

# WEEKLY EPIDEMIOLOGIST REPORT

September 11, 2023



**Central  
Connecticut  
Health  
District**

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## MOSQUITO-BORNE DISEASE SURVEILLANCE

The State of Connecticut’s Agricultural and Experimentation Station (CAES) performs mosquito trapping and testing starting at the beginning of June and ending in late October. Arboviruses tested at CAES include: West Nile Virus (WNV), Eastern Equine Encephalitis virus (EEE) and Jamestown Canyon Virus (JC). CAES has trapped and tested 280,943 mosquitoes between June 1, 2023 – September 4, 2023. Testing sites are located in 89 towns. Newington and Wethersfield are the only towns in the health district with test sites (see table below). **Wethersfield was the first town in Connecticut this year to report a mosquito positive with WNV and continues to report WNV positive mosquitoes.** There have been two human case of WNV for this year from New Haven County and Hartford County. There have been no human cases of EEE or JC reported in Connecticut or our district yet this year.

<i>Town</i>	<i>Site</i>	<i>Cumulative Mosquitoes Tested</i>	<i>Test Results</i>	<i>Virus</i>	<i>Mosquito Species (Positive Samples)</i>	<i>Date Collected</i>
<i>Newington</i>	<i>Churchill Park</i>	<i>1,562</i>	<i>Negative</i>	<i>-</i>	<i>-</i>	<i>-</i>
				<i>WNV (19)</i>	<i>Culex pipiens (1)</i>	<i>7/17</i>
					<i>Culex restuans (1)</i> <i>Culex salinarus (2)</i>	<i>7/27</i>
					<i>Culex pipiens (7), Culex resuans (1)</i>	<i>8/9/23</i>
<i>Wethersfield</i>	<i>Goff Road</i>	<i>5,334</i>	<i>Positive</i>		<i>Culex pipiens (2)</i>	<i>8/17/23</i>
					<i>Culex pipiens (1), Culex restuans (1), Culex salinarus (1)</i>	<i>8/29/23</i>
				<i>JC (2)</i>	<i>Anopheles punctipennis (1)</i>	<i>8/8/23</i>
					<i>Anopheles punctipennis (1)</i>	<i>8/17/23</i>

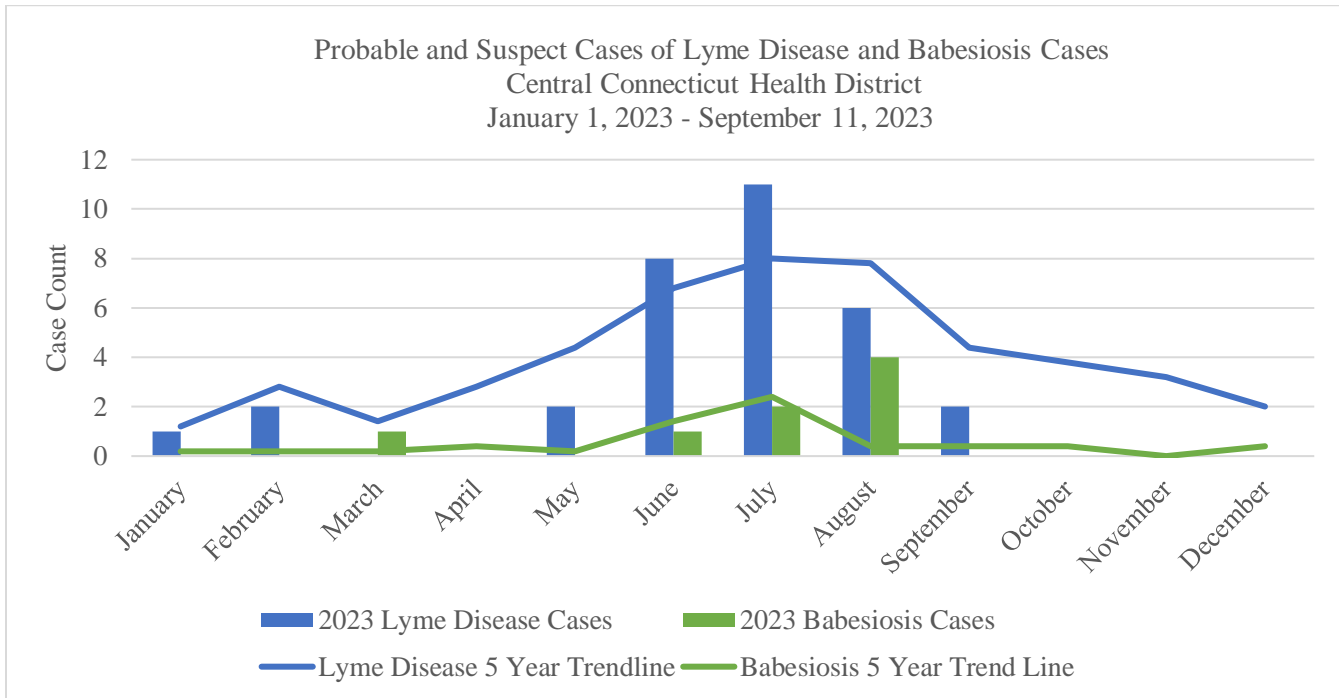
To protect yourself against mosquitoes and mosquito-borne disease, remember the 4 D’s:

