

Wallingford Health Department

Respiratory Diseases (RSV & Influenza)

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What is RSV?

- Respiratory syncytial virus, or RSV, is a common respiratory virus that usually causes mild, cold-like symptoms.
- Most people recover in a week or two, but RSV can be serious, especially for infants and older adults.
- RSV is the most common cause of bronchiolitis (inflammation of the small airways in the lung) and pneumonia (infection of the lungs) in children younger than 1 year of age in the United States.
- Almost all children will have an RSV infection by their second birthday.
- In the United States, RSV circulation generally starts during fall and peaks in the winter.
- The timing and severity of RSV circulation in a given community can vary from year to year.





RSV - Symptoms

 People infected with RSV usually show symptoms within 4 to 6 days after getting infected. Symptoms of RSV infection usually include:

- Runny nose;
- Decrease in appetite;
- · Coughing;
- Sneezing;
- Fever;
- · Wheezing.
- These symptoms usually appear in stages and not all at once.
- In very young infants with RSV, the only symptoms may be irritability, decreased activity, and breathing difficulties.
- Call your healthcare professional if you or your child is having difficulty breathing, not drinking enough fluids, or experiencing worsening symptoms.



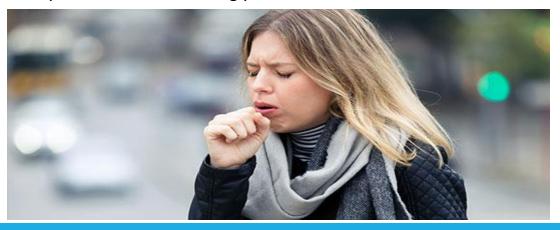


RSV - Transmission

- People infected with RSV are usually contagious for 3 to 8 days and may become contagious a day or two before they start showing signs of illness.
- RSV can spread when:
 - An infected person coughs or sneezes;
 - You get virus droplets from a cough or sneeze in your eyes, nose, or mouth;
 - You have direct contact with the virus, like kissing the face of a child with RSV;
 - You touch a surface that has the virus on it, like a doorknob, and then touch your face before washing your hands.

*Disinfecting Surfaces Contaminated with RSV:

According to researchers, RSV can be destroyed on frequently touched hard surfaces by first cleaning with detergent and water and then applying a one-to-ten dilution of regular (5.25%) bleach and water (e.g., one cup of bleach to nine cups of water).



People at High Risk for Severe RSV Infection



- Some infants, and people with weakened immune systems, can continue to spread the virus even after they stop showing symptoms, for as long as 4 weeks.
- RSV can survive on hard surfaces, such as tables and crib rails, and on soft surfaces, such as tissues and hands.
- Nearly all children are infected with RSV before their second birthday. However, repeat infections may occur
 throughout life, and people of any age can be infected. Infections in healthy children and adults are generally less
 severe than among infants and older adults with certain medical conditions. People at highest risk for severe disease
 include:
 - Premature infants;
 - Young children with congenital (from birth) heart or chronic lung disease;
 - Young children with compromised (weakened) immune systems due to a medical condition or medical treatment;
 - Children with neuromuscular disorders;
 - Adults with compromised immune systems;
 - Older adults, especially those with underlying heart or lung disease.



RSV - Prevention

- There are steps you can take to help prevent the spread of RSV.
- If you have cold-like symptoms you should:
 - Cover your coughs and sneezes with a tissue or your upper shirt sleeve, not your hands;
 - Wash your hands often with soap and water for at least 20 seconds;
 - Avoid close contact, such as kissing, shaking hands, and sharing cups and eating utensils, with others;
 - Clean frequently touched surfaces such as doorknobs and mobile devices.





RSV – Prevention (continued)

- Ideally, people with cold-like symptoms should not interact with children at high risk for severe RSV disease, including premature infants, children younger than 2 years of age with chronic lung or heart conditions, children with weakened immune systems, or children with neuromuscular disorders. If this is not possible, they should carefully follow the prevention steps mentioned above and wash their hands before interacting with such children. They should also refrain from kissing high-risk children while they have cold-like symptoms.
- Parents of children at high risk for developing severe RSV disease should help their child, when possible, do the following:
 - Avoid close contact with sick people;
 - Wash their hands often with soap and water for at least 20 seconds;
 - Avoid touching their face with unwashed hands;
 - Limit the time they spend in childcare centers or other potentially contagious settings during periods of high RSV activity. This may help prevent infection and spread of the virus during the RSV season.



Is there a RSV vaccine?

