# Prolonged Record Breaking June Heat

June 16, 2024 3:29 PM

For Western Pennsylvania, Eastern Ohio, and Northern West Virginia

### **Decision Support Briefing #3**

→ As of 3 PM Sunday June 15, 2024

### What Has Changed?

→ An Excessive Heat Watch continues to remain in effect Monday through Friday. Watch upgrade decisions will likely come in the next 12-24 hours.

## **Excessive Heat Watch**

#### TIMING:

Monday Morning through Friday Evening

#### HAZARD INFORMATION

A prolonged period of heat and humidity will likely cause heat stress during outdoor exertion or extended exposure.

This is a rare event and is considered dangerous!

### An Excessive Heat Watch Means....

- A prolong period of hot weather is expected.
- Overnight low temperatures and afternoon high temperatures could create a dangerous situation in which heat illness are possible.





# **Main Points**

#### Rare Excessive Heat Wave In June

Hazard	Impacts	Location	Timing		
Heat	Near certainty (99%) in a prolonged heat wave that could lead to heat illness and heat stress for those who don't have places to cool down during the day AND at night	Areawide. Highest values will be in urban areas	Monday through at least Saturday		

<u>The following slides</u> are a *new* experimental Heat Risk map which includes a color-numeric index that provides a forecast risk of heat-related impacts over a 24-hour period.

This map takes into consideration the following:

- How unusual the heat is for the <u>time of the year</u>
- The duration of the heat including both daytime and nighttime temperatures
- If those temperatures pose an elevated risk of heat-related impacts based on data from the CDC

This index is supplementary to official NWS heat products and is meant to provide risk guidance for those decision makers and heat-sensitive populations who need to take actions at levels that may be below current NWS heat product levels.





# Heat Risk: June 17th - June 18th

Category

Low Risk

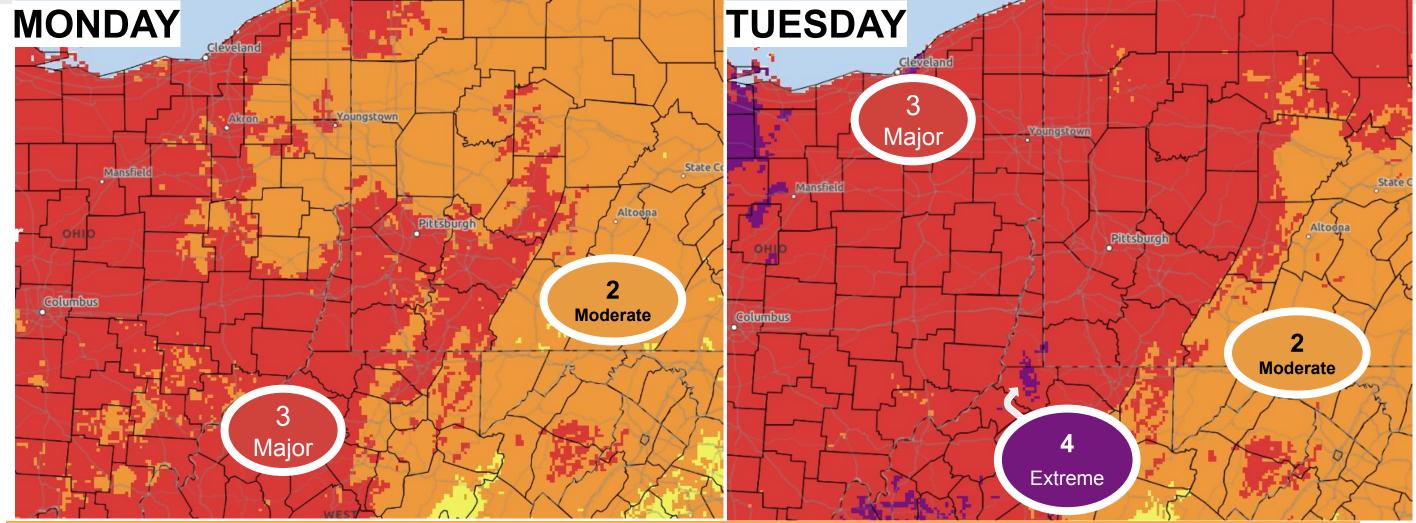
MINOR

MODERATE

MAJOR

3

EXTREME



MODERATE: This level of heat affects most individuals sensitive to heat, especially those without effective cooling and/or adequate hydration. Impacts POSSIBLE in some health systems and in heat-sensitive industries.

