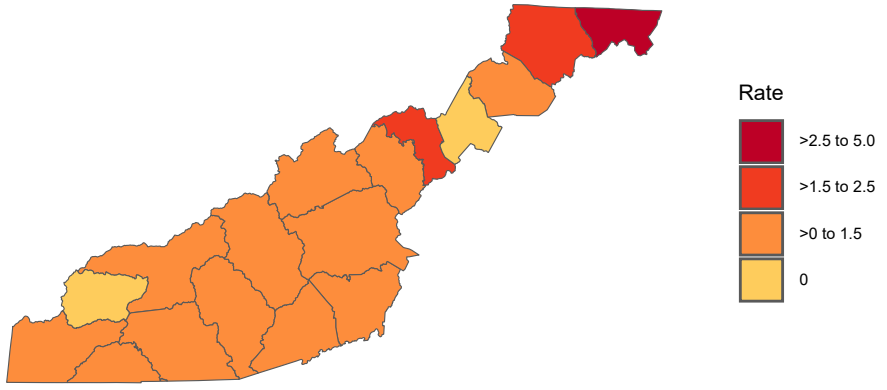
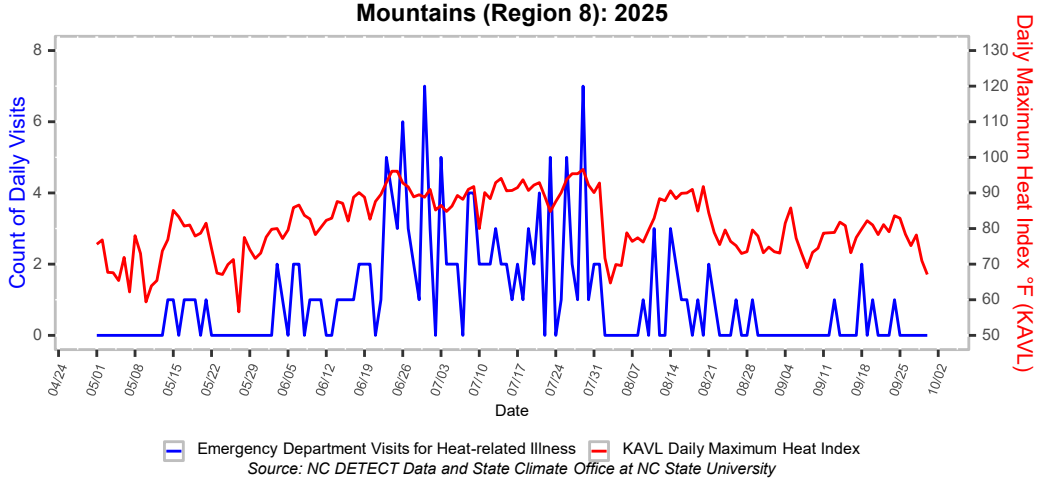
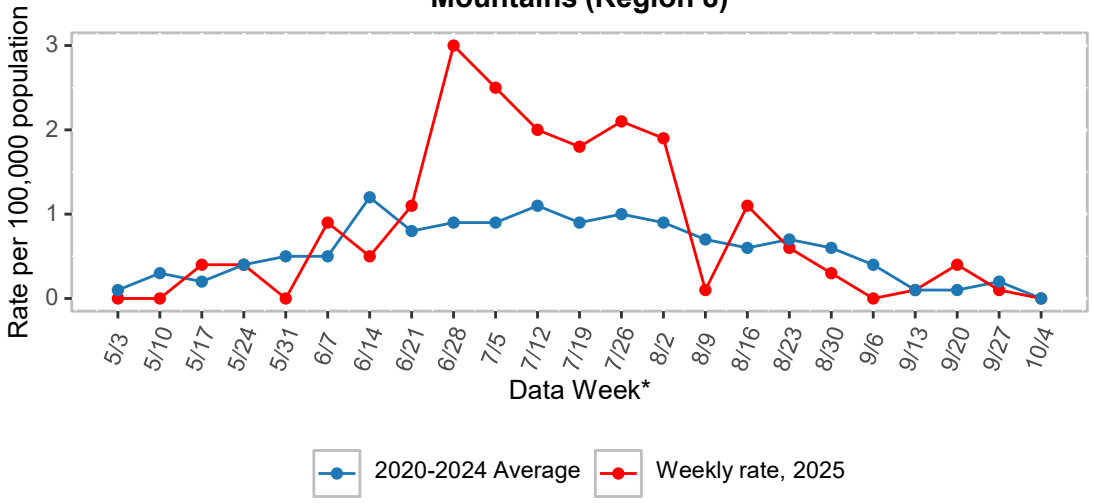


