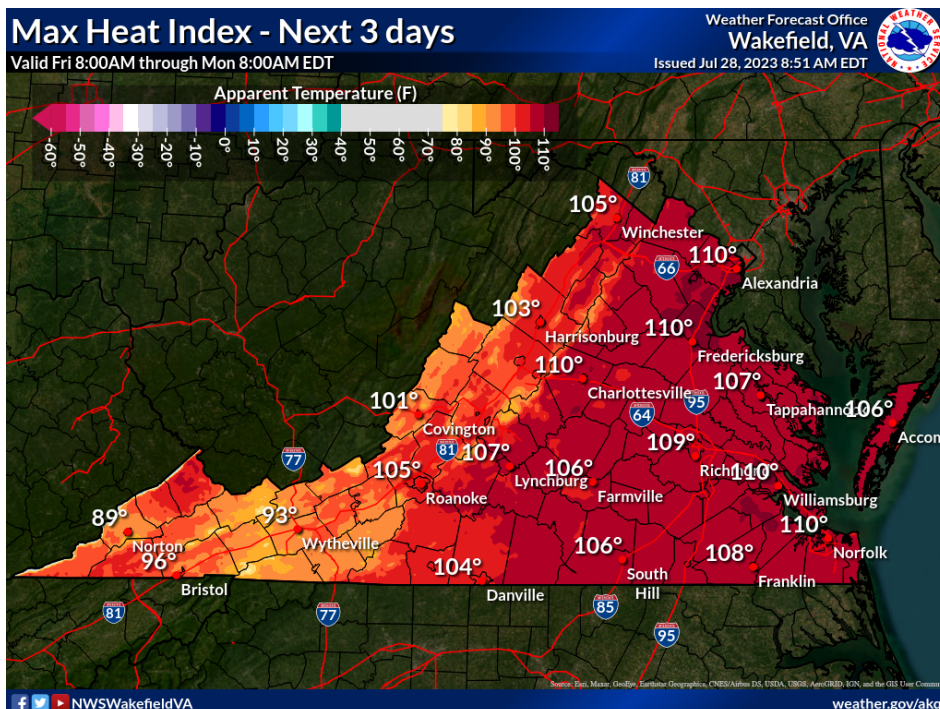


July 28, 2023

Key Takeaways

- Hazardous heat is expected across much of Virginia today and tomorrow, with the heat index above 103 degrees in much of the state. The National Weather Service rates these as dangerous conditions. All of Virginia will experience heat indexes in the 'extreme caution' range.
- Areas of the Southwest U.S. are reporting an increase in severe burns due to extreme heat, including burns from paved surfaces and metal surfaces in car interiors.
- The total number of Canadian wildfires jumped this week, including an increase in the number and intensity of wildfires in Quebec. Wildfire smoke is not expected to impact Virginia's air quality significantly over the next few days.
- Supply chain concerns eased, as tornado damage to a Pfizer facility was less than feared, and UPS and the Teamsters union agreed on a contract.
- The CDC is preparing for a seasonal respiratory disease season that now includes COVID-19, and a new vaccine for RSV.

Key Figures



Source: National Weather Service

COVID-19

13%

Chance that the WHO will identify a new COVID-19 Variant of Concern before 2024. (Metaculus forecast)

Heat-Related Illness

100%

The share of Virginia expected to have a heat index in the "extreme caution" or "danger" range over the next few days.

7%

The share of Virginians in poverty living within a 15-min drive of a cooling center in 2022.