MAJOR: This level of heat affects anyone without effective cooling and/or adequate hydration. Impacts LIKELY in some health systems, heat-sensitive industries and infrastructure.

Extreme: This level of rare and/or long duration extreme heat with little to no overnight relief affects anyone without effective cooling and/or adequate hydration. Impacts LIKELY in most health systems, heat sensitive industries and infrastructure.





# Heat Risk: June 19th - June 20th

Category

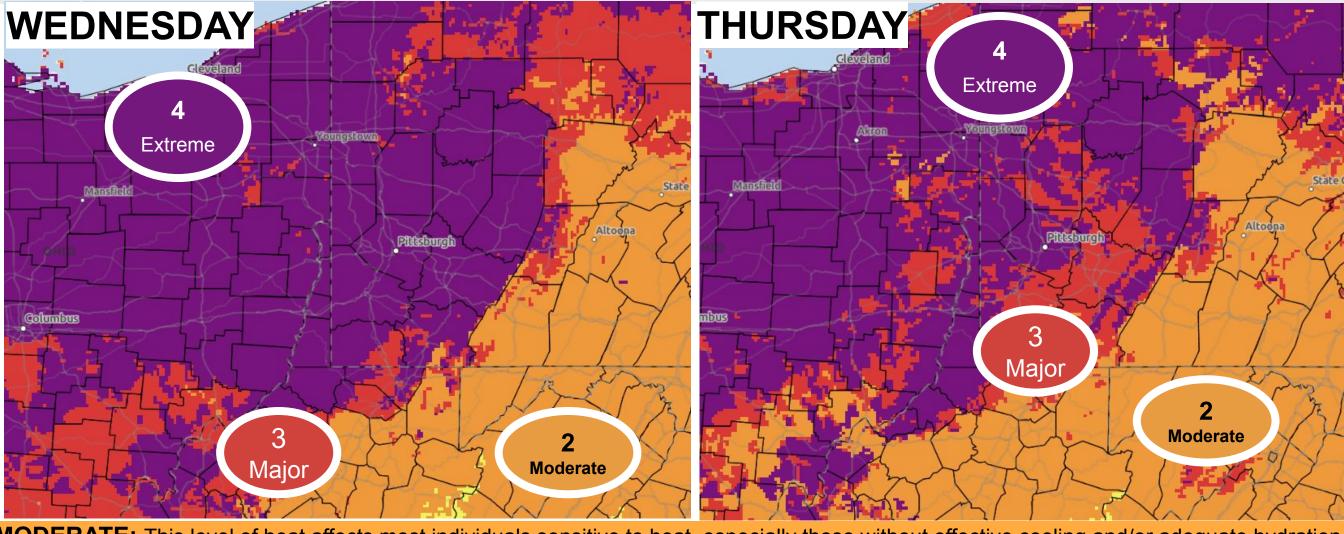
Low Risk

MINOR

MODERATE

MAJOR

EXTREME



MODERATE: This level of heat affects most individuals sensitive to heat, especially those without effective cooling and/or adequate hydration. Impacts POSSIBLE in some health systems and in heat-sensitive industries.

MAJOR: This level of heat affects anyone without effective cooling and/or adequate hydration. Impacts LIKELY in some health systems, heat-sensitive industries and infrastructure.

Extreme: This level of rare and/or long duration extreme heat with little to no overnight relief affects anyone without effective cooling and/or adequate hydration. Impacts LIKELY in most health systems, heat sensitive industries and infrastructure.





