

# WEEKLY EPIDEMIOLOGIST REPORT

September 5, 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 264,439 mosquitoes between June 1, 2023 – August 28, 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. Wethersfield also continues to report JC positive mosquitoes.** There has been one human case of WNV for this year from New Haven 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>	Churchill Park	1,523	Negative	-	-	-
<i>Wethersfield</i>	Goff Road	4,966	Positive	WNV (14)	<i>Culex pipiens (1)</i>	7/17
					<i>Culex restuans (1)</i>	7/27
					<i>Culex salinarus (2)</i>	
					<i>Culex pipiebns (7), Culex resuans (1)</i>	8/9/23
					<i>Culex pipien (2)</i>	8/17/23
		JC (2)	<i>Anopheles puntipennis (1)</i>	8/8/23		
				<i>Anopheles puntipennis (1)</i>	8/17/23	

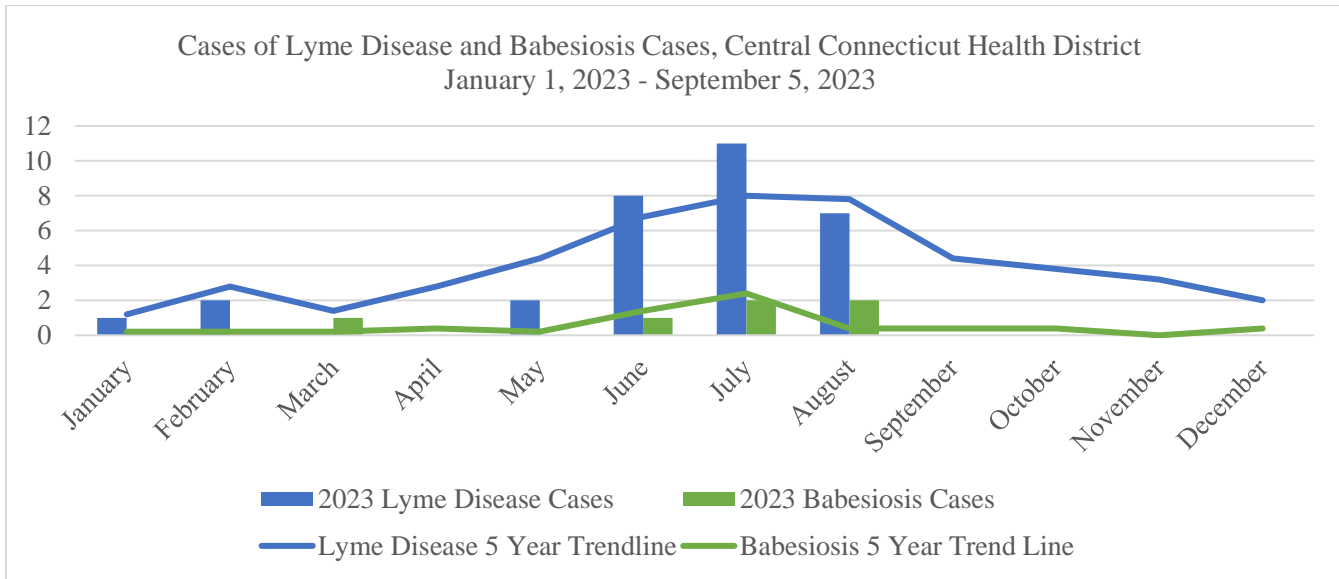
To protect yourself against mosquitoes and mosquito-borne disease, remember the 4 D’s:

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 line 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 are subject to change due to the delay in laboratory reporting and the confirmation of probable and suspect cases.



