

NEW YORK STATE DEPARTMENT OF HEALTH MUMPS ADVISORY
**Please distribute immediately to the Camp Director, Camp Physician/ Health Director,
Camp Nurse, Camp Emergency Medical Services, Camp Infirmary Services Staff**

BACKGROUND

- The New York State Department of Health (NYSDOH) has been following a large outbreak of mumps that originated in Iowa, has spread to neighboring Midwestern states, and has the potential to spread further. To date, one case of mumps linked with the outbreak in the Midwest has been reported in New York State. Risk of spread of mumps to and within New York State camps is high. NYSDOH is requesting that camp administrators and medical providers increase awareness for mumps in camp attendees of their camps, in particular among those from outside the United States.
- Any suspected case of mumps should be reported promptly to the local health department (LHD) of the county where the camp is located. LHDs should notify the NYSDOH Immunization Program in order to arrange for appropriate testing for confirmation.
- It is suggested that camps strongly consider requiring 2 doses of measles, mumps, and rubella (MMR) vaccine for their campers and staff.

MUMPS VACCINE INFORMATION

In a recent vote on May 17, 2006, the Advisory Committee on Immunization Practices (ACIP) recommended that two doses of mumps vaccine be required to confer immunity to mumps. Most U.S. residents receive 2 doses of mumps vaccine in the form of the combined MMR vaccine, first at age 12-15 months, and a second dose upon primary or post-secondary school entry. Experience with outbreaks has shown two doses of mumps vaccine to be more effective than one dose. The NYSDOH currently recommends all campers and camp employees be vaccinated for mumps, preferably with two doses. Please refer to the attached letter for further details on vaccine recommendations.

MUMPS OUTBREAK IN THE MIDWEST

As of May 16, 2006, 3,849 mumps cases have been reported to the CDC from 12 outbreak-affected states. Disease is being diagnosed in both vaccinated and unvaccinated individuals. The majority of cases reported from all states are in two-dose MMR recipients. This pattern would be expected in populations with high two-dose MMR vaccine coverage; limited data suggest that two doses protect about 90 percent of recipients from mumps. The predominant age group affected in most states reporting cases is 18-24 year olds. Initially in Iowa, about half the reported cases were among this age group, many of whom are college students, however cases range from < 1 to > 90

years of age. There have been reports of infectious individuals traveling by airplane, as well as exposure at intercollegiate sporting events.

REPORTING DETAILS

The camp health director or other healthcare provider should discuss the symptoms of mumps with staff and stress the need to report illness to the director at the first sign of the disease. Healthcare providers should increase their index of suspicion for mumps in clinically compatible cases, especially those with recent exposure to international travel or travel to the Midwestern United States. The local health department should be notified of any suspect case immediately.

MUMPS EPIDEMIOLOGY

Mumps is an acute viral illness that presents initially with non-specific muscle aches, appetite loss, malaise, headache, and low-grade fever. Swelling of the parotid gland (located in the cheek), parotitis, is the most common manifestation, and occurs in 30-40% of infected persons. Parotitis may be on one or both sides and swelling of the other salivary glands (under chin or jaw line) may also be seen. Parotitis tends to occur within the first 2 days of illness and may first be noted as earache or tenderness at the angle of the jaw. Symptoms tend to lessen after 1 week and usually resolve within 10 days. The incubation period of mumps is usually 14 to 18 days, with a range of 14 to 25 days. An individual with mumps is considered infectious from 3 days before to 9 days after the onset of parotitis.

Mumps may be complicated by encephalitis or aseptic meningitis (inflammation of the brain or the thin coating of the brain and spinal cord characterized by severe headache, light sensitivity, confusion, and nausea/vomiting); orchitis (testicular pain and swelling) in up to 50% of post-pubertal males; oophoritis (ovarian inflammation, characterized by abdominal pain) in 5% of post-pubertal females; pancreatitis (characterized by abdominal pain and vomiting); deafness; and myocarditis (inflammation of the heart, characterized by chest pain and severe fatigue).

Mumps is usually suspected clinically by the presence of parotitis. Although other viruses can cause parotitis, in an outbreak setting the cause is almost always mumps (see below, Mumps Diagnosis). Serology (blood test) is the most common method used to diagnose mumps. There is no effective post-exposure treatment to prevent or lessen mumps. However, mumps vaccination after exposure is not harmful, may possibly avert later disease, and is recommended in individuals not vaccinated previously.

MUMPS DIAGNOSIS

The diagnosis of mumps is usually suspected based on clinical manifestations, in particular the presence of parotitis. Though other viruses can cause parotitis, in an outbreak setting the cause is almost always mumps. Serology is the most common method used to diagnose mumps. Diagnosis is made by finding a positive mumps IgM

antibody or a significant increase in IgG antibody between acute and convalescent specimens. In those who are previously immunized against mumps, a positive IgM may not be seen. Mumps virus can be isolated from clinical specimens, including saliva, urine, and cerebrospinal fluid. If virus isolation is attempted, the specimen should be collected within the first 5 days of illness.

ADDITIONAL INFORMATION

For additional information please call your local health department or the NYSDOH Immunization Program at 518-473-4437. More information can also be obtained at the NYSDOH website:

(http://www.health.state.ny.us/nysdoh/communicable_diseases/en/pdf/mumps.pdf) and CDC's National Immunization Program website (<http://www.cdc.gov/nip/diseases/mumps/default.htm>)