1. **Defend:** use an EPA registered mosquito repellent
2. **Dress:** wear light colored clothing with long sleeves, socks, and pants to minimize mosquito bites
3. **Dusk/Dawn:** avoid areas where mosquitoes are active from one hour before sunset to one hour after sunrise
4. **Drain/Dump:** check around the home for containers or areas which hold water. Dump out once per week. Consider using mosquito dunks in large outdoor standing water containers, such as rain barrels.

Data regarding mosquito-borne disease surveillance is collected from <https://portal.ct.gov/CAES/Mosquito-Testing/Mosquito-Testing/Mosquito-Testing> and CTEDSS.

## TICK-BORNE DISEASE SURVEILLANCE

The graph below shows the five-year average trend lines for babesiosis and lyme disease cases (2018-2022) compared to this year's cases. Data for this year may change due to delays in reporting. July cases for Lyme appear to be above average, while August case counts, appear below; however, case counts are subject to change due to the delay in laboratory reporting and the confirmation of probable and suspect cases.

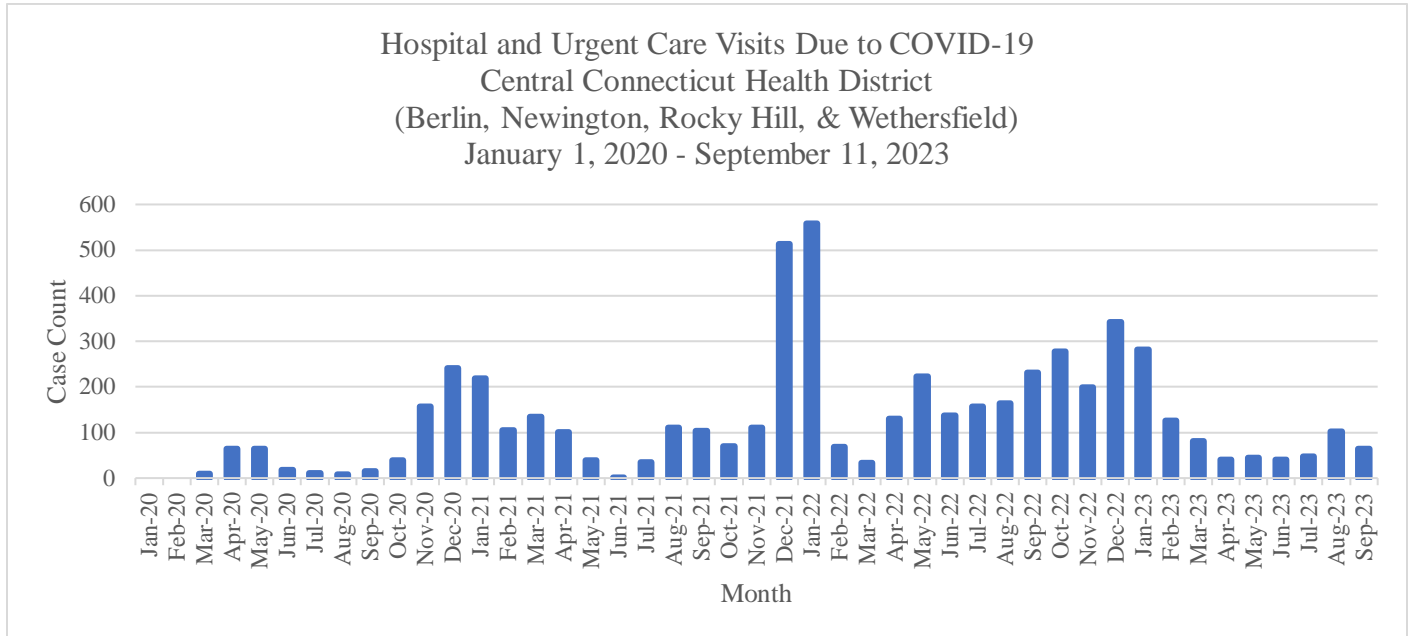


Connecticut has had four human cases of Powassan virus reported this past July. No cases were from our district. For more information on Powassan virus visit: <https://www.cdc.gov/powassan/index.html>. Visit CDC's "Fight the Bite" page for additional information on preventing tick and mosquito bites.



## COVID-19 SURVEILLANCE

Data for COVID-19 was collected on September 11, 2023 from EpiCenter. The bar graph below illustrates the syndromic surveillance of hospital and urgent care visits due to COVID-19 (those with a COVID-19 diagnosis and symptoms). Forty-one cases have been reported last week. We can expect to see the number of hospital and urgent care visits to continue to increase as the EG.5 Omicron variant continues to spread. Another omicron variant under monitoring is BA.2.86; it has 36 mutations.



