

WEEKLY EPIDEMIOLOGIST REPORT

August 21, 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 200,416 mosquitoes between June 1, 2023 – August 14, 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 this year to report a mosquito positive with WNV and continues to report WNV positive mosquitoes. JC has been reported in West Haven and North Haven. *On August 18th the Connecticut Department of Public Health reported the first human case of WNV for this year in a female resident age 50-59 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>	<i>Churchill Park</i>	<i>1,354</i>	<i>Negative</i>	<i>-</i>	<i>-</i>	<i>-</i>
					<i>Culex pipiens (1)</i>	<i>7/17</i>
<i>Wethersfield</i>	<i>Goff Road</i>	<i>3,121</i>	<i>Positive</i>	<i>WNV (12)</i>	<i>Culex restuans (1)</i> <i>Culex salinarus (2)</i>	<i>7/27</i>
					<i>Culex pipiens (7),</i> <i>Culex restuans (1)</i>	<i>8/9/23</i>

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

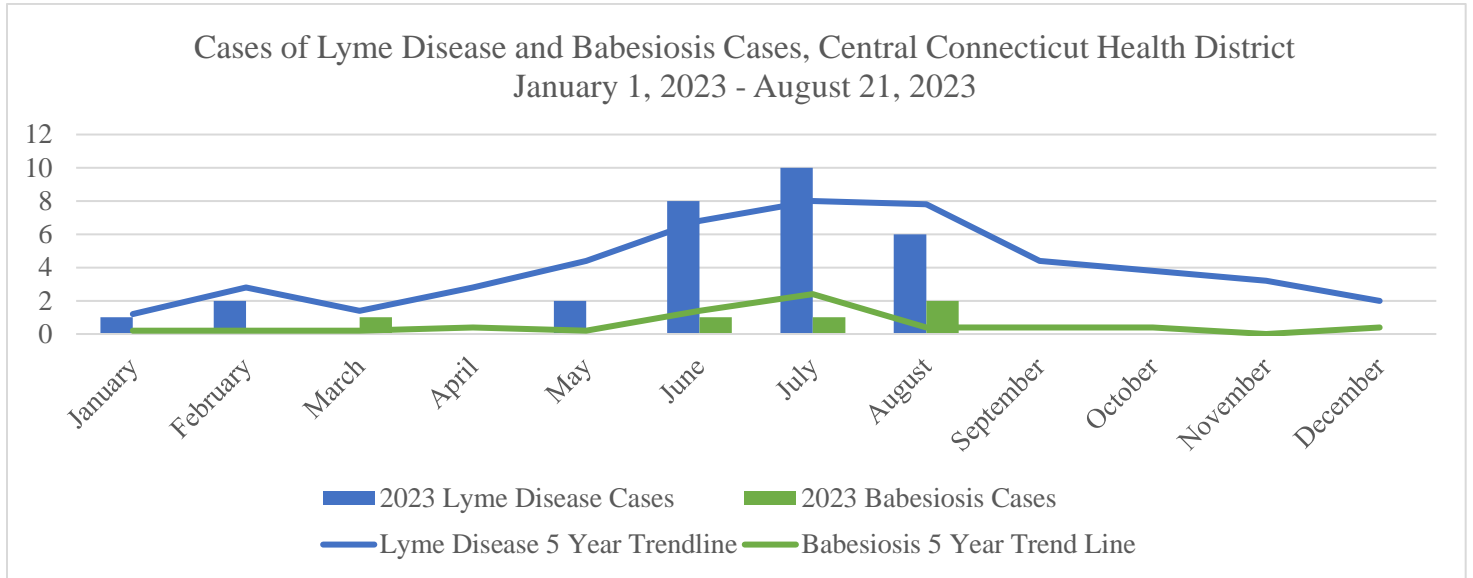
1. **Defend:** use an EPA registered mosquito repellent (DEET, picaridin, Oil of Lemon Eucalyptus, IR3535, or 2-undecanone)
2. **Dress:** wear light colored clothing with long sleeves, socks, and pants to minimize mosquito bites
3. **Dusk/Dawn:** avoid areas where mosquitoes are active from one hour 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. It appears that June and July case counts were above average. August case counts are subject to change due to the delay in laboratory reporting and the confirmation of probable and suspect cases.



