

The background of the slide features a warm, golden sunset over a range of mountains. The sun is positioned in the upper right corner, casting a bright glow across the sky. The mountains are silhouetted against the bright light, creating a layered effect. The overall color palette is dominated by shades of orange, yellow, and brown.

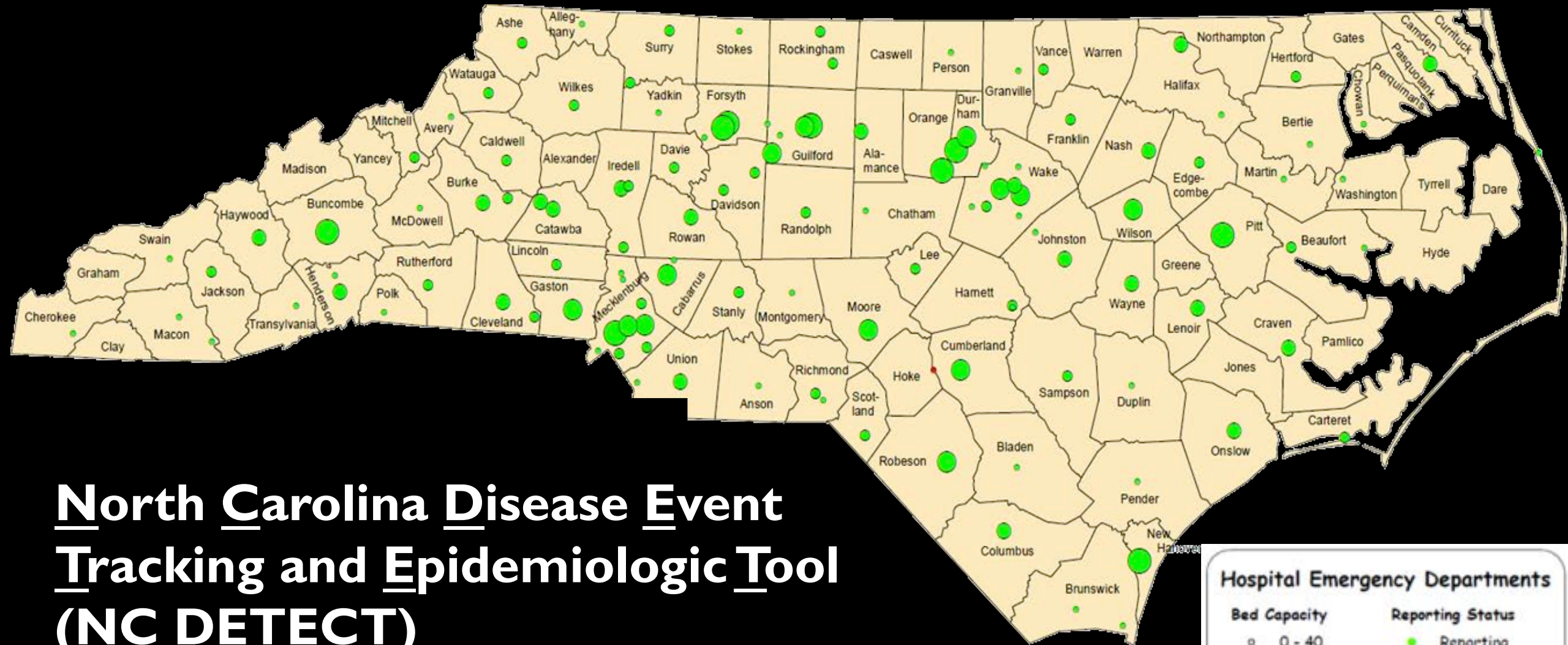
# Heat-Health Vulnerability in North Carolina: The Heat – Health Vulnerability Tool (*HHVT*)

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# North Carolina Disease Event Tracking and Epidemiologic Tool (NC DETECT)

