

Respiratory syncytial virus (RSV): What you need to know

What is RSV?

Respiratory syncytial virus (RSV) is a contagious respiratory virus that usually causes mild, cold-like symptoms. RSV is prevalent worldwide and is most active in Canada during the fall and winter months, when people in Canada are most likely to catch RSV and become sick.

What are the symptoms?

Symptoms of RSV are usually similar to that of the common cold, and for most people, the illness is mild. Symptoms typically appear two to eight days after exposure to the virus and may include:

- coughing,
- runny nose,
- sneezing,
- wheezing,
- fever,
- crackling when breathing, and
- a decrease in appetite and energy.



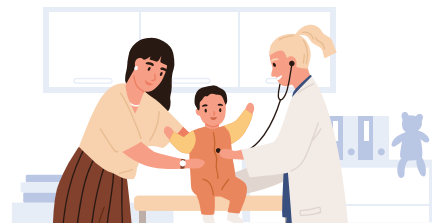
In severe cases, RSV can lead to bronchiolitis (inflammation of the small airways of the lungs) and pneumonia (a lung infection). Bronchiolitis is most commonly seen in infants and young children.

If your child has any of the following symptoms, take them to the nearest emergency department or call 911 immediately:

- trouble breathing or pauses in breathing
- a blue or grey tinge to their skin, particularly around the lips and nailbeds
- signs of dehydration, such as a decrease in wet diapers, and not drinking/feeding

For infants, RSV can lead to serious illness.

In these cases, infants with RSV may show only the following symptoms: fussiness or irritability, difficulty breathing, nasal congestion, and a decrease in energy and appetite. They may not exhibit coughing or a runny nose.



How does RSV spread?

RSV enters your body through your mouth, eyes, and nose through infected droplets. It is spread:

- through close contact with infected individuals (e.g., when an infected person coughs or sneezes near you),
- by sharing personal items, such as drinks, and/or
- through contact with contaminated surfaces (e.g., touching a countertop infected with the virus)

Remember, you can catch RSV more than once. In fact, it is common for people to catch RSV multiple times throughout their life. Recovering from an initial RSV infection does not guarantee future protection against RSV, and you can still get sick with the virus again. **However, if you do catch RSV again, the infection is typically milder.**

Respiratory syncytial virus (RSV): What you need to know

Who is at risk?

While anyone can catch RSV, people in the following groups tend to experience severe RSV infection more than others:

- infants younger than six months old,
- adults 65 years of age and older, and
- people who are immunocompromised (who have a weakened immune system).



What products are there to help protect against RSV infection?

There are currently five products approved for use in Canada to help protect against RSV infection.

Two of these products are medications for newborns and young children: palivizumab and nirsevimab (please see the section titled [What are palivizumab and nirsevimab?](#) for more information). Please keep in mind that these medications are not used to treat RSV in children already infected. Rather, they are used to prevent severe RSV infection in infants and young children who are at risk of contracting the virus in the future. They are not vaccines.

The other three products are vaccines: RSVPreF3, mRNA-1345, and RSVpreF.

- The RSVPreF3 vaccine is approved for use in people 50 years of age and older.

- The mRNA-1345 vaccine is approved for use in people 60 years of age and older.
- The RSVpreF vaccine is also approved for use in people 60 years of age and older, as well as anyone 32 to 36 weeks pregnant (please see the section [What are the benefits of getting the RSV vaccine while pregnant?](#) for more information).

If you are 50 years of age or older, or if you are pregnant, talk to your healthcare professional or local public health office about receiving the RSV vaccine.

Considerations are ongoing regarding other groups who may be eligible for RSV vaccines in the future. This factsheet will be updated accordingly.

Older adults: When is the best time to receive the RSV vaccine?

The RSV vaccine is given as a single dose. There is currently not enough data to determine how long the protection offered by the RSV vaccine lasts, or to determine if a second dose of the RSV vaccine would offer additional protection against infection. As such, the vaccine is strongly recommended for adults who are at highest risk of experiencing a severe RSV infection, including adults 75 years of age and older and adults 60 years of age and older living in nursing homes or other chronic care facilities.

While adults 50 to 74 years of age are eligible to receive the RSV vaccine, it may be advisable for anyone in this age group to consider deferring vaccination until they are at a higher risk of severe RSV infection. If you are 50 to 74 years of age, talk to your healthcare professional to determine if getting the RSV vaccine before 75 years of age would be beneficial for you.

Respiratory syncytial virus (RSV): What you need to know

What are palivizumab and nirsevimab?

Palivizumab and nirsevimab are monoclonal antibody medications, approved for use in children under two years of age, that offer extra protection against severe RSV infection. **Monoclonal antibodies are proteins designed to act like the antibodies your immune system produces.**

Antibodies are proteins produced by your body that help eliminate germs and harmful substances, such as bacteria and viruses, that enter your body.

