

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.

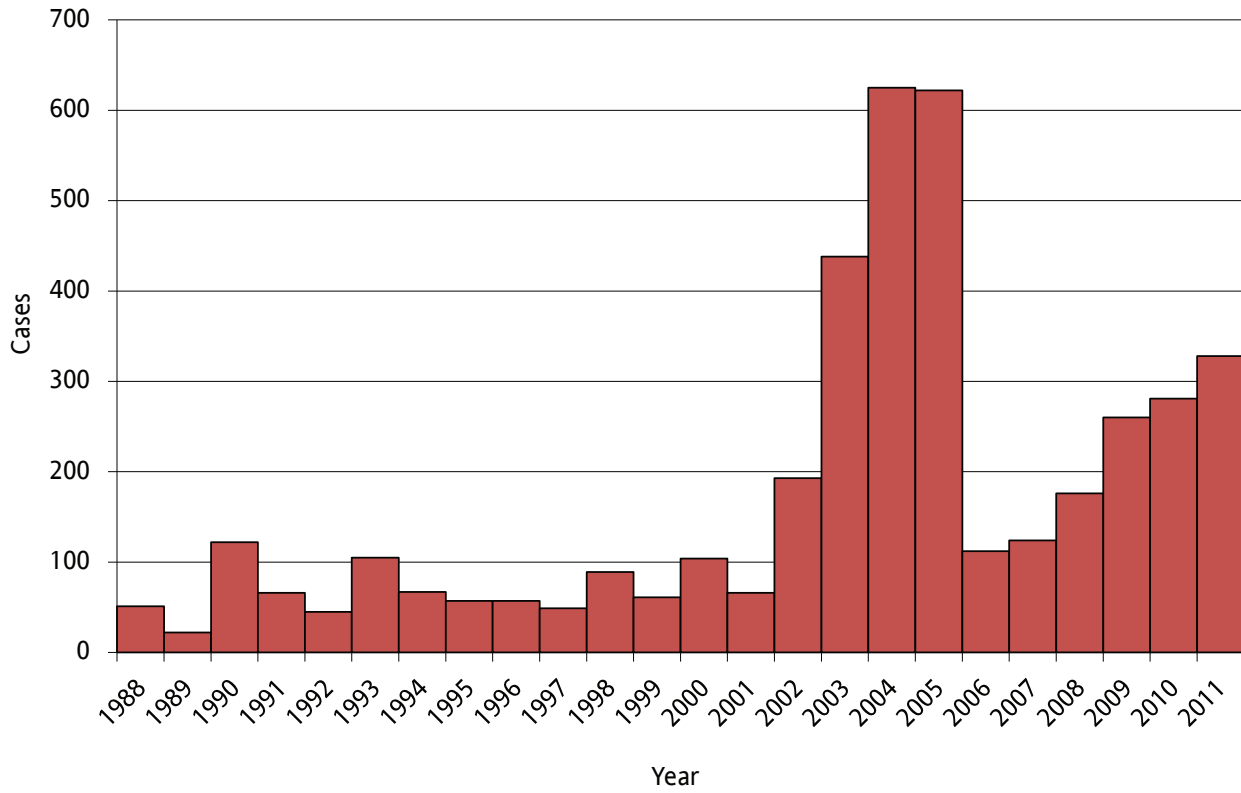
Despite high childhood immunization rates, pertussis remains endemic in the United States, with epidemics every three to five years. Pertussis has been on the rise in Oregon since 2006. Because pertussis often goes undiagnosed in adolescents and adults, it is likely that the actual number of cases greatly 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, 235 (44.8%) of the 525 infants diagnosed with pertussis in Oregon have been hospitalized, and four have died. In 2011, 42 (12.8%) of Oregon’s cases were infants, 17 (40.5%) were hospitalized, and none died.

