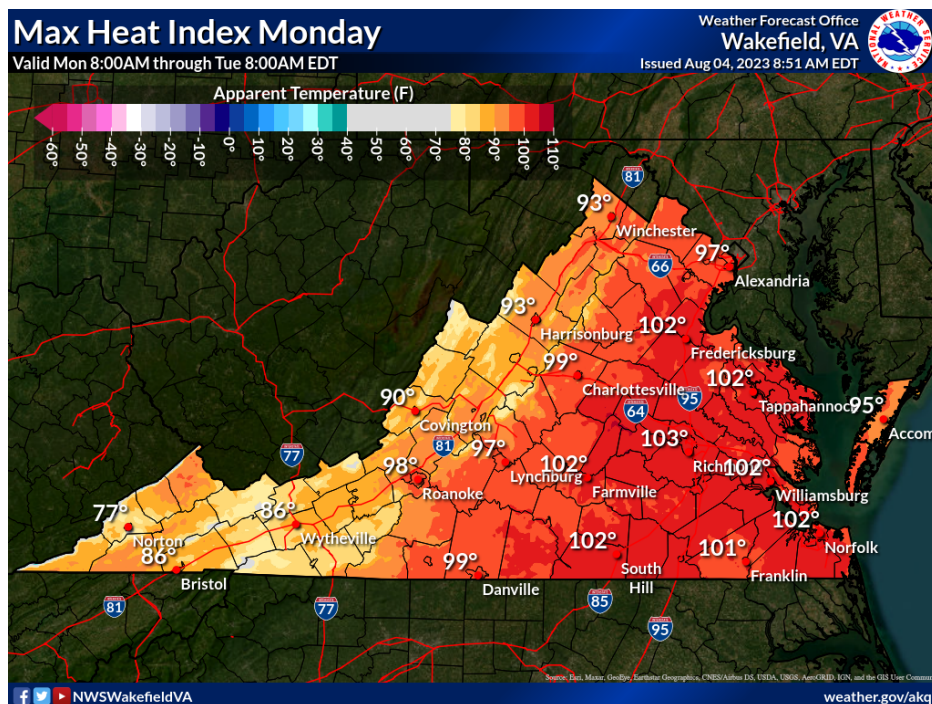


August 4, 2023

Key Takeaways

- COVID-19 indicators are inching upward nationally. In Virginia, COVID diagnoses at emergency facilities are increasing, but hospitalizations and wastewater detections remain steady.
- China is reporting over 100 new mpox cases per week. The mpox situation is stable outside of Asia.
- WHO reported 2 new vaccine-derived polio outbreaks in Africa. In 2021 and 2022, there were 88 active outbreaks, including a case and wastewater detections in New York.
- The CDC has approved a new RSV vaccine for infants. A new COVID-19 booster may also be available in early October.
- Michigan has reported a suspected case of H3 swine flu.
- Extreme heat is expected to return Monday, with much of Virginia experiencing heat indexes above 100° F. The [National Weather Service](#) recommends extreme caution in these ranges.

Key Figures



Source: [National Weather Service](#)

COVID-19

6%

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

51%

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

Wildfires

664 of 1,050

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

120 million

The number of Americans living in areas experiencing air quality alerts this summer.

