Measles

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

During 1989–1991, a major resurgence of measles occurred in the United States, with more than 55,000 cases and 120 deaths reported. The resurgence was characterized by an increasing proportion of cases among unvaccinated preschool-aged children. A focus on increasing vaccination among preschool children by following the 1989 recommendation for two doses of MMR vaccine resulted in a dramatic reduction in illness. Endemic measles has been eliminated from the United States, but cases are occasionally imported.

In Oregon, two doses of measles vaccination have been required since 1998. In 2009, >94% of school-aged children had received two doses of measles-containing vaccine. Since 2002, 10 cases have been reported in Oregon; eight of these were imported, and two were linked to imported cases. Most imported cases originated in Asia and Europe and occurred both among Oregon citizens traveling abroad and persons visiting Oregon from other countries. The median age of cases has been 29 (range, 19–49) years. Cases were either unvaccinated (9) or had undocumented vaccination status (1).

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, 1988–2009

Measles by country of importation: 1997–2009

- Japan: 40%
- Europe: 20%
- Saudi Arabia: 20%
- Hong Kong: 10%
- Kenya: 10%
- Other regions: 20%