**Hospital Emergency Departments**

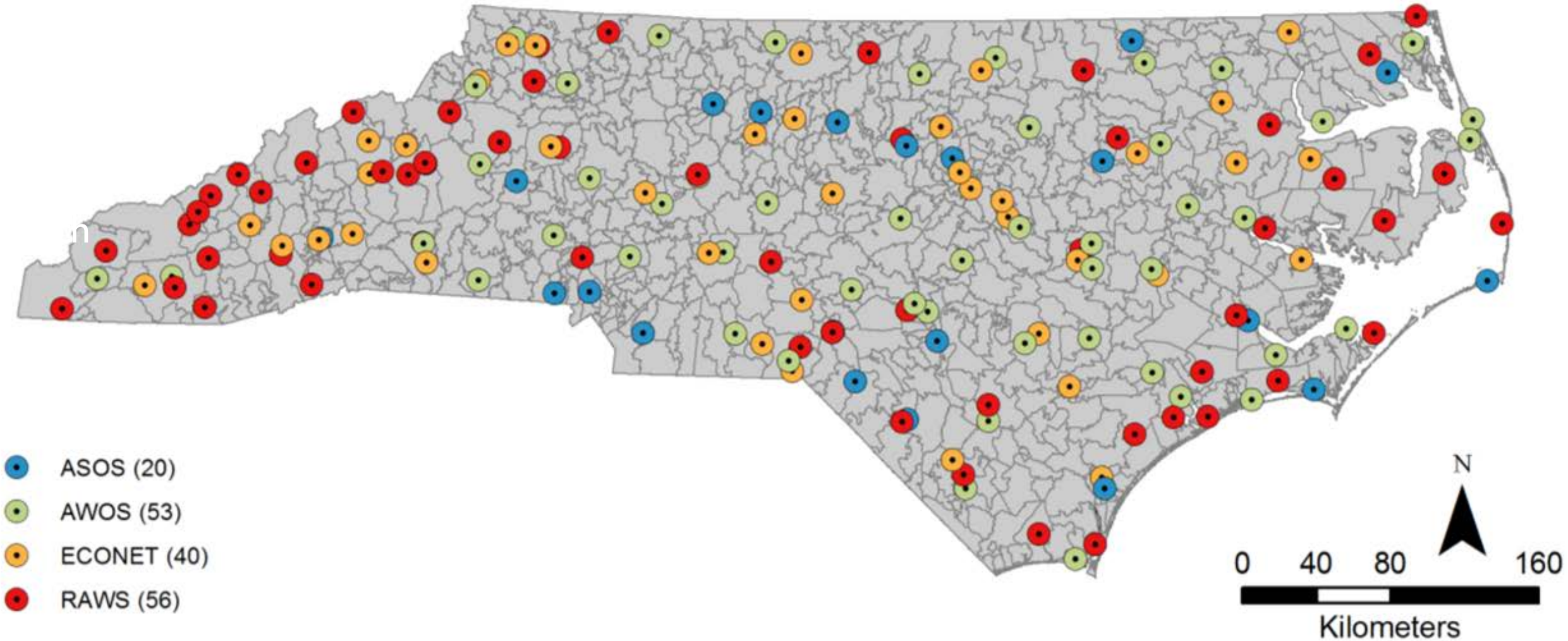
Bed Capacity	Reporting Status
○ 0 - 40	● Reporting
○ 41 - 70	● Not Reporting
○ 71 - 110	○ County
○ 111 - 300	
○ more than 300	



## NC- DETECT (2007 – 2012)

- Age
- Gender
- Date and Time of Visit
- All diagnostic codes(992)
- Billing address zip code/County

