



NEW YORK CITY DEPARTMENT OF  
HEALTH AND MENTAL HYGIENE  
Mary T. Bassett, M.D., M.P.H.  
*Commissioner*

**March 4, 2014**

**ALERT # 5: Mumps in New York City**

- 1) Twenty-seven cases of mumps have occurred in students at Fordham University.**
- 2) Keep suspect mumps cases isolated for 5 days following onset of parotitis.**
- 3) Immediately institute droplet precautions for patients with parotitis.**
- 4) If you suspect mumps, even if you do not have laboratory confirmation, report the case to the Health Department.**
- 5) If you suspect mumps, collect specimens and send to the Health Department for testing.**
- 6) Ensure that all patients and health care workers are up to date with measles-mumps-rubella (MMR) vaccination.**

**Distribute to All Primary Care, Infectious Disease, Emergency Medicine, Internal Medicine, Pediatrics, Family Medicine, Laboratory Medicine, and Infection Control Staff**

Dear Colleagues,

Twenty-seven cases of mumps in students attending Fordham University have occurred since January 12, 2014. Cases have ranged in age from 18 to 22 years and have occurred in students attending both the Bronx and Manhattan campuses. All cases had parotitis. One student was unvaccinated; the remaining students have at least one documented dose of mumps-containing vaccine. None of the cases have had complications of the disease.

Clinical Presentation

Mumps is an illness characterized by acute onset of unilateral or bilateral tender, self-limited swelling of the parotid or other salivary gland, lasting 2 or more days, without other apparent cause. The infectious period is from 2 days before onset of symptoms to 5 days after symptoms appear. The incubation period, from exposure to illness onset, ranges from 12 through 25 days. Less common manifestations of mumps include viral meningitis, viral encephalitis, orchitis, oophoritis, pancreatitis, and sensorineural hearing loss.

Transmission and Infection Control

In healthcare settings, providers should institute standard and droplet precautions. Exposed healthcare workers who do not have evidence of immunity at the time of exposure should be furloughed from day 12 through and including day 25 after exposure. Mumps cases at Fordham are being sent home or being isolated in their dormitory rooms.

Reporting

**Suspected cases of mumps should be reported to the Department of Health and Mental Hygiene (DOHMH) at 866-692-3641.** Reports should be made at time of initial clinical suspicion. **If you are considering the diagnosis of mumps and are ordering diagnostic testing, then report the case at that time.** Do not wait for laboratory confirmation to report as this delays institution of measures to prevent transmission.

### Laboratory Testing

Collect a buccal swab for mumps PCR as soon as mumps is suspected and blood for mumps IgM and IgG. Directions for obtaining an optimal specimen are available at <http://www.nyc.gov/html/doh/html/diseases/immum-provider.shtml>. Serology may be misleading in previously vaccinated persons, as confirmed cases may be IgG positive and IgM negative. Mumps PCR is critical for confirming the diagnosis and more likely to yield positive results in previously vaccinated persons compared to serology. When you call DOHMH to report the suspected case, we will arrange pick-up and transport of the specimens to the DOHMH laboratory. **Reporting suspected cases of mumps enables access to rapid testing through the DOHMH laboratory.** Use synthetic (non-cotton) swabs and place the swab in liquid, viral transport media. Refrigerate specimens after collection and transport on cold packs (4°C).

### Vaccination

Mumps vaccine should be given to children at 12 months of age with a second dose at 4-6 years of age. Individuals who are not fully vaccinated against mumps are at highest risk of infection. Only physician-documented doses of MMR vaccine are considered valid. If you are unsure of the vaccination status of a patient, DOHMH recommends administration of another dose to ensure they are fully immunized. There are no risks to receiving more than 2 doses of MMR, and the benefits of ensuring that the person is immune outweigh any theoretical risk. Vaccination histories of children can be obtained through the Citywide Immunization Registry at [www.nyc.gov/health/cir](http://www.nyc.gov/health/cir) or by calling 347-396-2400.

Estimates of effectiveness of mumps vaccine have ranged from 70% to 90% at preventing mumps disease. Because mumps vaccine is not fully effective at preventing illness, persons who are fully vaccinated may still develop mumps illness. As an example, at 90% effectiveness, 10 of every 100 people vaccinated would still be susceptible to infection. It is likely that without the high vaccination coverage at Fordham, the number of mumps cases would be much larger.

### Contacts of mumps cases

Mumps is spread via large respiratory droplets. Non-immune, close contacts are at risk for developing mumps and should be isolated at home for the incubation period from day 12 through and including day 25 after exposure and should **not** attend school or work. Although vaccination is not considered effective post-exposure prophylaxis against mumps, MMR vaccine should be administered to eligible close contacts (including parents and other household members) who do not have documentation of one or two live mumps-containing vaccinations, as age appropriate, to protect against subsequent exposures. Spring break at Fordham is scheduled for March 15<sup>th</sup> to 24<sup>th</sup> so students may be seen more widely throughout the country.

Thank you for your ongoing cooperation.

Sincerely,

*Jennifer Rosen*

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