

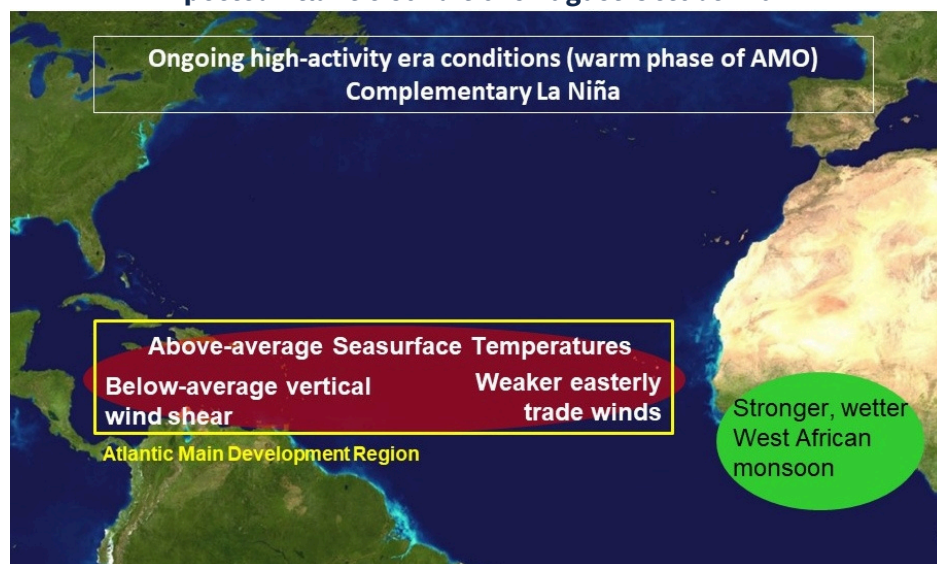
May 24, 2024

Key Takeaways

- A second human case of influenza A(H5N1) associated with dairy cattle was reported in Michigan. As with the first case in Texas, only mild symptoms were reported.
- National COVID-19 rates are minimal, but epidemic models suggest that COVID-19 activity is beginning to increase. The same models suggest that COVID-19 in Virginia is 'likely growing'.
- Other seasonal respiratory viruses are stable. Human metapneumovirus is the only seasonal virus with elevated activity in the region.
- Mpox rates are stable nationally. The more virulent clade I mpox has not yet been detected outside of Africa.
- There is an ongoing outbreak of pertussis in the Lexington, KY area.
- NOAA has released its seasonal outlook for the 2024 Atlantic hurricane season. They expect 17-25 named storms, 8-13 hurricanes, and 4-7 major hurricanes.
- A study in Nature reports that 2023 had the hottest summer in the northern hemisphere in at least the last 2,000 years.

Key Figures

Expected Atlantic Conditions August-October 2024



The combination of above-average sea surface temperatures, weaker trade winds and wind shear, and a wetter West African monsoon season, has led the NOAA Climate Prediction Center to forecast an "above-normal" 2024 Atlantic hurricane season. Image Source: [NOAA](#).

Mpox

21

The number of mpox cases reported in Virginia in 2024 as of May 21.

Measles

142

The number of new measles cases in the US detected since the start of 2024, as of May 24.

H5N1 A(H5N1)

2

Human cases of Influenza A(H5N1) detected in 2024 in the United States as of May 23, 2024.

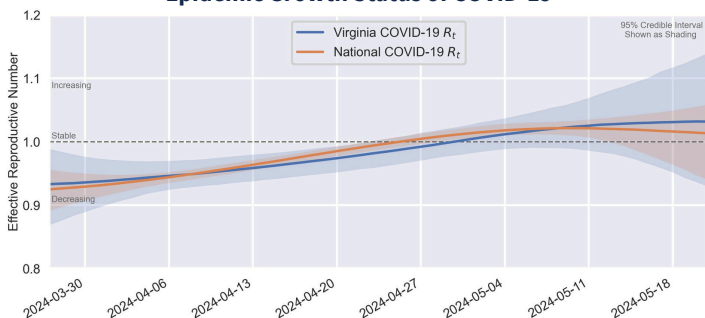
Spotlight: Influenza A H5N1

Ongoing Monitored Situations

Seasonal Respiratory Illness

- **Early signs of COVID-19 growth seen nationally.** Wastewater data continue to show that the national viral activity level is ‘minimal’. But epidemic models based on emergency department (ED) diagnoses suggest the possibility of sustained growth in a dozen states spread across the nation.
- **Virginia showing signs of early COVID-19 increases.** Wastewater data continues to show ‘low’ viral activity in the Commonwealth, but epidemic models suggest that activity is ‘likely growing’. Though still at a low overall level, ED diagnoses of COVID-19 in Virginia did increase by 10% this week.

