RSV Infection and RSV Vaccines for Adults



Respiratory syncytial (sin-SI-shul) virus, or RSV, is a common respiratory virus that infects the lungs and breathing passages. It usually causes a mild upper respiratory infection with cold-like symptoms that last 1 to 2 weeks. Older adults are at higher risk of developing more severe lung infection from RSV. In infants and children, RSV infection can affect the lungs, causing acute bronchiolitis (inflammation of the airways) or pneumonia. For more about RSV in infants and children, and RSV prevention in infants and young children, see www.thoracic.org/patients.

What are symptoms of RSV infection?

Symptoms of an RSV infection may look like the common cold, with a runny or stuffy nose, cough, sore throat, fatigue, and muscle aches. More serious RSV infection can lead to difficulty breathing and low oxygen levels, which may require hospitalization. RSV infection can worsen chronic medical conditions. In the most severe cases, RSV infection can result in respiratory failure requiring a breathing tube and mechanical ventilation. There are no specific treatments for RSV. In most cases, symptoms improve within a week without therapy. Severe cases are managed with treating the worsened medical conditions and giving supportive care in the hospital as needed, such as oxygen. People with chronic medical conditions may take longer to get better. While most individuals will recover quickly, some may experience prolonged symptoms including fatigue and cough or even difficulty breathing for weeks after their initial infection.

What can I do to prevent severe RSV?

As of 2023, certain adults at risk for severe RSV infection are able to be vaccinated against RSV. In addition, general day-to-day practices can reduce the spread of RSV and other germs. These include frequent handwashing, covering the face and mouth when sneezing or coughing, wearing a mask in public spaces, and staying home when sick. If someone in the home is sick, make sure to avoid sharing drinks or utensils, clean any frequently touched surfaces, wear a mask, open windows, and maintain distance from others if possible. Children are commonly infected with the RSV virus, so it is important to be aware of possible outbreaks occurring at their schools, daycares, or after-school activities.

Who are the adults who are at risk for severe RSV infection?

Adults ages 60 and older are at risk of severe lower respiratory disease or even death from RSV infection. Older adults with chronic medical conditions, including heart or lung disease, diabetes, and kidney disease, are particularly at risk for severe RSV infection. The US Centers for Disease Control and Prevention (CDC) estimates that RSV may lead to as many as 160,000 hospitalizations and 10,000 deaths in adults over 65 each year.

What is the RSV vaccine?

The FDA has approved three vaccines against RSV. Two are single-dose, protein subunit vaccines. Their brand names are Arexvy™ and Abrysvo™, made by GlaxoSmithKline and Pfizer. The third and latest RSV vaccine is a messenger RNA (mRNA) vaccine similar to the mRNA COVID and some influenza vaccines. The brand name is mRESVIA™ and it is made by Moderna. Other vaccines are in development and may be available in the future.

Who should receive an RSV vaccine?

The CDC recommends that adults ages 75 and older should receive the RSV vaccine. Those 50-74 years old and who are at increased risk for severe RSV should also receive the vaccine. If you are between 50 and 74 years old, your healthcare professional will consider your risk factors for getting seriously sick from RSV when helping you decide whether to get the vaccine. It is safe to receive the RSV vaccine at the same time as the COVID and Influenza vaccines; talk to your healthcare provider about which vaccines to take and when to take them.

Pregnant persons are also recommended to receive a single dose of RSV vaccine between 32 and 36 weeks of pregnancy, if this window of time falls between September and March in the northern hemisphere. For more on RSV vaccines in pregnancy, see RSV Vaccination in Pregnant Women at www.thoracic.org/patients.

How well do RSV vaccines work for adults?

It is important to note that no vaccine is 100% effective at preventing infection. However, the available RSV vaccines were shown to be safe and effective at preventing moderate to severe lower respiratory tract infections from RSV. People who have been vaccinated are at a reduced risk of severe RSV complications, including hospitalizations.

What are the side effects from the RSV vaccine?

The RSV vaccine is very safe. The most common side effects are pain or redness at the injection site, low-grade fever, headache, and muscle pain after vaccination. These side effects may last for a few hours and up to 24 hours after the shot.

A small number of people reported serious neurologic conditions, including Guillain-Barré syndrome (GBS), after RSV vaccination. However, studies are ongoing, but there is not yet conclusive research linking the vaccine to GBS or other neurologic effects.

How can I get an RSV Vaccine?

You can discuss receiving the RSV vaccine from your primary care doctor or from your local pharmacy. You do not generally need a prescription order to receive the vaccine and most private insurance plans will cover the cost. People with Medicare insurance will need to have Medicare Part D coverage to avoid any out of pocket costs. People with Medicaid insurance are guaranteed coverage for all vaccines that are part of CDC immunization guidelines, including the RSV vaccine.

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Additional Resources:

American Thoracic Society
https://www.thoracic.org/patients/
— RSV Infection in Babies and Children
— RSV Prevention in Infants and Young Children
— How Vaccines Work

Centers for Disease Control and Prevention (CDC)
Public Health Information
https://www.cdc.gov/rsv/
https://www.cdc.gov/rsv/hcp/vaccine-clinical-guidance/adults.html

Clinician Information
https://www.cdc.gov/media/releases/2023/s0629-rsv.html
https://www.cdc.gov/rsv/hcp/clinical-overview/index.html

This patient resource was adapted from the American Geriatrics Society resource "Learn More: What You Need To Know About RSV Vaccines For Older Adults (60+)" and the ATS Patient Fact Sheet "RSV Infection in Babies and Children."

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