# **Heat Risk: June 21st**

Category

Low Risk

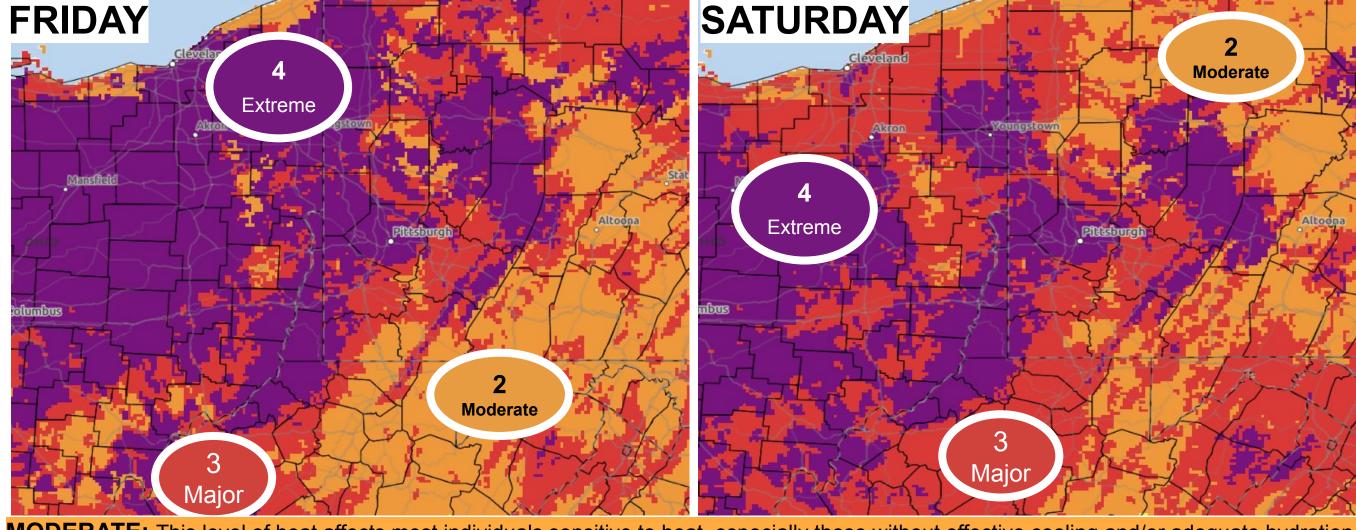
MINOR 1

MODERATE

MAJOR

3

EXTREME



MODERATE: This level of heat affects most individuals sensitive to heat, especially those without effective cooling and/or adequate hydration. Impacts POSSIBLE in some health systems and in heat-sensitive industries.

MAJOR: This level of heat affects anyone without effective cooling and/or adequate hydration. Impacts LIKELY in some health systems, heat-sensitive industries and infrastructure.

Extreme: This level of rare and/or long duration extreme heat with little to no overnight relief affects anyone without effective cooling and/or adequate hydration. Impacts LIKELY in most health systems, heat sensitive industries and infrastructure.





# High Temperatures / Peak Heat Index Values

Forecast High Temperatures (°F)								
	Mon 17th	Tue 18th	Wed 19th	Thu 20th	Fri 21st	Sat 22nd	Sun 23rd	
Butler, PA	93°	93°	94°	97°	96°	95°	89°	
Carrollton, OH	93°	94°	95°	98°	97°	96°	90°	
Coshocton, OH	94°	94°	96°	99°	99°	98°	92°	
Davis, WV	83°	84°	85°	86°	89°	88°	84°	
DuBois, PA	89°	90°	91°	94°	93°	91°	86°	
Indiana, PA	92°	93°	94°	96°	96°	95°	89°	
Latrobe, PA	93°	94°	95°	96°	97°	96°	91°	
Mercer, PA	91°	91°	93°	96°	94°	93°	87°	
Morgantown, WV	90°	92°	93°	95°	95°	95°	90°	
New Castle, PA	94°	94°	96°	98°	98°	96°	90°	
Oil City, PA	92°	92°	93°	97°	95°	93°	87°	
Pittsburgh, PA	95°	96°	96°	99°	99°	98°	92°	
Washington, PA	92°	94°	94°	97°	98°	97°	90°	
Weirton, WV	94°	96°	96°	99°	99°	98°	92°	
Wheeling, WV	93°	94°	96°	98°	98°	98°	91°	
Zanesville, OH	93°	94°	96°	98°	99°	98°	92°	