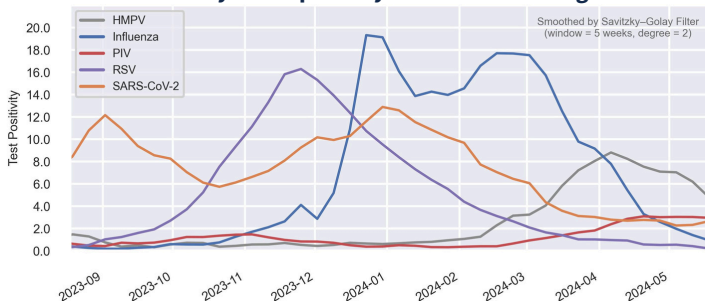
Epidemic Growth Status of COVID-19



Modeling suggests that COVID-19 has likely been growing nationally since April 23, and in Virginia since April 30. Data Source: [CDC](#).

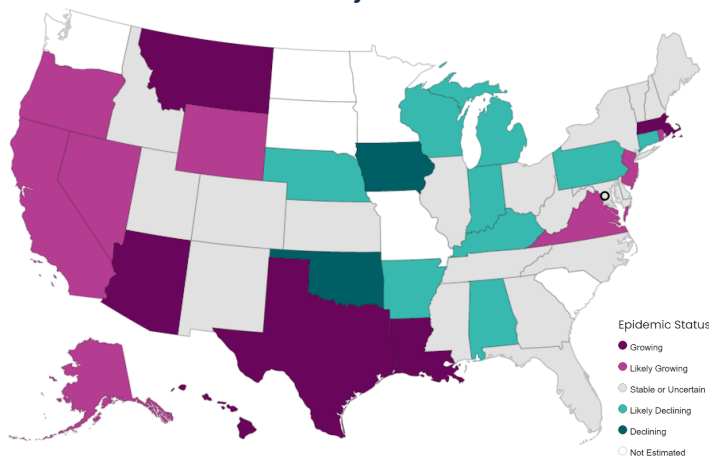
- **Rates of other respiratory viruses remain stable in Virginia.** The test positivity rates of influenza and RSV are stable in HHS Region 3 (which includes Virginia). Human metapneumovirus (HMPV) has an elevated positivity rate but is likely in a declining trajectory. Wastewater data corroborate this, showing ‘high’ HMPV rates in the American South with a ‘downward trend’. Wastewater data also suggest a ‘high’ rate of parainfluenza viruses (PIV) in the region, but this is not well reflected in test positivity data (below).

Test Positivity of Respiratory Viruses in HHS Region 3



HMPV activity is elevated but declining. Data Source: [CDC NRVES](#).

National Growth Trajectories of COVID-19

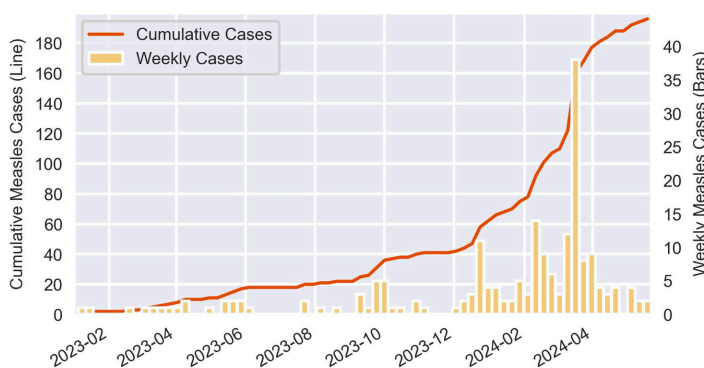


COVID-19 is growing in AZ, LA, MA, MT, and TX. Growth is considered ‘likely’ in several other states including Virginia. Image Source: [CDC](#).

Measles

- **National measles outbreaks continue sporadically.** The CDC reports eight new cases since the start of May. Most recently, a case was reported in Philadelphia, potentially exposing residents in the city and neighboring Montgomery County, PA. Over 80% of known cases have occurred among the unvaccinated or those with unknown vaccine status.

National Measles Cases Since the Start of 2023



Measles cases continue to grow slowly. Source: [CDC](#).