Four cases of Powassan virus POWV have been confirmed from this past July. All four cases were aged 50 and over. Two cases were from Litchfield County, one case was from Middlesex County and the other from Windham. All patients reported a known tick bite and were hospitalized with a central nervous system disease. They have been discharged and are recovering.

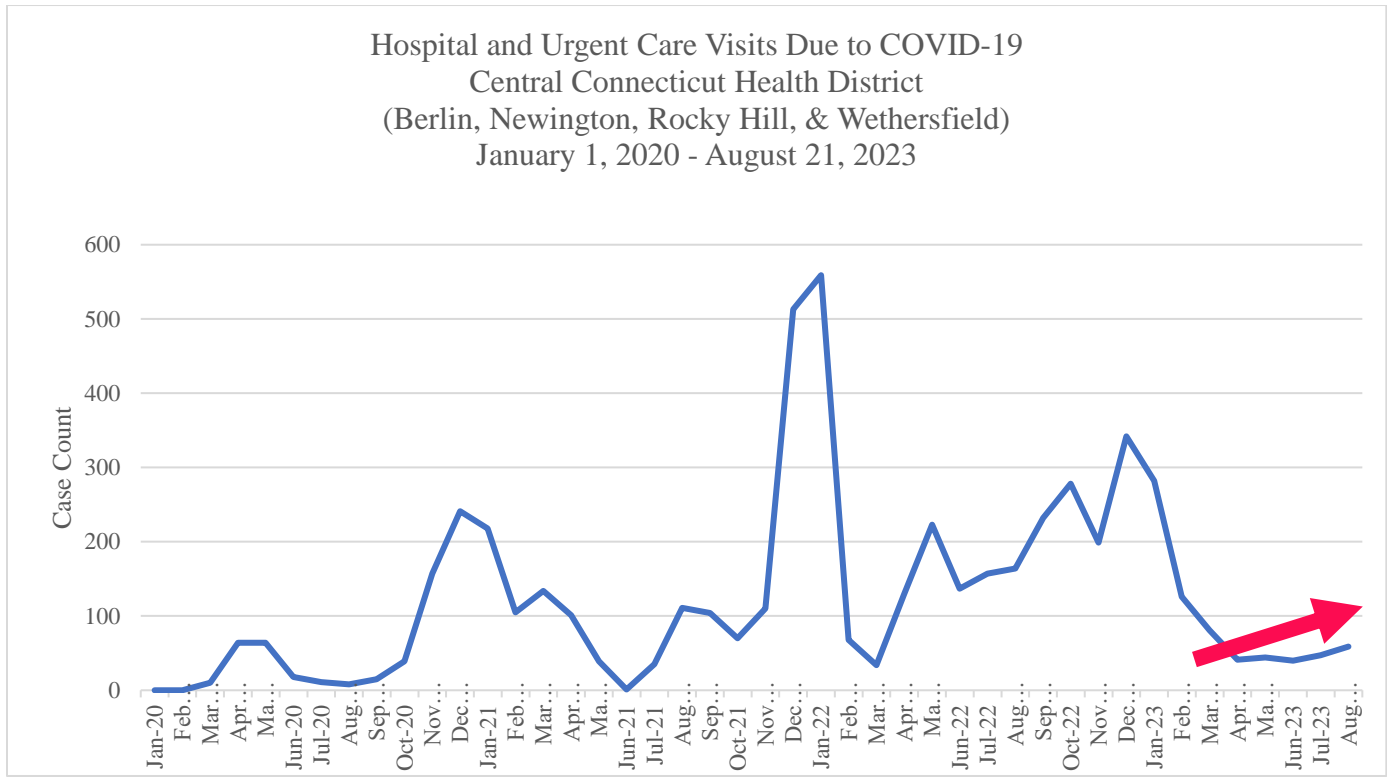
To protect yourself against tick bites and tickborne disease, remember to B-L-A-S-T:

- B- Bathe or shower soon after coming indoors.
 - Immediately put clothes in dryer on high heat for 20 minutes to kill any ticks that may be attached to them.
- L- Look for ticks and remove with fine point tweezers.
- A-Apply repellents
 - Application of 30% DEET-based repellent is effective at repelling deer ticks.
 - Application of .5% permethrin-base insecticide to clothing is highly effective at repelling and even killing ticks.
- S- Spray tick habitat areas in your yard.
 - www.spraysafeplaysafe.org
- T- Treat pets with veterinarian recommended products

For more information on BLAST Lyme please visit www.lymeconnection.org; and for more information on Powassan visit <https://www.cdc.gov/powassan/index.html>.

COVID-19 SURVEILLANCE

Data for COVID-19 was collected on August 21, 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 this August has been the highest so far this summer with 59 cases. 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). The F456L spike protein has been shown to evade immune response. Another omicron variant under monitoring is BA.2.86 and has 36 mutations. It has been isolated in a few samples collected in the United Kingdom.

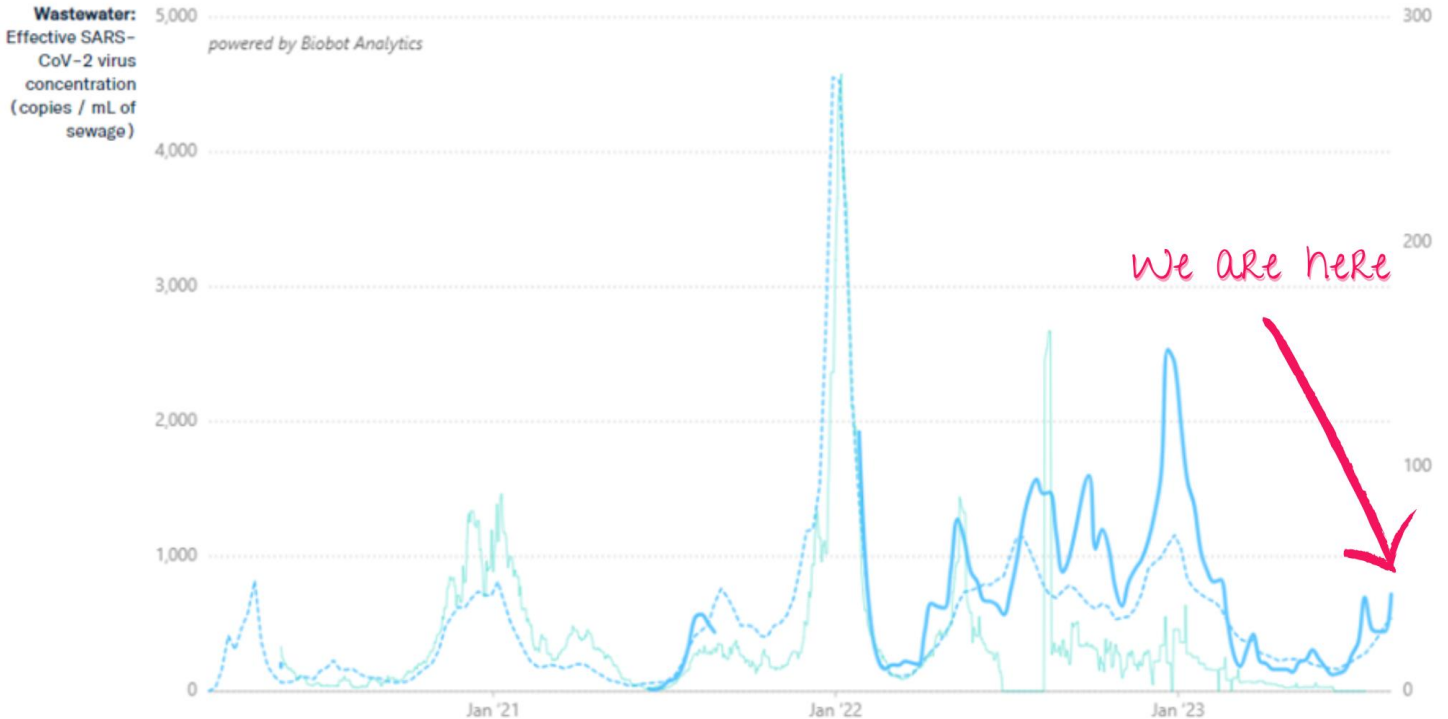


According to Biobot wastewater surveillance, genomic sequencing results for the Northeast (August 2, 2023) results showed that 20.3% of SARS-COV-2 viral fragments found in the wastewater were XBB (<https://biobot.io/data/>) The table below shows the abundance of variants detected in wastewater in the 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>XBB</i>	20.3
<i>XBB.1.5</i>	20.0
<i>XBB.1.16</i>	19.4
<i>EG.5</i>	11
<i>XBB.1.9.2</i>	10.1
<i>XBB.1.9</i>	1.2
<i>BA.2</i>	0.8
<i>Other</i>	0.7

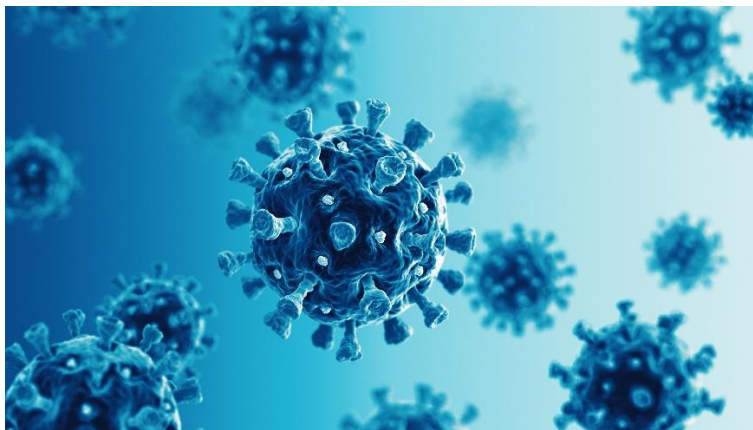
The graph below illustrates the copies of virus isolated from wastewater in Hartford County (blue) compared to the number of clinical cases reported per 100,000 population (teal) for the week of August 14th. As you can see, the viral concentration is increasing in our sewage, therefore COVID-19 cases are increasing in our community. Hartford County's wastewater concentration of SARS-CoV-2 virus (716 copies/mL) is higher than the Nation (540 copies/mL).

