

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, usually 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 two doses of measles vaccine, you are at risk for measles.
- NOTE: persons born before 1970 are generally considered immune because of the likelihood of exposure to measles disease circulating in the population before that time.

How does measles spread?

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

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.

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 at 811, before visiting any health care facility or provider.

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 (811) before visiting any health care facility or provider.

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 at 811, BEFORE visiting any healthcare facility or provider.

If I was near a measles exposure location 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.

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 (811) to discuss.
- If you are pregnant, are unsure if you are immune, and have been exposed to measles, please call Health Link (811) to discuss.
- If you are not immune to measles, you should receive the measles vaccine as soon as possible after your baby is born. (You cannot receive the measles vaccine while pregnant).

Is there a treatment for measles?

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

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 at 811.
- For more information on routine childhood immunizations, including for measles, visit www.immunizealberta.ca.

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 at 811, to discuss.

Who should get the measles vaccine?

- Children in Alberta should receive their first 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.

So, if I was born before 1970, I am immune to measles?

- 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.

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, to eligible individuals, through Alberta's publicly funded immunization program.
- Children in Alberta typically receive their first dose of measles vaccine at 12 months of age and 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.
- Adults who need vaccine should call Health Link (811) to book an appointment.
- For more information on routine childhood immunizations, including measles vaccine, visit www.immunizealberta.ca.

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

- Members of the public born before 1970 are generally considered to be immune because they likely would have been exposed to measles which circulated widely before 1970, therefore vaccine would not be necessary or recommended.
- However, , you can purchase this vaccine by booking an appointment through the Alberta Health Services Immunization Business Unit at 780-735-0100.
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My child is late receiving his or her measles vaccine. Can he or she still get it?

- Childhood immunization is available by appointment in all Zones.
- To book your child's appointment, call your local public health office.
- If you are uncertain, you can also call Health Link at 811 to discuss your child's immunization needs.
- For more information on routine childhood immunization, including the recommended immunization schedule, visit www.immunizealberta.ca.

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.

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 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 first 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 at 811.
- For more information on routine childhood immunization, including measles, please visit www.immunizealberta.ca.

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?

Measles Disease: Q & A

- Two doses of measles vaccine, at the appropriate ages and intervals, are 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.



First Nation and Inuit Health Branch
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February 25, 2019

Dear colleagues,

There have been recent media reports of measles outbreaks declared in the state of Washington, USA and Vancouver, British Columbia. Over the weekend, there was also an announcement that travelers at the Edmonton International Airport and in the Leduc area may have been exposed to a lab-confirmed measles case that was traveling from Vancouver through Edmonton to Inuvik. Please print and post the notice that can be found at <https://albertahealthservices.ca/news/Page14944.aspx> so community members can determine if they were exposed.

To date, there have been no reported cases of measles in Alberta. Alberta public health authorities including the First Nations and Inuit Health Branch, are closely monitoring the situation.

To ensure your communities are protected, we recommend that health centre staff focus their efforts on catching up individuals who are due for a measles-containing vaccine:

- **Individuals born in 1970 or later** should have documented history of 2 valid doses of measles-containing vaccine, history of laboratory confirmed measles disease, or serological evidence of measles immunity (measles IgG positive);
- **All healthcare workers regardless of their year of birth** should have documented history of 2 valid doses of measles-containing vaccine, history of laboratory confirmed measles disease, or serological evidence of measles immunity (measles IgG positive);
- **Post-secondary students born before 1970** should have documented history of 1 valid dose of measles-containing vaccine, history of laboratory confirmed measles disease, or serological evidence of measles immunity (measles IgG positive); and
- **Individuals born before 1970** are generally presumed to have acquired natural immunity to measles and do not require a measles-containing vaccine unless they are a healthcare worker or post-secondary student.

Note: Please consult the MMR and MMR-Var Vaccine Program Summaries for complete information.



Measles immunization schedules may be accelerated for children if community members will be **traveling to areas where an outbreak is occurring**. Community members can call Health Link at 811 for more information. As with other travel immunization recommendations, community members should access **AHS public health or a travel clinic** if immunizations related to travel are required.

Also, attached is an AHS Measles FAQ sheet which may be helpful to answer questions from community members.

Please share the information with your respective health director and community leadership.

Should you have any questions or require clarification please do not hesitate to contact Christina Smith at Christina.Smith@canada.ca or call at 780 495 5439.

Respectfully,

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