

TO: Chittenden County Health Care Providers, Hospitals, and Ambulatory Care Centers; Vermont College and University Student Health Centers

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MUMPS ADVISORY

Summary - Confirmed Mumps Case in a Saint Michael's College student

A confirmed case of mumps has been identified in a Saint Michael's college student. Close contacts of the student who may have been exposed between January 18 and January 23 have been notified.

Consider Mumps When Evaluating Clinically Compatible Illnesses

Mumps is a contagious viral infection characterized by the acute onset of unilateral or bilateral, tender swelling of parotid or other salivary glands. Parotitis is often preceded by a nonspecific prodrome, which may include low-grade fever, malaise, myalgia, and headache. An estimated 30% of mumps infections may be asymptomatic or manifest primarily as a respiratory infection. Complications or other presentations are usually mild but can include orchitis, oophoritis, and pancreatitis. Rare, but severe, complications include deafness, meningitis, and encephalitis. In recent U.S. mumps outbreaks, the majority of cases had received two doses of MMR vaccine. Therefore, a history of appropriate vaccination does not rule out mumps in persons with compatible symptoms.

Mumps is transmitted from person to person by contact with infectious respiratory droplets or saliva. The incubation period is 16 to 18 days (range 12-25 days) from exposure to onset of parotitis. Persons are contagious from 2 days before through 5 days after onset of parotitis.

- Consider mumps in persons with acute parotitis or other salivary gland swelling, or orchitis or oophoritis, unexplained by another more likely diagnosis, regardless of vaccination history.
- Use droplet and standard precautions when caring for suspect or confirmed cases and verify that healthcare workers likely to encounter these patients have documented immunity.

Report all suspected and confirmed cases to the Health Department's Infectious Disease - Epidemiology program at 802-863-7240.

Test for Mumps

The preferred method for confirming acute mumps infection is detection of mumps virus from a buccal specimen by reverse transcriptase-polymerase chain reaction testing (RT-PCR). Collection of a buccal specimen within 1 to 3 days of parotitis onset is optimal, although virus

may be detected for up to 9 days. Prior to obtaining the specimen, the parotid gland, which extends from in front of the ear to the angle of the jaw, should be massaged for 30 seconds.

Acute infection may also be laboratory confirmed by the presence of mumps IgM antibody or a significant rise in mumps IgG antibody titer between acute- and convalescent-phase serum specimens. However, interpretation of mumps IgM results should be made with caution, as the serologic response may be attenuated or absent in vaccinated persons, and false-positive IgM results are possible due to cross-reactivity with other viruses.

- Collect a buccal swab using a flocced polyester fiber or other synthetic swab. Swabs should be placed in 2ml of standard viral transport medium.
- Collect 7-10 ml of blood in a red-top or serum-separator tube.
- Following collection, buccal and serum specimens should be maintained at 4°C and shipped on cold packs within 24 hours.

Treatment

There is no treatment for mumps, only supportive care. Nonsteroidal anti-inflammatory drugs, such as ibuprofen or naproxen, may alleviate fever, pain and swelling. Increased fluid intake and rest are encouraged.

Prevent New Cases

Exclude – Isolate suspected and confirmed mumps cases and instruct them not to return to school, work, or other contact until the sixth day after onset of parotitis. Individuals who develop signs or symptoms of mumps should contact their healthcare provider prior to presenting for evaluation to ensure proper precautions and control measures are taken to prevent the further spread of disease.

Vaccinate - Vaccination is the best protection against mumps. Two doses of MMR vaccine are recommended for all children with the first dose given at 12-15 months of age and the second dose at 4-6 years of age, but before kindergarten entry.

For providers participating in the Vermont VFC/VFA program, contact the Health Department's Immunization program at 802-863-7240 for information about ordering vaccine.

Mumps Information for Clinicians

Resources for clinicians are available on the Health Department's website:

<http://www.healthvermont.gov/immunizations-infectious-disease/other-reportable-diseases/mumps>. If you have questions, contact the Vermont Department of Health, Infectious Disease - Epidemiology program at 802-863-7240.