

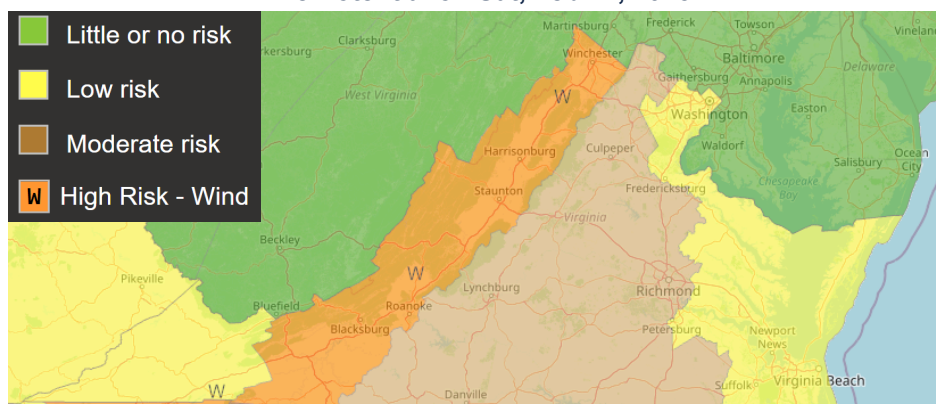
February 28, 2025

Key Takeaways

- CDC confirms that the two recent cases of severe H5N1 both had D1.1 genotype virus.
- USDA to invest \$1 billion in combatting H5N1.
- Respiratory illness activity in Virginia is moderate and declining. Flu continues to be the most prevalent respiratory illness.
- Measles cases in 2025 exceed 100 in both the U.S. and Canada.
- Chronic wasting disease has been identified in 36 U.S. states and five Canadian provinces.
- U.S. overdose deaths declined 24% in 2024.

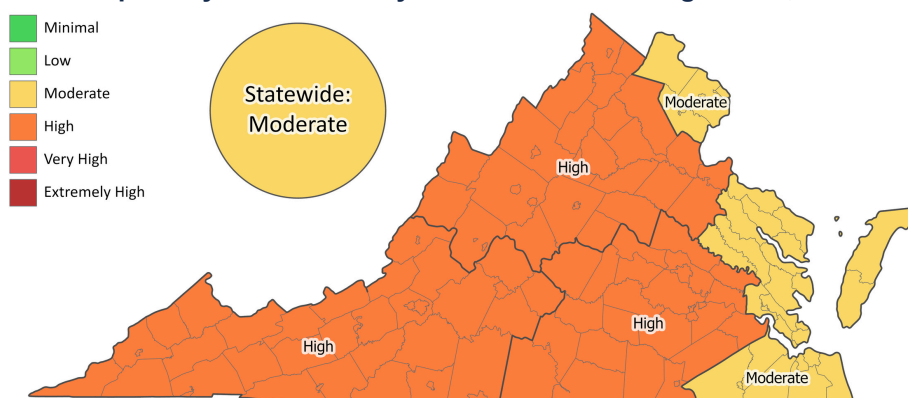
Key Figures

Fire Potential on Sat, Feb 27, 2025



Dry, windy conditions increase the risk of wildfire initiation and rapid spread over the weekend, with risk peaking on Saturday. Virginia's spring fire season began Feb 15. Image Source: [NICC](#).

Respiratory Illness Activity Levels – Week ending Feb 22, 2025



Respiratory illness activity has declined to “moderate” statewide and in the Northern and Eastern health planning regions. Data source: [VDH](#).

HPAI A(H5N1)

70

Human HPAI A(H5N1) cases in the United States as of Feb 27.

March 1

The start of Spring bird migration season in North America.

Seasonal Illness

3

Number of Virginia's five regions at 'High' or higher respiratory illness activity levels for the week ending Feb 22.

Measles

164

The number of measles cases reported in the U.S. in 2025, across nine states.

