

Toronto Measles Case

A previously healthy, unimmunized, 51 year old adult has lab-confirmed measles (IgM positive, IgG negative and urine and buccal swabs PCR positive). Cold-like symptoms began on October 12 followed by the development of a rash on October 28. The patient has a history of travel to London, England and France. Both countries have experienced recent measles activity. During the period of communicability the case visited doctors' offices on October 26th and 28th and Sunnybrook Emergency Department on October 30th. The case also attended a number of public venues. The case was infectious to others from October 24 to November 1st. Contact follow-up is ongoing by Toronto Public Health (TPH).

TPH is asking clinicians to be vigilant in the detection and appropriate testing of febrile rash illnesses. **Any suspect measles cases should be reported to TPH as soon as possible.**

The signs and symptoms suggestive of measles include: fever, cough, coryza (runny nose), conjunctivitis, Koplik spots (punctate blue-white spots on the bright red background of the buccal mucosa), followed by a maculopapular rash which lasts about six days. Measles is highly contagious and is spread by droplets and direct contact with the nasal or throat secretions of an infected person. Measles can also be spread through the airborne route. A person with measles is infectious from four days before to four days after the onset of the rash. The incubation period is typically 10 days (range seven to 21 days). **Patients suspected of having measles should wear a mask and be placed in a separate room with the door closed when attending a physician's office.**

Laboratory diagnosis of measles should include both serology and virus isolation/detection. The laboratory should be notified in advance that they are testing a suspect measles case so appropriate precautions can be taken.

Virus Isolation: A nasopharyngeal swab/aspirate or throat swab in viral culture media obtained optimally within four to seven days of rash onset and 50 mL of urine collected within seven days of rash onset.

Acute Serology (to test for IgM and IgG antibodies): A blood specimen should be obtained within seven days after the rash onset.

Convalescent Serology: A second blood specimen drawn > 10 days after the first to check for seroconversion or a significant rise in measles specific IgG antibodies between acute and convalescent sera. A significant rise in IgG is indicative of recent infection.

Send specimens marked STAT to the Public Health Laboratory-Toronto at 81 Resources Road, Toronto, ON M9P 3T1. Laboratory requisitions should be clearly marked "suspect case of measles" to facilitate rapid testing.

Measles is a reportable communicable disease. Please report all suspect and confirmed cases of measles immediately to TPH at 416-392-7411 (after hours at 416-690-2142).