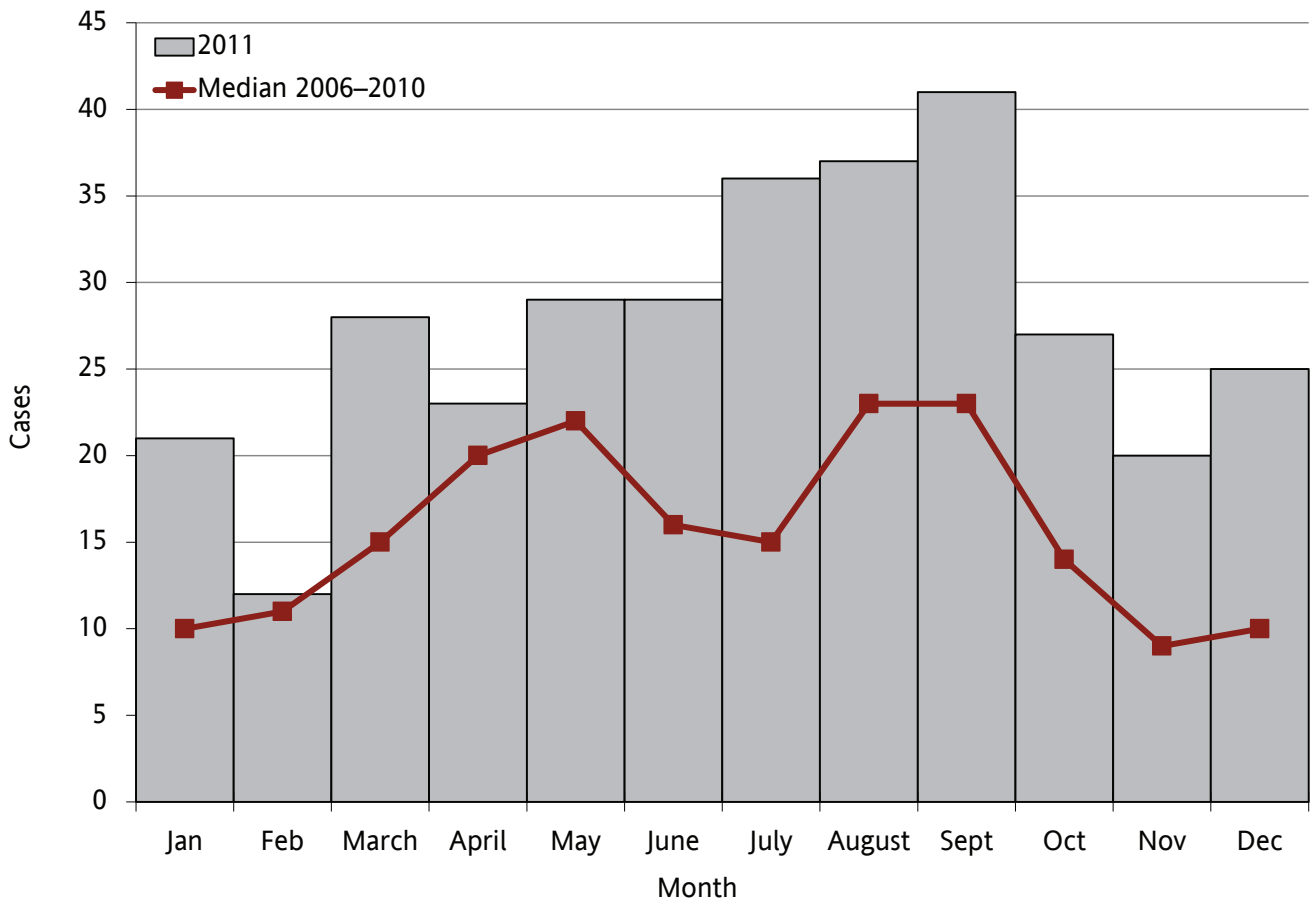
The greatest increase in incidence in recent years has been in adolescents and adults. Since 2000, approximately 60% of the pertussis cases have been >10 years of age. Tdap vaccine should provide some immunity to the disease for all of us older kids. Those ≥ 10 (including persons ≥ 65) years of age who have not received Tdap should receive a single dose of Tdap. It is preferred that pregnant women who have not previously received Tdap be vaccinated with Tdap during the third or late second trimester (≥ 20 weeks’ gestation), to prevent infant pertussis. Health care workers in particular are encouraged to get a dose.

Since 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 better delineate 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.

