

# Q&A Measles & MMR vaccines

Measles is a highly contagious illness that begins with mild to moderate fever, cough, runny nose, red eyes and sore throat. Two or three days after symptoms begin, tiny white spots (Koplik's spots) may appear inside the mouth.

Three to five days after the start of symptoms, a red or reddish-brown rash appears.

The rash usually begins on a person's face at the hairline and spreads downward to the neck, trunk, arms, legs and feet.

1

My two-year-old son has been having fever, cough, colds and sore eyes for three days. He's been exposed to a neighbor who had measles two weeks ago.

Could this be measles?

Can it develop even if he was given measles vaccine at 9 months?

Do I have to isolate my son?

The average interval between onset of signs and symptoms and contact with a known measles case is 7-14 days, so your son may have measles because the vaccine given at 9 months may lead to decreased immunogenicity due to the presence of maternal antibodies.

Children who were given measles vaccine at 6-9 months should have received two more doses of measles/mumps/rubella (MMR) vaccine (at 12-15 months and 4-6 years of age or earlier) to achieve optimal protection.

Measles can be transmitted to others 4 days before, up to 6 days after the appearance of the rash thus, your son needs to be isolated.

2

What about my six-month old son, how can I protect him?

Your 6-month old son could have been protected if the measles vaccine had been given within 72 hours of exposure to his brother. If you were unable to have him vaccinated within this period, you will have to wait for 21 days to see if he will develop the disease. If he does not naturally develop measles infection, you can have your infant vaccinated then.

However, another option is for him to be given immunoglobulin within 3-6 days post-exposure. Ask your pediatrician for the best course of action.

Measles vaccine is recommended to be given at 9 months, however, during outbreaks it can be given as early as 6 months.

3

My five-year-old has already received two doses of MMR (mumps, measles and rubella) vaccine. He's been exposed to his cousin who has measles, does he need an additional dose?

No further doses of measles-containing vaccine are recommended for those who have received two doses of MMR after the age of 12 months, given at least 28 days apart.

4

My son has been diagnosed to have measles. Is there anything that can be given to shorten the disease and prevent complications?

No specific anti-viral treatment is available for children with measles. However, it has been found that giving vitamin A once daily for two days can reduce the rate of complications. Your doctor can prescribe the dose appropriate for the age of your child.

When can he go back to school?

Children with measles should be isolated for at least 6 days after rash onset to prevent spread of the disease. He should also be fully recovered before sending him back to school.

5

My nine-month-old has been diagnosed with measles. He still has fever, but his rashes have darkened and started to peel off. Is it still part of the course? What are the complications of measles?

The fever of measles may become higher once the rash appears and should disappear within 48 hours once the rash reaches the feet.

Recurrence or persistence of fever may indicate the presence of complications, which occurs in about 30% of patients. These include pneumonia, ear infections and diarrhea. Encephalitis (brain inflammation) is a very rare complication. In a very young child who develops measles, a rare but fatal brain disease called SSPE (subacute sclerosing panencephalitis) may be seen 7-10 years after the measles infection.

6

My 1 y/o baby had measles when he was 8 months old. Can he develop measles again?

Patients who have had measles are immune to the disease throughout their lifetime, unless a severe problem with their immune system occurs.

Should he still receive an MMR vaccine?

Although he does not need the measles vaccine, and since separate mumps and rubella (German measles) are not available, he should still receive two doses of MMR (measles, mumps, rubella) vaccine to protect him against mumps and rubella. MMR in this child may be given as early as 1 year of age.

7

My 13 y/o son was exposed yesterday to a schoolmate who was diagnosed with measles. I am not sure if my son had one or two shots of MMR before. Is it safe to give another dose now?

In cases where vaccination status is unknown, two doses of MMR is still recommended, and it is safe.

MMR vaccine can be given within 3 days from exposure to his schoolmate to possibly prevent or minimize the impact of the disease.

When is it safe to say that he did not get infected by his classmate?

If he does not develop measles infection within 21 days after last exposure to the patient who is contagious, then he did not get infected.

8

A neighbor is saying that it's better to just let my baby naturally get the measles infection since it will give him life-long protection. Is this true? Will the measles/MMR vaccine protect my child from getting the infection throughout his lifetime?

Yes, he will have life-long protection after getting measles infection but, there is a high incidence of complications like pneumonia, ear infections, malnutrition, neurologic problems and even death.

The protection from live vaccines such as measles is like having the natural infection in terms of inducing immune response but without these complications.

9

I am afraid my 3-month-old will develop measles after hearing about the outbreak. Can my baby receive measles vaccine?

Measles vaccine is only indicated for infants 6 months or older. Babies less than 6 months old are usually protected if their mothers had measles or were given MMR vaccine previously.

10

My 3 y/o child received two doses of MMR vaccine and later on, was diagnosed with autism. I read from social media that MMR vaccine is associated with autism. I don't want my second child to receive MMR since it might cause the same condition. Is this true?

This has been proven to be patently FALSE. Scientific evidence do not link MMR vaccine with autism. This is based on many studies, which included hundreds of thousands of children in different countries. The studies were well-controlled and done by multiple investigators. The doctor who authored the article linking MMR with autism used fake data. His license to practice medicine has been revoked, and the article has been withdrawn.