

# MEASLES



## ABOUT THIS DISEASE

Measles is a very contagious rash illness caused by a virus. Common complications from measles include ear infections and diarrhea. Measles can cause severe illness and serious health complications, especially in children younger than age 5 years, adults older than age 20 years, pregnant women, and people with immune system problems. These complications include:

- Pneumonia
- Brain swelling, which could lead to permanent brain damage
- Death
- Subacute sclerosing panencephalitis (SSPE): a very rare progressive, disabling, and deadly brain disorder that results from a measles virus infection acquired earlier in life. SSPE generally develops 7 to 10 years after a person has measles, even though the person seems to have fully recovered from the illness.

## SIGNS AND SYMPTOMS

Symptoms of measles include:

- High fever
- Cough
- Runny nose
- Red, watery eyes

These symptoms are followed 3 – 5 days later by a rash that begins at the hairline, moves to the face and neck, and then spreads to the rest of the body. The rash usually lasts for 5 to 6 days.

The fever, cough, runny nose, and red, watery eyes usually start 7 to 14 days after infection, with the rash appearing about 14 days after a person is exposed to measles.

## TRANSMISSION

Measles spreads by direct contact with an infected person or through the air when an infected person coughs or sneezes. It is so contagious that you can catch this disease just by being in a room where someone with measles has been, up to 2 hours after that person is gone.

An infected person can spread measles to others from four days before developing the rash through four days afterward.

If you are not protected against measles (See “Immunity” below) and are exposed to someone with the disease, contact your healthcare provider immediately:

- MMR vaccine may prevent or lessen the severity of measles if given within 72 hours of exposure
- Immune globulin (a blood product containing antibodies to the measles virus) may prevent or lessen the severity of measles if given within 6 days of exposure.

## **DIAGNOSIS**

Measles is diagnosed by a combination of symptoms, physical signs, and laboratory tests. People with symptoms of measles or who have been exposed to someone with measles should contact a healthcare provider immediately.

## **TREATMENT**

There is no specific treatment for measles. Care of patients with measles consists mainly of ensuring adequate intake of fluids, bed rest, and fever control. Patients with complications may need treatment specific to their problem.

## **IMMUNITY**

In general, persons with at least one of the following may be considered protected from measles:

- Written documentation of adequate measles vaccination (see “Prevention” below)
- Blood test showing they are immune to measles or have had the disease
- Born before 1957\*

Please note: On rare occasions, measles can occur in people who have been fully vaccinated.

\*Although birth before 1957 is considered acceptable evidence of immunity, healthcare facilities should consider vaccinating unvaccinated personnel who were born before 1957 and do not have laboratory evidence of immunity.

## **RISK IN HAWAII**

Summary of Reported Cases of Notifiable Diseases:

<http://health.hawaii.gov/docd/resources/reports/summary-of-reported-cases-of-notifiable-diseases/>

## **PREVENTION**

The best way to prevent measles is to get vaccinated at the recommended age.

All children should receive two doses of the MMR vaccine which protects against three diseases: measles, mumps, and rubella. The first dose is given at age 12 - 15 months and the second dose at 4 - 6 years of age.

All adults born during or after 1957 should also have documentation of at least one MMR vaccination, unless they have had a blood test showing they are immune to measles or have had the disease. Certain adults at higher risk of exposure to measles (e.g., post-secondary school students, international travelers, and healthcare personnel) need a second dose of MMR vaccine, at least 4 weeks after the first dose.

If you are not protected against measles (See “Immunity” above) and are exposed to someone with the disease, contact your healthcare provider immediately:

- MMR vaccine may prevent or lessen the severity of measles if given within 72 hours of exposure
- Immune globulin (a blood product containing antibodies to the measles virus) may prevent or lessen the severity of measles if given within 6 days of exposure.

Before any international travel:

- Infants 6 months through 11 months of age should receive one dose of MMR vaccine. Infants who receive one dose of MMR vaccine before their first birthday should get two more doses (one dose at 12 through 15 months of age and another dose at least 28 days later).
- Children 12 months of age and older should receive two doses of MMR vaccine separated by at least 28 days.
- Teenagers and adults who do not have evidence of immunity against measles (See “Immunity” above) should get two doses of MMR vaccine separated by at least 28 days.

#### **ADDITIONAL RESOURCES**

- CDC Website: <https://www.cdc.gov/measles/index.html>
- Measles, Mumps, and Rubella Vaccine Information Sheet: <https://www.cdc.gov/vaccines/hcp/vis/vis-statements/mmr.pdf>

#### **INFORMATION FOR CLINICIANS**

- CDC Website: <https://www.cdc.gov/measles/hcp/clinical-overview/index.html>