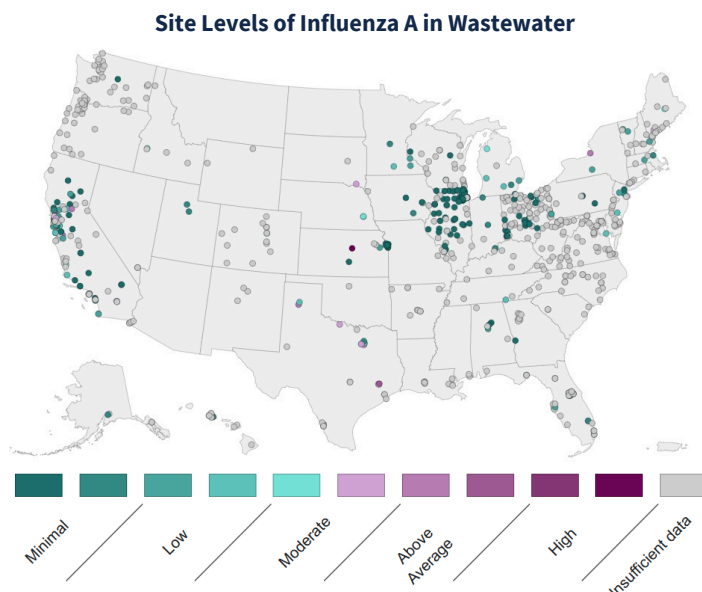
Mpox

- **National mpox rates have remained largely stable** since October of 2023. Despite the outbreak in DRC, no cases of clade I mpox have been detected outside of Africa. It is thought that the current Jynneos vaccine will offer protection against clade I mpox.

Spotlight

- **Wastewater surveillance suggests a ‘downward’ trend for Influenza A markers.** All nine of the [WastewaterSCAN](#) sites in Virginia, Maryland and North Carolina are now reporting ‘low’ levels of Influenza A. The rest of the American South is showing a ‘medium’ activity level, but with a ‘downward’ trend. The same downward trend is seen nationwide.
- **Second human case of H5N1 detected in U.S.** Officials in Michigan [report a case](#) in a farm-worker who was exposed to livestock known to have the virus. The worker experienced mild symptoms and quickly recovered. This marks the second confirmed human case of the virus in 2024, following a similar case detected in Texas in late March. A poultry worker was infected by H5N1 in 2022, but that case was not related to the ongoing outbreak among dairy cattle.
- **Australia reports its first human case of H5N1 in a child.** The case is thought to have [been imported](#), with initial exposure occurring in India. The patient reported “severe” symptoms but has since recovered.

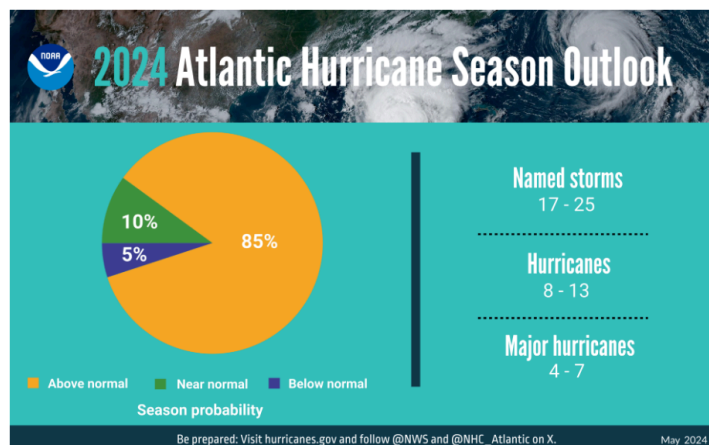
H5N1 A(H5N1)



The CDC has launched a new wastewater data dashboard to help in the tracking of H5N1. The dashboard displays the level of Influenza A detected at sampling sites. Note that testing does not distinguish between H5N1 and more common strains of flu A. But the CDC notes that flu season is over and flu rates should be minimal. Data for week ending 2024-05-18. Image Source: [CDC](#)

Other News

- **The Florida Department of Health has reported 164 cases of dengue virus so far this year.** The overwhelming majority of cases are linked to international travel, particularly to Latin America, where unusually high temperatures and humid conditions have contributed to a dramatic spike in cases. The CDC has identified Miami-Dade county as a hot spot for dengue in the US.
- **Following the confirmation of nine cases since the end of April, the Lexington-Fayette County Health Department in Kentucky has declared a pertussis outbreak.** Similarly in [Wisconsin](#), 43 confirmed and probable cases have been reported as of the end of April, rivaling the 51 cases reported in all of 2023.
- **A recent study confirmed that 2023 was the hottest year on record in the northern hemisphere in 2,000 years.** The extreme conditions contributed to a record number of heat-related deaths in some areas. The rising temperatures increase the [risk](#) of chronic and acute heat exposure to a vulnerable globally [aging population](#).



Various environmental factors including unusually warm sea temperatures, La Niña conditions, and less wind shear are expected to contribute to above-normal activity during the 2024 hurricane season in the Atlantic basin. Image Source: [NOAA](#).

- **Homelessness increased by over 12% in the Washington D.C. metropolitan area between 2023 and 2024.** A January 2024 [point-in-time](#) count estimated that 9,774 individuals were living on the streets or in temporary shelter.