

# Measles

Measles is an acute, highly communicable viral illness known for its red, blotchy rash. The rash starts on the face and then spreads widely over the body. It is preceded by a febrile prodrome that includes cough, coryza and conjunctivitis; photophobia and Koplik spots in the mouth also sometimes appear.

Detection of measles-specific immunoglobulin M (IgM) antibody and measles ribonucleic acid (RNA) by polymerase chain reaction are the most common methods for confirming measles infection (in a patient who has not recently been immunized). Treatment is supportive.

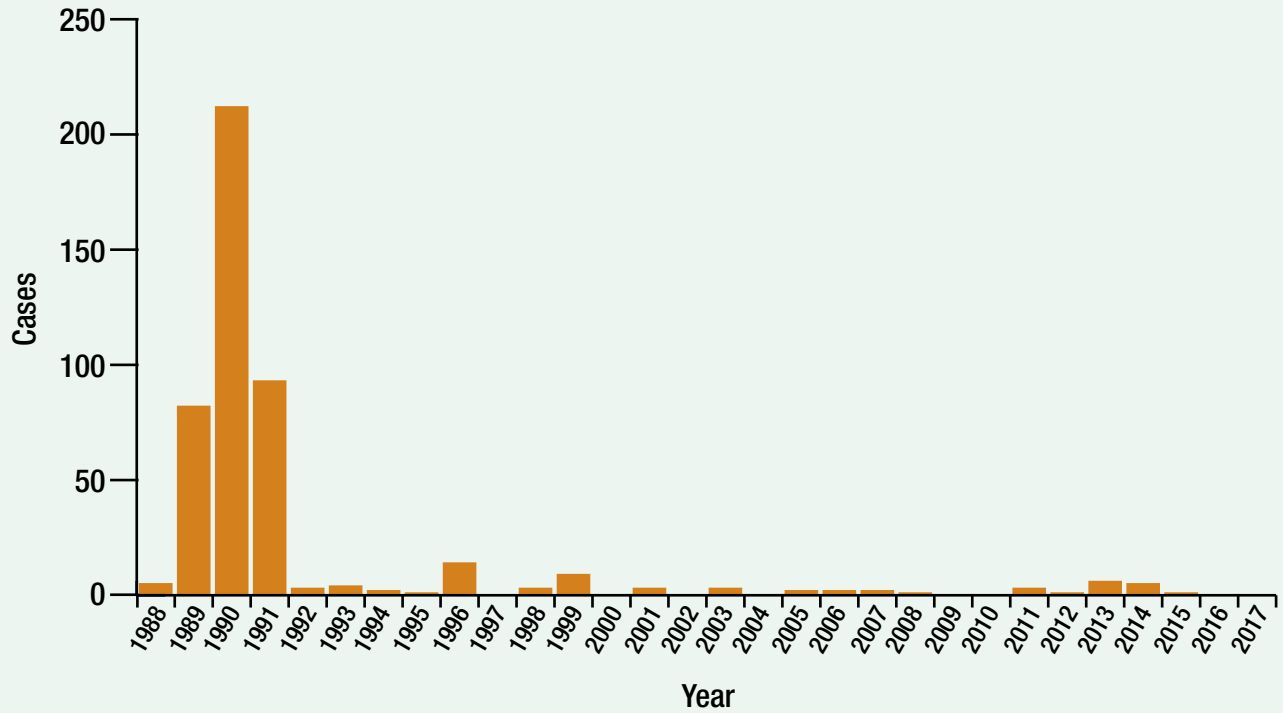
A focus on increasing vaccination among preschool children by following the 1989 recommendation for two doses of measles, mumps and rubella (MMR) vaccine resulted in a dramatic reduction in measles in the United States. In Oregon, two doses of measles-containing vaccine have been required for entry into kindergarten since 1998. In 2017 >96% of kindergartners had received two doses.

Since 2004, 23 cases have been reported in Oregon; 13 of these were imported and another 10 were linked to imported cases. Most imported cases originated in Asia or Europe and occurred both among Oregon citizens traveling abroad and in persons visiting Oregon from other countries. The median age of cases has been 7 years (range, 9 months–49 years) since 2004. Fifteen cases were unvaccinated; five were vaccinated; the vaccination status of two could not be documented; and one was too young for vaccine. No cases of measles were reported in Oregon in 2016 or 2017.