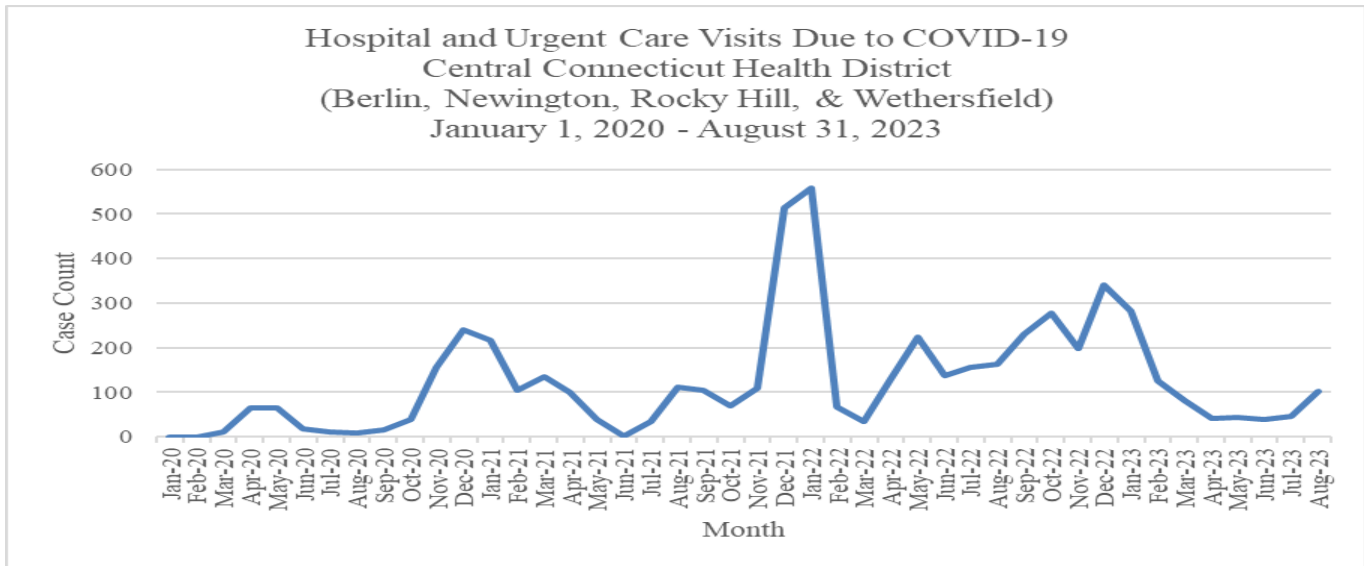
Connecticut has had four human cases of Powassan Virus reported this past July. No cases were from our district. To protect yourself against tick bites and tickborne disease, remember to B-L-A-S-T, Bath after being outdoors, Look, Apply repellent, Spray yard and Treat pets; for more information on BLAST Lyme please visit [www.lymeconnection.org](http://www.lymeconnection.org); and for more information on Powassan visit <https://www.cdc.gov/powassan/index.html>. Visit CDC's "Fight the Bite" page for additional information on preventing tick and mosquito bites.



<https://www.cdc.gov/fight-the-bite/prevent/index.html>

## COVID-19 SURVEILLANCE

Data for COVID-19 was collected on September 4, 2023 from EpiCenter. The line graph below illustrates the syndromic surveillance of hospital and urgent care visits due to COVID-19 (those with a COVID-19 diagnosis and symptoms). The number of hospital and urgent care visits has increased from 88 to 138 cases this reporting week (24 cases are from the first five days of September). 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, along with other variants with the F456L mutation in the virus spike protein (FL.1.5.1 & XBB.1.16.6) as this spike protein has been shown to evade immune response. Another omicron variant under monitoring is BA.2.86; it has 36 mutations. As of August 30<sup>th</sup>, BA.2.86 has been identified in at least four states (Michigan, Ohio, New York, Virginia) in samples from people or wastewater and comprises less than 1% of the circulating SARS-CoV-2 over the past two weeks.



According to Biobot wastewater surveillance, genomic sequencing results for the Northeast (August 24, 2023) results showed that 23.9% of SAR-COV-2 viral fragments found in the wastewater were XBB.1.16 ( <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>	16.6	+0.6
<i>XBB.1.5</i>	12.5	-0.1
<i>XBB.1.16</i>	23.9	+0.9
<span style="color: red;">→</span> <i>EG.5</i>	16.2	+3.0
<i>XBB.1.9.2</i>	11.2	-0.3
<i>XBB.1.9</i>	1.3	-1.0
<i>XBB.1.9.1</i>	17.9	-4.1
<i>Other</i>	0.9	0.0

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 August 30<sup>th</sup>. Hartford County’s wastewater concentration of SARS-CoV-2 virus (363 copies/mL) has decreased from the

previous reporting period (419 copies/mL). Some Connecticut counties are seeing an increase in the number of copies of virus isolated in their wastewater (Fairfield & New London)

**Filter by State to View Counties**

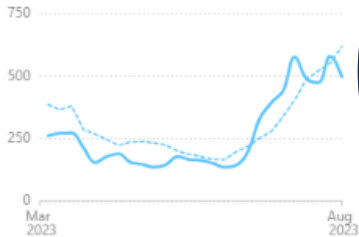
Connecticut x

Show nationwide average  Show cases

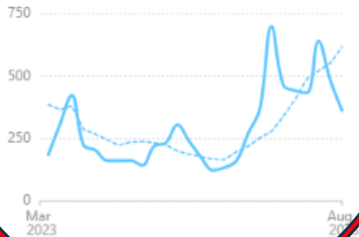
Total results Last 6 months Last 6 weeks