Spotlight: Chronic Wasting Disease

Ongoing Monitored Situations

Avian Influenza

- **CDC releases details on ill H5N1 patients.** The agency has confirmed three new human cases. All three had high-risk exposures, and two were hospitalized. Sequencing from the NV and WY cases identified D1.1 genotype virus.
- **Oseltamivir-resistant H5N1 found in Canada.** Researchers found evidence that reassortment has led to a clade 2.3.4.4b H5N1 with resistance to oseltamivir (Tamiflu).
- **USDA to invest \$1 billion to combat avian flu.** The agency will fund enhanced biosecurity efforts, financial relief for farmers, and vaccine research.
- **Raw pet food leads H5N1 infections in cats.** Two more indoor cats have tested positive after consuming raw pet food in Washington state. The same brand was recently implicated in an outbreak among cats in Oregon.
- **Study suggests that windborne transmission of H5N1 may be possible.** The pre-print study found genomic evidence that wind had spread H5N1 across Czech farms in 2023 and 2024.

Measles

- **Outbreaks in Texas and New Mexico continue.** Texas has reported 146 cases across nine counties, and New Mexico has reported 9 cases. None of the cases were fully vaccinated. One child has died and 20% have been hospitalized. Despite reports and proximity, there is no evidence that the two outbreaks are connected.
- **Canada reports over 100 new cases this year spread across three provinces.** Canada's outbreak began when an infected traveller attended a wedding. Attendees then spread the virus to other communities.

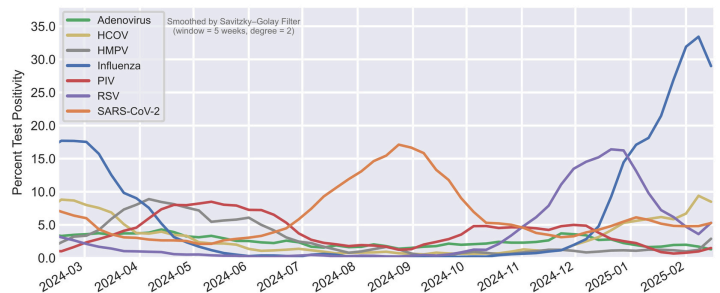
Mpox

- **Conflict confounds mpox response.** Fighting in the eastern regions of DR Congo has severely impacted mpox response and surveillance efforts. The conflict has also caused hundreds of mpox patients to flee, potentially spreading the virus.

Seasonal Illness

- **Respiratory illness activity is now moderate in Virginia and trending downward.** Respiratory illness activity remains high nationally. Some area hospitals have reinstated mask requirements for patients, visitors, and staff.
- **Flu activity in Virginia is high but declining,** accounting for 6.5% of emergency department (ED) visits. COVID-19 and RSV are both stable in Virginia, accounting for about 1.2% and 0.2% of ED visits respectively. Models estimate Virginia's effective reproduction rate (R_t) for flu to be 0.93 and 0.98 for COVID-19, suggesting very gradual declines in activity for both.

Test Positivity for Respiratory Viruses in HHS Region3



Flu activity is elevated but declining in the region. HMPV activity is increasing. Data source: [CDC](#).

- **GI illness activity in Virginia is elevated.** ED and urgent care (UC) visits for gastrointestinal illnesses have declined for three weeks in a row. But norovirus test positivity in Census Region 3 and wastewater norovirus concentrations in HHS Region 3 have both rebounded and are increasing.
- **HCOV activity stabilizes as HMPV increases.** After growing for months, test positivity for human coronaviruses excluding SARS-CoV-2 (HCOV) in HHS Region 3 declined this week. However, test positivity for human metapneumovirus (HMPV) has more than doubled in the same time.