- Researchers are working to develop RSV vaccines, but none are available yet.
- A drug called palivizumab is available to prevent severe RSV illness in certain infants and children who are at high risk for severe disease.
 - This could include, for example, infants born prematurely or with congenital (present from birth) heart disease or chronic lung disease.
- The drug can help prevent serious RSV disease, but it cannot help cure or treat children already suffering from serious RSV disease, and it cannot prevent infection with RSV.
- If your child is at high risk for severe RSV disease, talk to your healthcare provider to see if palivizumab can be used as a preventive measure.



Caring for someone with RSV

- Most RSV infections go away on their own in a week or two.
- There is no specific treatment for RSV infection. Researchers are working to develop vaccines and antivirals (medicines that fight viruses).
- There are steps to relieve symptoms:
 - Manage fever and pain with over-the-counter fever reducers and pain relievers, such as acetaminophen or ibuprofen. (Never give aspirin to children).
 - **Drink enough fluids.** It is important for people with RSV infection to drink enough fluids to prevent dehydration (loss of body fluids).
 - Talk to your healthcare provider before giving your child nonprescription cold medicines. Some medicines contain ingredients that are not good for children.

RSV can cause more serious health problems

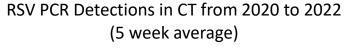


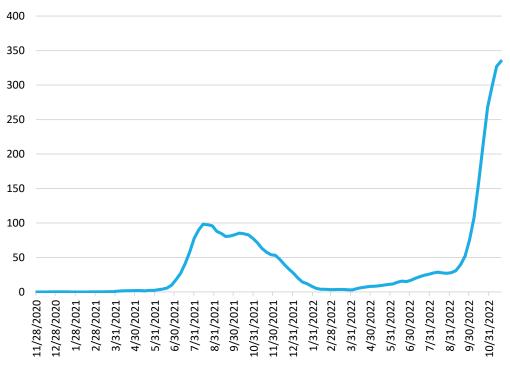
- RSV can also cause more severe infections such as bronchiolitis, an inflammation of the small airways in the lung, and pneumonia, an infection of the lungs.
- It is the most common cause of bronchiolitis and pneumonia in children younger than 1 year of age.
- Healthy adults and infants infected with RSV do not usually need to be hospitalized. But some people with RSV infection, especially **older adults and infants younger than 6 months of age**, may need to be hospitalized if they are having trouble breathing or are dehydrated.
- In most severe cases, a person may require additional oxygen, or IV fluids (if they can't eat or drink enough), or intubation (have a breathing tube inserted through the mouth and down to the airway) with mechanical ventilation (a machine to help a person breathe). In most of these cases, hospitalization only lasts a few days.
- Learn more about people at high risk for severe RSV infection.



RSV – Data Surveillance

- Not only Influenza, and other winter viruses, but also RSV are emerging earlier this season.
- There is an increase in the number of cases compared to previous years.
- Data from positive RSV PCR Detection in Connecticut from 2020 to 2022 shows that numbers are higher this year in comparison with previous years, and starting earlier in the season



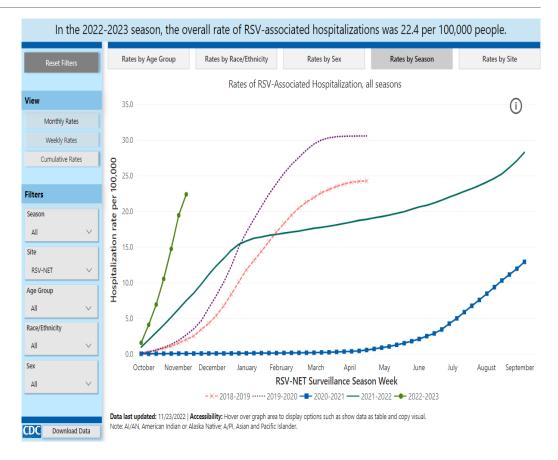




RSV – Data Surveillance

 Data from the CDC of rates of RSV-Associated Hospitalizations in the United States in different years.

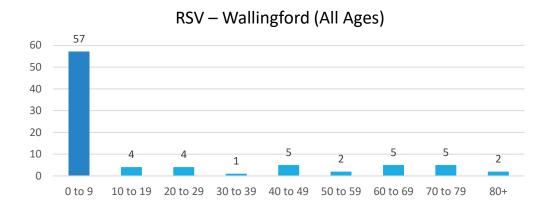
*Rates presented likely underestimate actual rates of RSV. Hospitalization rates are based only on those who had positive test results for RSV through a test ordered by a health care professional; not all people hospitalized with respiratory illness are tested for RSV. The most recent 2 weeks of data are most prone to reporting lag. Results must be interpreted with caution.