Figure 3. Emergency Department Visits for Heat-related Illness and Maximum Heat Index
Mountains (Region 8): 2025



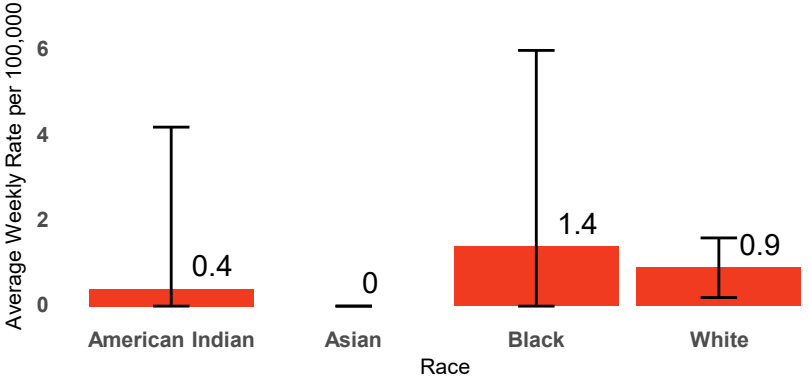
Source: NC DETECT Data and State Climate Office at NC State University

Figure 4. Rate of Emergency Department Visits for Heat-related Illness
Mountains (Region 8)



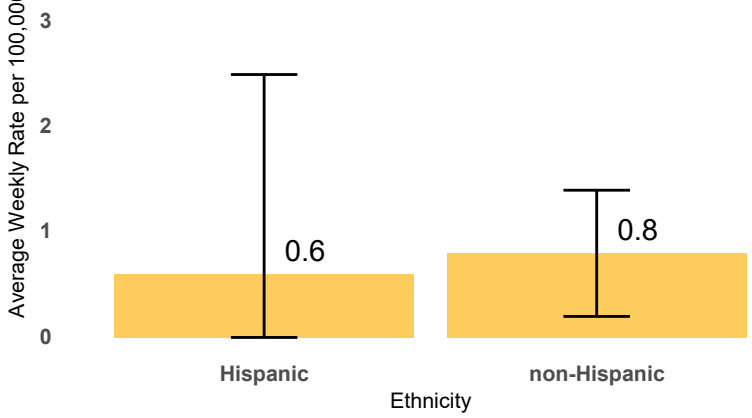
Week ending dates may vary by a few days for earlier years. For data week definitions see https://ndc.services.cdc.gov/wp-content/uploads/MMWR-Weeks-Calendar_2024-2025.pdf

Figure 5. Average Weekly Rate of Heat-related Illness ED Visits by Race per 100,000 Population
Mountains (NC DETECT Region 8)



Error bars represent 95% confidence intervals. Wider confidence intervals represent less precise estimates.
The Pacific Islander race category has been removed due to lack of precision in the rates.

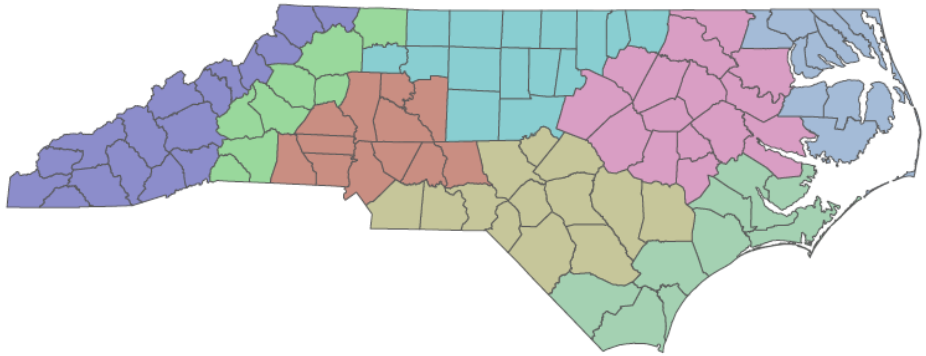
Figure 6. Average Weekly Rate of Heat-related Illness ED Visits by Ethnicity per 100,000 Population
Mountains (NC DETECT Region 8)



Error bars represent 95% confidence intervals. Wider confidence intervals represent less precise estimates.

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 NCDHHS Division of Public Health (DPH) Federal Public Health Emergency Preparedness Grant and managed through collaboration between 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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This report is available on the NCDHHS Climate and Health website at https://www.dph.ncdhhs.gov/programs/epidemiology/occupational-and-environmental-epidemiology/climate-and-your-health/extreme-heat/nc-heat-health-data-and-reports