Emerging Health Threats

Jonathan Falk, MPH Office of Epidemiology, VDH



Topics

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Viral Respiratory Diseases
Influenza
Respiratory Syncytial Virus (RSV)
COVID-19
Highly Pathogenic Avian Influenza (HPAI)
Monkeypox Virus
Ebola Virus Disease (EVD)
Healthcare-Associated Infections
Candida auris & Carbapenemase-Producing Organisms (CPO)
Other infections in Virginia hospitals
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Viral Respiratory Diseases



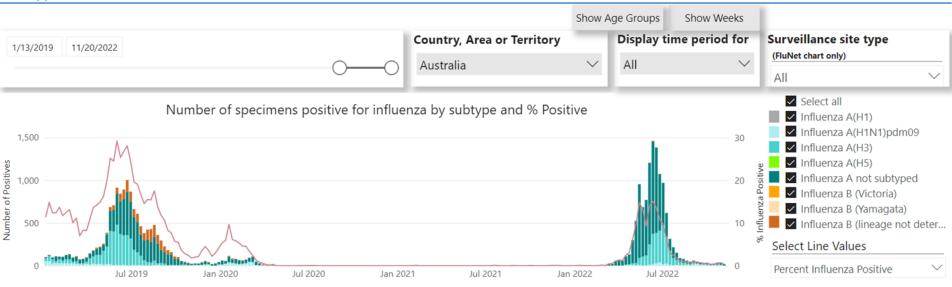
Influenza - Australia 2022



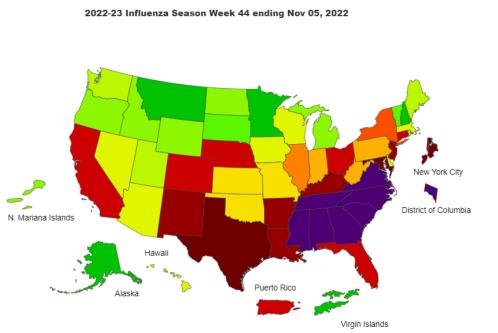
Influenza surveillance report

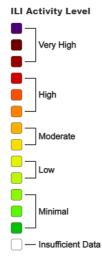
Data as of:

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Influenza - U.S. 2022-23



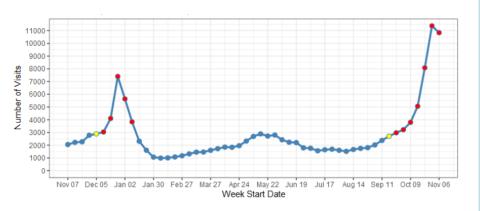


Data since October 2, 2022	
Positive Specimens	2,854
Influenza A	2,824 (98.9%)
(H1N1)pdm09	485 (21.2%)
H3N2	1,798 (78.8%)
Influenza B	30 (1.1%)



Influenza & RSV - Virginia

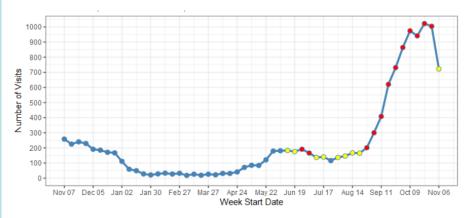
Weekly ED and Urgent Care Visits for ILI Excluding Diagnosed COVID-19 10/31/2021 - 11/12/2022



Data is from the week of Nov. 6 - Nov 12, 2022. Percent change is from week prior

* ILI - ED and urgent care visits with a chief complaint of 'flu' or fever + sore throat/cough. Visits with diagnosed COVID-19 are excluded.

Weekly ED and Urgent Care Visits with Diagnosed RSV 10/31/21 – 11/12/22



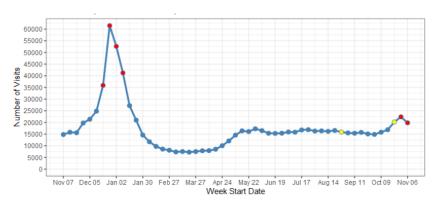
Data is from the week of Nov. 6 - Nov 12, 2022. Percent change is from week prior

* RSV - ED and urgent care visits that include RSV in the discharge diagnosis (not necessarily confirmed cases)



