

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.

Am I at risk for measles?

- If you have not had lab-confirmed measles in the past, or have not received measles vaccine, you are at risk for illness. Persons born before 1970 are generally considered immune.

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 if the contagious person has left the space.
- Measles can also be spread through coughing and sneezing.

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.
- Lab testing is not needed if you have measles symptoms and were exposed to an infectious measles case (that was confirmed by lab testing).

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 seven 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.

I have been exposed to measles. What should I do? Do I need to stay home?

- If you have been exposed to measles, please monitor for symptoms of measles.
- If symptoms do develop, stay home and call Health Link Alberta (1.866.408.5465) BEFORE visiting any healthcare facility or provider.

If I was near to one of the [measles exposure locations listed in an AHS Health Advisory](#), but wasn't actually IN the exposure setting, am I at risk?

- AHS lists very specific locations, times & dates of exposure in all AHS Health Advisories related to measles.
- As noted in those Advisories, only those individuals who were within the very specific exposure setting(s), in the noted timeframe(s) on the noted date(s), are at risk.
- Individuals who were not in the specific setting(s), within the specific timeframe(s), on the noted date(s) are not at risk of disease related to that exposure.

My child is not immune to measles, and was in one of the [exposure settings listed in one of the AHS Health Advisories, regarding measles](#). Can he or she get immunized now to prevent the disease?

- After exposure to measles, your unimmunized child must receive vaccine within 72 hours of exposure to the measles case, to receive prophylactic protection against the disease.
- If your child does not receive vaccine within that 72 hour window, he or she will need to wait for a full 21 days after his or her last exposure to the case, to be immunized.
- If your child does NOT develop measles within that 21 day period, he or she is strongly recommended to receive the vaccine at that time.

If my child is exposed to measles, and is not immune, can he or she be excluded from school and/or childcare facilities?

- Yes: under Alberta's Public Health Act, students or staff at any school or children or staff at any childcare facility in Alberta who have been exposed to measles and who are susceptible to measles, are required to stay home for the period of time starting five days after first exposure to a case of measles through 21 days after the last exposure to a case of measles.
- It's important that susceptible individuals who have been exposed to measles stay home from all public activities during the period of time in which they may develop the disease.
- By staying home, this greatly reduces the risk of further spread of disease to other vulnerable individuals.

How does AHS determine who will be excluded from school or childcare facility?

- When a case of measles is confirmed in a school or childcare facility, AHS immediately works with the case, and the school or childcare facility, to confirm when the case attended school or the childcare facility.
- If the case attended school and/or a childcare facility while infectious, the school and/or childcare facility provides AHS with a list of all individuals who may have been exposed to this case.
- AHS cross-references the list against public health immunization records, and identifies all those for whom AHS does NOT have a record of two doses of measles vaccine, at the appropriate ages.
- AHS directly contacts exposed adults and the parents/guardians of students and/or children for whom AHS does NOT have immunization records. These persons are asked to send documentation to AHS of immunizations received elsewhere. (For example, official immunization records documenting vaccines administered outside of Alberta).

- Anyone who cannot provide acceptable evidence of immunity to measles will be considered non-immune, and will be excluded from school and/or the childcare facility.
- The exclusion period will start five days after first exposure to the case to 21 days after last exposure to the case. During this time, the excluded individual is required to stay home from school and/or the childcare facility, and from all activities that take place outside of home.
- NOTE: Anyone for whom AHS already has record of adequate immunity on file will not be contacted by AHS.

How do I know if my child could be excluded from school and/or childcare facility if he or she were to be exposed to a case of measles?

- Children who have not received two documented doses of measles vaccine, at the appropriate intervals on or after the first birthday, can be excluded from school and/or a childcare facility, if exposed to a case of measles.
- In Alberta, measles vaccine is offered, free of charge, through Alberta's publicly funded immunization program.
- Children in Alberta typically receive their 1st dose of measles vaccine at 12 months of age, and their second dose between the ages of four and six years.
- If you are uncertain of your immunization history, or your child's immunization history, please call your local public health office or Health Link Alberta (1.866.408.5465) to discuss.

What should I do if my child/myself have the symptoms of measles?

