

MMR

Measles

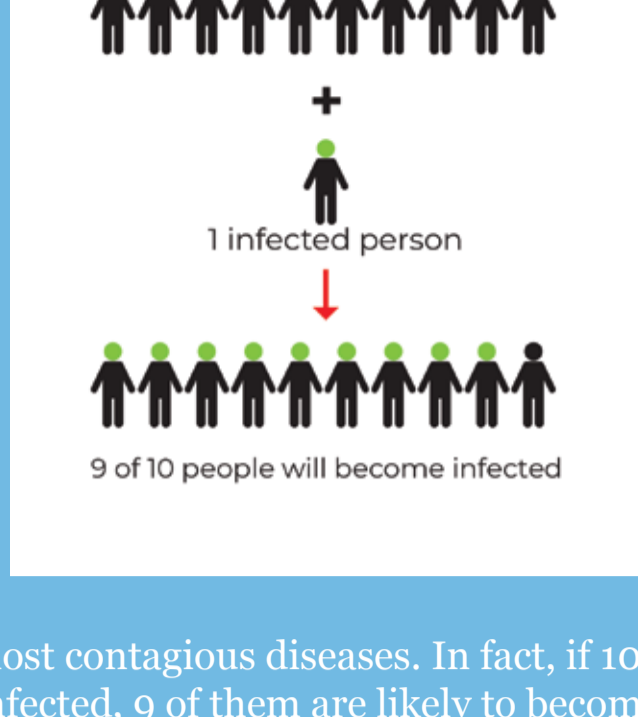
Mumps

Rubella

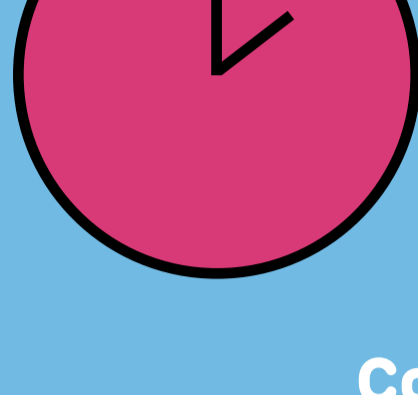
What Is Measles?

Measles is a disease that is caused by a virus. People with measles may have some or all of the following: Fever, cough, runny nose, bluish-white spots inside of the mouth, rash consisting of red spots, diarrhea and lack of appetite.

How Contagious Is It?



Measles is one of the most contagious diseases. In fact, if 10 people are in a room with someone who is infected, 9 of them are likely to become ill with measles.



If someone who has not had measles enters an elevator or other small space up to 2 hours after an infected person has left, they can still be infected with measles.

Complications of Measles

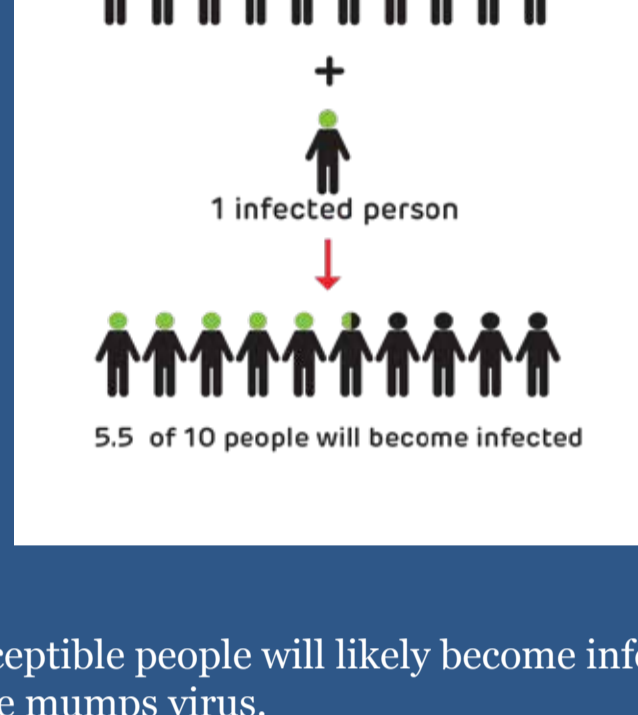
About every 3 of 10 people who get measles will develop complications such as:

- Ear infections
- Pneumonia
- Encephalitis (swelling of the brain)
- Subacute sclerosing panencephalitis (SSPE; a disease characterized by progressive neurological deterioration and early death)
- Hemorrhagic measles
- Clotting disorder
- Death

What Is Mumps?

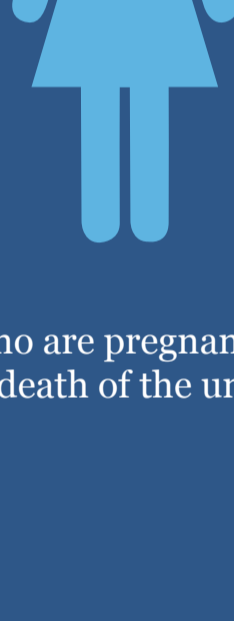
Mumps is a virus that usually causes swelling in the salivary or parotid glands, just below the ear, lasting for about 7 to 10 days. The swelling may occur on one or both sides of the face, causing a chipmunk-like appearance in infected people. This may be accompanied by muscle aches, fatigue, lack of appetite, headache and low-grade fever.

How Contagious Is It?



Around 6 out of 10 susceptible people will likely become infected if exposed to 1 person infected with the mumps virus.

