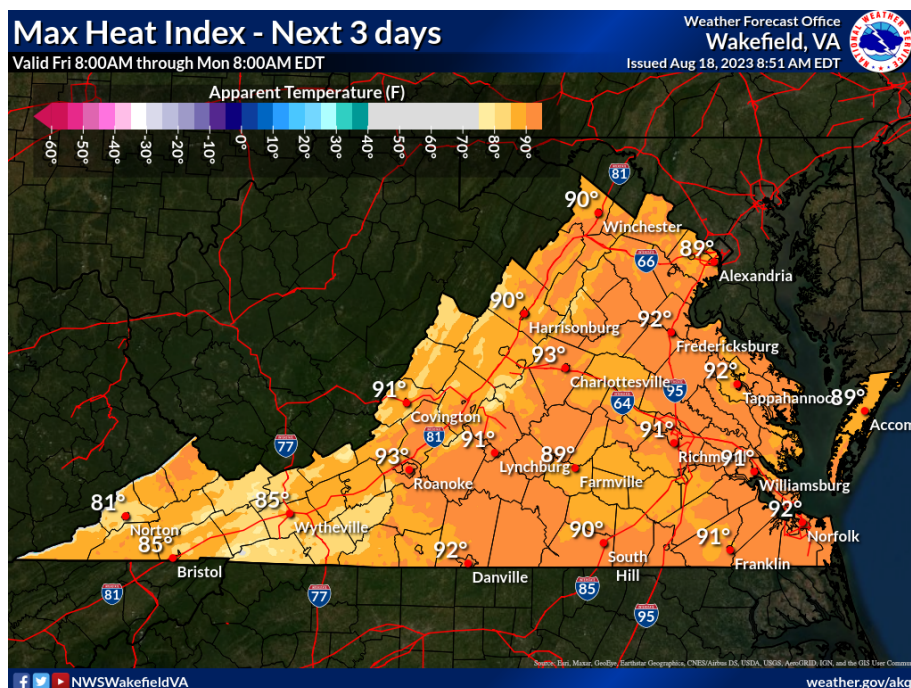


August 18, 2023

## Key Takeaways

- COVID-19 indicators continue to rise. While still low, COVID-19 hospital admissions increased 58% in Virginia for the week ending August 5, compared to 14.3% nationally.
- Virginia is expected to experience a break in extreme heat this weekend. Nevertheless, heat indexes above 90° F are expected in much of the state. The National Weather Service recommends extreme caution during these conditions. Triple digit heat indexes may return to parts of the state on Monday.
- Wildfires in Canada continue to burn, and wildfires are burning in the Northwest and Southwest United States. Unhealthy air quality is expected in parts of the Midwest over the weekend, but only moderate impact is expected in Virginia.
- Officials and community members continue to respond to the wildfires that devastated parts of Maui last week.
- Mosquito trapping efforts have detected West Nile virus and eastern equine encephalitis virus in Eastern Virginia. So far, no human cases have been reported.

## Key Figures



Source: National Weather Service

## COVID-19

**10%**

*Chance that the WHO will identify a new COVID-19 Variant of Concern in 2023. (Metaculus forecast)*

**43%**

*Chance that the Virginia will experience a COVID-19 surge in 2023. (Metaculus forecast)*

## Wildfires

**671 of 1,050**

The number of uncontrolled wildfires in Canada, out of the total number of active fires.

## Hurricanes

**60%**

*The chance of an 'above average' 2023 Atlantic hurricane season.*

**2-5**

*The number of major hurricanes still expected in the Atlantic this hurricane season.*

