

MMR Vaccine: Protecting Against Measles, Mumps, and Rubella

The **MMR vaccine** is a combination vaccine that protects against three highly contagious viral diseases: **measles**, **mumps**, and **rubella**. In South Africa, the MMR vaccine is part of the routine childhood immunisation schedule and is essential for preventing outbreaks of these serious diseases. Each of these viruses can cause serious complications, making vaccination an important step in keeping both individuals and communities safe.

What is the MMR Vaccine?

The **MMR vaccine** provides protection against:

- **Measles:** A highly contagious virus that causes fever, cough, and a red rash. Measles can lead to complications such as pneumonia, brain inflammation (encephalitis), and even death, particularly in young children.
- **Mumps:** A viral infection that primarily affects the salivary glands, causing swelling and pain. Complications can include meningitis (inflammation of the brain and spinal cord), hearing loss, and, in some cases, sterility in males.
- **Rubella:** Also known as German measles, rubella causes a mild rash and fever. While it is usually mild in children, rubella can be very dangerous for pregnant women, potentially causing serious birth defects if contracted during pregnancy.

The MMR vaccine combines these three vaccines into one shot, simplifying the vaccination process and providing protection against all three viruses in one go.

Why is the MMR Vaccine Important?

Measles, **mumps**, and **rubella** were once common childhood illnesses, but thanks to vaccination, the number of cases has dropped dramatically. However, these diseases can still spread if vaccination rates decline, which is why it's crucial to keep up with immunisations.

- **Measles:** In recent years, some parts of the world have seen measles outbreaks due to a drop in vaccination rates. Even in South Africa, occasional outbreaks can occur, making vaccination critical to prevent its spread.
- **Mumps:** While mumps is not as common, outbreaks do occur in places where people are not vaccinated. Mumps can lead to complications, especially in older children and adults.
- **Rubella:** Rubella is of particular concern for pregnant women. A rubella infection during pregnancy can lead to severe birth defects known as congenital rubella syndrome, which can cause deafness, heart defects, and developmental delays in babies.

When is the MMR Vaccine Given?

In South Africa, the **MMR vaccine** is typically given in two doses:

1. **First dose at 12 months** of age.

2. **Second dose at 18 months** of age.

These two doses ensure long-lasting protection against all three diseases. It's important that children receive both doses to be fully protected. Missing a dose can leave them vulnerable to infection.

Is the MMR Vaccine Safe?

Yes, the **MMR vaccine** is very safe and effective. Millions of doses have been given worldwide, and it has been proven to provide excellent protection against measles, mumps, and rubella. Like any vaccine, mild side effects such as fever or redness at the injection site can occur, but serious side effects are extremely rare.

There has been misinformation linking the MMR vaccine to autism, but numerous studies have shown no link between the two. Health authorities such as the **World Health Organization (WHO)** and **South Africa's Department of Health** strongly recommend the MMR vaccine as part of the routine immunisation schedule.

Why is Herd Immunity Important?

When enough people are vaccinated, it creates **herd immunity**, which helps protect the entire community, including those who cannot be vaccinated due to medical conditions. Herd immunity helps prevent outbreaks and keeps vulnerable individuals safe from serious illness.

References:

1. Expanded Programme on Immunisation (EPI)