

## Measles Continues to Circulate in the Greater Toronto Area

The measles outbreak in Ontario that began in March 2008 continues. To date, nine confirmed cases have been reported to Toronto Public Health. All of the cases have presented with symptoms of measles including fever and rash. Most were either unimmunized or received only one dose of measles vaccine. Only one individual received two doses of measles vaccine and was mildly ill. A further 18 cases have been reported elsewhere in Ontario since the outbreak began.

Five of these cases worked or lived in downtown Toronto. Health care providers should be alert for individuals with symptoms of measles particularly if they have not had two doses of measles vaccine.

**Toronto Public Health is recommending vaccination of all adults born after 1970 with two doses of MMR vaccine.** Most individuals born from 1971 to 1995 have received one dose of MMR vaccine and will require a second dose. Those born from 1995 onwards should have received two doses of MMR through the routine childhood schedule or the measles catch-up program in 1996.

**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. Typically, the rash begins in the hairline and then involves the face and upper neck. Over the next three days, the rash gradually proceeds downward and outward, reaching the hands and feet. 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 18 days). Complications of measles occur in 10 to 20% of individuals and include: otitis media, pneumonia and encephalitis. **Patients suspected to have measles should wear a mask and be placed in a separate room with the door closed when attending a health care setting.**

Laboratory diagnosis of measles should include both serology and virus isolation/detection. Laboratory requisitions should be clearly marked "suspect case of measles" to facilitate rapid testing and sent to the Central Public Health Laboratory.

**Acute Serology** (to test for IgM and IgG antibodies): A blood specimen should be obtained within seven days after the rash onset, preferably on days 4 after rash onset.

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

**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).**

Web-site: <http://www.toronto.ca/health/cdc/surveillance>