
Rubella

Summary

- Rubella is a viral illness that causes a skin rash and joint pain.
 - A rubella infection is mild for most people, but can cause death or birth defects in an unborn baby.
 - The rubella vaccine is available in combined vaccines that also contain vaccines against other serious and potentially fatal diseases.
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Rubella is a viral illness that causes a skin rash and joint pain. A rubella infection is mild for most people, but it can have catastrophic consequences for an unborn baby. If a pregnant woman contracts rubella, her baby is at risk of severe and permanent birth defects or death.

Rubella is sometimes called German measles, but rubella is a different viral disease to measles.

Rubella is uncommon in Australia and other countries with widespread immunisation programs. Outbreaks still occur, so it is important to continue vaccinating children to prevent the spread of infection to pregnant women.

Symptoms of rubella

About half of rubella cases are so mild that there are no symptoms. If symptoms do occur, they usually appear between two and three weeks after infection. Some of the signs and symptoms of rubella may include:

- mild fever
- headache
- runny nose
- sore eyes
- skin rash
- swollen lymph nodes
- joint pain.

Complications of rubella

Rubella is a mild illness compared to measles and most people recover within about three days. Possible complications of rubella include:

- arthralgia – lingering joint pain that may take a month or more to get better
- otitis media – inflammation of the middle ear
- encephalitis – inflammation of the brain, which can be fatal in some cases.

Congenital rubella syndrome

A pregnant woman can spread the rubella infection to her unborn baby. This can have severe consequences such as miscarriage or birth defects known as congenital rubella syndrome (CRS), especially if the mother contracts the disease during the first trimester (first three months) of her pregnancy.

About nine in every 10 unborn babies exposed to rubella during the first 10 weeks of pregnancy will have a major congenital abnormality.

Birth defects associated with CRS include:

- deafness
 - blindness
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- heart defects
- intellectual disability
- impaired growth
- inflammation of various organs such as the brain, liver or lungs.

Pregnant women who suspect they may have been exposed to rubella should see their doctor.

Causes of rubella

Rubella is most commonly spread when someone ingests (swallows) or inhales the cough or sneeze droplets from an infected person. Infants with CRS shed the rubella virus in their nose and throat secretions and in their urine for months or even years.

Symptoms occur usually between 14 to 17 days (and up to 21 days). People infected with rubella are infectious for approximately one week before, and for at least four days after, the onset of the rash.

High-risk groups

Rubella is uncommon in Australia but cases still occur. Anyone who hasn't been vaccinated against rubella is at risk, in particular:

- travellers to (and visitors from) areas where rubella vaccination programs aren't widespread
- childcare workers
- people who work in healthcare settings such as hospitals
- unborn babies whose mothers have low or non-existent rubella immunity.

Diagnosis of rubella

Rubella can be difficult to diagnose because the signs and symptoms are vague and non-specific. For example, many illnesses other than rubella cause fever and the rash looks similar to other types of rashes. Methods used to diagnose rubella may include:

- medical history including immunisation status and travel history
- physical examination
- blood tests.

Treatment for rubella

No specific medical treatment for rubella exists and the symptoms are usually mild. Antibiotics don't work because the illness is viral. Treatment aims to ease symptoms and reduce the risk of complications. Options may include:

- bed rest
- plenty of fluids
- paracetamol to reduce pain and fever.

It is important to isolate yourself for at least four days following the onset of the rash to reduce the risk of infecting others.

Pregnant women who contract rubella should discuss their options with their doctor.

Immunisation against rubella

Immunisation is the best way to prevent rubella. A single rubella infection usually offers lifelong immunity for most people. Although unlikely, it is still possible to contract rubella even if you have had a vaccination or a previous rubella infection.

There are two types of rubella vaccine. In the first type, the rubella vaccine is combined with the measles and mumps vaccines and is commonly known as the measles, mumps, rubella (MMR) vaccine. In the second type, the rubella vaccine is combined with measles, mumps and varicella (chickenpox) vaccines and is commonly known as MMRV.

Protection against rubella is available under the National Immunisation Program Schedule. In Victoria, immunisation

against rubella is free of charge for:

- Children at 12 months – the first dose of rubella vaccine is given as the MMR combination vaccine.
- Children at 18 months of age – the second dose of rubella vaccine is given as the MMRV combination vaccine.
- All children under 10 years of age can receive the free National Immunisation Program vaccines.
- Young people 10 to 19 years of age, of families who currently receive family assistance payments between 1 January 2016 to 31 December 2017
- Women planning pregnancy or shortly after delivery – if their blood test shows they have no immunity to rubella.
- Children up to and including nine years – catch-up immunisations are available for children who have not been fully vaccinated.
- Women planning pregnancy or after the birth of their child – two doses of MMR are available for women who have low immunity or no immunity to rubella
- Aboriginal and Torres Strait Islander people, refugees, asylum seekers and vulnerable people – catch-up immunisations are available for people who have not been fully vaccinated.

Immunisation is also recommended for adults born during or since 1966, unless you have evidence of having received two doses of MMR or a blood test to show natural immunity to measles, mumps and rubella. If you have not received the vaccine, ask your doctor about catch-up doses. The MMRV vaccine is not recommended for people aged 14 years and over.

Pregnancy and immunisation against rubella

If you are intending to become pregnant, you should have a blood test to check your immunity against rubella and then have a vaccination if necessary. This blood test is necessary because even if you have previously been vaccinated against rubella, you may not be immune.

Women who are not immune require two doses of vaccine a minimum of 28 days apart and should avoid pregnancy for at least 28 days after immunisation.

A pregnant woman should not receive the MMR vaccine. The MMRV vaccine is not recommended for people 14 years and over. If you are pregnant and not immune, you are advised to avoid contact with anyone who has rubella. You should also arrange for an immunisation soon after you have your baby and you should then avoid another pregnancy for at least 28 days.

People who work with children

If you work with children, you need to remember that you are at an increased risk of catching and passing on infectious diseases. Stay up to date with all necessary vaccinations to protect yourself and the children (and their mothers) with whom you have regular contact. Some diseases cause only a mild illness in adults, but can be very serious for young children. For example, whooping cough (pertussis) can be deadly for young babies.

People who should not be immunised against rubella

Vaccination against rubella is not recommended for some people. A person with a impaired immune system should not be vaccinated.

Some of the possible causes of impaired immunity include:

- Infection with human immunodeficiency virus (HIV) or the presence of acquired immunodeficiency syndrome (AIDS) from an HIV infection
- Taking certain medications, such as high-dose corticosteroids
- Having immunosuppressive treatment including chemotherapy and radiotherapy
- Having some types of cancer, such as Hodgkin's disease or leukaemia
- Having an immune deficiency with extremely low levels of antibodies (hypogammaglobulinaemia, multiple myeloma or chronic lymphoblastic leukaemia).

Where to get help

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- Your doctor
- In an emergency, always call triple zero (000)
- Emergency department of your nearest hospital
- Local government immunisation service
- Maternal and Child Health Line (24 hours) Tel. 132 229
- NURSE-ON-CALL Tel. 1300 60 60 24 – for expert health information and advice (24 hours, 7 days)
- Immunisation Program, Department of Health & Human Services, Victorian Government Tel. 1300 882 008
- National Immunisation Information Line Tel. 1800 671 811
- Pharmacist

Things to remember

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This page has been produced in consultation with and approved by:

Department of Health and Human Services - RHP&R - Health Protection - Communicable Disease Prevention and Control Unit

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