# **MMR Vaccine**

### Vaccine for Measles, Mumps, and Rubella

Most children get  $\underline{\mathbf{M}}$  easles,  $\underline{\mathbf{M}}$  umps and  $\underline{\mathbf{R}}$  ubella vaccines all together in one shot called MMR. All three of these vaccines work very well, and will protect most children for the rest of their life.

Children should get two doses of MMR vaccine. The first is given between 12 and 15 months of age. The second may be given at any time, as long as it is at least 28 days after the first. It is usually given at 4-6 years of age, before the child enters kindergarten or first grade.

Measles, mumps, and rubella vaccines can be given separately, too. But this is not usually done because it means giving a child three shots instead of one. Sometimes — usually during a measles outbreak — children might be given measles or MMR vaccine before their first birthday. This is for short-term protection only. These children should still be given two doses of MMR vaccine at the usual ages.

### Side Effects from MMR Immunization

**MEASLES**. About 1 child in 5 will get a mild rash or fever beginning a week or two after vaccination. These reactions last for a few days.

MUMPS. Very few children suffer any ill effects from mumps vaccine. Occasionally a child will get a mild fever one or two weeks after vaccination, or swollen glands in the cheeks or under the jaw. More serious reactions are extremely rare.

RUBELLA. About 1 child out of 7 will get a rash or swelling in the lymph glands after getting rubella vaccine. This usually happens within a week or two after the shot and lasts 1 or 2 days. Also, about 1 child out of 100 will have some pain or stiffness in the joints, which can last from a few days to a few weeks. There is a small chance (less than 1 in 100) that a child will have painful swelling of the joints (arthritis) after getting rubella vaccine. This usually lasts only a few days, but it can last longer, and can come and go. These joint problems occur more often in adults, especially women.

Febrile seizures (seizures caused by a fever) have occasionally been reported among children who have gotten MMR vaccine. These usually happen 1 or 2 weeks after the shot and are caused by the fever that can accompany vaccination rather than the vaccine itself. Children recover from febrile seizures quickly, and they do not cause permanent harm.

There have been reports of children getting encephalitis (inflammation of the brain) after an MMR shot. This happens so rarely - less than once in a million shots - that experts are not sure whether the MMR vaccine causes this problem or whether it simply happens by chance. Remember, though, that if the same million children got measles, about 1,000 of them would get encephalitis, 6,000 to 7,000 would have convulsions, and several hundred would die. The benefits of MMR vaccine greatly outweigh the slight risk.

MMR, like any vaccine or medicine, could trigger a severe allergic reaction in a child who was allergic to one of the vaccine's components. But severe allergic reactions to childhood vaccines are very rare (estimated at around one per million doses), and no child is ever known to have died from an allergic reaction to a vaccine.

#### Precautions

There are several reasons a doctor might want to delay giving a child an MMR vaccination or not give it at all:

- A child who is known to have a severe allergy to gelatin or the antibiotic neomycin should not get MMR.
- A child who has had a severe (life-threatening) allergic reaction after a dose of MMR should not get another dose.
- A child whose immune system is suppressed (because of a disease such as cancer or HIV infection, or medication such as steroids) should be evaluated by a doctor before getting MMR vaccine.
- A child who has recently gotten a transfusion or other blood product might have to wait up to several months before getting MMR.
- A child who has a moderate or severe illness on the day an MMR (or any) vaccination is scheduled should probably delay the vaccination until he or she has recovered.

Your doctor or nurse can give you more details.

# After Getting MMR Vaccine . . .

If the child has **any** serious or unusual problem after getting this vaccine, call a doctor or get the child to a doctor right away.