- If you have symptoms of measles, do not visit any clinic or hospital.
- Instead, please stay home, avoid contact with others, and call Health Link Alberta (1.866.408.5465) before visiting any health care facility or provider.

My child has been excluded from school and/or childcare facility. Why must he or she stay home? Is it important?

- Yes, it is important that your child remain home and NOT attend school and/or the childcare facility (or any other activity outside of the home) if he or she has been excluded, following exposure to measles.
- If your child is not immune to measles, and has been exposed to measles, your child is at risk of developing measles.
- Your child can develop measles from seven to 21 days after being exposed to measles, and your child will actually be contagious before his or her symptoms even show.
- For this reason, it's very important that your child stay home from school and/or the childcare facility, and from all activities that take place outside of home, during the entire period of time in which he or she could develop the disease.
- By staying home, this greatly reduces the risk of further spread of disease to other vulnerable individuals.
- Remember: measles is an extremely contagious and potentially severe illness. Please help reduce the spread of illness.

What should I do if I think I'm sick with measles, but am not sure?

- Stay home, avoid contact with others, and call Health Link Alberta (1.866.408.5465) before visiting any health care facility or provider.

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.

I'm pregnant. Does measles put my unborn baby at risk?

- Yes, your unborn baby could be at risk if you are not immune to measles.
- Measles infection during pregnancy can lead to miscarriage, premature birth, and low birth weight. Birth defects are rare, but possible.
- If you are immune to measles, you will pass measles antibodies to your unborn child, mostly in the last third of your pregnancy. These maternal antibodies will provide some protection against measles to your infant, but this protection will disappear over time.
- Your infant will need to receive his or her own measles vaccines, to be immune to measles.
- Children in Alberta typically receive their 1st dose of measles vaccine at 12 months of age, and their second dose between the ages of four and six years. Both doses are needed, to be protected.

I am pregnant and am not sure if I am immune to measles. What should I do?

- Pregnant women who have had two documented doses of measles vaccine are not at risk for measles.
- If you unsure of your immunization history, please call Health Link to discuss.
- If you are pregnant, are unsure if you are immune, and have been exposed to measles, please call Health Link to discuss.
- If you are not immune to measles, you should receive the measles vaccine as soon as possible your baby is born. (You cannot receive the measles vaccine while pregnant).

I had a blood test (titre) to check if I am immune to measles. How do I get the results?

- If your blood test was completed by AHS Public Health, you will receive a phone call to advise you of the result.
- If your blood test was ordered by your doctor, you will need to speak to your doctor's office to find out the result.

Is there a treatment for measles?

- No, there is no treatment for measles.
- Measles can be prevented through immunization.

If I have measles, what care do I need?

- There is no specific treatment for measles.

- Most cases of measles should be treated through self-care, at home.
- Self-care for measles at home should include rest, drinking plenty of fluids, and taking acetaminophen or other non-prescription drugs to relieve fever and other symptoms. Avoid using over-the-counter medications containing ASA (aspirin) in children because of the risk of Reye syndrome, a rare but potentially fatal disease.

Is there medicine to cure the symptoms of measles?

- No, there is no medicine to cure measles.

Can antibiotics cure measles?

- No, there is no medicine to cure measles.
- Antibiotics are not used to cure or treat measles.
- Antibiotics may be needed if you develop a bacterial infection like an ear infection or pneumonia which can happen as a result of measles, but, antibiotics cannot be used to cure or treat measles.

Is measles preventable? How can I protect myself?

- Immunization is the best defense against measles.
- In Alberta, measles vaccine is offered, free of charge, through Alberta's publicly funded immunization program.
- Children in Alberta typically receive their 1st dose of measles vaccine at 12 months of age, and their second dose between the ages of four and six years.
- If you are uncertain of your immunization history, or your child's immunization history, please call your local public health office or Health Link Alberta (1.866.408.5465) to discuss.

Is there a vaccine available for measles?

- Yes. In fact, measles is preventable through immunization with the measles vaccine.
- In Alberta, measles vaccine is offered, free of charge, through Alberta's publicly funded immunization program.
- Children in Alberta typically receive their 1st dose of measles vaccine at 12 months of age, and their second dose between the ages of four and six years.
- Anyone uncertain of their immunization history should contact their local public health office, or Health Link Alberta, to discuss.