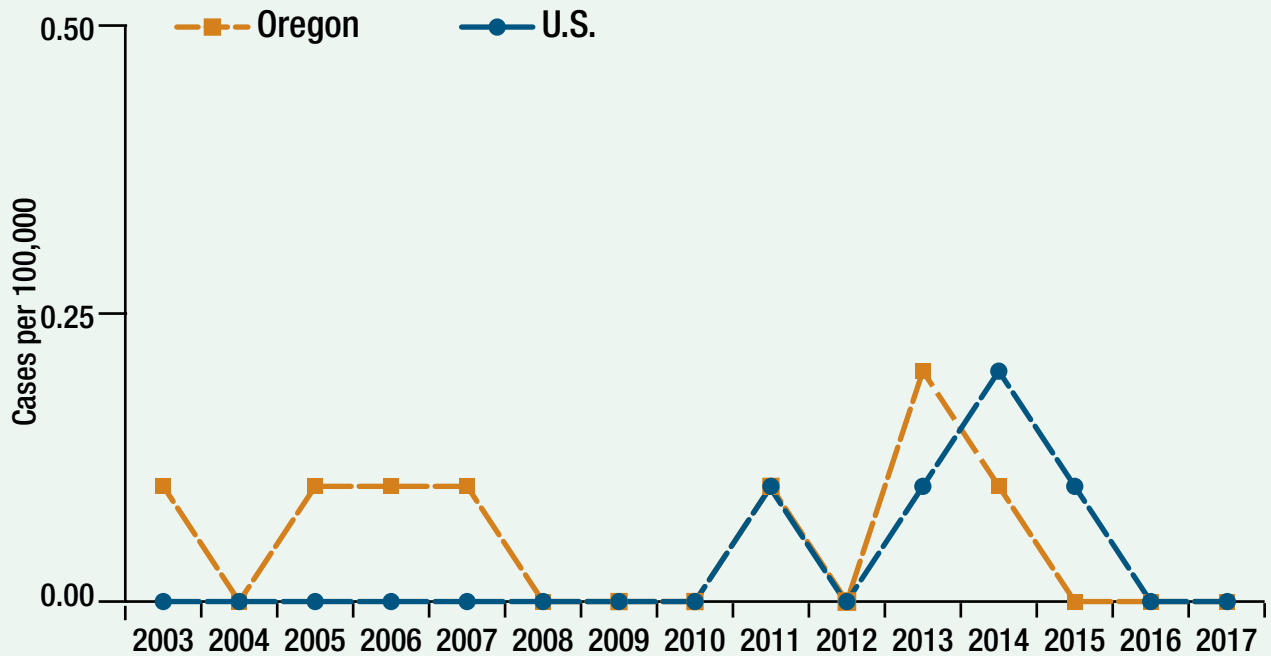
One Oregon case was reported in 2015 linked to an outbreak associated with Disneyland. Five Oregonians caught the measles during 2014; all were preventable. Four cases were in unvaccinated preschool or school-aged children linked to international importation. One was an internationally imported case in an unvaccinated infant. Although measles vaccine is not typically recommended before 12 months of age, the Advisory Committee on Immunization Practices (ACIP) recommends that infants as young as 6 months of age receive one dose of measles vaccine before any international travel.

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, 1988–2017

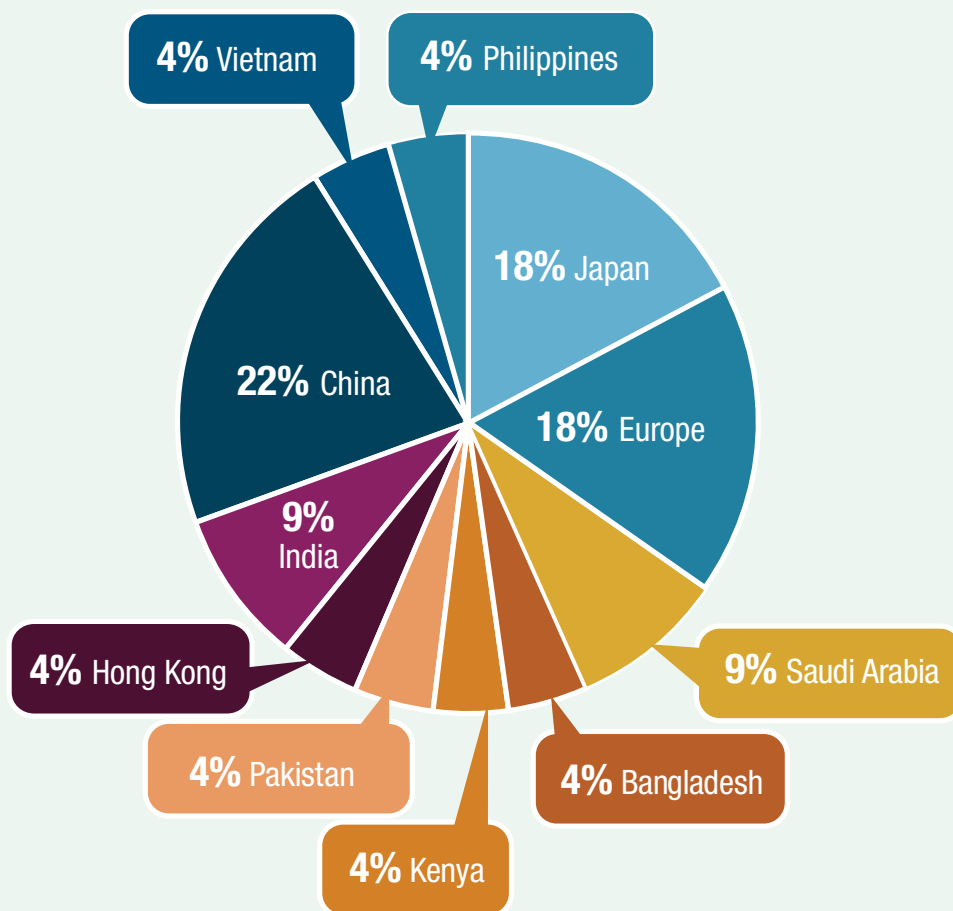


## Incidence of measles: Oregon vs. nationwide, 2003–2017



Oregon	0.1	0.0	0.1	0.1	0.1	0.0	0.0	0.0	0.1	0.0	0.2	0.1	0.0	0.0	0.0
U.S.	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.0	0.1	0.2	0.1	0.0	0.0

## Measles by country of importation: 1997–2017



## Prevention

- Vaccinate:
  - › One dose for preschool-age children >12 months of age and for persons born during or after 1957; a second dose for school-age children and for adults at high risk of measles exposure (e.g., health care 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.