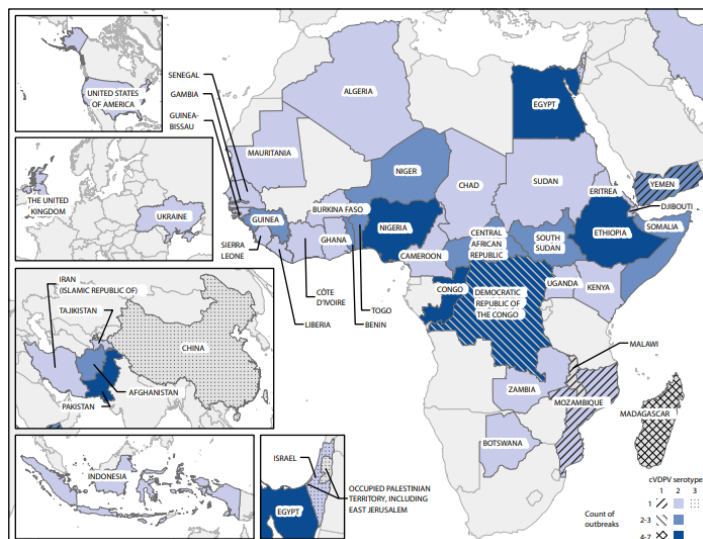
Spotlight: Polio

Forecasts are italicized

Spotlight

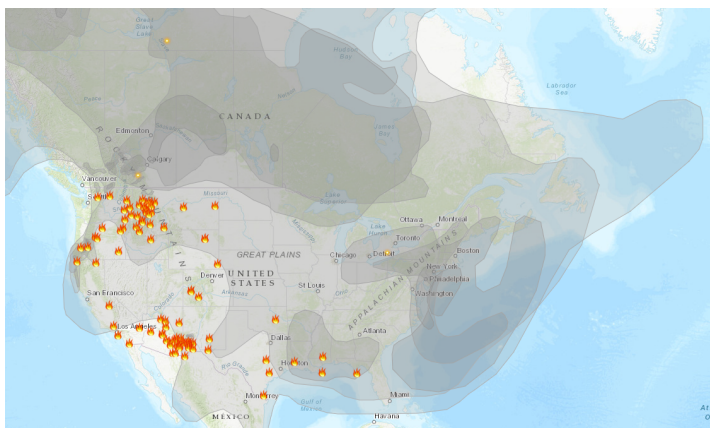
- The WHO reported 2 new vaccine-derived poliovirus (cVDPV) outbreaks in Kenya and Tanzania. The Kenya outbreak is genetically linked to a strain circulating in Somalia, while the Tanzania outbreak is linked to Congo. WHO assessed the risk to be high nationally and regionally.
- A CDC report identified 88 active cVDPV outbreaks affecting 46 countries in 2021 and 2022. VDPV originates in communities that use live, attenuated oral poliovirus vaccine. Where vaccine uptake is low, the vaccine-derived virus can spread among unvaccinated individuals. Over long periods it can mutate to a form that can cause paralysis.
- cVDPV has been detected sporadically in Western countries, including in New York and London in 2022. London's detections were in wastewater only, while New York's wastewater detections were linked to a confirmed case in an unvaccinated adult. In both cases, cVDPV was thought to be imported before circulating among un- and under-vaccinated populations.

Polio



While centered in Africa, circulating vaccine-derived polio has also been detected in Asia, Europe and North America. This map shows the locations of outbreaks and detections occurring in 2021 and 2022. Image Source: [CDC](#)

Other News



Over 120 million Americans lived in areas experiencing air quality alerts this summer. Scientists are working to understand long-term risks. Wildfire smoke still blankets much of the country, but ground-level air quality is expected to remain good or moderate in Virginia over the coming weekend. Source: [AirNow.gov](#)

- **National COVID-19 indicators inch upward.** Across the U.S. indicators suggest that COVID-19 is growing slowly. In Virginia, the percent of ED and UC visits diagnosed with COVID-19 has doubled since July 1. But hospitalizations have remain relatively steady, and wastewater surveillance does not show significant growth in the Commonwealth.
- **COVID-19 booster may be available in October.** In an interview, CDC director Dr. Mandy Cohen is quoted as saying she expects a new booster to be available "probably in the early October time frame."
- **Human swine flu case in Michigan.** Michigan authorities have identified a suspected human case of H3 variant swine flu. The patient had contact with pigs at a county fair.
- **China suffers mpox surge.** Asia is the new epicenter of the mpox epidemic, and China is reporting over 100 new cases per week. China has not yet approved any mpox vaccines.
- **Concern rising about nicotine poisoning in children.** As refillable vapes become more common, toxicologists are concerned by the prospect of young children being exposed to the liquid nicotine contained within.

- **CDC approves new RSV preventative for infants.** The CDC cleared the new monoclonal antibody injection for immunization among infants and high-risk children.