COVID-19

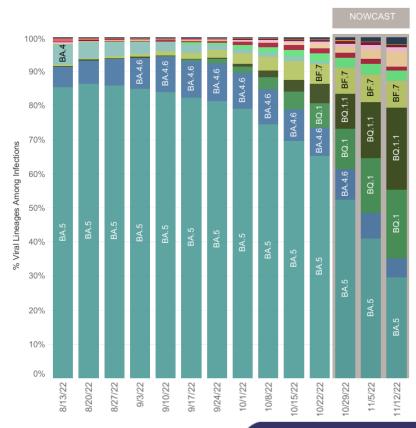
Weekly ED and Urgent Care Visits for COVID-Like Illness, VA, 10/31/21 – 11/12/22



Data is from the week of Nov. 6 – Nov. 12, 2022. Percent change is from week prior

*CLI - ED visits noting symptoms of fever + respiratory complaint (e.g. fever with cough, shortness of breath, or difficulty breathing), loss of taste or smell, those with a coronavirus or severe respiratory diagnosis, or visits that mention COVID-19 as the reason for visit.

United States: 8/7/2022 - 11/12/2022

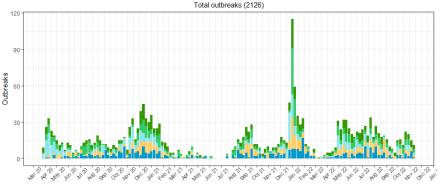




Questions can be directed to:

Number and Region of LTCF COVID-19 Outbreaks by Date VDH Notified

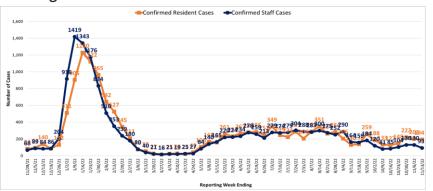
COVID-19 Outbreaks in a Long-term Care Setting



Week VDH Notifie

Outbreaks reported from nursing homes, assisted living facilities, and multicare facilities to VDH with a confirmed or suspected etiologic agent of SARS-CoV-2. Data from Virginia Outbreak Surveillance System as of 11/13/2022; data retrospectively updated and subject to

Nursing Home Resident and Staff COVID-19 Cases



Data are from NHSN as of 11/13/2022 and are subject to change. For reporting information, please refer to the NHSN data collection forms: <u>residents</u>, <u>staff</u>.



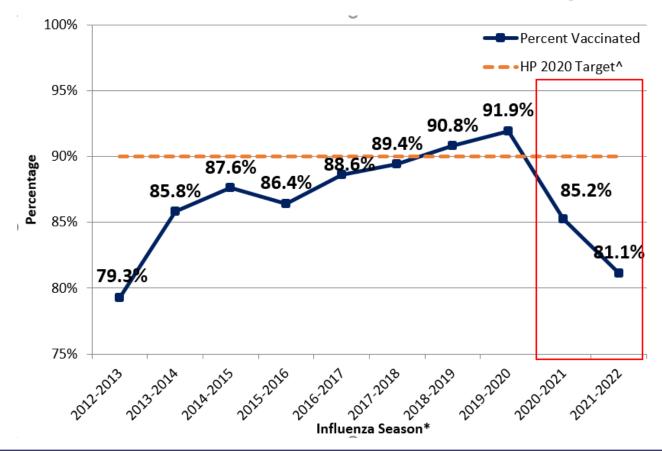
There were 79 LTCF COVID-19 outbreaks reported in the past 30 days (top right figure).

Reported nursing home resident and staff cases are decreasing (bottom right figure).

• For the reporting week ending November 13, 2022, 194 resident and 93 staff cases were reported to NHSN. Data for this reporting week are preliminary.

For reporting week ending October 30, 2022, data reported by 250 nursing homes showed 88.3% of residents and 95.2% of staff completed the primary COVID-19 vaccine series.

Healthcare Personnel Influenza Vaccination, Virginia Acute Care Hospitals



*An influenza season is from October 1st through March 31st of the following year.

^The HHS Healthy People 2020 goal for HCP influenza vaccination in the United States is 90%.

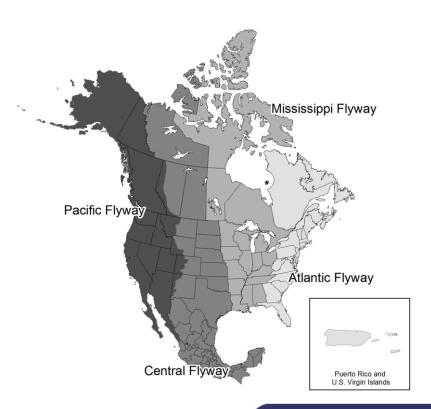


Highly Pathogenic Avian Influenza

Avian influenza viruses are classified as either "low pathogenic" or "highly pathogenic" based on their genetic features and the severity of the disease they cause in poultry.