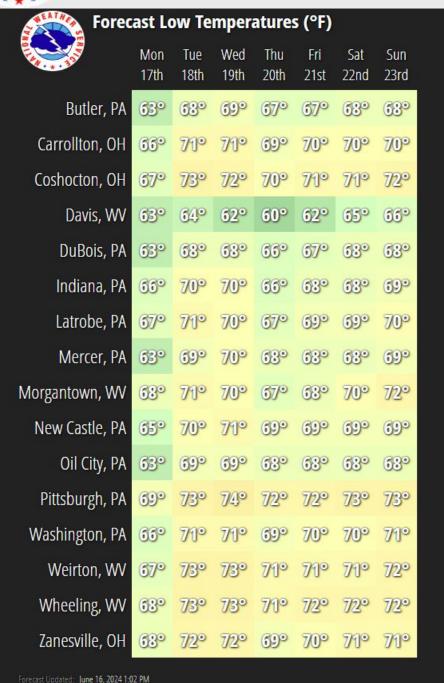
Maximum Heat Index Forecast (°F)							
	6/17	6/18	6/19	6/20	6/21	6/22	6/23
	Mon	Tue	Wed	Thu	Fri	Sat	Sun
Butler	97	98	97	98	97	96	91
Carrollton	99	99	97	99	99	97	92
Coshocton	101	100	98	100	101	99	95
Davis	85	84	84	85	87	86	84
Dubois	91	92	92	93	92	91	86
Indiana	94	96	96	96	95	95	90
Latrobe	94	96	96	95	95	96	92
Mercer	95	96	95	96	95	94	88
Morgantown	95	96	95	94	96	96	93
New Castle	100	101	100	100	99	98	93
Oil City	96	98	98	99	96	95	89
Pittsburgh	100	101	99	101	100	100	95
Washington	94	96	95	95	95	95	92
Weirton	99	100	98	99	100	99	94
Wheeling	99	99	97	99	99	98	94
Zanesville	101	99	98	99	100	100	95
-80 -55 -50 -45 -40 -35 -30 -25 -20 -15 -10 -5 0 5 10 15 20 25 30 35 40 45 50 55 80 85 70 75 80 85 90 95 100 105 110 115 120 140  Maximum Heat Index Forecast (°F)							

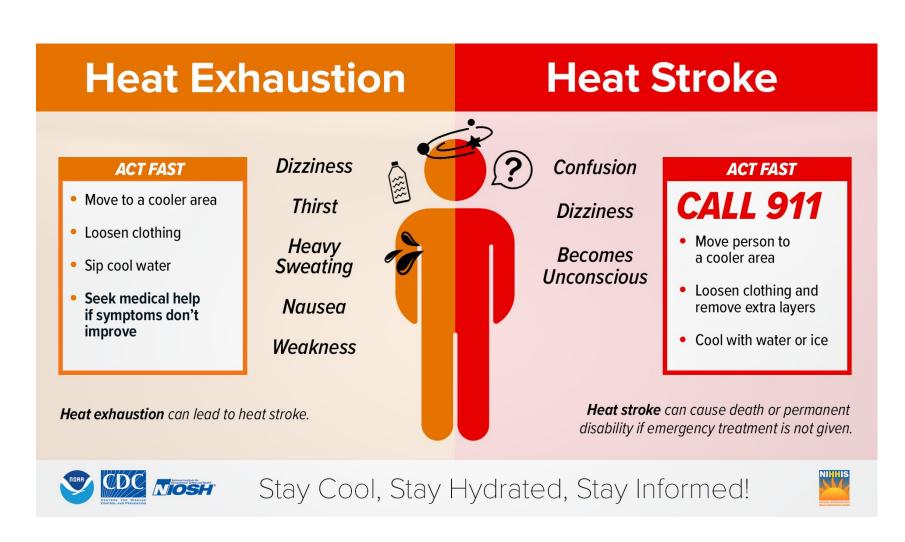
Created: 3 pm EDT Sun 6/16/2024 | Values are maximums over the period beginning at the time shown.





# **Overnight Low Temperatures**

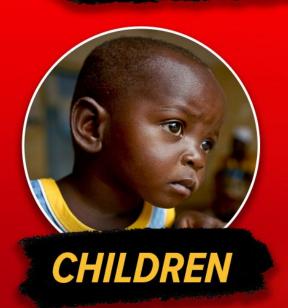




# Heat Impacts: Vulnerable Populations









Extreme heat events have been associated with adverse birth outcomes such as low birth weight, preterm birth, infant mortality, and congenital cataracts.

Newborns are extra sensitive to heat because their ability to regulate body temperature is limited.

Young children and infants are particularly vulnerable to heat, as their bodies are less able to adapt to heat than adults. Those under four are especially vulnerable.

Older adults, especially those who have preexisting diseases, take certain medications, live alone or have limited mobility are at higher risk for heat illness. People with chronic medical conditions are more likely to have a serious health problem during a heat wave.

#### Source:

The Impacts of Climate Change on Human Health in the United States, A Scientific Assessment (U.S. Global Changes Research Program)

