

2021 Health Advisory #26:

Atypical summer transmission of Respiratory Syncytial Virus (RSV)

- RSV is circulating nationwide at a higher rate than usual for this time of year and New York City (NYC) has been experiencing a similar off-season surge since early July
- Most (71%) RSV cases are occurring in children less than 5 years old
- RSV activity is occurring citywide, though areas in Queens and Brooklyn have been more affected
- Clinicians advised to consider RSV in infants, young children, and older adults with compatible illnesses, especially if SARS-CoV-2 testing is negative
- Consider palivizumab prophylaxis for infants and children at greatest risk for severe infection

August 19, 2021

Dear Colleagues:

Respiratory syncytial virus (RSV) is a seasonal respiratory virus that commonly circulates in fall and winter months, sometimes lasting into the spring. It is the main cause of bronchiolitis and pneumonia in infants, infects other young children, and can lead to severe upper respiratory illness in older adults. Premature and young infants, children with chronic underlying conditions, and those 65 years of age or older are at increased risk for complicated illness courses.

As was seen with influenza and human metapneumovirus, RSV isolation in World Health Organization Collaborating Laboratories in the United States (U.S.) decreased to historic lows during the 2020-spring 2021 season.¹ This reduction in RSV activity was likely due to the prevention of respiratory droplet transmission s facilitated by the widespread use of facemasks and other non-pharmaceutical interventions implemented in response to the COVID-19 pandemic. Due to reduced circulation of RSV during the winter months of 2020-2021, older infants and toddlers might now be at increased risk of severe-RSV associated illness since they have likely not had typical levels of exposure to RSV during the past 15 months.

During April and May 2021, CDC noted an increase in U.S. RSV cases, especially in southern states, which may have been due to relaxation of previous COVID-19 prevention efforts.

RSV activity in NYC first began to increase in early March 2021 through April, primarily in Brooklyn. Over the next two months, RSV cases decreased by approximately 70%, though activity began to spread in Brooklyn and into Queens, and Staten Island.

Since the first week of July, RSV events have rebounded to roughly 50% of the April peak. (**Figure 1**) From July 4 to July 29, a total of 1,142 RSV diagnostic tests were reported in NYC, of which 815 (71%) were in children less than 5 years old. Three hundred seventy-two (33%) and 330 (29%) were in Queens and Brooklyn, respectively.

¹ Olson SJ, Winn AK, Budd AP et al. Changes in Influenza and Other Respiratory Virus Activity During the COVID-19 Pandemic – United States, 2020-2021. MMWR Morb Mortal Wkly Rep. 2021;70:1013-1019. DOI: http://dx.doi.org/10.15585/mmwr.mm7029a1

On June 10, 2021, CDC distributed a Health Advisory, alerting clinicians that infants, young children, and older adults might be at increased risk for RSV infection.² NYC providers are asked to consider testing for RSV infection in infants, young children, and older adults with compatible illnesses, and especially if SARS-CoV-2 testing is negative. Real-time reverse transcription polymerase chain reaction (RT-PCR) is the recommended testing method for RSV.

There is no specific treatment for RSV infection other than symptomatic management. Providers should consider prophylaxis with palivizumab (humanized monoclonal antibody to RSV F glycoprotein) for up to 5 months in patients most susceptible to severe RSV infection, including premature infants (especially less than 29 weeks gestation); certain infants and children with chronic lung disease, congenital heart disease, neurological or neuromuscular disorders that impair the ability to clear upper airway secretions, and immunodeficiency (Detailed recommendations available in the American Academy of Pediatrics <u>interim</u> guidance on palivizumab prophylaxis). Patient caregivers should be encouraged to use contact and standard precautions in most settings and to frequently either wash hands with soap and water or use an alcohol-based hand sanitizer.

Sincerely,

Sellen

Joel Ackelsberg, MD, MPH Bureau of Communicable Disease



Figure 1. Influenza and RSV case reports, by week, NYC, 4/17/21 – 8/14/21. NYC Department of Health and Mental Hygiene, Bureau of Communicable Disease.

² CDC. Increased Interseasonal Respiratory Syncytial Virus (RSV) Activity in Parts of the Southern United States. CDCHAN-00443; 2021 June 10.