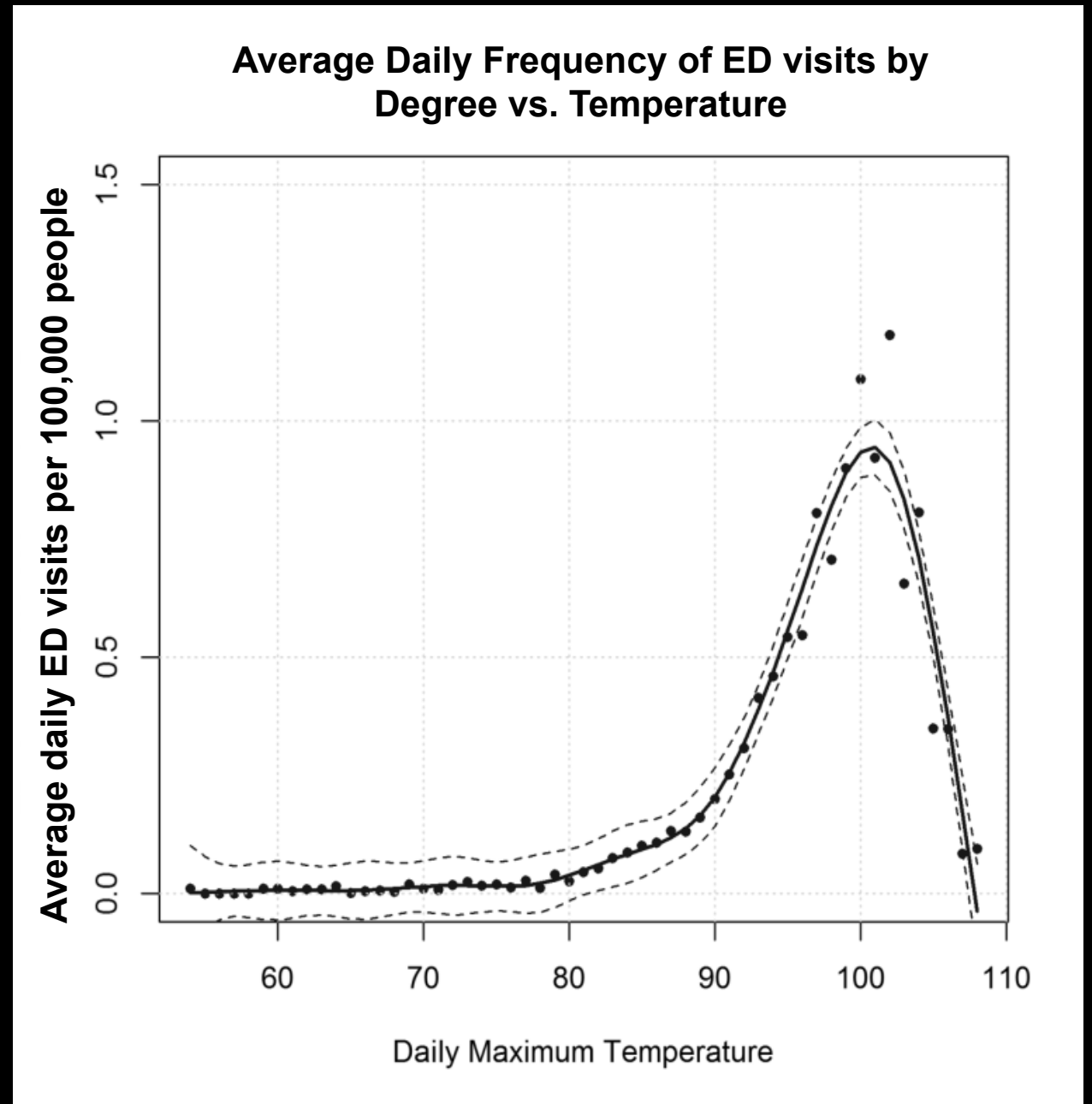
# ED visit linked to the daily maximum temperature at the nearest weather station.