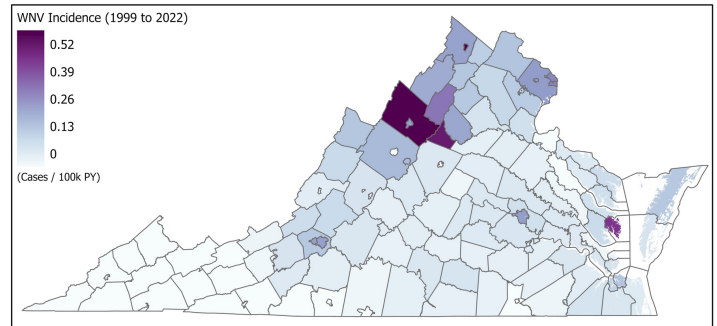
## Spotlight: Mosquito-borne Illness

*Forecasts are italicized*

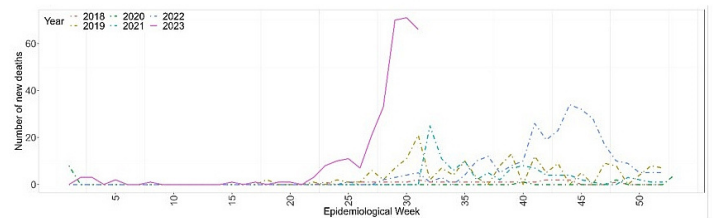
## Spotlight

- **West Nile virus (WNV) detected in Southeast Virginia.** WNV is spread primarily by the common house mosquito and was detected by mosquito trapping in Suffolk. Virginia has not reported any human cases this year, but there have been 190 cases in 27 other states including Maryland and West Virginia.
- **American Southwest leads nation in WNV cases.** Arizona reports 54 cases so far this year, rivaling the total of 2022. WNV often peaks in late-August, and as such more cases are expected. In 2021, Arizona was the epicenter of a severe WNV outbreak which included 1,715 cases.
- **Dengue virus continues to simmer in Florida.** Officials issued an alert, as more cases of the disease were found in the Miami area. Dengue is traditionally seen as a tropical disease, but climate change has increased the range of its mosquito vector, leading to locally-acquired cases in the Miami area. Health officials in Florida have also detected cases of Chikungunya, malaria, and West Nile virus, though these are thought to be travel-related.
- **Dengue virus outbreak slams Bangladesh.** The WHO has reported 69,483 cases this year, including 327 deaths (case-fatality rate of 0.47%). It is thought that climate is to blame as atypical levels of heat and rainfall have led to the highest density of mosquitos in five years.

## Mosquito-Borne Illness

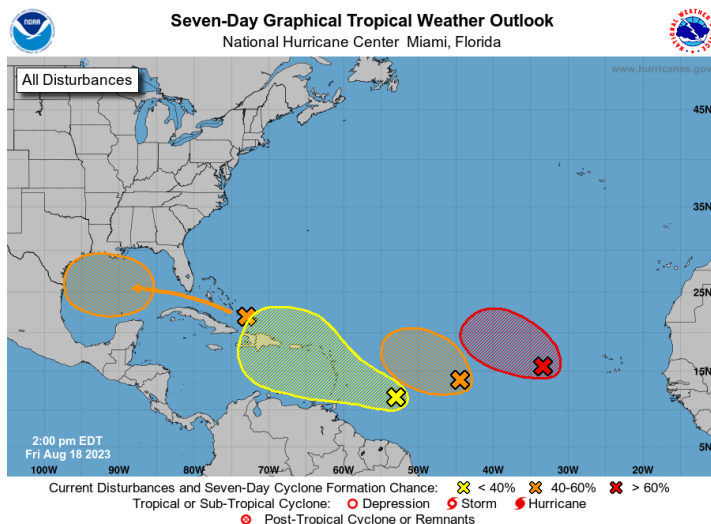


Since 1999, Virginia has reported 243 cases of West Nile virus (WNV). Incidence of WNV is highest in the Shenandoah Valley and along the Chesapeake Bay. So far, no cases have been reported in 2023. Note that raw incidence rates have been spatial empirical Bayes smoothed. Data Source: [CDC](#).



The number of Dengue-related deaths in Bangladesh far exceeds that of prior years. This is owing to a heat and wetness related increase in mosquito density. The case-fatality rate has also increased since 2022; the cause of this is under investigation. Data Source: [WHO Disease Outbreak News](#).

## Other News



The National Hurricane Center in Miami is monitoring four air disturbances in the Atlantic with the potential to form into a tropical cyclone over the next 7 days, including one with a 70% chance of becoming a cyclone. Last week, NOAA increased its Atlantic Hurricane season prediction to above normal, citing record-warm sea surface temperatures. Image Source: [NOAA/NWS](#).

- **In a recent survey, 32% of hospital pharmacists reported critical drug shortages.** Critical shortages were defined as requiring rationing, delaying, or canceling treatments or procedures. Another 63% reported moderate shortages, with only 5% indicating minimal or no shortages.
- **The Western Pacific Region has seen a 661% increase in mpox cases over the three weeks ending August 14.** The increase was driven by China, which reported 522 cases in the past three weeks, out of a total of 892 cases reported by China during the pandemic.
- **Louisiana declared a state of emergency due to extreme heat.** Governor John Bel Edwards cited the large number of heat-related emergency room visits, drought conditions, and low water levels in the Mississippi river when issuing the declaration.
- **While still low, COVID-19 hospital admissions increased 58% in Virginia for the week ending August 5.** Nationally, hospital admissions have increased 14.3%. Over the same period, COVID-19 diagnoses in Virginia urgent care facilities and emergency departments increased 22.8%.