

MMR: Mumps, Measles, and Rubella



What you need to know about mumps, measles, and rubella

MMR vaccine protects against mumps, measles, and rubella

Measles (M):

- Causes fever, cough, runny nose, and red, watery eyes, commonly followed by a rash that covers the whole body.
- It can lead to seizures, ear infections, diarrhea, and pneumonia. In rare circumstances, measles can cause brain damage or death.

About 1 in 16 children with measles will get pneumonia - the most common cause of measles-related death in children.

Mumps (M):

- Causes fever, headache, muscle aches, tiredness, loss of appetite, and swollen and tender salivary glands under the ears.
- It can lead to deafness, swelling of the brain and/or spinal cord covering, painful swelling of the testicles or ovaries, and death in rare circumstances.

1 in 7 children with mumps will develop viral meningitis.

Rubella (R):

- Causes fever, sore throat, rash, headache, and eye irritation. It can cause arthritis in up to half of teenage and adult women.
- If a person gets rubella while they are pregnant, they could have a miscarriage or the baby could be born with serious birth defects.

80% of babies born to mothers who got rubella will have birth defects.

Children will need 2 doses of MMR vaccine, recommended at:

First dose at age 12 through 15 months Second dose at age 4 through 6 years





Infants who will be traveling outside the United States when they are between 6 and 11 months of age should get a dose of MMR vaccine before travel. These children should still get 2 additional doses at the recommended ages for long-lasting protection.

Older children, adolescents, and adults also need 1 or 2 doses of MMR vaccine if they are not already immune to measles, mumps, and rubella. Your health care provider can help you determine how many doses you need.





A third dose of MMR might be recommended for certain people in mumps outbreak situations.

Two doses of MMR vaccine are 97% effective against measles and rubella, and 88% effective against mumps



Data Sourced from CDC, PA-AAP Report on 2021 SILR Data



MMR vaccine may be given at the same time as other vaccines. Children 12 months through 12 years of age might receive MMR vaccine together with varicella vaccine in a single shot, known as MMRV.



American Academy of Pediatrics

WHAT TO EXPECT AFTER VACCINATION

It's normal to experience immune response after vaccination, this is how you know the vaccine is doing its job. These side effects are usually mild and disappear on their own in a few days. Some normal immune responses for MMR vaccine include:



Tell your vaccination provider if the person getting the vaccine:

- Has had an allergic reaction after a previous dose of MMR or MMRV vaccine, or has any severe, lifethreatening allergies
- Is pregnant or thinks they might be pregnant—pregnant people should not get MMR vaccine
- Has a weakened immune system, or has a parent, brother, or sister with a history of hereditary or congenital immune system problems
- Has ever had a condition that makes him or her bruise or bleed easily
- Has recently had a blood transfusion or received other blood products
- Has tuberculosis
- Has gotten any other vaccines in the past 4 weeks

Normal immune responses to MMR vaccination can be treated by applying a cold compress to the injection site and an oral pain reliever such a Children's Motrin or Tylenol. Please talk to your healthcare provider for recommended dosage.

More serious reactions happen rarely (approximately 1 in 1 million). These can include seizures (often associated with fever) or temporary low platelet count that can cause unusual bleeding or bruising.

MMR Vaccination Rates

The Centers for Disease Control and Prevention (CDC) recommends a kindergarten vaccine coverage rate of **95% or above** for the measles, mumps and rubella (MMR) vaccine.



Percentage of children entering kindergarten with 2 doses of MMR vaccine in 2020-2021 school year



U.S.



P.A.

Percentage of Pennsylvania students who had received 2 doses of MMR vaccine by 2020-21 school year



K-12



7th Grade



12th Grade

