

March 20th, 2014

Dear Health Care Professional:

Re: Increased Risk of Measles in Nova Scotia

As you are likely aware, there has been a noticeable increase in the number of cases of measles in Canada and elsewhere this year. Since January 2014, there have been confirmed cases of travel associated measles in a number of communities across the country and currently there is an outbreak with ongoing sustained transmission in the Fraser Valley of British Columbia. Most of these cases have occurred in under-immunized populations but as the BC outbreak is showing, there is the potential for measles to spread to the general community.

There have been no reported cases of measles in N.S. since 2008 but the current global situation increases the possibility of local measles cases.

PREVENTION

The most important step in limiting the risk of measles is to ensure high coverage rates with MMR vaccine. In Nova Scotia the following groups are eligible to receive MMR vaccine as part of the publicly funded immunization program.

1. Infants and Children:

Two doses of a measles-containing vaccine are recommended for children.

The first dose should be given on or after the first birthday and the second dose should be given at 4-6 years of age.

During outbreaks or for travel to regions where measles is a concern, <http://travel.gc.ca/travelling/health-safety/travel-health-notice/measles>, the vaccine may be given as early as six months of age. Under these circumstances, the routine two dose series must be then restarted on or after the first birthday, for a total of three doses.

2. Adolescents and Adults:

Adults born in or after 1970 should receive two doses of measles-containing vaccine unless they have documented immunity (serology) from measles disease.

It is generally safe to assume that Canadian residents born before 1970, regardless of place of birth, have naturally-acquired immunity against measles, mumps and rubella.

However, international travelers of this age should receive one dose of measles containing vaccine if they do not have one of the following:

- documented evidence of receiving measles-containing vaccine on or after their first birthday;
- laboratory evidence of immunity (e.g. through blood testing); or
- a history of laboratory confirmed measles disease.

Like other travel-related vaccinations, this is not part of the publicly funded immunization program.

I encourage you to take every opportunity to ensure your patients are appropriately immunized with MMR vaccine.

DIAGNOSIS AND MANAGEMENT OF POTENTIAL MEASLES CASES

It is extremely important that clinically suspected measles cases are reported immediately to your local Public Health office <http://novascotia.ca/dhw/publichealth/phs-offices.asp> or after-hours to the on-call Medical Officer of Health (902-473-2222/2220)

Incubation period for measles: The time from exposure to rash onset averages 14 days (7-18 days).

Period of Communicability: From one day before the beginning of the prodromal period (usually about four days before rash onset) to four days after the appearance of the rash.

Symptoms of measles:

- Fever
- Runny nose, cough
- Conjunctivitis
- Small white or grayish spots may appear in the mouth (Koplik spots).
- Three to seven days after the start of the above symptoms, a maculopapular rash appears that starts on the face and neck and then spreads over the rest of the body.

History:

Be sure to ask about:

- Potential exposures (i.e. ill friends or family members)
- Immunization history (MMR, number of doses, date received)
- Travel history

Laboratory Diagnosis of Measles:

Recommended testing:

- Serology:
 - If acute disease is suspected serology should be done.
 - A blood specimen should be collected between 3 and 7 days after onset of rash. (Specimens collected prior to this may be falsely negative and will require a follow up convalescent specimen).
 - If you suspect your client to be infectious, inform blood collection services that the patient is being sent for testing.

In cases with a high probability of being measles you may be requested to also order nasopharyngeal/throat swab or urine testing as these specimens are required for molecular confirmation and genetic surveillance

- Nasopharyngeal swab or throat swab (in viral transport media) or aspirate (tubing should be flushed with viral transport media in a sterile container), within 4 days after onset of rash **and/or** 50 ml urine (in sterile container) within 7 days after onset of rash. Specimens transported to the lab should be maintained at 4°C.

Management of a Suspected Case of Measles:

- Treatment is symptomatic.
- Report all suspected and confirmed cases of measles to Public Health Services immediately.
- Any patient with suspected measles who is a health care worker should be advised to contact Occupational Health or Infection Control at their place of employment immediately.
- Tell patients to stay home from work, social activities etc until the 5th day after the onset of their rash.
- Advise patients that they will be contacted by Public Health.

Office-based Infection Control:

Measles is transmitted from person-to person through direct contact with infectious droplets or via airborne spread. Infectious particles can remain suspended in air or on surfaces for up to two hours depending on ventilation conditions in a room.

- Screen patients at the time the office visit is scheduled.
- Attempt to schedule these patients at the end of the day.
- Persons with febrile rash illness or suspected measles should be removed from the waiting room as soon as they are identified and placed into a private exam room.
- Close the door of the exam room and limit access to that room.
- All health care personnel born in or after 1970, who access this exam room, should have documented evidence of measles immunity or of having received two doses of MMR vaccine.
- If at all possible, this exam room should not be used for 2 hours after the patient leaves.
- If patient is being sent to any other health care facility, e.g. Emergency Departments, please call ahead and notify the department.

Please contact your local public health office <http://novascotia.ca/dhw/publichealth/phs-offices.asp> with any questions or concerns.

Sincerely,



Robert Strang, MD, MHSc, FRCPC
Chief Public Health Officer