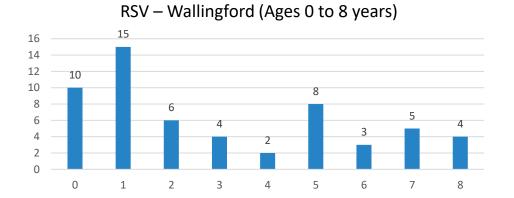




RSV – Wallingford (2022)

- The Respiratory Diseases season is from October 1st, 2022 to April 30th, 2023.
- The number of RSV cases reported to DPH from Wallingford as of December 1st, 2022 is 85.
- Ages from 0 to 9 represent the highest age group with 57 cases (67.06% of the 85 cases).
- Ages 0 to 1 year represent the highest number of cases in the age group 0 to 9 years, with 25 cases total.

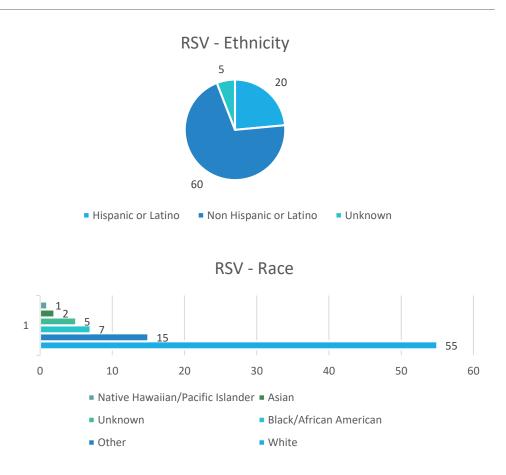






RSV – Wallingford (2022)

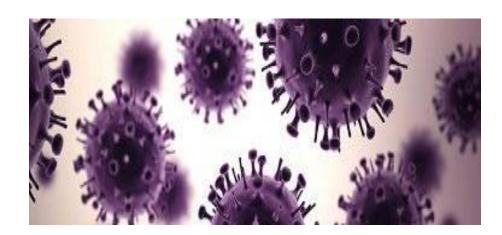
- Among the 85 cases, 46 are male and 39 are female.
- Sixty cases identified themselves as not Hispanic or Latino, 20 as Hispanic or Latino and 5 as Unknown.
- Fifty-five cases identified themselves as White, 15 as Other, 7 as Black/African American, 5 as Unknown, 2 as Asian and 1 as Native Hawaiian/Pacific Islander.





What is Influenza?

- Influenza (flu) is a contagious respiratory illness caused by influenza viruses that infect the nose, throat, and lungs.
- •Some people, such as people 65 years and older, young children, and people with <u>certain health conditions</u>, are at higher risk of serious flu complications.
- •There are two main types of influenza (flu) viruses: types A and B. The influenza A and B viruses that routinely spread in people (human influenza viruses) are responsible for <u>seasonal flu epidemics</u> each year.
- The best way to reduce the risk of flu and its potentially serious complications is by getting <u>vaccinated</u> each year.



Source: https://www.cdc.gov/flu/about/index.html



Influenza - Transmission

Person to Person:

- People with flu can spread it to others.
- Most experts think that flu viruses spread mainly by droplets made when people with flu cough, sneeze, or talk.
- These droplets can land in the mouths or noses of people who are nearby (usually within about 6 feet away) or possibly be inhaled into the lungs.
- Less often, a person might get flu by touching a surface or object that has flu virus on it and then touching their own mouth, nose, or possibly their eyes.

• When Are People with Flu Contagious?

- Flu viruses can be detected in most infected persons beginning one
 day before symptoms develop and up to five to seven days after becoming sick.
 People with flu are most contagious in the first three to four days after their
 illness begins. However, infants and people with weakened immune systems
 who are infected with flu viruses may be contagious for longer than seven days.
- Symptoms typically begin about two days (but can range from one to four days) after flu viruses infect a person's respiratory tract.
- Some people can be infected with flu viruses and have no symptoms but may still be able to spread the virus to their close contacts.



Source: https://www.cdc.gov/flu/about/disease/spread.htm



Influenza - Prevention

- The best way to reduce the risk from seasonal flu and its potentially serious complications is **to get vaccinated every year**.
- If you are a health professional, please see <u>Seasonal Influenza Vaccination Resources for Health Professionals</u>.
- To find flu vaccine, access: https://www.vaccines.gov/find-vaccines/
- •OR scan the QR code with camera of your phone.

