



# Health Alert



Rahm Emanuel, Mayor

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Julie Morita, MD Commissioner

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## Local Public Exposures for Two Recent Measles Cases

### Summary and Action Items:

- **Two persons recently passed through Chicago while infectious with measles.** These cases are **unrelated** to each other. There is no measles outbreak or ongoing risk at O'Hare airport.
- Local public exposures for both cases are listed below. **Patients who report these exposures do not require any testing, regardless of vaccination status, unless they have symptoms.**
- As always, **report any cases of suspected measles to the Chicago Department of Public Health immediately.** Monday-Friday during working hours, call Enrique Ramirez at 312-746-5911. After hours, weekends, and holidays, call 311 and ask for the communicable disease physician on call.

**Background:** You and your patients may have heard press reports about persons with measles recently passing through the Chicago area. While both individuals traveled through O'Hare airport, the individuals were unrelated and had separately contracted measles before boarding their respective planes. They were not infected at the airport or on a plane and there is not a measles outbreak at O'Hare airport. **There is no reason for your patients to alter travel plans or for you to alter their routine vaccination schedules,** based on current information.

**Potential Exposures:** Below are the combined public locations where the two individuals spent time while infectious. Two hours have been added to the times after the individual left the locations, as measles virus can remain infectious in the air and on surfaces for two hours after an infected person leaves the area.

Date	Location	Potential Exposure Time
January 9, 2018	Chicago O'Hare International Airport, Terminal 5	8:30am-12:00 noon
January 10, 2018	Chicago O'Hare International Airport, Terminals 1 and 5	6:30am-1:00 pm
January 10, 2018	Concourse Office Plaza 4709 Golf Road, Skokie	11:00am-2:00 pm
January 10-11, 2018	NorthShore Evanston Hospital Emergency Department	11:00pm-1:20am January 10-January 11
January 10-11, 2018	NorthShore Skokie Hospital Emergency Department	11:50pm-3:30am January 10-January 11
January 11-13, 2018	Advocate Children's Hospital Park Ridge Emergency Department	3:15pm-2:15am January 11-January 13

### Symptoms:

- Patients typically present initially with a prodrome: fever plus conjunctivitis, coryza, cough and Koplik spots (small spots with white or bluish-white centers on an erythematous base on the buccal mucosa).
- A characteristic red blotchy rash appears on the 3<sup>rd</sup> to 7<sup>th</sup> day of symptoms; the rash typically begins on the face, then becomes generalized, and lasts 4-7 days. Leukopenia is common.
- The disease is more severe in infants and adults than in children. Complications may result from viral replication or bacterial superinfection, and both acute and delayed mortality have been reported in infants and children.

**Transmission:** Measles is a highly communicable viral disease.

- Transmission is airborne by droplet spread.
- Incubation period is about 10 days (range 7-21 days) from exposure to onset of fever, and usually 14 days until rash appears. Based on the exposures above, someone who is susceptible and infected could develop symptoms as late as January 31-February 3, depending on the exposure.
- Period of communicability is 4 days before rash appearance until 4 days after rash appearance.

**Diagnosis:** Usually based on clinical and epidemiological factors, with laboratory confirmation.

- Measles-specific IgM antibodies can be detected 3-4 days after rash onset and detection confirms diagnosis, as does a significant rise in antibody concentrations between acute and convalescent sera.
- RT-PCR can be used to identify measles RNA in urine, blood, and nasopharyngeal mucus.
- If you are considering testing a patient for measles, please call CDPH for further guidance.

**Prevention:**

- As always, **whenever a patient presents with rash and fever, ask about a history of international travel**, contact with foreign visitors, transit through an international airport, or possible exposure to a measles patient in the 3 weeks prior to symptom onset. Suspect measles in patients with such a history. Immediately mask and isolate the patient and call CDPH.
- Routine childhood immunization (e.g. MMR) at age 12-15 months induces immunity in 94-98% of recipients; the second routine dose increases immunity levels to 97-99%. **There is no need to alter childhood vaccination schedules at this time based on the public exposures above; please call CDPH with questions.** Encourage on-time vaccination for children.
- Nonimmune individuals can receive vaccination or immune globulin early in the incubation period to help prevent disease. Health departments have already contacted individuals for whom this was appropriate and possible. There is no current role for immune globulin administration based on the timing of above exposures. If you see an older child or adult who is not immune (e.g. did not receive childhood vaccines), as always, offer MMR.
- See attached our standard guidance for measles isolation precautions and testing recommendations.

**Public Health Action:**

- Whenever a person is diagnosed with measles anywhere in the U.S., and travel is identified during the infectious period, the Centers for Disease Control and Prevention (CDC) works with the carrier (airline, train, bus) to identify travelers at risk who may have been in close contact with the index patient. The CDC then reaches out to state/local health departments across the country, who in turn contact and assess the travelers. **We have already contacted Chicago residents who were at risk from sharing planes with these individuals.**
- When health care exposures are identified, health departments work with the health care provider to assess patients, staff, and other contacts who may have been exposed. These individuals are contacted individually by the health department or health care provider. This is already underway in this situation.

**Contact:**

- Please call CDPH with any questions or concerns about measles. During working hours, call Enrique Ramirez at 312-746-5911 or Immunization Program Medical Director Marielle Fricchione, MD at 312-746-5382 or [marielle.fricchione@cityofchicago.org](mailto:marielle.fricchione@cityofchicago.org).
- After hours, weekends, and holidays, call 311 and ask for the communicable disease physician on call.

**Resources:**

- *Measles Isolation Precautions and Testing Recommendations for Chicago* (attached)
- Measles: For Healthcare Professionals: <https://www.cdc.gov/measles/hcp/>
- [2015 Red Book. Section 3: Measles. p535-547.](#)
- Control of Communicable Diseases Manual, 19<sup>th</sup> ed. American Public Health Association