

Mumps Advisory, Windham County

To: Windham County Health Care Providers, Hospitals, and Ambulatory Care Centers

From: Susan Schoenfeld RN, MSPH
Deputy State Epidemiologist

During the past week, two individuals suspected to have mumps have been reported to the Department of Health. These individuals did not have contact with each other. Neither had a known exposure to mumps or significant travel history. Both live full or part time in Windham County.

- An adult individual with onset of illness March 30 had clinical symptoms consistent with mumps and a positive mumps IgM serologic test. This individual was born before 1957, does not recall whether or not he was infected as a child, but had household exposure to mumps when his children were small.
- A fully immunized school age child (onset of illness April 10) had symptoms consistent with mumps. This child does not attend public school. Laboratory test results will not be available until the week of April 20. Due to limitations of available mumps testing, mumps can only be confirmed and not definitively ruled out by these tests.
- Consider mumps in the differential diagnosis of patients presenting with compatible clinical and epidemiological features.
- People who have mumps can be asymptomatic or may not be aware of any exposure to mumps. Mumps may also occur in fully vaccinated people (two doses of the vaccine is only about 90% effective).
- **Report suspected cases of mumps** to the Vermont Department of Health Infectious Disease program by calling 802-863-7240 or 1-800-640-4374 [in Vermont]. An epidemiologist is available 24/7.
- **To arrange for mumps testing** through the Vermont Department of Health Laboratory for cases meeting the clinical case definition and epidemiologic criteria described below — contact the Infectious Disease program (contact information above).
- Two doses of a mumps-containing vaccine is the most effective way of preventing mumps. Please assess the vaccination status of your health care workforce and ensure they are appropriately protected. Specific recommendations can be found at:
<http://www.immunize.org/catg.d/p2017.pdf>

Mumps Disease

Early symptoms are nonspecific, and include myalgia, lack of appetite, malaise, headache, and low-grade fever. Parotitis is the most common manifestation and occurs in 30 percent to 40 percent of infected persons. Parotitis may be unilateral or bilateral, and any combination of single or multiple salivary glands may be affected. Parotitis tends to occur within the first 2 days and may first be noted as earache and tenderness on palpation of the angle of the jaw. Symptoms tend to decrease after 1 week. The symptoms usually start 16 to 18 days after a person has been exposed to the mumps virus, but can start anywhere from 12 to 25 days after exposure. As many as 20 percent of mumps infections are asymptomatic, and 40 percent to 50 percent may have non-specific or only respiratory symptoms. A single dose of mumps vaccine is estimated to be 80 percent effective, while two doses are about 90 percent effective.

Mumps diagnosis

Laboratory testing is recommended when there is a suspicion that a patient may have mumps:

- Clinical case definition: acute onset of unilateral or bilateral tender, self-limited swelling of the parotid or other salivary gland, lasting 2 or more days, and without other apparent cause.

and

- Epidemiologic criteria: travel to an area experiencing mumps and/or direct contact with a person with known or suspected mumps.

Less strict epidemiologic criteria may be considered for unvaccinated individuals.

The Vermont Department of Health Laboratory can arrange diagnostic testing for mumps at the CDC in selected circumstances. Contact the Infectious Disease program to pre-arrange testing.

Serology: IgM antibodies usually become detectable within 3 to 4 days of clinical illness and reach a peak about 1 to 2 weeks after onset. However, IgM may be transient or missing in persons who have had one or more doses of mumps-containing vaccine. As a result, a negative IgM does not rule out mumps. Serum should be collected at least 4 days after onset of clinical illness for IgM testing. **Mumps viral culture:** Viral culture is the recommended test for the confirmation of mumps virus. Optimal specimen collection is within 5 days of symptom onset.

Serum for IgM and viral specimens should be handled as per facility routine. Under certain circumstances, with prior arrangement, specimens for serology and viral culture may be submitted through the Vermont Department of Health Laboratory to be sent to CDC for diagnostic testing. Mumps virus immune status (IgG) testing can also be performed by the Health Department Laboratory to determine immune status in asymptomatic persons. Laboratory specimens must be accompanied by a Clinical Test Request Form (Micro 220). http://healthvermont.gov/enviro/ph_lab/documents/VDHclinical_form.pdf

For additional information about this Advisory, please call (802) 863-7240 [1-800-640-4374 in Vermont].