



## California Department of Public Health Healthcare Facility Infection Control Recommendations for Suspect Measles Patients March 2014

To minimize the risk of measles transmission in healthcare settings, healthcare personnel should:

1. Query patients with a febrile rash illness\* 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.
2. If measles is strongly suspected in a patient who has not yet presented at the facility, encourage such patients to be evaluated at a facility with an airborne infection isolation room if this is feasible (many emergency departments have such rooms).
3. If suspect measles patients are being evaluated in a clinic or urgent care setting, schedule them at the end of the day when other patients will not be present.
4. Mask suspect measles patients immediately. If a surgical mask cannot be tolerated, other practical means of source containment should be implemented (e.g., place a blanket loosely over the heads of infants and young children suspected to have measles when they are being transported through the waiting room or other common areas).
5. Do not allow suspect measles patients to remain in the waiting area or other common areas; isolate them immediately in an airborne infection isolation room if one is available. If such a room is not available, place patient in a private room with door closed and evaluate patient as soon as possible.
6. If possible, allow only healthcare personnel with documentation of two doses of live measles vaccine or laboratory evidence of immunity (measles IgG positive) to enter the patient's room.
7. Regardless of immune status, all healthcare personnel entering the patient room should use respiratory protection at least as effective as an N95 respirator per CalOSHA regulations.
8. If possible, do not allow susceptible family members or visitors in the patient's room.
9. Depending on the number of air changes per hour\* (see page 2), do not use the examination room for up to one hour after the possibly infectious patient leaves.
10. Notify the local health department immediately of any suspect measles patients; arrange for measles testing at a public health laboratory.
11. Notify any location where the patient is being referred for additional clinical evaluation or laboratory testing about the patient's suspect measles status and do not refer suspect measles patients to other locations unless appropriate infection control measures can be implemented at those locations.
12. Instruct suspect measles patients and exposed persons to call ahead and inform all healthcare providers of the possibility of measles prior to entering a healthcare facility so that appropriate infection control precautions can be implemented.
13. Make note of the staff and other patients who were in the area during the time the suspect measles patient was in the facility and for one hour after they left. If measles is confirmed in the suspect case, exposed people will need to be assessed for measles immunity.

For more information on measles and measles testing, please see:

<http://www.cdph.ca.gov/HealthInfo/discond/Pages/Measles.aspx>

For additional infection control information, please see the CDC "Guideline for Isolation Precautions" at:

<http://www.cdc.gov/hicpac/2007IP/2007isolationPrecautions.html>

\*Measles typically begins with a mild to moderate fever accompanied by cough, coryza, and conjunctivitis. Two to three days later, Koplik's spots (tiny red spots with bluish-white centers inside mouth on the lining of the cheek), which are a characteristic sign of measles, may appear. At this time the fever spikes, often as high as 104-105°F. At the same time, a red blotchy maculopapular rash appears that may become confluent, usually appearing first on the face - along the hairline and behind the ears. This slightly itchy rash rapidly spreads downward to the chest and back and, finally, to the thighs and feet. In approximately one week, the rash fades in the same sequence that it appeared.

**TABLE 1. Air changes per hour (ACH) and time required for removal efficiencies of 99% and 99.9% of airborne contaminants\***

ACH	Minutes required for removal efficiency†	
	99%	99.9%
2	138	207
4	69	104
6	46	69
12	23	35
15	18	28
20	7	14
50	3	6
400	<1	1

\* This table can be used to estimate the time necessary to clear the air of airborne *Mycobacterium tuberculosis* after the source patient leaves the area or when aerosol-producing procedures are complete.

† Time in minutes to reduce the airborne concentration by 99% or 99.9%.

From: Guidelines for Preventing the Transmission of *Mycobacterium tuberculosis* in Health-Care Settings, 2005 at: <http://www.cdc.gov/mmwr/pdf/rr/rr5417.pdf> (page 20)