According to Biobot wastewater surveillance, genomic sequencing results for the Northeast (September 7, 2023) showed that 26.2% of SARS-COV-2 viral fragments found in the wastewater were XBB.1.16 and EG.5 is gaining ground at 25.4% (<https://biobot.io/data/>). The table below shows the abundance of variants detected in wastewater in the Northeast Region which includes the states of Maryland, Pennsylvania, Delaware, New York, Massachusetts, Vermont, Connecticut, New Jersey, Maine, New Hampshire, and Rhode Island.

<i>SARS-COV-2 Variant</i>	<i>Percent</i>	<i>Change</i>
<i>XBB</i>	12.2	-4.4
<i>XBB.1.5</i>	9.4	-3.1
<i>XBB.1.16</i>	26.2	+2.3
<span style="color: red;">→</span> <i>EG.5</i>	<span style="color: red;">25.4</span>	<span style="color: red;">+9.2</span>
<i>XBB.1.9.2</i>	4.1	-7.1
<i>XBB.1.9</i>	2.2	+0.9
<i>XBB.1.9.1</i>	18.8	+0.9
<i>Other</i>	1.6	+0.7

On the following page, circled in red, is a graph that illustrates the copies of virus isolated from wastewater in Hartford County (solid line) compared to the Nationwide wastewater (dashed line) for the week of September 4th. Hartford County’s wastewater concentration of SARS-CoV-2 virus (639 copies/mL) has increased from the previous reporting period (363 copies/mL). Some Connecticut counties are continuing to a steady increase in the number of copies of virus isolated in their wastewater (Fairfield & New London)

Filter by State to View Counties

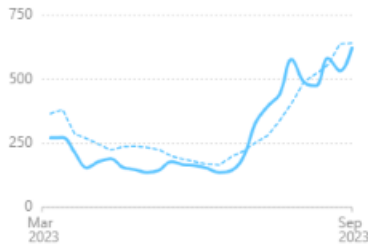
Connecticut x

Show nationwide average  Show cases

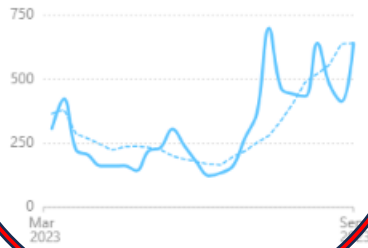
Total results Last 6 months Last 6 weeks