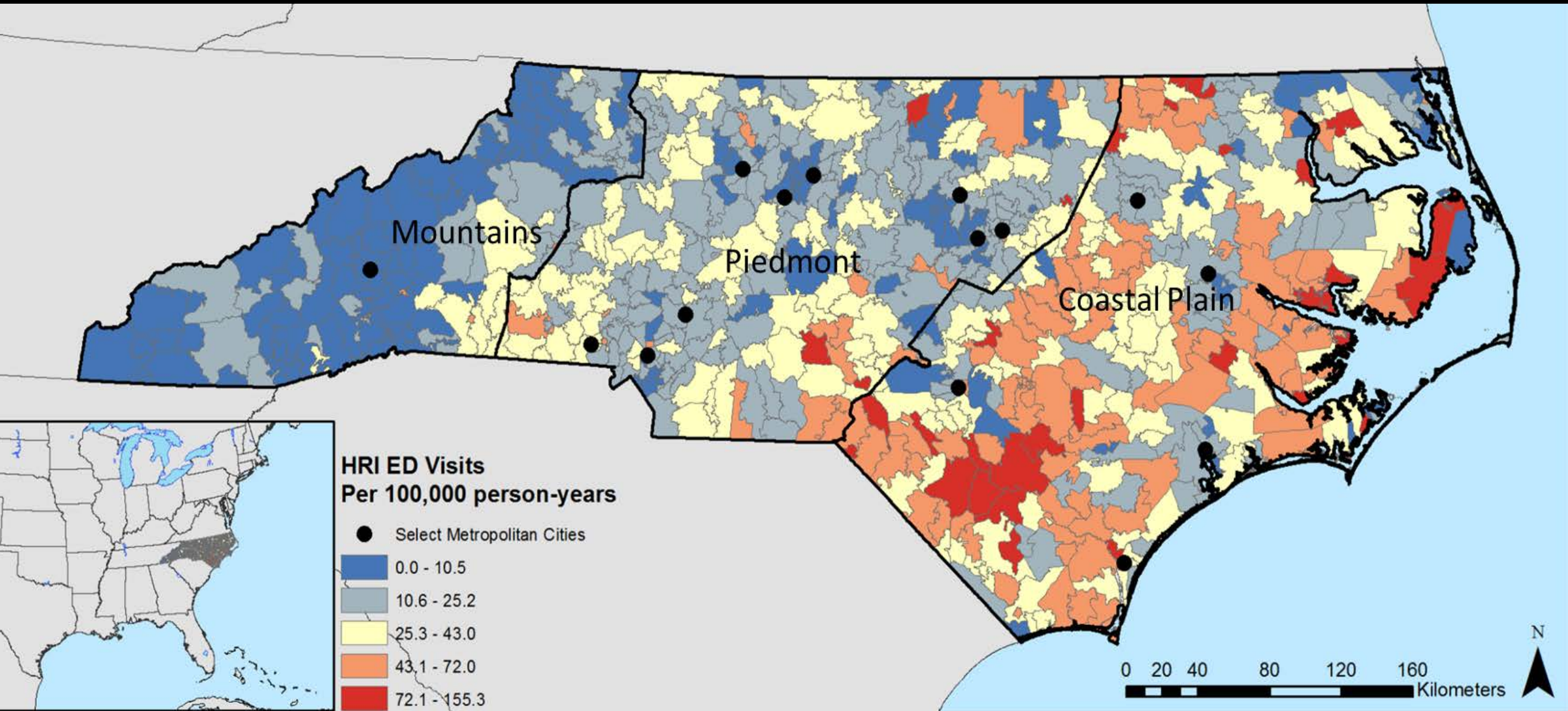


# Methodology

HRI rates are adjusted for the frequency of temperature observations → Average daily HRI ED Visits Per 100,000 people

*More ED visits on abnormally hot (95 to 100F) days but marked decrease in HRI rates at the highest temperatures (greater than 100F)*





