

## **Mumps Advisory, Bennington County**

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

From: Susan Schoenfeld RN, MSPH  
Deputy State Epidemiologist

An adult resident of Bennington County has been diagnosed with a probable case of mumps. The individual traveled outside the U.S. during the period of probable exposure. The infectious period for this individual was April 20 through May 3, 2009. The Vermont Department of Health is in the process of contacting individuals with known close exposure during the infectious period. There may have been limited community exposure in the Bennington County area during this period.

- Consider mumps in the differential diagnosis of patients presenting with compatible clinical and epidemiological features. Secondary cases would be expected to occur between May 4 and May 28.
- People who have mumps may not have symptoms, or may not be aware of any exposure to mumps. Mumps may also occur in fully vaccinated people. Two doses of the vaccine is about 90 percent effective.
- **Report suspected cases of mumps** to the Vermont Department of Health Infectious Disease section by calling 802-863-7240 or 1-800-640-4374 (within Vermont only). An epidemiologist is also available after regular working hours.
- Contact the Infectious Disease section to arrange for mumps testing through the Vermont Department of Health Laboratory for cases meeting the clinical case definition and epidemiologic criteria described below.
- 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 non-specific, and include myalgia, lack of appetite, malaise, headache, and low-grade fever. Parotitis is the most common manifestation and occurs in 30 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 two 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 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 CDC in selected circumstances. Contact the Infectious Disease section 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 people 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](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].