County wastewater Nationwide wastewater

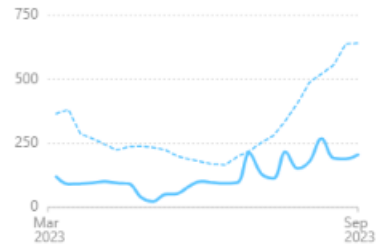
Fairfield County, CT



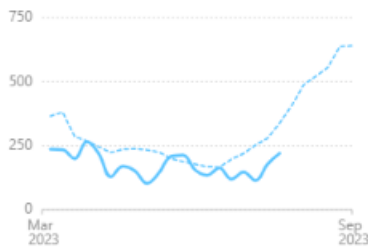
Hartford County, CT



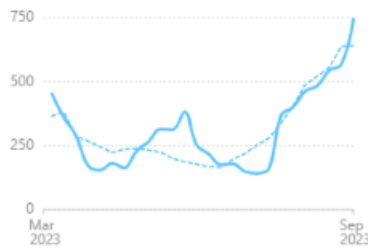
Middlesex County, CT



New Haven County, CT



New London County, CT



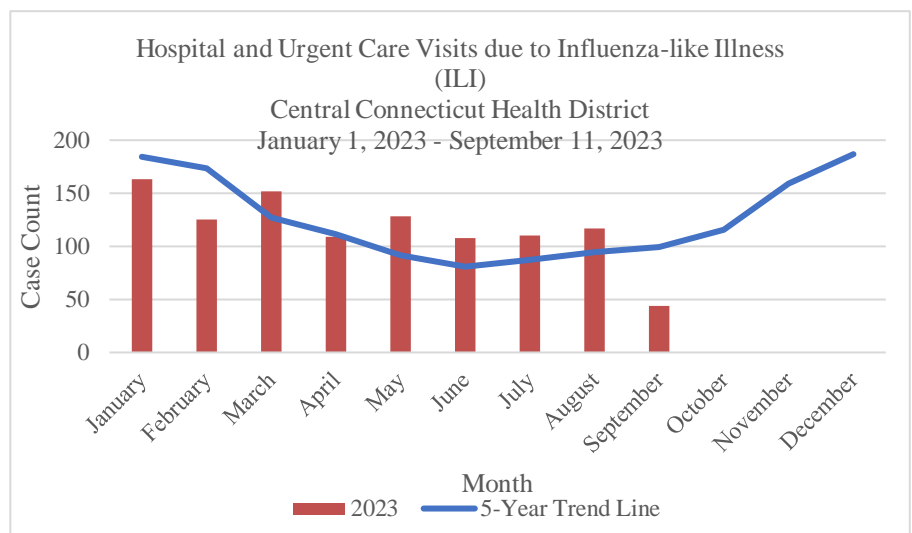
Source: Wastewater data from Biobot Analytics; Clinical data from USAFacts

**INFLUENZA SURVEILLANCE**

Data for Influenza-like Illness Syndromic Surveillance was collected on September 11, 2023 from EpiCenter. The graph below illustrates the syndromic surveillance of hospital and urgent care visits due to influenza-like illness (ILI) five- year average trend line (2018-2022) compared to this years cases. The number of cases reported last week fo ILI was 25.

Other circulating respiratory viruses can present as influenza-like illness.

The district has received its first laboratory confirmed case of flu on September 9, 2023. The levels of ILI can be attributed to other respiratory diseases with similar symptoms to influenza (see the National Respiratory and Enteric Virus Sureillance System Update).