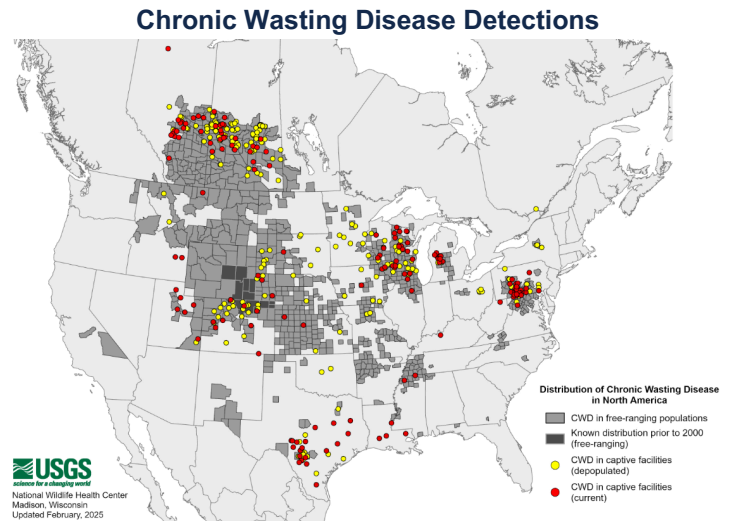
Viral Hemorrhagic Fevers

- **Uganda begins countdown to declare outbreak over.** All known Ebola cases have either died or recovered and been discharged. If no new cases are reported in 42 days, the outbreak will end.

Spotlight

- **Chronic Wasting Disease (CWD)** is a prion disease affecting deer and other cervids. Its known range has expanded significantly over the past two decades, and has continued to be identified in new U.S. states and counties, and in Canada, in 2025.
- **Recent research suggests that CWD is unlikely to infect humans.** The authors, note limitations including genetic variation and the potential for new strains may emerge. Mad cow disease, a prion disease similar to CWD, was transmitted to humans, while previous studies have suggested transmission is unlikely but possible.
- **CWD has been confirmed in 15 Virginia counties**, in separate geographic clusters in Northern, Northwest, and Southwest Virginia. Virginia's Department of Wildlife Resources manages four CWD Disease Management Areas, along with statewide surveillance, including free voluntary testing and mandatory spot testing.

Chronic Wasting Disease



Chronic Wasting Disease has spread well beyond the few Midwest counties it had been detected in prior to 2000. It has now been identified in 36 U.S. states, including states on both coasts, in five Canadian provinces, and in Finland, Norway, Sweden, and South Korea. Image source: [USGS](#).

Other News

- **School officials notified staff and students' families of a probable mumps case at an Abingdon middle school.** An estimated 99% of the school's student population are vaccinated against mumps.
- **A hospital shooting in Pennsylvania left several injured and two individuals dead**, including the gunman and a police officer. The gunman held staff members hostage and opened fire in the facility's ICU. While the motive remains under investigation, it is believed that the shooter specifically targeted hospital staff.
- **Malware accounted for 85% of cyber attacks in the health sector in 2024, but non-malware attacks have greater consequences.** According to a recent report, non-malware attacks such as brute-forcing, phishing, and malspam had the most impact on health sector facilities.
- **Chile experienced a widespread power outage affecting most of the country.** Eight million homes were without power. Power was knocked out to the subway, resulting in mass evacuations. The president declared a state of emergency and deployed the military to maintain order.
- **Deputies discovered a homemade improvised explosive device (IED) while executing a search warrant on an Amherst County home.** Authorities determined the IED to be a live explosive and detonated it remotely. The suspect has been arrested and the investigation is ongoing.
- **Overdose deaths have decreased 24% in the 12-month period ending September 2024** compared to the previous year. The 87,000 deaths captured in this timeframe represent the lowest number of overdose-related deaths in any 12-month period since June 2020.
- **A post-flood outbreak killed 14 in Australia.** Melioidosis, an antibiotic resistant, soil-dwelling bacteria, infected 94 people. Although rare, the bacteria surfaces in tropical areas after heavy rain or flooding.