



Indiana State Department of Health

Indiana Health Alert Network Advisory – April 6, 2016

UPDATE: CONFIRMED CASES OF MUMPS AT UNIVERSITIES IN INDIANA

The Indiana State Department of Health (ISDH), in collaboration with the respective universities and county health departments, continues to investigate confirmed outbreaks of mumps in students at four universities in Indiana –Butler University in Indianapolis, Indiana University (IU), Bloomington, Indiana University-Purdue University Indianapolis (IUPUI), and **Purdue University**. As of Tuesday, April 6, 2016, confirmed case counts total 24 at Butler, 18 at IU Bloomington, 4 at IUPUI, and **3 at Purdue**. In addition, fourteen cases unrelated to the university outbreaks have been identified in central Indiana. While incidence of cases appears to be slowing, it is important to note that all three universities recessed for spring break recently (between March 7-11 for Butler, and March 14-18 for IU Bloomington, Purdue, and IUPUI), and cases could increase again.

Mumps is a viral infection spread through respiratory droplets. Initial symptoms are often non-specific and include myalgia, malaise, headache, loss of appetite, and low-grade fever, and parotitis, or swelling of the salivary gland below the ear, typically lasting two or more days. Parotitis may be unilateral or bilateral. Complications of mumps are relatively uncommon, but can include orchitis, oophoritis, encephalitis, pancreatitis, and transient deafness. Patients infected with mumps are considered most infectious between approximately 2 days before and 5 days after the onset of parotitis and should be instructed to self-isolate during this time. Altered clinical presentations may occur in fully vaccinated persons, and approximately one-third of all mumps cases are asymptomatic or experience no parotitis.

Health care providers are strongly encouraged to collect a buccal swab **within five days of parotitis onset on any individual (vaccinated or not) presenting with parotitis for testing at the ISDH Laboratories.** Acute mumps infection can also be confirmed by the presence of serum mumps IgM and a significant rise in IgG antibody titer in acute- and convalescent-phase serum specimens. Serology (IgG and IgM) should be requested through a reference laboratory and no authorization is necessary. **Mumps specimen collection and submission guidelines for virology (PCR) testing at the ISDH Laboratory can be found [here](#). Specimen authorization is required prior to submission at this time for mumps testing at ISDH Laboratory.** Please contact the ISDH Epidemiology Resource Center at 317-233-7125 for testing information, authorization, and additional submission guidance. Specimens will not be tested until authorization is received and results for specimens that have not been authorized prior to submission may be significantly

delayed. Appropriate laboratory specimens are essential for the confirmation of mumps virus, as a number of other etiologies can cause swollen salivary glands. Large universities in Iowa, Kentucky, New Hampshire, Massachusetts, California, and Illinois have reported mumps outbreaks recently, so providers are also encouraged to ask about recent domestic or international travel or exposure history for patients suspected of mumps.

The Advisory Committee on Immunization Practices (ACIP) recommends two doses of measles, mumps, and rubella (MMR) vaccine to protect against mumps. Children and adults who are not immunized or are not up-to-date with immunization should receive MMR vaccine. Two doses of MMR vaccine are considered about 88% effective (range 66%-95%) in preventing mumps infection, however fully vaccinated persons may still contract the disease. Health care providers are encouraged to be vigilant for (compatible) clinical symptoms **compatible with mumps** despite vaccination status. Students and staff of Butler University and IU-Bloomington may receive a third dose of measles, mumps and rubella (MMR) vaccine to protect against the ongoing outbreaks of mumps on those campuses at no cost by contacting the respective local health departments (i.e. Marion County for Butler and Monroe County for IU). At this time third doses are not being provided at the local health department for IUPUI or Purdue students. Individuals may also seek vaccination with a third dose at their healthcare provider; however, there may be out of pocket cost incurred.

For questions or concerns, contact Mugdha Golwalkar, ISDH Vaccine-Preventable Disease Epidemiologist, at mgolwalkar@isdh.in.gov or at 317-233-7125, or after hours the ISDH duty officer at 317-233-1325. More information about mumps infection and outbreak case counts can be found at <http://www.in.gov/isdh/25450.htm>.