Preventing RSV in infants:



What you need to know

What is RSV?

Respiratory syncytial virus (RSV) is a contagious respiratory virus. While it usually causes mild, cold-like symptoms, RSV can be a **very serious** illness in infants. RSV is common around the world 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).

How serious is RSV in infants?

Infants younger than six months of age are one of the groups most likely to experience **severe RSV infection**, and severe RSV infection in infants can result in **hospitalization** or **intensive care unit (ICU) admission**. In fact, RSV leads to around **16 times** more hospitalizations in young children than influenza (the flu). RSV is also the leading cause of **bronchiolitis** (inflammation of the small airways of the lungs) and **pneumonia** (a lung infection) in infants and very young children – those under one year of age.



What products are there to help protect infants against RSV?

There are **three products** currently approved for use in Canada that can help protect infants against RSV infection.

Two of these products are medications: **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 may become infected with the virus in the future. They are **not** vaccines.

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The other product is a **vaccine** – the RSVpreF vaccine – that is approved for use in people **32 to 36 weeks pregnant**. Getting immunized against RSV while pregnant gives your baby **protection for up to 6 months** against severe RSV infection after they have been born (please see the section *Passing on immunity: How getting the RSV vaccine while pregnant protects your infant*).



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 that are developed to act like the **antibodies** your body produces.

Antibodies are proteins your body makes that help get rid of germs/harmful substances that enter your body, such as bacteria and viruses.

The monoclonal antibodies used in palivizumab and nirsevimab **specifically recognize and target RSV** to help prevent severe RSV infection in infants and young children who are at risk of becoming infected with the disease. Both medications are given as injections and provide **temporary protection**. **Nirsevimab** provides protection to infants for at least the first **5 months of life** if the medication is given **at birth**.

Passing on immunity: How getting the RSV vaccine while pregnant protects your infant

Getting the RSV vaccine allows your body to produce protective proteins called antibodies that specifically protect against RSV infection. When you get immunized against RSV while pregnant, you pass on some of these antibodies to your baby in the womb (*in utero*). These antibodies give your baby protection for up to 6 months against the severe effects of RSV after they have been born.



Overview of products approved for use in Canada to help prevent RSV infection in infants

Product	Product type	Administration method and doses needed	Approved for use in
Nirsevimab	Monoclonal antibody medication	Injection 1 dose	 Newborns and infants who were born during, or who will be experiencing their first, RSV season (fall and winter in Canada) Children up to 2 years of age who are at risk of severe RSV infection during their second RSV season (such as those who are immunocompromised or who have a chronic lung disease)
Palivizumab	Monoclonal antibody medication	Injection Up to 5 doses	• Newborns, infants, and children up to 2 years of age who are at risk for severe RSV infection (such as those born prematurely or who have a chronic lung disease)
RSVpreF	Vaccine	Injection 1 dose	• People who are 32 to 36 weeks pregnant

Please keep in mind that product availability, and the eligibility criteria regarding who can receive palivizumab, nirsevimab, and the RSV vaccine, vary by province and territory.

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Nirsevimab, palivizumab, and the RSV vaccine are **safe**. There is **no evidence** that nirsevimab or palivizumab will harm your newborn or infant, nor is there any evidence that the RSV vaccine will harm you or your baby.

Talk to your doctor, nurse, pharmacist, midwife, or local public health office to see whether your newborn or infant should receive nirsevimab or palivizumab.

If you are pregnant or planning a pregnancy, you can also speak with any of the previously mentioned healthcare professionals to see if you can receive the RSV vaccine.



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

Nirsevimab or the RSV vaccine: A choice during pregnancy

In provinces and territories where both nirsevimab and the RSV vaccine are available, people who are pregnant will be asked to decide whether they would prefer to receive the RSV vaccine in pregnancy, or have 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.

RSV vaccines in pregnancy: What you need to know



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