Find a Flu Vaccine:



Source: https://www.cdc.gov/flu/about/disease/spread.htm



Influenza – SmartFind Flu ChatBot

- The purpose of this CDC SmartFind Flu ChatBot is to answer common questions about influenza (flu) and flu vaccines.
- This chatbot is NOT intended to provide individual medical advice, including individual medical recommendations for the prevention, diagnosis, or treatment of flu or other diseases or conditions. If you have questions about your personal health or are seeking medical advice, please contact a health care provider. If you are experiencing a life-threatening emergency, please call 911 immediately.
- To access the SmartFind Flu ChatBot: https://www.cdc.gov/flu/prevent/index.html#
- •OR scan the QR code with camera of your phone



SmartFind Flu
ChatBot
Get answers about

Flu.



Source: https://www.cdc.gov/flu/about/disease/spread.htm



Influenza - Treatment

- Can flu be treated? Yes. There are prescription medications called "influenza antiviral drugs" that can be used to treat flu illness. Antiviral drugs work best when started early, such as one to two days after your flu symptoms begin.
- If you get sick:
 - Take Antivirals Drugs, if a health care provider prescribes them
 - Take everyday precautions to protect others while sick
 - While sick, stay away from others as much as possible to keep from infecting them.
 - Cover your nose and mouth with a tissue when you cough or sneeze. Throw the tissue in the trash after you use it.
 - Wash your hands often with soap and water. If soap and water are not available, use an alcohol-based hand rub.
 - Clean and disinfect surfaces and objects that may be contaminated with germs like flu.
 - Stay home until you are better
- If you are sick with flu-like illness, CDC recommends that you stay home for at least 24 hours after your fever is gone except to get medical care or for other necessities. Your fever should be gone without the use of fever-reducing medicine.
- See Other Important Information for <u>People Who are Sick</u>.
- What should you know about Influenza (Flu) Antiviral Drugs? https://www.cdc.gov/flu/pdf/treatment/what-should-know-antiviral.pdf

Source: https://www.cdc.gov/flu/treatment/treatment.htm



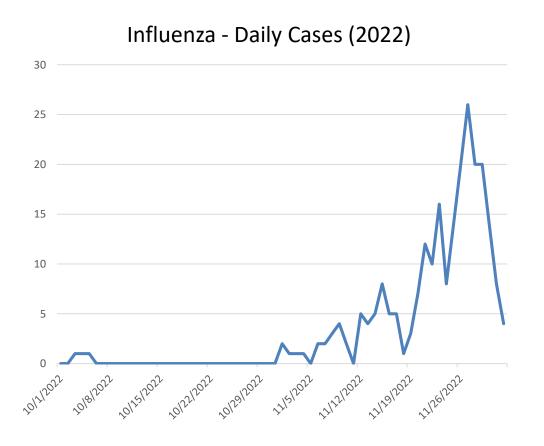
Influenza – Data Surveillance

- In Connecticut, the DPH uses multiple <u>surveillance systems</u> to monitor circulating influenza viruses.
- Seasonal flu viruses can be detected throughout the year; however, seasonal flu activity generally begins as early as October and November and can continue through late May.
- The weekly surveillance reports show how this year's flu season is developing.
- Each report is progressive and includes data starting from the beginning of this flu season.
- Statewide influenza activity is increasing. See national influenza statistics through Flu View.
- To see more data, access:
 - https://portal.ct.gov/DPH/Epidemiology-and-Emerging-Infections/Influenza-Surveillance-and-Statistics
 - https://app.powerbigov.us/view?r=eyJrIjoiYjFkNjc1NjItOTFjNi00ZjI5LWE3ODUtYWQ4MjZkZjIIZDY1IiwidCl6IjExOGI3Y2 ZhLWEzZGQtNDhiOS1iMDI2LTMxZmY2OWJiNzM4YiJ9



Data - Wallingford (Season 2022-2023)

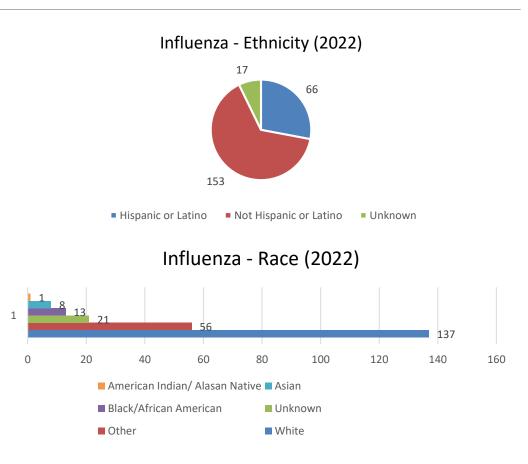
- The Respiratory Diseases season is from October 1st, 2022 to April 30th, 2023.
- The number of Influenza cases reported to DPH from Wallingford as of December 2nd, 2022 is 236.
- Data shows that cases are higher this year in comparison with previous years, and starting earlier in the season.





