Emerging Health Threats

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Topics

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
Viral Respiratory Diseases
Influenza surveillance report

Number of specimens positive for influenza by subtype and % Positive

Data as of: 11/15/2022 11:01:16 AM
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

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

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.
Virginia: COVID-19 Burden in Virginia LTCFs

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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.
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.

**HPAI 2022 Confirmed Detections**

*as of November 14, 2022*

Last reported detection Thursday, November 10, 2022

Data updated weekdays by 12pm Eastern

619 Confirmed Flocks

Birds tested and confirmed having HPAI

<table>
<thead>
<tr>
<th>Month</th>
<th>Commercial Flocks</th>
<th>Backyard Flocks</th>
<th>Birds Affected*</th>
</tr>
</thead>
<tbody>
<tr>
<td>Aug</td>
<td>8</td>
<td>13</td>
<td>0.61M</td>
</tr>
<tr>
<td>Sep</td>
<td>33</td>
<td>37</td>
<td>2.11M</td>
</tr>
<tr>
<td>Oct</td>
<td>23</td>
<td>70</td>
<td>1.34M</td>
</tr>
<tr>
<td>Nov</td>
<td>11</td>
<td>25</td>
<td></td>
</tr>
</tbody>
</table>

46 Affected States

States with at least one confirmed infected flock

Birds Affected*

50.34M

*Number of birds on confirmed infected premises

Bars reflect most recent 4 months (numbers may not add up to total)

Sources/Usage: Public Domain.

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

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

Data as of 13 Nov 2022 17:00 CEST

- 110 Countries reporting cases
- 79,411 Confirmed cases
- 50 Deaths

Source: WHO
Monkeypox Virus - Virginia

Total Cases: 546
Total Hospitalizations: 23
Total Deaths: 0

95% of cases are Male
76% of cases are 20-40 y.o.
43% of cases are Black
Ebola Virus Disease
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.
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 [CDC 2019 AR Threats Report](https://www.cdc.gov/drugresistance/threat-report-2019/)
- Local health departments work with healthcare facilities to contain transmission when cases are identified.

**CPO Clinical Case Counts**

![Number of CPO Cases by Quarter, January 2019-June 2022 (n=618)](VDH CPO Quarterly Case Report)
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

The HHS Healthy People 2020 SIR goal is 0.50.

CLABSI (central line-associated bloodstream infection)

Methicillin-resistant *Staphylococcus aureus* (MRSA) bacteremia

The HHS Healthy People 2020 SIR goal is 0.50.