Who should get the measles vaccine?

- Children in Alberta should receive their 1st dose of measles vaccine at 12 months of age, and their second dose between the ages of four and six years.
- Measles vaccine is also recommended for individuals born in or after 1970 who have not previously had measles disease.
- Members of the general public born before 1970 are considered immune because they would have been exposed to measles which circulated widely before 1970.

PLEASE NOTE:

- During measles outbreaks, vaccine eligibility criteria can be expanded.
- Please visit www.albertahealthservices.ca/measles for information on changes to measles vaccine eligibility that were implemented on April 29, 2014, and will remain in place for the duration of the current outbreak declaration.

So, if I was born before 1970, I do not require vaccine?

- Members of the general public born before 1970 are considered immune to measles, as these individuals were exposed to measles when it circulated widely before 1970.

- Please note: post-secondary students are considered immune, regardless of year of birth, only if they have received two documented doses of measles vaccine, at the appropriate ages and intervals.
- Health Care Workers (including post-secondary health care students) are considered immune, regardless of year of birth, only if one of the following is 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)

Do adults need two doses of the measles vaccine?

- Two doses of measles vaccine are recommended for individuals born in or after 1970, who have not previously had measles disease.
- Members of the general public born before 1970 are considered immune to measles, as these individuals were exposed to measles when it circulated widely before 1970.

Where and at what cost can I get the measles vaccine?

- In Alberta, measles vaccine is offered, free of charge, through Alberta's publicly funded immunization program.
- Children in Alberta typically receive 1st dose of measles vaccine at 12 months of age; second dose between the ages of four and six years. You can schedule your child for these immunization appointments by calling your local public health office or community health centre.
- PLEASE NOTE: only those individuals who require measles vaccine will be offered measles vaccine in Alberta. Measles vaccine is not for sale.

I was born before 1970 but I want to get the vaccine; can I purchase this vaccine?

- No, you cannot purchase this vaccine.
- Measles vaccine is not approved in Alberta for use on individuals who were born before 1970, with the exception of healthcare workers and post-secondary students.
- Member of the general public born before 1970 are considered to be immune to measles and do not need vaccine.

My child is late receiving his or her measles vaccine. Can he or she get it now?

- Yes, measles vaccine is available by appointment in all Zones, and by additional drop in clinics in some Zones, during an outbreak.
- We recommend you call your local public health office or Health Link Alberta to discuss your child's immunization needs, and access vaccine.

My child is less than four years of age and has received his or her first dose of measles vaccine. I want him or her to receive the second dose of measles vaccine before the age of four. Can this be done?

- The second dose of measles vaccine is offered to children at age four or older, only.
- Second doses are not given early for this age group.
- Children age 12 months to less than four years of age who have received one dose of measles vaccine are considered adequately protected for that age range.
- Second dose is administered to children at age four and older.

Who should NOT receive the 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 any of its components

Does the measles vaccine cause autism?

- No – the measles vaccine is safe.
- All vaccines in Canada go through rigorous testing before being approved for use.
- The claims that some individuals make about concerns with the safety of the measles vaccine are not supported by any scientific research, and in fact, have been debunked, proven false.

Can the measles vaccine cause measles?

- No, the vaccine cannot cause measles. The vaccine elicits an immune response necessary to provide protection, without causing clinical disease.

How long does it take for the measles vaccine to work?

- Your body will be protected against measles within two to six weeks of being immunized.
- If you come in contact with measles within that two to six week window, the vaccine can still provide you with protection.
- Remember: without two doses of measles vaccine at the appropriate ages and intervals, you are not fully protected against measles.

Does the measles vaccine fully protect me?

- Two doses of measles vaccine, at the appropriate ages and intervals, is required to be considered immune to measles.
- One dose of measles vaccine provides approximately 95% protection.
- The second dose of vaccine is required for 99% immunity.
- Everyone's body responds slightly differently to vaccine, so, no vaccine is 100% effective; however, without vaccine, you are 100% at risk.