

## 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 two doses of measles-containing vaccine at appropriate intervals, you are at risk for measles.
- NOTE: 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 after 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 may not be 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 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.

## 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 / I have the symptoms of measles?

- Please stay home, avoid contact with others, and call Health Link at 8-1-1, 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 at 8-1-1 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 the exposed individual is an infant under the age of 12 months, a pregnant woman, or someone with a weak immune system, call Health Link at 8-1-1. These persons may be eligible for medication to prevent measles disease.
- If symptoms do develop, stay home and call Health Link at 8-1-1, BEFORE visiting any healthcare facility or provider.

## If there is an AHS Health Advisory, and I was near a measles exposure location listed 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 are offered their first dose of measles-containing vaccine at 12 months of age, and their second dose at four years of age. 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-containing vaccine are not at risk for measles.
- If you unsure of your immunization history, please call Health Link at 8-1-1 to discuss.
- If you have been exposed to measles, please call Health Link at 8-1-1 to discuss.
- If you are not immune to measles, you should receive the measles-containing vaccine as soon as possible after your baby is born. (You cannot receive the measles-containing vaccine while pregnant).

### **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?**

- No, there is no medicine to cure measles. Antibiotics could be prescribed to treat some of the complications from 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 are offered their first dose of measles-containing vaccine at 12 months of age, and their second dose at four years of age.
- The recommended schedule for measles-containing vaccine may be adjusted if there is increased risk of exposure (e.g., travel).
- 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 8-1-1.
- For more information on routine childhood immunizations, including for measles, visit [www.immunizealberta.ca](http://www.immunizealberta.ca).

## **Is there a vaccine available for measles?**

- Yes. In fact, measles is preventable through immunization with the measles-containing vaccine.
- In Alberta, measles-containing vaccine is offered, free of charge, through Alberta's publicly funded immunization program.
- Children in Alberta are offered their first dose of measles-containing vaccine at 12 months of age, and their second dose at four years of age.
- Anyone uncertain of their immunization history should contact their local public health office, or Health Link at 8-1-1, to discuss.

## **Who should get the measles vaccine?**

- Children in Alberta should receive their first dose of measles-containing vaccine at 12 months of age, and their second dose at four years of age.
- Measles-containing 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-containing vaccine?**

- Two doses of measles-containing vaccine are recommended for individuals born in or after 1970, who have not previously had measles disease.
- All healthcare workers regardless of their year of birth are recommended to have two doses of measles-containing vaccine if they do not have history of laboratory confirmed measles disease or serological evidence of immunity.
- Post-secondary students born before 1970 are recommended to have one dose of measles-containing vaccine if they do not have history of laboratory confirmed measles disease or serological evidence of immunity.
- 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.

## **I am travelling. Are there any additional recommendations for measles-containing vaccine?**

- There may be additional recommendations for those travelling to areas where measles is occurring in North America (includes Canada, USA and Mexico) or travelling outside of North America.
- Refer to travel advisories for current recommendations.
  - Infants six months to less than 12 months of age may be eligible to receive a dose of measles-containing vaccine because of increased risk of exposure.
  - Children 13 months to less than four years of age may be eligible to receive a second dose of measles-containing vaccine early because of increased risk of exposure
  - Adults born before 1970 may be eligible to receive measles-containing vaccine if they do not have a documented history of one valid dose of measles-containing vaccine or history of laboratory confirmed diseases or serological evidence of immunity.

- If you are unsure of your immunization history, please call Health Link at 8-1-1 to discuss.
- If you have been exposed to measles, please call Health Link at 8-1-1 to discuss.

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

- In Alberta, measles-containing vaccine is offered, free of charge, to eligible individuals, through Alberta's publicly funded immunization program.
- Children in Alberta are offered their first dose of measles-containing vaccine at 12 months of age and second dose at four years of age. You can schedule your child for these immunization appointments by calling your local public health office or community health centre.
- For more information on routine childhood immunizations, including measles vaccine, visit [www.immunizealberta.ca](http://www.immunizealberta.ca).

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

- Measles-containing vaccine is not publicly funded in Alberta for individuals who were born before 1970, with the exception of healthcare workers, post-secondary students and some travellers.
- 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-containing 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 8-1-1 to discuss your child's immunization needs.
- For more information on routine childhood immunization, including the recommended immunization schedule, visit [www.immunizealberta.ca](http://www.immunizealberta.ca).

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

- The second dose of measles-containing vaccine is routinely offered to children at age four years of age or older.
- Second doses are not routinely given early for this age group.
- Children age 12 months to less than four years of age who have received one dose of measles-containing vaccine are considered adequately protected for that age range unless they are travelling to areas where measles is circulating. In these situations measles-containing vaccine may be given early.
- Refer to travel advisories for current recommendations.

### **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 not immune and 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 individuals that are not immune and susceptible 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-containing 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-containing vaccine is offered, free of charge, through Alberta's publicly funded immunization program.
- Children in Alberta are offered their first dose of measles-containing vaccine at 12 months of age, and their second dose at four years of age.
- 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 8-1-1.
- For more information on routine childhood immunization, including measles, please visit [www.immunizealberta.ca](http://www.immunizealberta.ca).

### **Who should NOT receive the measles-containing vaccine?**

- Measles-containing 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-containing 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-containing 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-containing 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-containing vaccine at the appropriate ages and intervals, you are not fully protected against measles.

### **Does the measles-containing vaccine fully protect me?**

- Two doses of measles-containing vaccine, at the appropriate ages and intervals, are required to be considered immune to measles.
- One dose of measles-containing 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.