# Rural Urban Commuting Areas (RUCA) Classification

**Metropolitan**

**Rural Metropolitan**

**Rural Town**

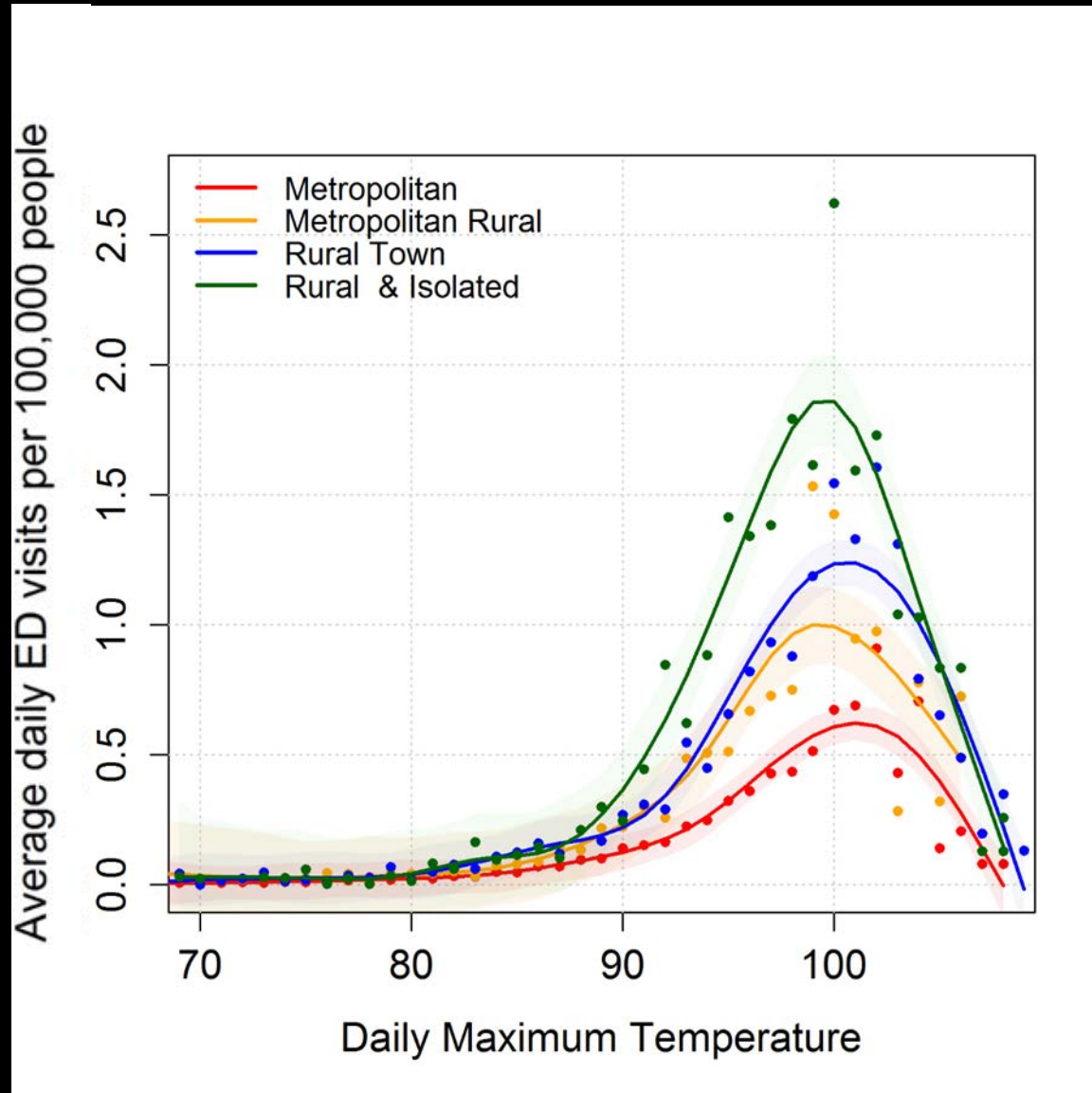
**Rural Isolated**



**Most Urban**

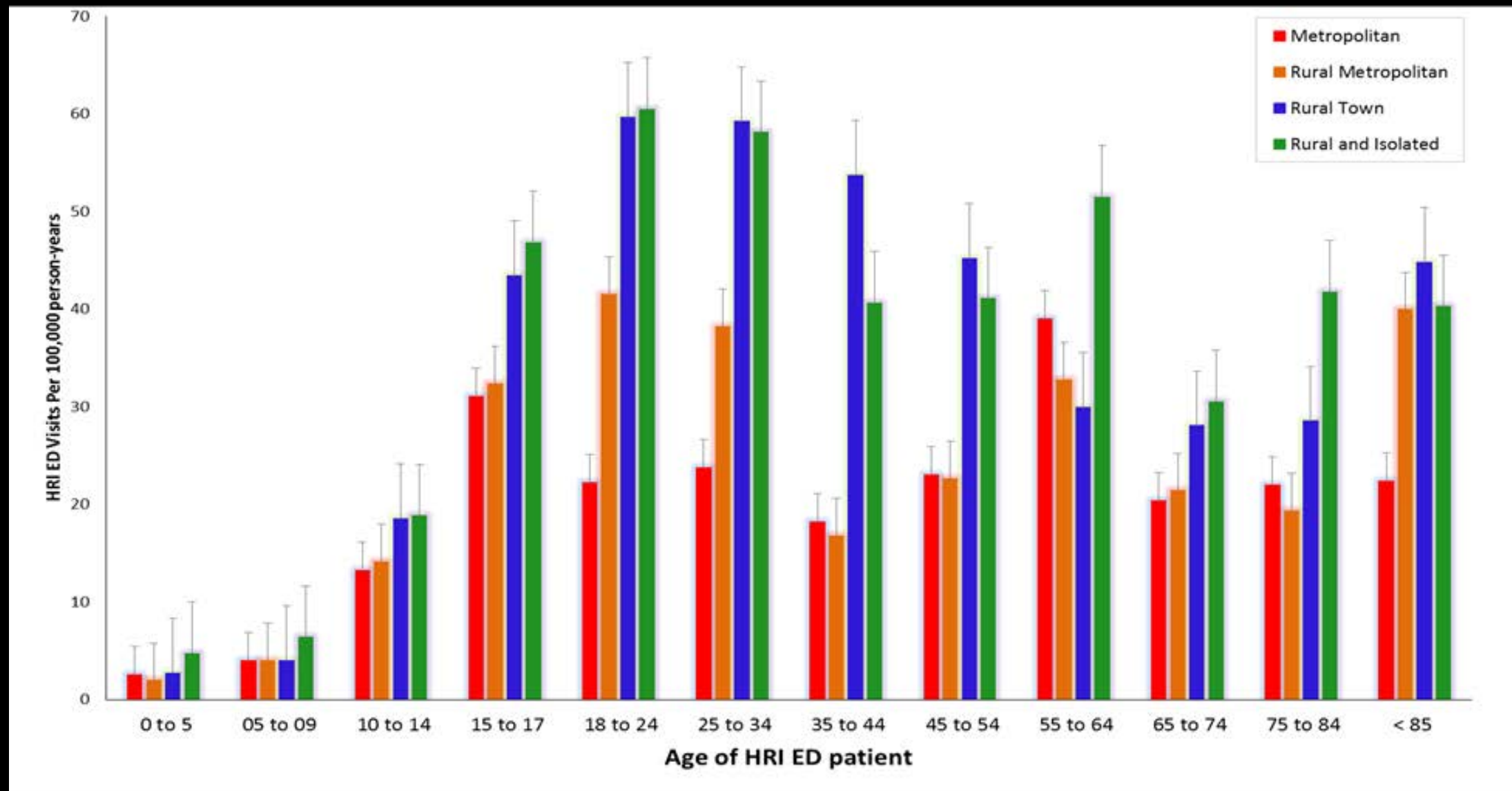
**Most Rural**

# Detailed Rural Urban Commuting Areas Differences





# Rural Urban Commuting Areas -- Demographic

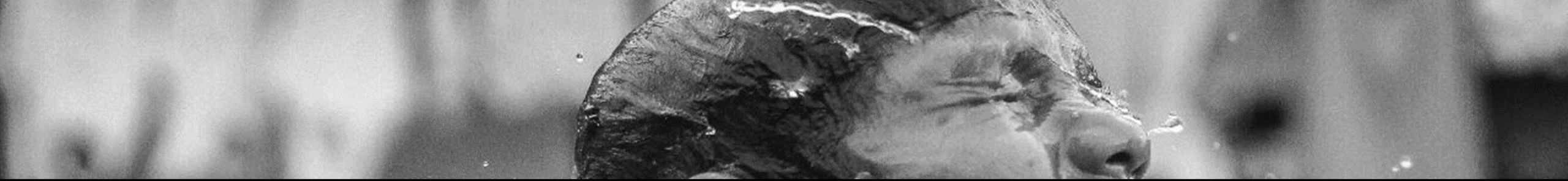


# Summary

Heat-related illness is greatest in:



- **Abnormally Hot (90 to 100°F )**
  - *Not the exceptionally hot (greater than 100°F )*
- **Rural locations**
  - *Not the urban locations*
- **18 to 44 male demographic**