Wildfires

620 of 1,004

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

Spotlight: Extreme Heat

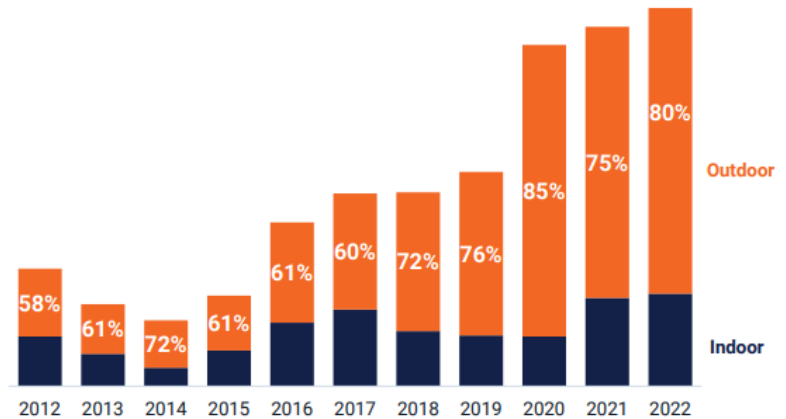
Forecasts are italicized

Spotlight

- **Extreme and dangerous heat expected to impact all of Virginia over the next few days.** The [National Weather Service](#) categorizes a heat index from 90° to 103° as 'Extreme Caution' while a heat index from 103° to 124° is 'Danger.' Most of Virginia will enter the Danger category, with mountainous areas in the Extreme Caution category, at points this weekend.
- **Extreme heat is causing an increase in the extreme burns.** Physicians in Phoenix [note](#) that burns are caused mostly by falls on hot concrete or asphalt. The elderly, children, and drug users are most at risk. Metal surfaces inside cars, such as seat belts, have also caused severe burns.
- **Violent storms hit parts of Europe last week.** The violent storms occurred when a cold front hit a 'heat dome' covering much of the continent. Severe weather, including hurricane force winds, baseball size hail, and a rare tornado, escalated rapidly from calm conditions.

Extreme Heat Impacts

Deaths in outdoor settings have driven the increase in total number of heat-associated deaths in recent years



Maricopa County Arizona, which includes Phoenix, recently completed an in-depth examination of heat-associated deaths. They found a large spike over the past few years, largely driven by an increase in outdoor deaths, which accounted for 80% of deaths in 2022. Almost all indoor deaths were associated with a lack of AC. Over half of deaths were among homeless people, and 67% involved substance use. Source: [Maricopa DPH](#)

Other News

- **Medical supply chain concerns ease.** UPS and the Teamsters have reached a [tentative agreement](#) ending the threat of a strike which could have immobilized domestic shipping. The FDA reports that the Pfizer facility destroyed by a tornado last week will not have “[immediate significant impacts](#)” on drug supply chains.
- **Gas pipeline explodes near Interstate 81.** A rupture in the Columbia Gas Transmission Pipeline [caused an explosion](#) near Strasburg, VA. The resulting fire was contained without injuries.
- **The CDC reports Virginia is a hotspot for tickborne Alpha-Gal Syndrome.** The number of suspected cases increased from 13,371 in 2017 to 18,885 in 2021. Charlotte county Virginia had 12,273 of the 90,018 identified during the study period.
- **White House creates Office of Pandemic Preparedness and Response Policy.** The office will take over federal COVID-19 and mpox response duties, and is tasked with [preparing the nation for future pandemics](#).
- **CDC prepares for seasonal COVID-19, flu, and RSV.** Combined, the three viruses may tax the hospital system. Officials hope that the new RSV vaccine, in conjunction with flu and COVID-19 vaccines, will [dampen the possible surge](#).
- **Spillovers of Avian Influenza continue to cause alarm.** Chinese authorities are investigating a potential [case of H5N6](#) in a 64-year old poultry farmer. Officials in South Korea [have confirmed](#) the H5N1 virus was found in [two cats](#) this week. Meanwhile, Brazilian authorities in the state of Parana, known for its poultry exports, have declared a [state of emergency](#) due to bird flu cases in wild birds. Officials [call for vigilance](#) as bird flus continue to spread in wildlife.
- **MERS-CoV returns to the Middle East.** The virus, which caused an outbreak in Saudi Arabia in 2014 and South Korea in 2015, was found in a [28-year old Emirati man](#). A relative of SARS-CoV-2 which causes COVID-19, MERS-CoV has a higher case-fatality rate but is not easily transmitted.
- **Animal reservoirs of COVID-19 still a concern.** The USDA has confirmed ongoing transmission of SARS-CoV-2 among [white-tailed deer](#). Dutch authorities have identified a COVID-19 outbreak [among zoo animals](#) in Rotterdam. The threat of animal-human transmission remains low.
- **GBS cases declining in Peru, cause still unknown.** The [surge of cases of Guillain Barré syndrome](#), which started in early July, may be slowing. Though *Campylobacter jejuni* ST2993 was detected in most patients, authorities have yet to confirm it as the etiological agent.