

# Iowa Mumps Outbreak Spreads to Nearby States

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More than 1,000 cases of mumps in nine states have been confirmed in the nation's largest mumps outbreak in decades, announced Dr. Julie Gerberding, director of the Centers for Disease Control and Prevention in Atlanta.

The outbreak of mumps cases began in Iowa in December 2005 among college students, whose close living conditions make them susceptible to the virus, Dr. Gerberding said in a press briefing.

By comparison, a yearly average of 265 mumps cases have been reported for the entire country since 2001, while Iowa previously averaged just 5 cases per year since 1996, the CDC reported (MMWR [Dispatch] 2006;55:1-3).

"As clinicians become more aware of what we are looking for, we expect more cases will be diagnosed," Dr. Gerberding said. "A lot of clinicians have never seen a case of mumps; not everyone presents with swollen glands."

Most cases occurred in people aged 18-25 years, many of whom had received either one or two doses of the mumps vaccine. Cases are under investigation in Illinois, Indiana, Kansas, Michigan, Minnesota, Missouri, Nebraska, and Wisconsin. Dr. Gerberding declined to name additional states in which suspected but unconfirmed cases are under investigation.

In addition, two individuals have been identified in Iowa who were potentially infectious during nine different commercial flights between March 26 and April 2, to or from cities outside the Midwest, including Tucson, Ariz.; Dallas; and Washington, the CDC said in an official health advisory issued on April 14.

Mumps, an acute viral upper respiratory infection, may present initially with nonspecific symptoms such as myalgia, anorexia, malaise, headache, and fever, and progress to acute onset of unilateral or bilateral tenderness and swelling of parotid or other salivary glands. An estimated 30%-70% of unvaccinated individuals develop typical acute parotitis, but up to 20% of infections are asymptomatic, and nearly 50% are associated with nonspecific symptoms or symptoms that are primarily respiratory, with or without parotitis. Severe complications can include deafness, orchitis, oophoritis, mastitis, meningitis/encephalitis, and spontaneous abortion.

Most people with mumps are ill for about a week, and they can be contagious from 3 days before symptoms appear until about 9 days after the appearance of symptoms, according to the CDC.

"It's very important for health care workers to have a second dose of the MMR vaccine," Dr. Gerberding emphasized.

Health care providers in affected areas are advised to offer the MMR vaccine to individuals without evidence of immunity, including all unvaccinated individuals born after 1957. In addition, a second dose is recommended for school-age children, college students, and other high-risk groups.

Most children have received both doses,

but vaccine coverage rates will vary with location and population, Dr. Gerberding said.

The supply of MMR vaccine is adequate to cope with the outbreak, Dr. Gerberding said. The CDC will assist states with vaccine supplies as needed, and Merck has donated 25,000 doses to the CDC's stockpile.

"Vaccine coverage matters," Dr. Gerberding said. "We have no information to suggest that there is any problem with the vaccine." The problem, she explained, is a

lack of complete coverage with a vaccine that is not 100% effective. About 10% of people who receive both doses simply fail to respond and remain susceptible to mumps.

Individuals suspected to have mumps should be tested and any positive cases reported immediately to local public health officials. Such individuals should be isolated for 9 days after symptom onset, the CDC advised.

Physicians should familiarize themselves

with the clinical presentations of mumps, said Dr. Mary Anne Jackson, chief of infectious disease at Children's Mercy Hospital, Kansas City, Mo. Some patients complain of pain at the corner of the jaw, or of an earache that can be confused with otitis. Ovarian inflammation, which may occur in up to 5% of infected post-pubertal females, may be confused with appendicitis.

At the time of the press briefing, no deaths related to the mumps outbreak had been reported, Dr. Gerberding said. ■

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