Complications of Mumps



Mumps can cause swelling of the testicles in up to 1 of every 3 infected males. Some of these males will become sterile as a result.

In women who are pregnant, mumps can result in the death of the unborn child.

Other complications of mumps can include:

- Meningitis
- Swelling of the testicles
- Pancreatitis
- Deafness
- Encephalitis (swelling of the brain)
- Inflammation of the ovaries
- Myocarditis
- Miscarriage

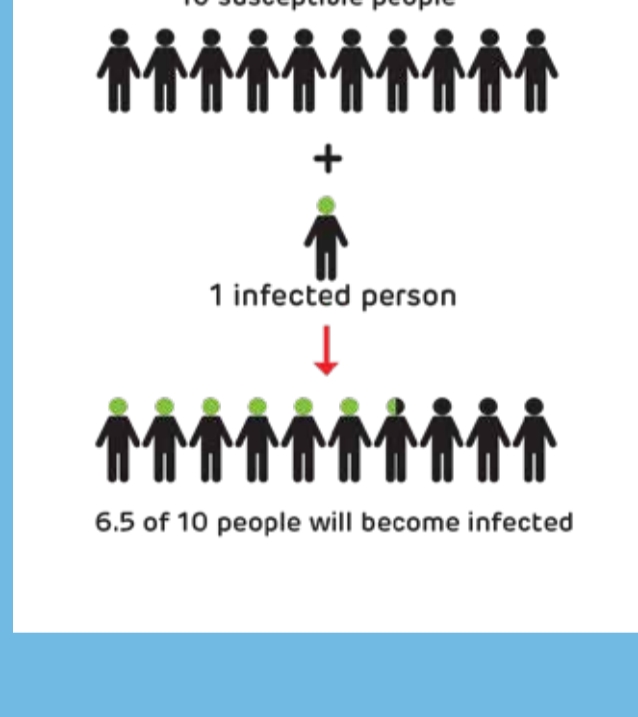
Did You Know?

About 50 of 100 males who have swollen testes due to mumps infection will suffer long-term effects. This can result in sterility.

What Is Rubella?

Rubella is a viral infection. It is also known as German measles. Rubella is not always a mild infection. Before the vaccine, as many as 20,000 babies were born every year with birth defects due to the ability of the virus to infect the unborn child.

How Contagious Is It?



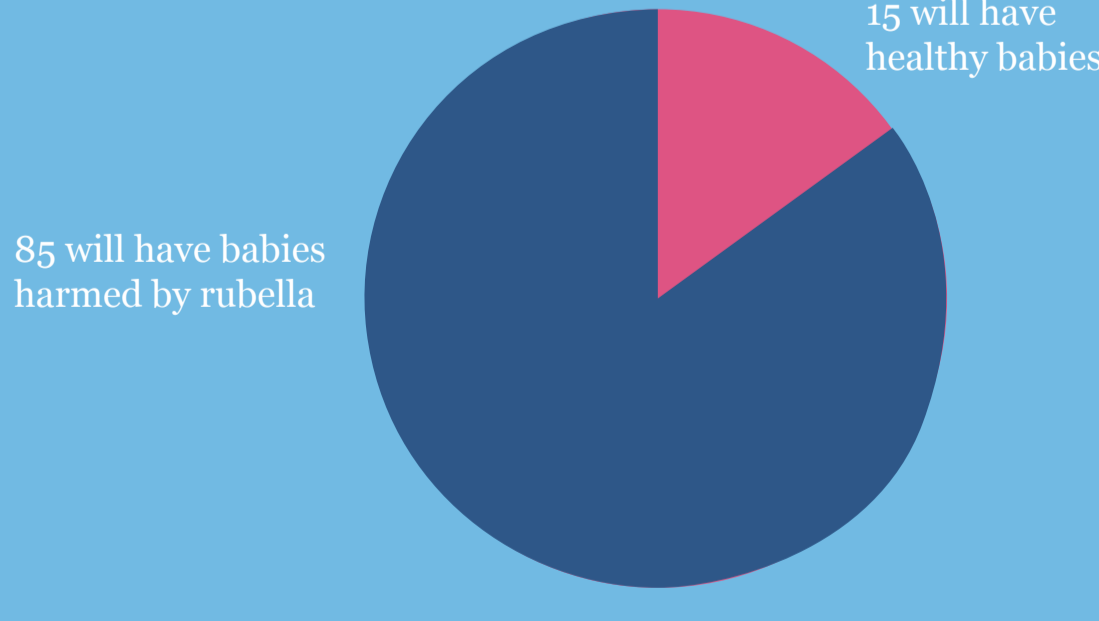
Around 7 of 10 susceptible people will likely become infected if exposed to 1 person infected with rubella.

Complications of Rubella

Rubella can cause symptoms such as a mild rash, low-grade fever, swollen glands below the ear and short-lived swelling of the small joints. Other complications of rubella can include:

- Encephalitis (swelling of the brain)
- Lowering of platelets
- Congenital rubella syndrome (CRS), which can occur in unborn babies in the first trimester and cause birth defects such as deafness, autism, skeletal damage and more

When a Pregnant Woman Is Infected With Rubella During the First Trimester of Pregnancy:



The Vaccine

The MMR vaccine protects against all three of these viral infections (measles, mumps and rubella). The vaccine is given as a series of two doses with the first dose at 12 to 15 months of age and the second at 4 to 6 years of age.

Side Effects of MMR Vaccine