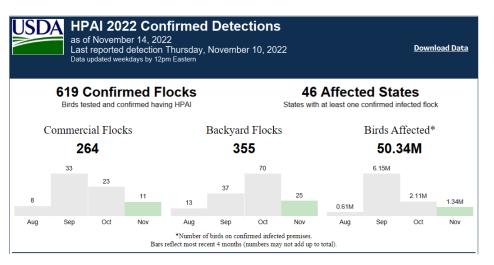
Since early 2022, more than 49 million birds in 46 states have either died as a result of bird flu virus infection or have been culled (killed) due to exposure to infected birds.

This number is nearing the 50.5 million birds in 21 states that were affected by the largest bird flu outbreak that occurred in 2015.

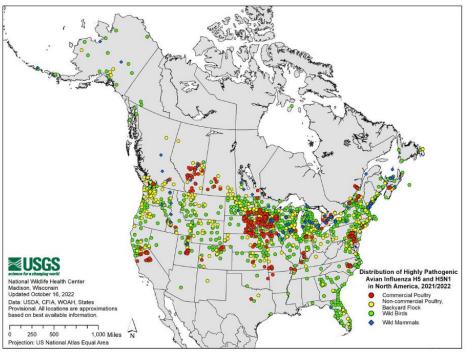




HPAI - U.S.



Distribution of Highly Pathogenic Avian Influenza H5 and H5N1 in North America, 2021/2022



Sources/Usage: Public Domain.

Distribution of Highly Pathogenic Avian Influenza H5 and H5N1 in North America, 2021/2022. Updated October 16, 2022.



Monkeypox Virus



Monkeypox Virus

Monkeypox virus is an orthopoxvirus that causes a disease with symptoms similar, but less severe, to smallpox. Monkeypox virus disease continues to occur in countries of central and west Africa, typically as a zoonosis: a disease that is transmitted from animals to humans.

Since early May 2022, cases of monkeypox have been reported from countries where the disease is not endemic, notably Europe and North America.

This is the first time that many monkeypox cases and clusters have been reported concurrently in non-endemic and endemic countries in widely disparate geographical areas and at such large numbers.



Monkeypox Virus - Global

110

Countries reporting cases

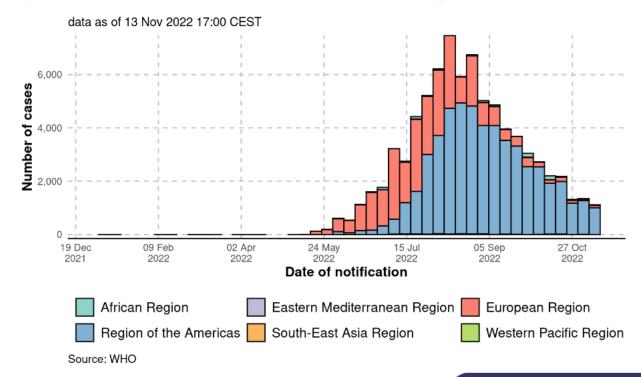
79,411

Confirmed cases

50

Deaths

Epidemic curve shown for cases reported up to 13 Nov 2022 to avoid showing incomplete weeks of data.



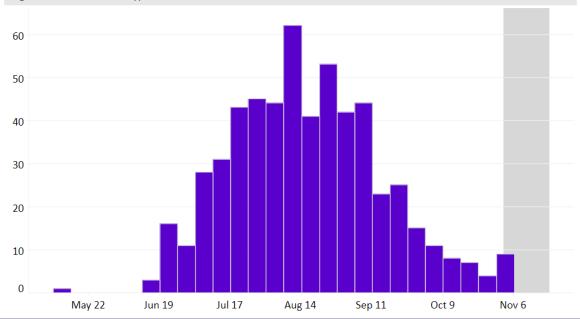


Monkeypox Virus - Virginia



Number of Cases by Week

The graph shows the number of monkeypox cases reported to VDH by the date closest to when the person became ill or got tested for the monkeypox virus.