  - *Not the elderly or very young*



## The Heat-Health Vulnerability Tool



# Web-Based Heat-Health Vulnerability Tool (HHVT)

Inputs NWS maximum temperature forecasts and translates these values into predictions of the number of cases of heat illness.

- County or region level
- Demographic/socioeconomic group (e.g. adult males, those in poverty etc.)



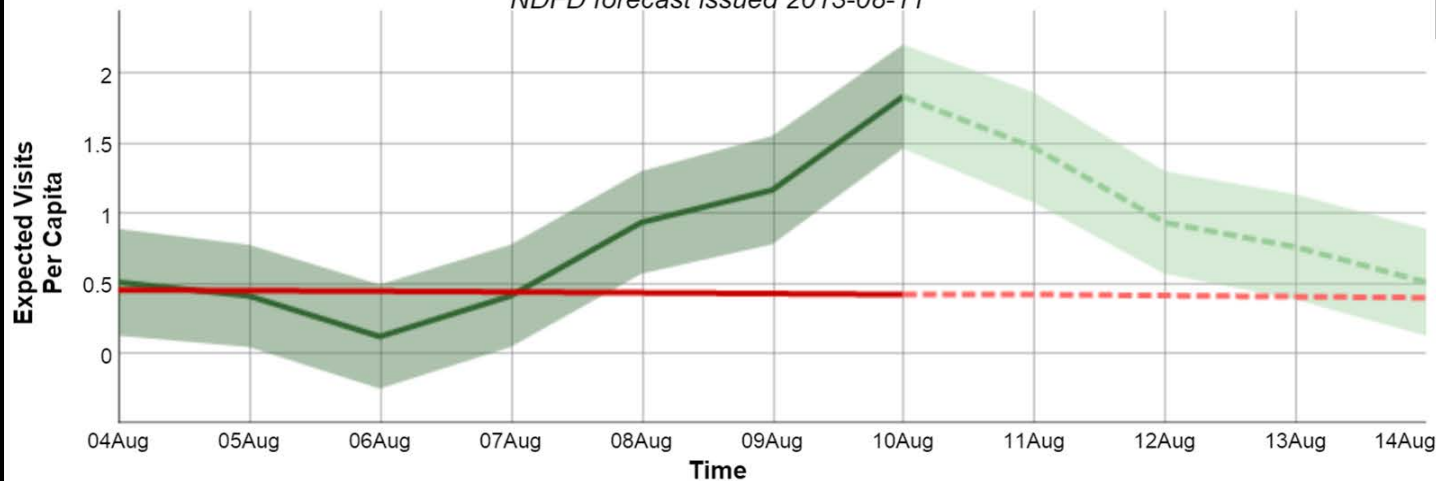
The screenshot displays the Heat Health Vulnerability Tool interface. On the left is a topographic map of Bladen County, North Carolina, with a zoom control in the top-left corner. On the right is a control panel with the following elements:

- Select a county:** A dropdown menu showing "Bladen County".
- Select a model:** A dropdown menu showing "Isolated Rural (Per Capita Degree)".
- Category:** Two checked checkboxes: "PerCapitaDegree" and "Upper / Lower". Below them is a "Choose a display color:" dropdown menu set to "Red".
- Choose a valid forecast date:** Three dropdown menus showing "August", "10", and "2013".
- A red "Graph" button at the bottom.

### Piedmont/Coastal Plain Rural Metropolitan (Male 18-45 years old) Model for Robeson County at Lumberton Municipal Airport (KLBT)

Observations from 2013-08-04 through 2013-08-10

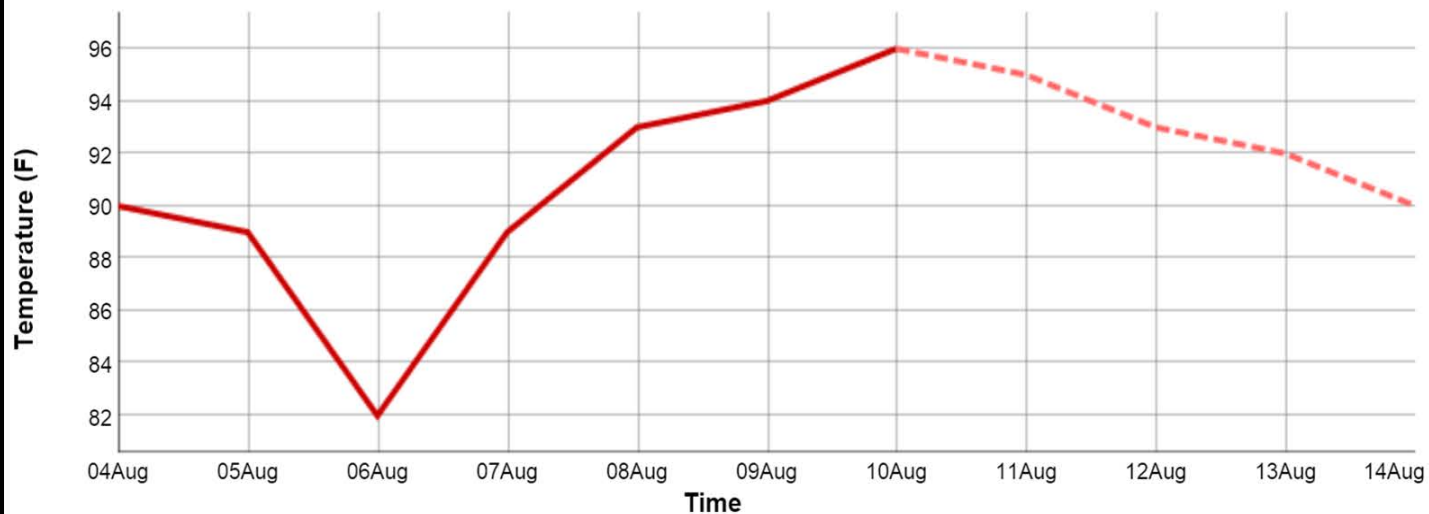
*NDFD forecast issued 2013-08-11*



### Maximum Temperature for Robeson County at Lumberton Municipal Airport (KLBT)

Observations from 2013-08-04 through 2013-08-10

