



Measles Testing: Lane County

Public Health

151 W. 7th Avenue
Eugene, OR 97401

Communicable Disease

Room 310
541-682-4041
Fax: 541-682-2455

Prevention

Room 410
541-682-3031
Fax: 541-682-8700

Environmental Health

Room 430
541-682-4480
Fax: 541-682-7459

Maternal Child Health

Room 210
541-682-8702
Fax: 541-682-3925

Vital Records

Room 520
541-682-4045
Fax: 682-9825

WIC

Room 210
541-682-4202
Fax: 541-682-4248

Current CDC measles testing recommendation

- Collect urine and a nasopharyngeal swab (preferred) or throat swab for PCR **AND**
- Collect serum for IgM & IgG testing

PCR Testing at the Oregon State Public Health Laboratory (OSPHL)

OSPHL offers measles PCR testing, but that testing is for public health purposes and must be “prior approved” by Lane County Public Health (LCPH). Call LCPH at 541-682-4041 for case review and approval. Priority cases for OSPHL testing include patients with:

- Known exposure to a confirmed measles case and compatible symptoms (e.g., rash).

The measles PCR test is most sensitive when collected on the first day of rash through the third rash day. A nasopharyngeal swab is preferred. OSPHL can also perform measles PCR on urine (preferred volume = 50 mL). OSPHL requires completion of the following sample request form:

<https://apps.state.or.us/Forms/Served/le0042p.pdf>

Additional information on measles testing through OSPHL can be found at:

<https://www.oregon.gov/oha/PH/LABORATORYSERVICES/COMMUNICABLEDISEASETESTING/Documents/measles.pdf>

PCR Testing via Your Clinical Laboratory

If testing is desired for a patient not meeting OSPHL criteria, please work with your laboratory to secure that testing. Most likely that PCR testing will occur via a reference laboratory.

Potential Value of Measles Serology

Lane County is served by four main clinical laboratories: Lab Corp, Quest, Legacy, and Interpath. Those laboratories do not offer measles PCR, but do offer measles serology (IgM and IgG). The turnaround time is 1-6 days, depending on the lab.

A positive IgM result can be virtually diagnostic for measles. The IgM test is most sensitive when it is obtained 72 hours or more *after* rash onset. Data from a “famous” study in the Journal of Infectious Diseases (JID 1997; volume 175, pages 195 – 199) supports IgM use as noted here:

- Nearly 100% of measles cases demonstrated IgM antibody 72 hours or more after rash onset
- Approximately 80% of measles cases had detectable IgM antibody by IgM capture EIA within 72 hours of rash onset.

If you obtain a negative IgM result from a specimen drawn less than 72 hours after rash onset and believe the patient has measles, consider testing the patient again beyond the 72 hour window to ensure the first result was not a false negative. Measles IgG testing is only diagnostic with a 4-fold or greater titer rise between acute and convalescent sera.