95% of cases are Male

76% of cases are 20-40 y.o.

43% of cases are Black



Ebola Virus Disease



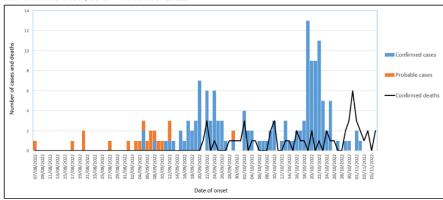
EVD - Uganda

September 20, 2022, the Ministry of Health of Uganda officially declared an outbreak of EVD caused by Sudan virus.

As of November, 7 2022, there have been 136 confirmed cases and 53 (39%) confirmed deaths. 3867 contacts have been registered, of which 2237 (68%) have completed the 21-day follow-up period.

Since October 7, 2022, U.S.-bound air passengers who have been to Uganda in the prior 21 days are redirected to five U.S. airports and undergo health screenings. Travelers are then interviewed by local health departments and monitored based on assessed risk.

Figure 1. Cases (confirmed and probable) and deaths (confirmed) of Ebola disease caused by SUDV by date of illness onset, as of 7 November 2022.



Graph re-produced using data reported in the Ministry of Health Uganda and WHO Situation Reports



Healthcare-Associated Infections & Antimicrobial Resistance (HAI/AR) Program

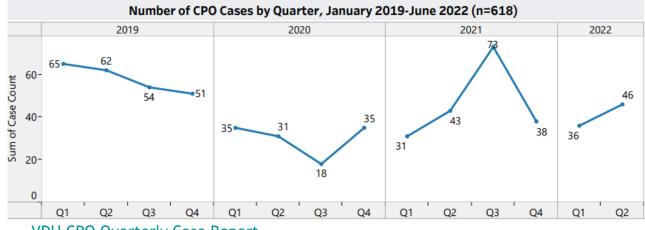


Targeted Multidrug-Resistant Organisms (MDROs)

Background

- The HAI/AR Program has been tracking clinical and colonized cases of Candida auris and Carbapenemase-Producing Organisms (CPO) since 2019
- These organisms are considered urgent threats according to the <u>CDC 2019 AR Threats Report</u>
- Local health departments work with healthcare facilities to contain transmission when cases are identified

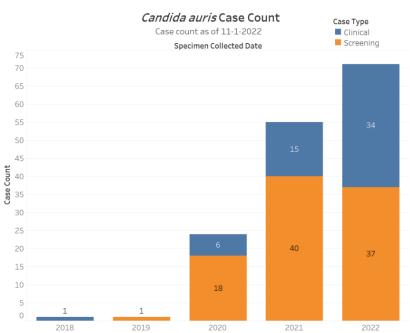
CPO Clinical Case Counts





Targeted Multidrug-Resistant Organisms (MDROs)

Candida auris Clinical and Colonized Case Counts



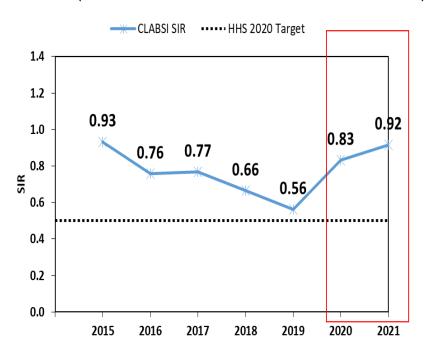
Summary

Virginia is following national trends identifying more cases of these targeted MDROs, potentially due to setbacks in prevention practices from the COVID-19 pandemic.



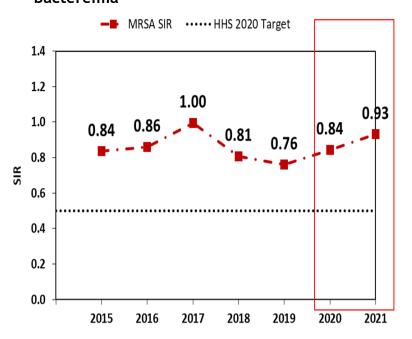
Healthcare-Associated Infections, Virginia Acute Care Hospitals

CLABSI (central line-associated bloodstream infection)



The HHS Healthy People 2020 SIR goal is 0.50.

Methicillin-resistant *Staphylococcus aureus* (MRSA) bacteremia



The HHS Healthy People 2020 SIR goal is 0.50.