County wastewater Nationwide wastewater

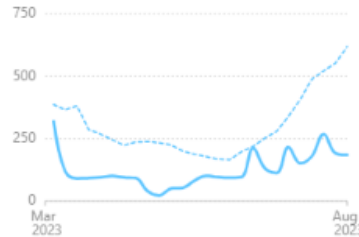
**Fairfield County, CT**



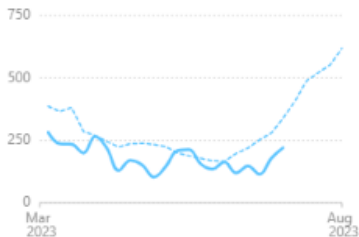
**Hartford County, CT**



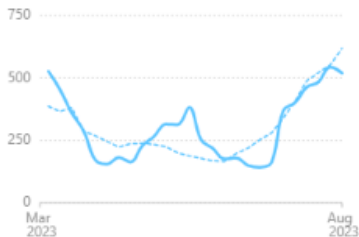
**Middlesex County, CT**



**New Haven County, CT**



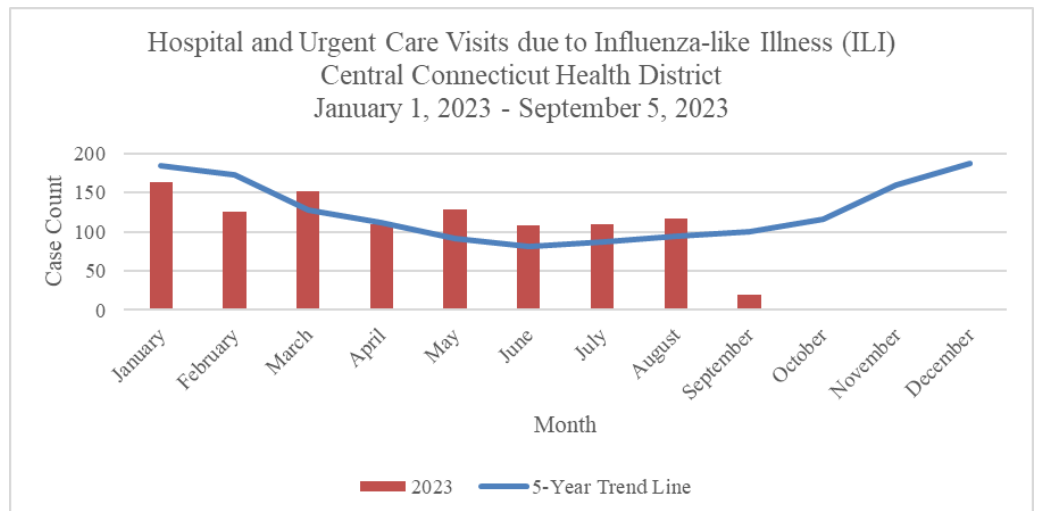
**New London County, CT**



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

**INFLUENZA SURVEILLANCE**

Data for Influenza-like Illness Syndromic Surveillance was collected on September 4, 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 ILI cases have increased from 101 to 136 this week (+35). Other circulating respiratory viruses can present as influenza-like illness. The district has not received any reports of influenza types A or B since April 24, 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 August 31, 2023.*

*All data is preliminary and subject to change.*

#### **Adenovirus**

Nationally adenovirus antigen test positivity has decreased from 5.1% to 3.5%. 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 increased from 4.4% to 6.0%. HPIV 2 has increased from 1.4% to 2.5% and HPIV 3 antigen test positivity has increased from 0% to 1%. 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 12.4% to 8.9%. 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 is 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%.

## **FOOD RECALLS**

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/>

## **BACK TO SCHOOL**

Helpful Resources for families with school-aged children:

1. <https://www.211ct.org/>
2. Hartford Healthcare’s “Connections That Matter,” <https://connectionsthatmatter.org/>
3. Visit Snap4CT to get healthy recipes you and your family can enjoy <https://www.snap4ct.org/>
4. Concussion ABC’s: **A**ssess the situation, **B**e alert for signs and symptoms, and **C**ontact a healthcare professional. For more information visit [https://www.cdc.gov/headsup/basics/concussion\\_respondingto.html](https://www.cdc.gov/headsup/basics/concussion_respondingto.html)
5. CDC’s Bullying Fact Sheet: <https://www.cdc.gov/violenceprevention/pdf/bullying-factsheet508.pdf>
6. COVID-19: Check with your school system to see if they have a COVID-19 protocol if your child should test positive. The CDC recommendations are to stay home for 5 days after symptoms, or positive test and mask for the following 5 days in public if symptoms have resolved. <https://www.cdc.gov/coronavirus/2019-ncov/prevent-getting-sick/prevention.html#home>

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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.*