

What is measles?

Measles is a very contagious virus infection that can spread when an infected person coughs or sneezes.

What are the symptoms of measles?

Symptoms of measles generally appear 10-12 days after a person is infected (can be 7-21 days) and they vary between individuals. They usually start with flu-like symptoms such as fever, runny nose, inflamed eyes, swollen and tender lymph nodes, and headaches. Three or four days after symptoms begin, skin rash breaks out that lasts for another three to four days.

Measles can be serious and even cause death. Some people may suffer from complications such as ear infection, pneumonia, stomach aches, vomiting, diarrhea, and encephalitis (swelling of the brain). Serious measles-induced brain damage can also occur months after the infection.

What should I do if I have been in contact with an infected person?

Contact your physician or a nurse (call your primary health care or the number 1700) and inform that you have been exposed to measles. Information regarding whether an individual is immune is based on registered vaccination or age.

If you are not protected it is possible to get vaccinated within 72 hours of exposure to reduce the likelihood of getting ill. In some cases, especially infants, it is possible to give immunoglobulin after exposure to prevent illness. If you are exposed and do not receive vaccination within the 72 hours you should stay away from places where you could get in contact with sensitive individuals (schools, kindergartens and hospitals). By doing so an outbreak can be prevented. Your doctor will give you further information regarding this matter.

Am I protected from measles?

Chief Epidemiologist considers you to be protected if you have received one or two vaccinations, although one gives a slightly less protection than two. Confirmed immunity against measles predicts very good protection. If you are born before 1970 it is highly likely that you got measles and then you are protected throughout your lifetime.

What should I do if I am unvaccinated?

To start with you should check if there exists information regarding your vaccinations. Vaccinations from 2003 can be found at heilsuvera.is, but older vaccinations should be registered in your certificate of vaccinations or in your primary health care centers' registry. If no such information exists you should get vaccinated. There is no harm in additional vaccinations.

I think I have measles. What should I do?

Contact a doctor or a nurse at your primary health care center by phone or call 1700. They can possibly inform you if you have been vaccinated or if you have gotten the measles. They will arrange a clinical examination at home. You should not attend any clinics or hospitals and risk spreading the disease.

I was told by a doctor or another health care professional that I have measles.

What should I do?

If you have the measles then you should stay at home for at least four days after the skin rash breaks out. By doing so you greatly reduce the likelihood of spreading the disease. Consult your doctor about what it is safe to be around other people. When you cough or sneeze you should cover your mouth and nose with tissue and throw it immediately in a closed trash bin. If you do not have a tissue then you should cough/sneeze in your sleeve/arm but not your hands.

Wash your hands repeatedly with soap and water. Do not drink or eat from the same tableware or utensils as other people. Repeatedly clean surfaces you often touch. Contact a doctor by phone or call 1700 if your symptoms worry you.

How effective is the vaccine?

The vaccine is very effective. One dose of vaccine is about 93% effective, while two doses are about 97% effective.

Can I get measles if I am fully vaccinated?

Very few (about three per 100) that have received two doses of vaccination can get measles if exposed to the virus. It is not fully clear why, but the immune system sometimes fails to produce antibodies against the virus. The good news are that those that are fully vaccinated, and still get measles, usually get mild symptoms and do not transmit the virus to others, including those that are very young and those with poor immune system.

Do I ever need a vaccine booster?

No. The Chief Epidemiologist considers those that have gotten two doses of the vaccine, according to vaccine schedule, to be protected throughout life. Adults need at least one dose. If they are expected to be highly exposed it is best to vaccinate twice with 28 days in between. That includes for example high school students, health care professionals, and international travelers.

How common were measles in Iceland before scheduled vaccination started?

Measles were very common in Iceland during the 19th and 20th century. The incidence of measles reduced after scheduled vaccination started at 2 years of age in 1976. In 1986 all 18 months old children were offered vaccination for measles, rubella, and mumps. In 1994 it was decided to re-vaccinate all 9 year olds, and in 2001 it was moved to 12 year olds. Measles disappeared in Iceland in 1996, apart from occasional cases in recent years. The last big measles outbreaks in Iceland were in 1973 with 3.877 cases and in 1977 with 2.994 cases. Chief Epidemiologist considers that if you are born before the year of 1977 it is highly likely that you have gotten measles and then you are protected throughout life.

How many people are vaccinated in Iceland?

Approximately 95% of children are vaccinated in Iceland. It is very important to keep the prevalence at least at 95%.

Where to all these cases of measles come from?

Travelers can carry the virus to Iceland from any of the countries where measles are common. Measles outbreaks are common in Europe, Africa, Asia, America and many of the Pacific Islands. Worldwide the incidence of measles is 19 cases per million per year and the kills about 90 thousand people yearly.

How come are we getting all these cases of measles in Iceland in the recent years?

Occasionally, an infected individual carries the virus to Iceland. However, measles have not been able to spread around Iceland because of our strong herd immunity and other precautions. It is however unusual how many have caught the virus now because of an infected traveler. While outbreaks of measles are common in countries we often visit it is expected that occasional cases might be found here in Iceland, however, an outbreak is not expected.

What is the role of the Chief Epidemiologist regarding response to measles?

The Chief Epidemiologist is responsible for managing disease prevention, including vaccinations. He works in close collaboration with regional epidemiologists as well as infectiologists, other health care professionals, and health authorities.

Has measles been eliminated from Iceland?

Yes. Thanks to extensive vaccinations there are no measles epidemics in Iceland anymore. However, it is expected that unvaccinated individuals might get infected, but the herd immunity because of vaccinations prevents major outbreaks. Because measles is common in many countries around us it is not unlikely that someone carries the virus and transmits the disease to sensitive individuals.

What does it mean that measles has been eliminated?

It means that there are now measles epidemics anymore.

Should we worry about measles in Iceland?

Yes. Measles is still common in many countries and will occasionally appear in Iceland. Measles is very contagious and anyone that is not protected has a high risk of getting infected if exposed. That is, those that are unvaccinated due to age, and those that for some reasons refuse vaccinations. Those that refuse vaccinations are at high risk of getting infected and transmitting the disease to those that cannot be vaccinated due to age or other medical reasons.

Can we expect measles epidemics in Iceland in the future?

Yes. It could happen if vaccination participation reduces. Sometimes people simply forget to get vaccinated or vaccinate their children, but some people refuse vaccinations due to religious, philosophical, or personal reasons. If we start to see large groups of unvaccinated individuals then an epidemic is possible.