The monoclonal antibodies used in palivizumab and nirsevimab specifically target and protect against RSV infection. They help prevent severe RSV infection in infants and young children. Both medications are given as injections and provide temporary protection. Nirsevimab provides protection to infants for at least the first 5 months of life when administered at birth.

What are the benefits of getting the RSV vaccine while pregnant?

Getting the RSV vaccine allows your body to produce protective proteins called antibodies that specifically target and protect against RSV infection. When you get immunized against RSV during pregnancy, some of these antibodies are passed on to your baby in the womb (in utero). **These antibodies give your baby protection from severe RSV effects for up to 6 months after birth.**

Nirsevimab or the RSV vaccine: A choice during pregnancy

In provinces and territories where both nirsevimab and RSVpreF are available, pregnant women and pregnant people will be asked to choose between receiving the RSV vaccine during pregnancy, or having nirsevimab administered to their newborn. (Please see our factsheet, [RSV vaccines in pregnancy: What you need to know](#), for more information.) Talk to your doctor, nurse, pharmacist, midwife, or local public health office about which option will be best for you and your newborn.



Respiratory syncytial virus (RSV): What you need to know



Are there other ways I can help to protect myself and others against RSV?

Yes! In addition to getting vaccinated, there are several other measures you can take to help prevent the spread of RSV and protect yourself and your loved ones, including:

- washing your hands often,
- coughing and sneezing into the crook of your elbow, your sleeve, or a tissue (not your hand),
- keeping your children home from school or daycare if they or other children are sick,
- sanitizing and cleaning frequently touched surfaces (such as doorknobs and countertops), and
- avoiding close contact with others (such as sharing personal items or shaking hands).

For more information, please visit <https://immunize.ca/respiratory-syncytial-virus-rsv>.

References

Public Health Agency of Canada. (2024.) Canadian Immunization Guide. Respiratory syncytial virus (RSV) vaccines. <https://www.canada.ca/en/public-health/services/publications/healthy-living/canadian-immunization-guide-part-3-active-vaccines/respiratory-syncytial-virus.html>

Public Health Agency of Canada. (2024.) Canadian Immunization Guide. Immunization in pregnancy and breastfeeding. <https://www.canada.ca/en/public-health/services/publications/healthy-living/canadian-immunization-guide-part-3-vaccination-specific-populations/page-4-immunization-pregnancy-breastfeeding.html>

Public Health Agency of Canada. (2023.) Respiratory syncytial virus (RSV): Symptoms and treatment. <https://www.canada.ca/en/public-health/services/diseases/respiratory-syncytial-virus-rsv.html>

National Advisory Committee on Immunization. (2024.) An Advisory Committee Statement (ACS): National Advisory Committee on Immunization (NACI). Statement on the prevention of respiratory syncytial virus (RSV) disease in infants. <https://www.canada.ca/content/dam/phac-aspc/documents/services/publications/vaccines-immunization/national-advisory-committee-immunization-statement-prevention-respiratory-syncytial-virus-disease-infants/naci-statement-2024-05-17.pdf>

National Advisory Committee on Immunization (NACI). (2022.) An Advisory Committee Statement (ACS): National Advisory Committee on Immunization (NACI). Recommended use of Palivizumab to reduce complications of respiratory syncytial virus infection in infants. <https://www.canada.ca/en/public-health/services/publications/vaccines-immunization/palivizumab-respiratory-syncytial-virus-infection-infants.html>

Canada's Drug and Health Technology Agency (CADTH). (2023.) CADTH Health Technology Review: Nirsevimab (Beyfortus). <https://www.cadth.ca/sites/default/files/hta-he/HCO059%20Nirsevimab%20for%20RSV%20prophylaxis-secured.pdf>

GlaxoSmithKline Inc. (2023). Product Monograph: Arexvy. <https://ca.gsk.com/media/6988/arexvy.pdf>

Centers for Disease Control and Prevention. (2023.) Respiratory Syncytial Virus Infection (RSV). <https://www.cdc.gov/rsv/index.html>

Cleveland Clinic. (2023.) RSV (Respiratory Syncytial Virus). <https://my.clevelandclinic.org/health/diseases/rsv-respiratory-syncytial-virus>

Cleveland Clinic. (2022.) Antibodies. <https://my.clevelandclinic.org/health/body/22971-antibodies>

Cleveland Clinic. (2021.) Monoclonal Antibodies. <https://my.clevelandclinic.org/health/treatments/22246-monoclonal-antibodies>

Caring for Kids. (2023.) RSV (Respiratory Syncytial Virus Infection). https://caringforkids.cps.ca/handouts/health-conditions-and-treatments/respiratory_syncytial_virus