

Vaccination Recommendations for Persons Affiliated With University of Illinois, Urbana-Champaign

Sixty-nine cases of mumps have been diagnosed in persons with an affiliation with the University of Illinois at Urbana-Champaign (UIUC) since January 1, 2015. Most had received two doses of measles-mumps-rubella (MMR) vaccine. Although Indiana is **not** currently experiencing an increase in mumps cases as a result of this outbreak, we want to alert local health departments and providers about the following recommendation being made in Illinois in the event that students or faculty attending UIUC reside in your jurisdiction and seek vaccination prior to their return to school.

Mumps is a viral infection spread through respiratory droplets. The incubation period of mumps is 12-25 days after exposure. Initial symptoms are often non-specific and include myalgia, malaise, headache, and low-grade fever. Parotitis typically develops 16-18 days after exposure. Some people with mumps are asymptomatic or develop very mild symptoms. Orchitis, or testicular swelling (in post-pubertal males), is the most commonly described complication of mumps infection, with about 3.3-10% of infected males reporting this complication in the post-vaccine era. Much less commonly, oophoritis, encephalitis, pancreatitis, and transient deafness can also be complications of mumps infection. Patients with mumps infectious are considered most infectious between approximately 6 days before and 5 days after onset of parotitis.

The Centers for Disease Control and Prevention (CDC) recommends 2 doses of measles, mumps and rubella (MMR) vaccine, the first dose administered at ages 12 through 15 months and the second dose administered at 4 through 6 years. Persons not up to date on their MMR vaccinations should consult their healthcare provider to ensure completion of the 2-dose series. Doses of vaccine must be spaced at least 4 weeks apart and the first dose should not be administered prior to 12 months of age.

Evidence indicates that a third dose of MMR vaccine can be helpful in controlling mumps outbreaks in university settings.^{1,2} The McKinley Health Center at UIUC, the Champaign-Urbana Public Health District and the Illinois Department of Public Health are recommending a third dose of MMR vaccine for UIUC students who have previously received two vaccinations. Most known outbreaks of mumps in recent years have occurred or started in congregate-living settings, so this is especially important for those planning on living in congregate settings such as dormitories, or fraternity or sorority houses. If possible, this extra dose of MMR vaccine should be obtained prior to returning to campus. Classes start on August 24 and students may begin returning to school between August 17 and 23.

Although the third dose is recommended it is not required to return to the UIUC campus. Students and their families should contact their health insurance company to verify coverage for a third MMR vaccine. Students may also contact their local health department to determine other vaccination options available in their county. The university is holding vaccine clinics for students currently on campus. Information about future vaccination opportunities through McKinley Health Center will be posted at the McKinley website: <http://www.mckinley.illinois.edu>.

This recommendation highlights the need for providers to regularly inquire if their patients attend university and/or live in congregate settings (inside or outside of Indiana), since these settings pose higher risks for infectious disease transmission. Indiana Code 21-40-5-2 requires that a state educational

institution may not permit a student to matriculate in a residential campus unless the student had documentation of immunity to: diphtheria, tetanus, measles, mumps and rubella. This code applies to all public post-secondary schools with on-campus housing.

If you have further questions or concerns about this recommendation or the ongoing mumps outbreak at UIUC, please call or email Mugdha Golwalkar, ISDH Vaccine-Preventable Disease Epidemiologist, at 317-233-7112 or mgolwalkar@isdh.in.gov. For questions about vaccination, please contact the ISDH Immunization Division at 800-701-0704 or immunize@isdh.in.gov.

1. Nelson, George E., et al. "Epidemiology of a Mumps Outbreak in a Highly Vaccinated Island Population and Use of a Third Dose of Measles–Mumps–Rubella Vaccine for Outbreak Control—Guam 2009 to 2010." *The Pediatric infectious disease journal* 32.4 (2013): 374-380.
2. Ogbuanu, Ikechukwu U., et al. "Impact of a third dose of measles-mumps-rubella vaccine on a mumps outbreak." *Pediatrics* 130.6 (2012): e1567-e1574.