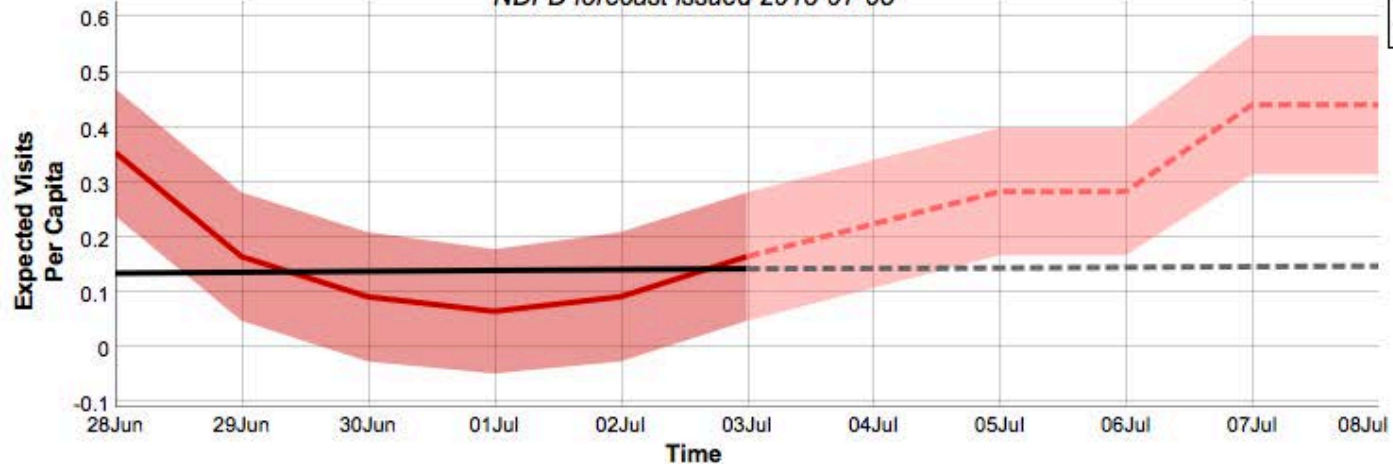
*NDFD forecast issued 2013-08-11*



### Isolated Rural (Per Capita Degree) Model for Halifax County at Halifax-Northampton Regional Airport (KIXA)

Observations from 2013-06-28 through 2013-07-04

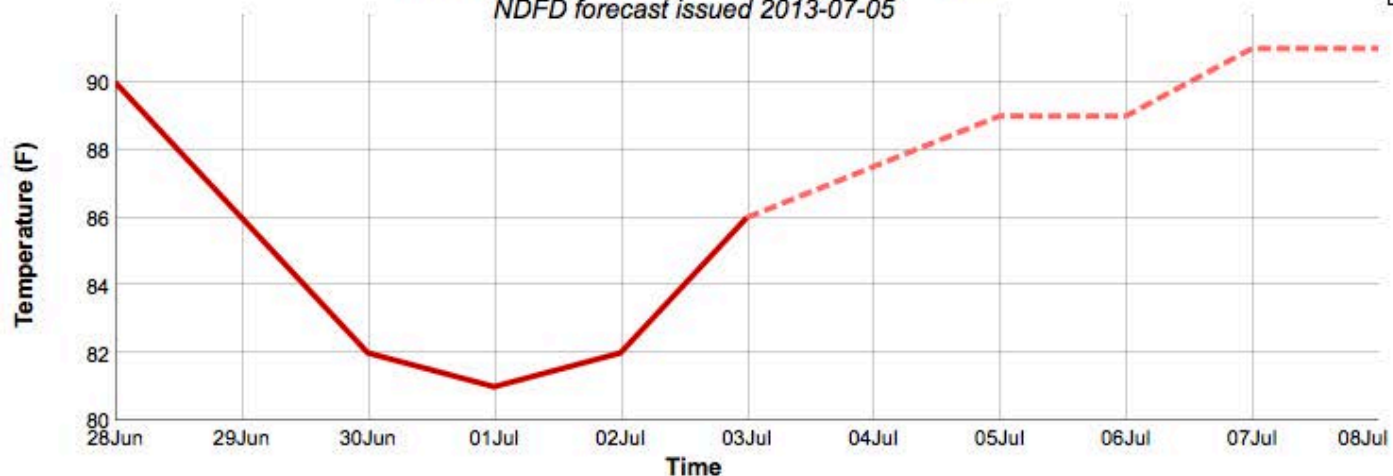
*NDFD forecast issued 2013-07-05*



### Maximum Temperature for Halifax County at Halifax-Northampton Regional Airport (KIXA)

Observations from 2013-06-28 through 2013-07-04

*NDFD forecast issued 2013-07-05*



# Acknowledgements

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The NC DETECT Data Oversight Committee does not take responsibility for the scientific validity or accuracy of methodology, results, statistical analyses or conclusions presented.

[Heat Health Vulnerability Tool--http://sercc.com/hhvt](http://sercc.com/hhvt)

