

Rubella:

What you need to know

What is rubella?

Rubella is a highly contagious viral infection caused by the rubella virus. While the infection is mainly mild to moderate in adults and children, it can cause **serious complications for your baby** if you become infected during pregnancy. When a baby is affected by rubella while in the womb (in utero), this is known as **congenital rubella syndrome (CRS)**. In fact, rubella is the leading cause of birth complications in the world among diseases that can be prevented through vaccination.



Rubella is now rare, and CRS extremely rare, in Canada due to the success of rubella immunization programs. However, rubella is still endemic in many countries worldwide, mainly in regions throughout Africa and South-East Asia (see text box: **What does endemic mean?**).

What does endemic mean?

A disease is considered endemic within a specific geographic region or group of people when it is:

- consistently present, and
- predictable (i.e., there is typically an expected/stable number of people that will catch the disease within a specific timeframe).

For example, the common cold is considered endemic in Canada as the viruses that cause the common cold are present all year long (though they circulate the most in the fall and winter months), and we typically have a good idea of how many people will catch the common cold at different points in the year (predictable). There is no vaccine for the common cold.

What are the symptoms?

Rubella is typically mild in adults and children, with some people not experiencing any symptoms at all. Typical symptoms include:

- low-grade fever,
- swollen lymph nodes in the upper part of the neck, particularly behind the ears,
- a rash that begins on the face and spreads to the rest of the body,
- pink/inflamed eyes, and
- in adults, joint pain.

What are the symptoms?

Severe cases of rubella are uncommon, but rubella is **very serious if caught during pregnancy**, as it can result in **congenital rubella syndrome (CRS)**. CRS can mean your baby may be born with conditions that **will affect them for life** such as heart problems (i.e., congenital heart disease), eye problems (cataracts), deafness, intellectual disabilities, and diabetes, amongst others.

The **earlier** you catch rubella during your pregnancy, the more likely it will be that your baby will be severely affected by CRS. It is uncommon for babies to be greatly affected by rubella if it is caught during the **third trimester**. Catching rubella while pregnant may also cause you to give birth prematurely, and/or can result in your baby being stillborn.

Did you know?

Rubella is also known as “German measles”. It was initially thought that rubella was a variant of measles. That was until it was first recognized as a separate disease in the German medical literature in 1814. That is why rubella is now sometimes known as “German measles”.

Who is at risk?

While anyone can catch rubella, it is **most serious** in people who are pregnant, due to the risk of congenital rubella syndrome (CRS) and the possibility of miscarriage.

Travellers to areas where rubella is still commonly spreading, such as areas outside the Americas, are at **greatest risk** of being exposed to the virus.



How is it spread?

The rubella virus enters the body through the **mouth and nose**. Rubella is typically spread:

1. through close contact with others (e.g., coughing or sneezing next to someone, or sharing personal items such as drinks)
2. through coming into direct contact with an infected person’s mucus or spit and then getting these fluids in your nose or mouth

People who are pregnant and who catch rubella can also pass the virus to their unborn baby. This can result in the baby being born with congenital rubella syndrome (CRS). Babies born with CRS can also spread the rubella virus to people for **one year or more** through their urine, mucus, and spit.

Who should be immunized?

It is recommended that the following people/groups be immunized against rubella:

- children and adolescents according to the childhood immunization schedule in their province/territory
- adults who **have not been** immunized against rubella or who **do not have** laboratory-confirmed immunity to rubella
- anyone considering becoming pregnant, as you cannot receive the rubella vaccine during pregnancy (this is especially true for anyone born outside of Canada, or anyone who is a staff member or student at an educational facility, as people in these groups tend to be exposed to and catch rubella more than others)

The following groups should also be immunized against rubella, as they tend to be exposed to and catch rubella more than others:

- people who work with children (such as teachers and daycare workers)
- healthcare workers
- people travelling to areas where rubella is actively spreading

Publicly funded immunization schedules for rubella may vary between provinces and territories.

Why are some people more likely to be exposed to and catch rubella?

Certain environmental factors can put someone at higher risk for being exposed to rubella. For example, rubella spreads more easily in places where people are crowded together, such as school settings (elementary, secondary, and post-secondary) among students, teachers, and other staff. Additionally, people who work with children, such as daycare workers, are also more likely to catch rubella as they may work with many children who might not be fully protected (immunized) against the disease.



As well, many countries outside of Canada do not routinely offer immunization against rubella. This means many people who are newcomers to Canada may not have good protection against rubella and are more likely to catch the disease as a result.

Are you protected against rubella?

Rubella vaccines are safe and the most effective way to protect against rubella infection.

The rubella vaccine is combined with other vaccines – mainly the measles, mumps, and varicella (chickenpox) vaccines. Together, they make the measles, mumps, and rubella (MMR) vaccine or the measles, mumps, rubella, and varicella (MMRV) vaccine. With the MMR or MMRV vaccine, you get protection against multiple diseases in one shot.

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Talk to your doctor, nurse, pharmacist, or local public health office about getting yourself and your child immunized against rubella.

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