# Rubella (German measles) Frequently Asked Questions

## 1. What is rubella?

Rubella, also known as German measles, is a contagious illness characterized by symptoms like fever and a rash. It's caused by the rubella virus. While it's typically a mild illness in children and adults, it can be very harmful if contracted by pregnant women, as it can infect their unborn babies and lead to a condition called congenital rubella syndrome (CRS), which has serious consequences for the baby's health.

## 2. Who can get rubella?

Any person who is not immune to rubella can be infected by the rubella virus. In countries where rubella vaccination is not included in the routine immunization schedule (such as South Africa), sporadic rubella cases usually occur throughout the year, with seasonal peaks in spring. However, no rubella outbreaks have been reported since 2019, as the non-pharmaceutical interventions (social distancing, wearing of masks and hand washing) that were implemented during the COVID-19 pandemic successfully interrupted rubella transmission.

## 3. Where does rubella occur in South Africa?

The rubella virus is found throughout South Africa. Typically, there is a higher number of cases in late winter and early spring. When there are numerous rubella cases in a community within a short time, it's considered a rubella outbreak. These outbreaks have been observed in places like daycare centres, schools, and higher education institutions.

### 4. How is rubella transmitted?

Rubella is a disease that spreads when someone comes into contact with the saliva or mucus of an infected person, usually when the infected person coughs, sneezes, or talks. It takes about 17 days (range: 12–23 days), for someone exposed to the virus to show symptoms. People with rubella are most contagious when they have a rash. They can spread the virus from 7 days before the rash appears to 7 days after. Babies born with congenital rubella syndrome (CRS) can shed the virus for up to a year, so they can infect people who care for them if those people are not immune to rubella.

## 5. What are the signs and symptoms of rubella?

Rubella infection is characterized by several symptoms, including a rash, a mild fever (typically below 39°C), nausea, a sore throat, slight redness in the eyes (conjunctivitis), headaches, cough, runny nose, and swollen lymph nodes in the neck. The rash typically begins on the face and neck before spreading to other parts of the body. This rash usually lasts for about five days.

# 6. What are the complications resulting from rubella infection?

Most rubella cases don't lead to complications. Sometimes, adult women with rubella can experience temporary arthritis that usually goes away after the infection. In rare instances, rubella can have serious consequences. However, the most severe risk associated with rubella is the harm it can cause to a developing baby if a pregnant woman becomes infected. Potential outcomes of rubella infection during pregnancy include miscarriage, abnormal foetal growth, and the development of severe birth defects, collectively known as congenital rubella syndrome (CRS). These birth defects can involve heart conditions, hearing problems, and developmental delays. CRS is more likely to occur if a woman contracts rubella during the first trimester, which is roughly within the first 14 weeks of pregnancy.

## 7. How is rubella diagnosed?

Rubella can be diagnosed by a blood test to detect rubella antibodies (IgM) and a throat swab to detect the virus. Without laboratory testing, it is not possible to distinguish rubella from other viral infection rash illnesses such as measles.

## 8. How is rubella treated?

There is no specific treatment for rubella. Symptoms can be managed by rest and medication to control fever.

## 9. How is rubella prevented?

Many adults are already immune to rubella because they had the infection during childhood. However, vaccination is an effective way to prevent rubella. Currently, rubella vaccination is not part of the national expanded program on immunization (EPI) schedule. But you can still get the rubella vaccine, which is often given as an MR vaccine (measles combined with rubella vaccines) or MMR (measles, mumps, rubella) vaccine in the private sector. Rubella vaccines can be given to adults, however, they are not recommended for pregnant women, as it is a live-attenuated vaccine. Women who plan to become pregnant can get tested for rubella, and if they test negative for rubella antibodies (IgG negative), they can choose to purchase the measles, mumps, and rubella (MMR) vaccine from the private sector. It's advisable to delay conception for 6-8 weeks after vaccination.

Additionally, if there's a suspected rubella case in a child under 5 years of age who has been in close contact with another rubella case, vaccination is recommended. This helps prevent further spread of the virus.

### 10. Where can I find out more information?

Healthcare workers may contact the NICD hotline after hours and in an emergency for clinical or medical advice. The Centre for Vaccines and Immunology may be reached on 011-386-0542.