

Public Health Advisory

Mumps Update — April 20, 2006

Current Situation

On March 30th, the Centers for Disease Control and Prevention (CDC) announced an ongoing outbreak of mumps occurring in Iowa and neighboring states. Through April 17, the Iowa Department of Public Health has reported a total of 815 cases; Iowa typically reports about 5 cases of mumps each year. The states of Minnesota, Kansas, Illinois, Nebraska, Wisconsin, Missouri, and Oklahoma have reported a total of 350 cases, and several other states are investigating possible cases. The Iowa Department of Public Health has also identified two cases that were potentially infectious during travel on nine different commercial flights involving two airlines during late March and early April.

While cases have been reported in all age groups, from as young as 1 year to as old as 77 years, most cases have occurred in college aged persons 18-22 years. Nearly three-quarters of cases reported have been vaccinated against mumps. Although this may seem surprising, in a highly vaccinated population, a majority of the cases will occur in vaccinated individuals because the vaccine is not 100% effective.

Symptoms and Transmission

Mumps is an acute viral infection characterized by fever and swelling of the salivary glands; symptoms last about a week. Complications can include inflammation of the testicles or ovaries, meningitis or encephalitis, and deafness. It is estimated that 20%30% of cases do not experience any symptoms. Because other diseases can cause swollen salivary glands, laboratory confirmation of the disease is essential.

Mumps is spread through airborne transmission or by direct contact with infected droplet nuclei or saliva. It typically takes about two weeks from exposure to the disease until a person develops symptoms, although it can be as long as 24 days. Persons with mumps are infectious to others from three days before the onset of disease to about four days after.

Prevention

Although there is no treatment for mumps, it can be prevented by vaccination, which will prevent the disease in about 95% of people. All fifty states require that children be vaccinated for mumps before entering school. In general, people born before 1957 are considered to be immune to mumps due to natural infection during childhood. Persons who have not received two doses of a mumps-containing vaccine are encouraged to receive the appropriate vaccination.

Implications for Southern Nevada

As southern Nevada receives about 40 million visitors each year, we can expect that persons incubating or ill with mumps will travel through our community potentially exposing others. This is in addition to southern Nevadans who may travel to affected areas and later return home ill after being exposed to mumps virus.

Because people can unknowingly transmit disease before the onset of their symptoms, it is likely that, until the outbreak is contained, infectious persons will continue travel to southern Nevada, and potentially expose other visitors and residents. Unfortunately, there is no way to identify these individuals, and thus there is no way to prevent transmission in these situations. Thus, control



strategies focus on the rapid identification of illness in either employees or visitors, isolation of ill guests, and prevention of disease through vaccination, frequent hand-washing, and using a tissue when coughing or sneezing.

Dealing With Ill Guests

Because of the long incubation period for mumps, it is possible that persons may develop symptoms of disease while visiting Southern Nevada. Suspect cases of mumps should be referred to a physician for diagnosis, and the Office of Epidemiology should be notified at 759-1300, option #2. In order to prevent the transmission of disease, visitors ill with mumps should be confined to their rooms, and not be allowed to enter public areas of the resort; this includes restaurants and guest amenities.

In order to protect staff members who are dealing with ill visitors, employees should wear a surgical mask and gloves when entering the visitor's room or when dealing with ill guests; special air handling and ventilation are not necessary. Employees should also wash their hands after working with ill visitors. Any employees who have not had mumps, or have not received two vaccinations with a mumps-containing vaccine (e.g. MMR) should not be allowed to work with ill guests, and should be vaccinated.

Environmental Cleanup

The mumps virus can survive for about a day, on average, outside the human body. Although extensive cleaning of most resort areas is not necessary, rooms of known mumps cases should be deep-cleaned with a hospital-grade disinfectant upon checkout to ensure the safety of other guests. Staff involved in cleaning the room should use the same precautions used by staff dealing with ill guests.

Ill Employees

Employees suspected of having mumps should be excluded from work until they have been diagnosed by a physician; as other diseases can cause inflammation of the salivary glands, laboratory confirmation is essential. In addition, the Office of Epidemiology (OOE) should be notified at 759-1300, option #2. The OOE investigates all cases of known or suspected mumps, and is responsible for managing work exclusions. The OOE will contact the employer of any person suspected of having mumps, and exclude the employee according to Nevada Administrative Code (NAC) 441A.625, which requires that persons with mumps be excluded from contact with susceptible persons for at least nine days after the onset of their symptoms.