Measles

Measles is an acute, highly communicable viral illness known for its red, blotchy rash, which starts on the face and then spreads widely over the body. The rash is preceded by a febrile prodrome that includes cough, coryza and conjunctivitis, and sometimes photophobia and “Koplik spots” in the mouth. Diagnosis is confirmed by the presence of serum IgM antibodies (in a patient who has not recently been immunized). Treatment is supportive.

A focus on increasing vaccination among preschool children by following the 1989 recommendations for two doses of MMR vaccine resulted in a dramatic reduction in the illness. In Oregon, two doses of measles vaccination have been required for entry into kindergarten since 1998. In 2013, >93% of kindergartners had received two doses of measles-containing vaccine.

Since 2004, 17 cases were reported in Oregon; 10 of these cases were imported and six were linked to imported cases. Most imported cases originated in Asia and Europe, and occurred both among Oregon citizens traveling abroad and in persons visiting Oregon from other countries. The median age of cases has been 21 years (range, 11 months–40 years). Ten cases were unvaccinated, six were vaccinated and the vaccination status of one could not be documented.

Six Oregonians caught the measles during 2013 — our highest case count in 14 years. Marion County had two clusters initiated by an unvaccinated index case exposed in Eastern Europe and two additional cases among unvaccinated contacts. A separate Marion County case was unvaccinated and exposed in China. Two Washington County cases occurred among vaccinated persons; the index case exposed in India, the other a close contact.

Though measles is highly infectious, the risk of exposure to measles in Oregon remains low. Sustaining high levels of vaccination is important to limit the spread of measles from imported cases and to prevent it from becoming re-established as an endemic disease in the United States.
Measles by year: Oregon, 1988–2013

In incidence of measles: Oregon vs. nationwide, 1999–2013
Measles by country of importation: 1997–2013

Prevention

- Vaccinate: One dose for preschool-age children >12 months of age and for persons born during or after 1957; and a second dose for school-age children and for adults at high risk of measles exposure (i.e., healthcare personnel, international travelers and students at post-high-school educational institutions).
- Post-exposure vaccination can prevent or lessen illness if given within 72 hours of exposure.