

Measles Disease and Health Care Workers

GENERAL MEASLES DISEASE INFORMATION

What causes measles?

- Measles disease is caused by a virus.
- This virus infects humans, causing measles disease in anyone who is not immunized or who has not previously had measles.

What are the symptoms of measles?

- Symptoms of measles are:
 - Fever 38.3° C or higher; and
 - Cough, runny nose or red eyes; and
- Red blotchy rash appearing three to seven days after fever starts, beginning behind the ears and on the face and spreading down to the body and then to the arms and legs

Is measles contagious?

- Measles is extremely contagious.
- The potential spread of measles is a serious health concern.

How does measles spread?

- As an airborne disease, measles is spread through the air.
- Measles can survive up to two hours in the air even after the contagious person has left the space.
- Measles can also be spread through coughing and sneezing.

When are people with measles contagious?

- A person with measles is considered to be contagious from one day before having any symptoms (which is usually about four to seven days before the rash appears), until four days after the appearance of the rash.

How long is a person with measles contagious?

- A person with measles is contagious even before showing symptoms!
- From about one day before having any symptoms until four days after the appearance of the rash, a person is considered contagious.

How long does it take to show signs of measles after being exposed?

- Symptoms of measles can be seen within 7 to 21 days of being exposed to measles. If you are at risk for measles, typically you would start seeing symptoms 10 days after exposure
- Measles can be life-threatening, and tends to be more severe in infants and adults.

How is measles diagnosed?

- Measles is diagnosed by a combination of symptoms, history of exposure to a measles case, and lab testing including blood tests.
- If you have measles symptoms or were exposed to a known case of measles (confirmed by lab testing), please stay home, and contact Workplace Health & Safety, for further direction.

Is there a treatment for measles?

- No, there is no specific treatment for measles. Complications from measles include severe diarrhea and related dehydration, ear, eye and severe respiratory infections such as pneumonia and encephalitis (an infection that causes the brain to swell).
- Dehydration can be treated with fluid replacement and antibiotics can be prescribed to treat eye, ear and respiratory infections.
- Measles can be prevented through immunization.

Can antibiotics cure measles?

- Antibiotics are not used to cure measles.
- Antibiotics may be used to treat a bacterial infection (such as an ear infection or pneumonia) that develops as a complication of measles; however, antibiotics cannot be used to cure or treat measles disease.

Can someone get measles more than once?

- It would be very unusual for an individual to have lab-confirmed measles disease more than once.
- Generally, once you have had measles, you are protected against measles for life.

What are the possible complications from measles?

- In addition to the fever, rash and other symptoms, about one in three persons with measles will have one or more complications, including:
 - diarrhea
 - ear infections (which can lead to permanent hearing loss)
 - pneumonia
 - encephalitis (inflammation of the brain)
 - seizures
- A very rare but fatal disease of the brain and spinal cord can also develop months to years after measles infection. This fatal disease is called sub-acute sclerosing panencephalitis.
- Measles can also lead to death.
- Complications are more common among children under five years of age and individuals 20 years of age and older.

If a person has measles, what care do they typically need?

- There is no specific treatment for measles.
- Most cases of measles are best treated through self-care at home. They should avoid contact with others, and call Health Link at 8-1-1, BEFORE visiting any health care facility or provider.
- Self-care for measles at home generally includes rest, drinking plenty of fluids, and taking acetaminophen or other non-prescription drugs to relieve fever and other symptoms.
- Avoid using the over-the-counter- medications containing ASA (aspirin) in children because of the risk of Reye syndrome, a rare but potentially fatal disease.

As a Health Care Worker, am I at risk for measles?

- If you are a health care worker who is NOT immune to measles, you are at risk
- Please see the definition of “immune”, as it pertains to health care workers, in this document.

As a Health Care Worker, how do I protect myself from measles?

- All health care workers need to ensure they are immune to measles.
- If you are not immune (see definition in this document) you should be immunized. Seek guidance from Workplace Health & Safety.
- If you are uncertain of your immune status, seek guidance from Workplace Health & Safety.

As a Health Care Worker, how do I know if I am immune to measles?

- Health care workers, **regardless of year of birth**, are considered immune to measles only if one of the following have been confirmed:
 - Two documented doses of measles vaccine at the appropriate time interval, or
 - Laboratory confirmation of measles disease, or
 - Serological evidence of measles immunity (measles IgG positive).

As a Health Care Worker, do I need to know whether or not I'm immune to measles?

- Yes- due to the highly contagious nature of measles, all health care workers, whether they work in a facility or community setting, should be immune to measles disease.
- If you do not know your immune status, you may unknowingly be at risk of getting and spreading this highly contagious disease.
- Please consult with Workplace Health & Safety if you are unsure of your immune status.

I am a Health Care Worker, am I eligible for measles vaccine?

- Health care workers who are not immune to measles are eligible for vaccine.
- To confirm your immune status, please contact your local Workplace Health & Safety office.

Should any Health Care Workers NOT receive measles vaccine?

- Measles vaccine should not be given to:
 - Pregnant women
 - Individuals with weakened immune systems due to disease or medications
 - Individuals who have had severe allergic reactions to previous doses of this vaccine or its components

As a Health Care Worker, what should I do if I have been, or think I have been exposed to a case of measles?

- If you have been, or believe you have been exposed to a case of measles, please advise your Manager and your local Workplace Health & Safety office immediately.

As a Health Care Worker, do I need to wear Personal Protective Equipment (PPE), and if yes, when?

- Ideally, only health care workers who are immune to measles should assess and care for patients who could have measles.
- As a precautionary measure, it is recommended that immune compromised health care workers follow the same PPE recommendations as a non-immune health care worker, even if the immune compromised health care worker would otherwise be considered immune to measles.
- Health care workers with known confirmed immunity (two documented doses of measles vaccine, or lab confirmed measles disease, or serological evidence of measles immunity, regardless of year of birth) **are not** required to wear an **N95 respirator** when entering the

room of a patient with confirmed measles or symptoms suggestive of measles; however they should wear a procedure mask, eye protection, gown and gloves to protect themselves against other infectious risks if measles has not yet been diagnosed.

- **Routine Practices** should also always be followed.
- If a non-immune health care worker must assess and care for a known or suspect measles case, that non-immune health care worker should wear:
 - A fit-tested N95 respirator, that is seal-checked.
 - Eye protection, gown, and gloves as required to protect them against other infectious risks, if measles has not yet been confirmed.
 - Please see and follow the appropriate donning and doffing procedures, as outlined at: <http://www.albertahealthservices.ca/6422.asp>

What do community physicians and their staff need to know about personal protection?

- All physicians and their staff should ensure they are immune to measles (which means they have had either two documented doses of measles containing vaccine, or, lab confirmation of measles disease, or serological evidence of measles immunity, regardless of year of birth).
- Ideally, only health care workers who are known to be immune should assess and care patients who could have measles.
- If a non-immune health care worker must assess and care for a known or suspect measles case, that non-immune health care worker should wear:
 - A fit-tested N95 respirator, that is seal-checked.
 - Eye protection, gown and gloves as required to protect them against other infectious risks, if measles has not yet been confirmed.
 - Please see and follow appropriate donning and doffing procedures, as outlined at: <http://www.albertahealthservices.ca/6422.asp>