

Mumps: Increased Activity and Testing Recommendations

Attention: Physicians, Emergency Departments, Infection Control Practitioners, Nurse Practitioners, Walk-In Clinics/Urgent Care Clinics, Family Health Teams, Occupational Health Professionals, Neighbouring Health Units, County of Simcoe Paramedic Services, Medavie EMS Ontario – Muskoka, Rama Mnjikaning EMS, Midwives, NSM LHIN, Central LHIN

Date: March 6, 2017

The Greater Toronto Area is seeing an increase in confirmed cases of mumps primarily involving individuals 20 to 34 years of age. Locally, we have had one confirmed mumps case in 2017. Provincially, there have been 32 cases of confirmed and probable mumps for 2017, compared to 40 cases for all of 2016.

Primary health care providers should consider testing for mumps in symptomatic young adults, regardless of their vaccination history. Suspect or confirmed mumps cases are to be advised to self-isolate for five days after onset of symptoms.

Signs and symptoms of mumps include swelling and pain in one or more salivary glands, fever, headache, myalgia, fatigue and anorexia. These symptoms can last up to ten days. In recent U.S. mumps outbreaks, orchitis occurred in 3% to 10% of post-pubertal males, and oophoritis in $\leq 1\%$ of adolescent and adult females. Pancreatitis, hearing loss, meningitis and encephalitis occurred in $< 1\%$ of cases in these outbreaks.

Testing Recommendations

Order virus isolation **and** serologic testing to confirm mumps infection including all three of the following tests:

- **Blood test:** Mumps IgM and IgG antibodies; **and**
- **Urine:** Mumps virus PCR; **and**
- **Buccal** (preferred) or throat swab: Mumps virus PCR (in viral culture media)

It is very important that both a urine, and a buccal or throat swab are collected, as the serology alone is often inconclusive. Optimal recovery of mumps virus or detection of mumps RNA is achieved if specimens are obtained three to five days after symptom onset. However, the buccal and throat swab can be collected up to nine days after symptom onset, and 14 days for the urine. Mark "suspect mumps" on the Public Health Ontario Lab requisition and include symptoms, date of onset, travel/exposure history and vaccination status.

Please refer to the Public Health Ontario Laboratories Testing Recommendations for further information:

<http://www.publichealthontario.ca/en/eRepository/Diagnostic%20Test%20Recommendations%20for%20Mumps%20-%20April%202010%20final.pdf>

Vaccine Recommendations

One dose of vaccine is 75% (62% to 91%) effective against mumps and two doses is about 85% (76% to 95%) effective. In addition, vaccination reduces the risk of mumps complications.

- **Anyone born in 1970 or later should receive two doses of mumps containing vaccine.**
Note: those born from 1970 to 1992 may have only received one dose of MMR vaccine.
- If an individual is unsure of their vaccination history, a booster dose of MMR can be given.

Infection Prevention and Control Recommendations

Use droplet precautions in addition to routine practices when caring for a suspect or confirmed case of mumps.

Immediately report any suspect or confirmed cases of mumps to the Communicable Diseases Program at (705) 721-7520 or 1-877-721-7520 extension 8809 during business hours or after hours to 1-888-225-7851.