## NATIONAL RESPIRATORY AND ENTERIC VIRUS SURVEILLANCE SYSTEM (NREVSS)

### UPDATE:

*Data for the following CDC disease surveillance programs were updated on September 7, 2023.*

*All data is preliminary and subject to change.*

#### **Adenovirus**

Nationally adenovirus antigen test positivity has increased from 3.5% to 7.2%. Adenovirus is the most common cause of respiratory illness. Adenovirus can also cause gastroenteritis, conjunctivitis, cystitis, and less commonly, neurological disease. For more information please visit:

<https://www.cdc.gov/adenovirus/hcp/clinical-overview.html>

#### **Human Metapneumovirus (hMPV)**

Northeastern U.S. Census Region antigen percent positivity remains at 0%. HMPV can cause upper and lower respiratory disease in people of all ages. Common symptoms of hMPV include cough, fever, nasal congestion, and shortness of breath. For more information visit: <https://www.cdc.gov/ncird/human-metapneumovirus.html>.

#### **Human Parainfluenza Virus Types 1-3**

Nationally, parainfluenza virus type 1 (HPIV) antigen test positivity has decreased from 6.0% to 3.8%. HPIV 2 has increased from 2.5% to 3.4% and HPIV 3 antigen test positivity has decreased from 1% to .5%. HPIV is associated with croup and can cause upper and lower respiratory illness and cold-like symptoms. For more information on HPIV please visit: <https://www.cdc.gov/parainfluenza/hcp/clinical.html>

#### **Norovirus**

The Northeastern Region levels of PCR test positivity decreased from 8.9% to 7.1%. Norovirus can remain on surfaces for weeks at a time and is extremely contagious. Symptoms of norovirus include diarrhea, vomiting, nausea and stomach pain. <https://www.cdc.gov/norovirus/about/index.html>.

#### **Respiratory Syncytial Virus (RSV)**

In the State of Connecticut, RSV (antigen and PCR) test positivity remain **undetected**. RSV can cause different types of respiratory illness, however it most commonly causes cold-like symptoms. It can cause serious illness, such as bronchitis and pneumonia in infants and young children and people who are immunocompromised or who have chronic lung disease. For more information please visit:

<https://www.cdc.gov/rsv/clinical/index.html>

#### **Rotavirus**

In the Northeast region, rotavirus antigen test positivity remains at 0%. Symptoms of rotavirus include vomiting and watery diarrhea for three to eight days. Fever and abdominal pain is also common. Rotavirus is primarily transmitted through the fecal-oral route. For more information please visit:

<https://www.cdc.gov/rotavirus/clinical.html>

#### **Coronavirus**

NREVSS conducts surveillance on four types of human coronaviruses other than SARS-CoV-2, which include CoV229E, CoVNL63, CoVOC43 and CoVHKU1. People around the world commonly get infected with these four common human coronaviruses. In the Northeastern region, test positivity for all four types remain below 1%.

## **RESPIRATORY DISEASE SUMMARY**

The data from this weekly report indicates that we are at the beginning of the Fall respiratory season. The best way to prevent the spread of infectious respiratory illness is to:

- Cover your cough and sneezes,
- Wash your hands often,
- Get vaccinated for flu,
- Stay home when you are ill,
- Minimize close contact with sick people.

## **FOOD RECALLS**

On September 5<sup>th</sup>, the FDA advised restaurants and retailers not to serve or sell and consumers not to eat certain potentially pathogen contaminated oysters from an approved area in Groton, Connecticut. People can get sick with food poisoning after ingesting certain pathogens, like Salmonella or E. coli. Symptoms may vary, depending on the pathogen and can range from mild to serious. The most common symptoms of food poisoning are diarrhea, stomach pain or cramps, nausea, vomiting, and fever. Symptoms may start within a few hours or may take a few days and can last for a few hours or several days.

Click the link to know what foods have been recalled because they are contaminated. Please check your cupboards and throw out any of these items: <https://www.cdc.gov/foodsafety/>

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## **THE BERLIN FAIR**

The Berlin Fair is this weekend, hooray!! My family looks forward to it every year. When visiting animal exhibits be sure to avoid contact with surfaces that appear to be contaminated with animal excreta, wash hands immediately after exiting animal exhibits, and practice good food safety and hygiene. Have a great fair weekend!



*Photos above are of my family at the Berlin Fair*

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*The Central Connecticut Health District is committed to improving the quality of life in our communities through prevention of disease and injury, fostering of a healthy environment, and promotion of the health of our residents.*