Data - Wallingford (Season 2022-2023)

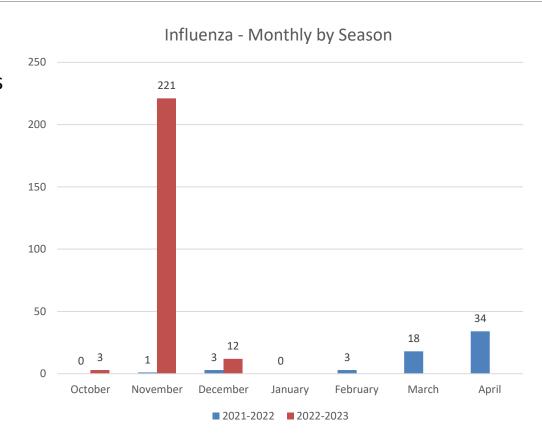
- Among the 236 cases, 121 are female and 115 are male.
- One hundred fifty-three cases identified themselves as not Hispanic or Latino, 66 as Hispanic or Latino and 17 as Unknown.
- One hundred thirty-seven cases identified themselves as White, 56 as Other, 21 as Unknown, 13 as Black/African American, 8 as Asian and 1 as American Indian/Alaskan Native.





Data - Wallingford (Season 2022-2023)

- •During the Season 2021-2022, DPH reported 59 influenza cases, while in Season 2022-2023, there were 236 influenza cases reported in Wallingford as of December 2nd,2022.
- •Season 2021-2022 is from October 1st,2021 to April 30th,2022.
- Season 2022-2023 still ongoing, until April 30^{th,} 2023.
- •It is important to remember that during Season 2021-2022, some prevention measures, such as mask mandate, isolation/quarantine and social distancing were in place due the transmission of COVID-19.



Difference between Respiratory Diseases

Common Cold – *Rhinovirus*

Seasonal Influenza – *Influenza virus* (A and B)

COVID-19 – Severe acute respiratory syndrome coronavirus 2 (SARS-CoV-2)

RSV – Respiratory syncytial virus

VIRUS	LEVEL OF INFECTIVITY	TIME FROM EXPOSURE TO INFECTION	COMMON SYMPTOMS	PREVALENCE IN CHILDREN	VACCINE
COMMON COLD Rhinovirus	Less contagious Symptomatic individuals shed the virus during the first 2 to 3 days of infection	2 to 3 days	Cough, Low-grade fever Sneezing Sore throat	Common Most children experience 2 to 4 colds per year; frequently associated with asthma	None
SEASONAL INFLUENZA Influenza virus (A and B)	Contagious Spreading can occur 1 day before symptoms appear, peaking around day 3 of illness.	1 to 4 days	Body aches Chills Cough Fatigue Fever Headache Sore throat Stuffy nose	Common Children younger than 2 are at highest risk for more severe disease	Multiple approved
COVID-19 Severe acute respiratory syndrome coronavirus 2 (SARS-CoV- 2)	More contagious A person is contagious 2 to 3 days before symptoms appear, peaking around day 3 of illness.	2 to 14 days	Body aches Chills Cough Diarrhea Fatigue Fever Headache Loss of smell/taste Nausea/vomiti ng Shortness of breath Stuffy/runny nose	Common, and asymptomatic children are possible Typically children have mild symptoms	Vaccines and boosters approved for ages 6 months and older
RSV Respiratory syncytial virus	Very contagious Symptoms can last 7 to 10 days, but some kids can develop a cough that takes up to six weeks to clear	4 to 6 days	Cough Runny nose Sneezing Fever Wheezing	Common Infants are at high risk for severe disease, including pneumonia or bronchiolitis	None



Questions and Concerns?

If you, your children or someone else is experiencing cold-like symptoms, talk to you healthcare provider.

If you have any questions and concerns,

contact the Wallingford Health Department:

Call: (203) 294-2065, or

E-mail: <u>health@wallingfordct.gov</u>

Wallingford Health Department Website:

https://www.wallingfordct.gov/government/departments/health-department/