Pertussis

Pertussis is a highly contagious acute bacterial infection of the respiratory tract attributable to *Bordetella pertussis*. It is transmitted from person to person through contact with respiratory secretions (droplet transmission). The disease is most severe in infants and young children, many of whom suffer the intense paroxysmal coughing that usually terminates in an inspiratory “whoop.” Although the disease may be milder in older persons, those who are infected may transmit the disease to other susceptible persons, including unimmunized or incompletely immunized infants.

Despite high childhood immunization rates, pertussis remains endemic in the U.S., with epidemics every three to five years. California reported >9,200 cases in 2010; with 285 cases, Oregon’s incidence was lower, but still the highest since 2005. Because pertussis often goes undiagnosed in adolescents and adults, it is likely that the actual number of cases greatly exceeds the number reported.

Infants have the highest risk of pertussis-related complications and death and have had the highest reported incidence rate in Oregon. Since 2000, 217 (44.7%) of the 485 infants diagnosed with pertussis in Oregon have been hospitalized, and four have died. In 2010, forty-six (16%) of Oregon’s cases were infants, one-third were hospitalized, and none died.

The greatest increase in incidence in recent years has been in adolescents and adults. Since 2000, approximately 60% of the pertussis cases have been >10 years of age. Tdap vaccine should provide some immunity to the disease for all of us older kids. Health care workers in particular are encouraged to get a dose.

In 2010, with funding from the federal Centers for Disease Control and Prevention, Oregon launched the Metropolitan Area Pertussis Surveillance (MAPS), enhancing surveillance in Clackamas, Multnomah and Washington counties to delineate better the epidemiology of pertussis. Each reported case is investigated extensively, and standardized data are collected. It is hoped that these data will guide future developments in regional and national areas of public health policy.
Pertussis by year: Oregon, 1988–2010

![Yearly Pertussis Cases Graph](image)

Pertussis by onset month: Oregon, 2010

![Monthly Pertussis Cases Graph](image)
Incidence of pertussis by age and sex: Oregon, 2010

Incidence of pertussis: Oregon vs. nationwide, 1995–2010