Hartford County, CT



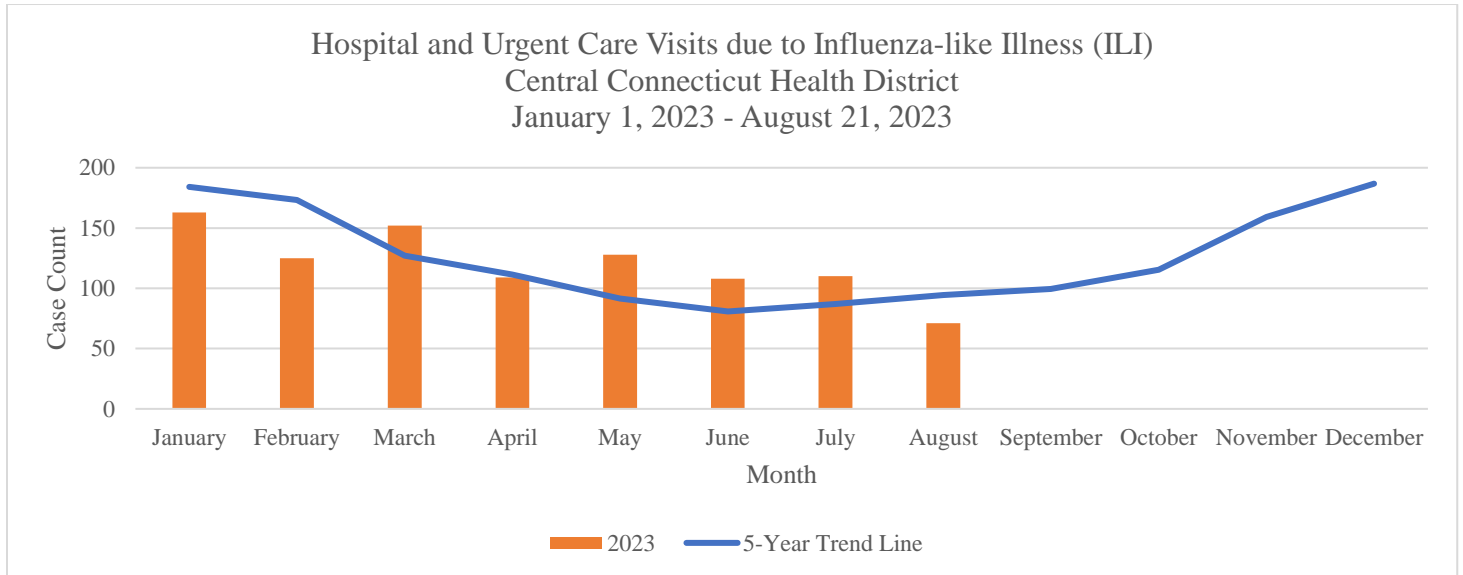
After three years of navigating the COVID-19 pandemic, we have the knowledge and experience on how to reduce the risk of spreading and contracting COVID-19 through social distancing, staying home when sick, testing before traveling, testing after travel, eating a healthy balanced diet, wearing a mask in crowded settings when COVID-19 rates are elevated and staying up to date on vaccinations.

Central Connecticut Health District still has N95 masks and at-home test kits available at 2080 Silas Deane Highway, Rocky Hill, CT and offers COVID-19 rapid PCR testing at our Clinical Health Services at 506 Cromwell Avenue in Rocky Hill, CT.



INFLUENZA SURVEILLANCE

Data for Influenza-like Illness Syndromic Surveillance was collected on August 21, 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. 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).



With Highly Pathogenic Avian Influenza (HPAI) circulating the globe at this time, the recent case of swine flu in Michigan (8/2/23), and agricultural fair season fast approaching in Connecticut, the Central Connecticut Health District encourages residents to protect their health by:

1. Avoiding contact with sick or dead animals with unknown causes of death.
2. Reporting dead wild birds and or mammals and request removal by contacting Connecticut's State Veterinarian at (860) 713-2505 or email ctstate.vet@ct.gov.
3. Avoid contact with surfaces at agricultural fairs that appear contaminated with animal excreta.
4. Wash hands immediately after exiting animal exhibits.
5. Practice good food safety and hygiene.



NATIONAL RESPIRATORY AND ENTERIC VIRUS SURVEILLANCE SYSTEM (NREVSS) UPDATE:

Data for the following CDC disease surveillance programs were updated on August 16, 2023.

All data is preliminary and subject to change.

Adenovirus

Nationally adenovirus antigen test positivity has increased from 10.8% to 7.6%. 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 dropped from 100% to 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 8.05% to 2.7%. HPIV 2 has increased from 2.01% to 4.0% and HPIV 3 antigen test positivity has decreased from 0% to .45%. 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 increased from 9.5% to 11.2%. 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 5%. 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/>

On August 18th the CDC reported a listeria outbreak associated with “Soft Serve on the Go” ice cream manufactured by Real Kosher Ice Cream of Brooklyn, NY. No illnesses related to the outbreak have been identified in Connecticut.

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
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>

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.