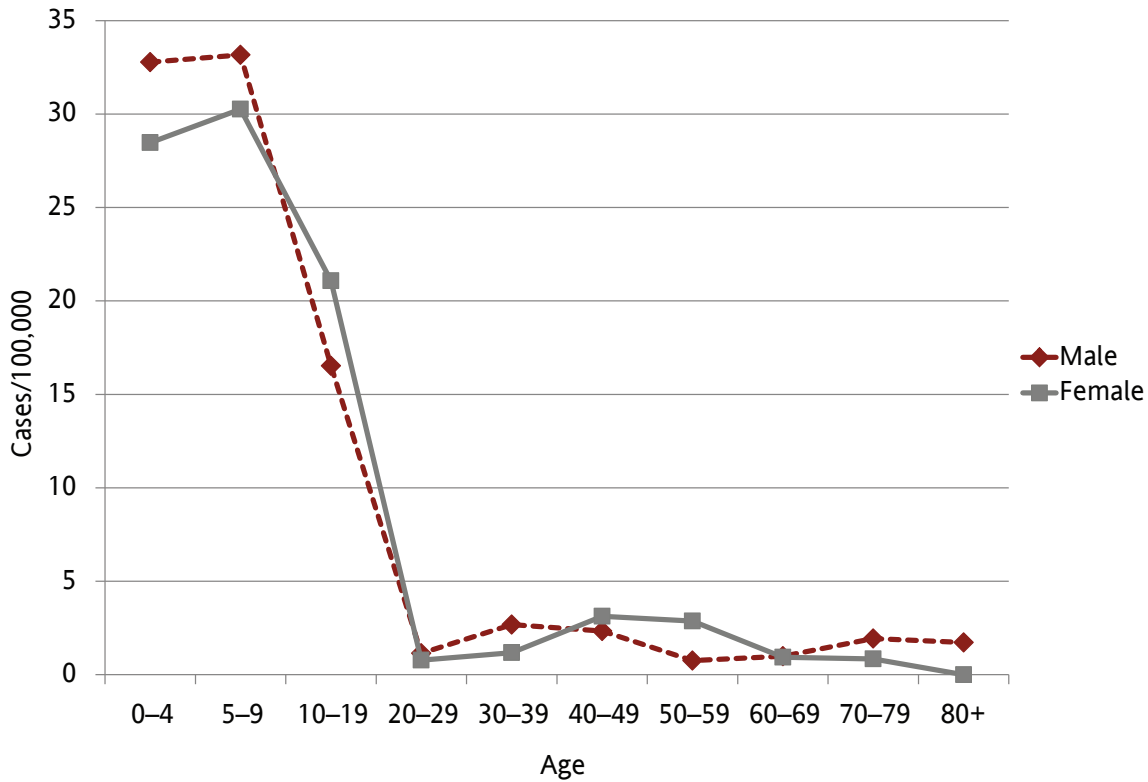
Pertussis by year: Oregon, 1988–2011



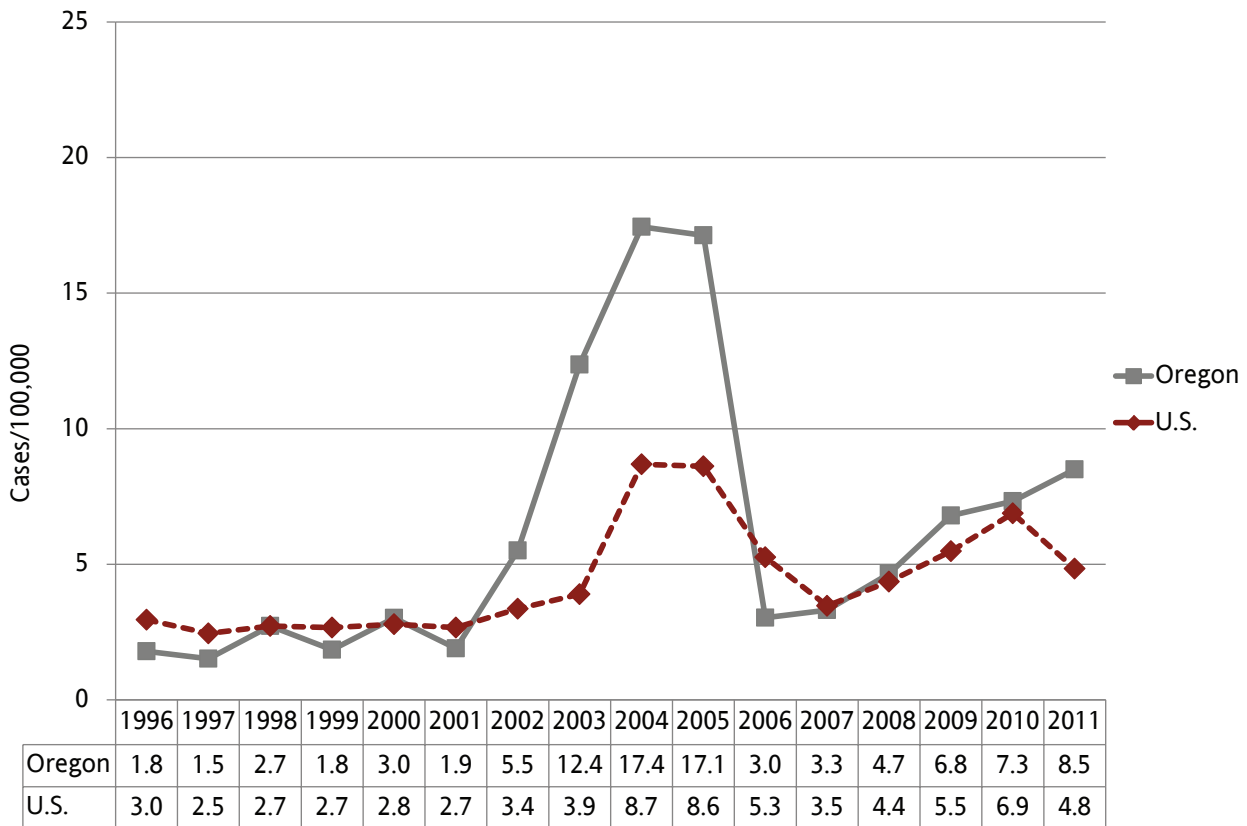
Pertussis by onset month: Oregon, 2011



Incidence of pertussis by age and sex: Oregon, 2011



Incidence of pertussis: Oregon vs. nationwide, 1996–2011



Incidence of pertussis by county of residence: Oregon, 2002–2011

