

***Haemophilus influenzae* infection**

Until the advent of an effective vaccine against *Haemophilus influenzae* serotype b (Hib) organisms, *H. influenzae* was the leading cause of bacterial meningitis in children <5 years of age in Oregon and elsewhere. It plummeted in the rankings, and *Streptococcus pneumoniae* is now in the lead. In 2012, Hib was cultured from sterile body fluids of five Oregonians, the largest number since 1999. Two of the Hib cases were children, one fully immunized, the other completely unimmunized; both presented with bacteremia. The remaining three cases were among persons >60 years of age. Appropriate use of conjugate vaccine will help ensure that Hib infection remains minimal well into the future. All sterile-site *H. influenzae* isolates must be sent to the Oregon State Public Health Laboratory for additional typing.

Sixty-seven cases of invasive *H. influenzae* disease (IHiD, all serotypes) were reported in 2012. With the decline in invasive Hib disease in children, there has been increased recognition of non-serotype b and nontypeable cases in persons >5 years of age, especially among those >65 years of age. In 2012,

55% of cases were nontypeable, 18% were identified as serotype f, 10% serotype a, and the remaining cases were other serotypes. The burden of IHiD in 2012 was highest (8.4/100,000 persons) among those >80 years of age, followed by those 50–59 years of age (3.3/100,000 persons). *Haemophilus influenzae* is treated with antibiotics. In 2012, the top two clinical syndromes of invasive IHiD reported in Oregon were bacteremia (66%) and pneumonia (46%). There were 8 deaths related to IHiD infection.

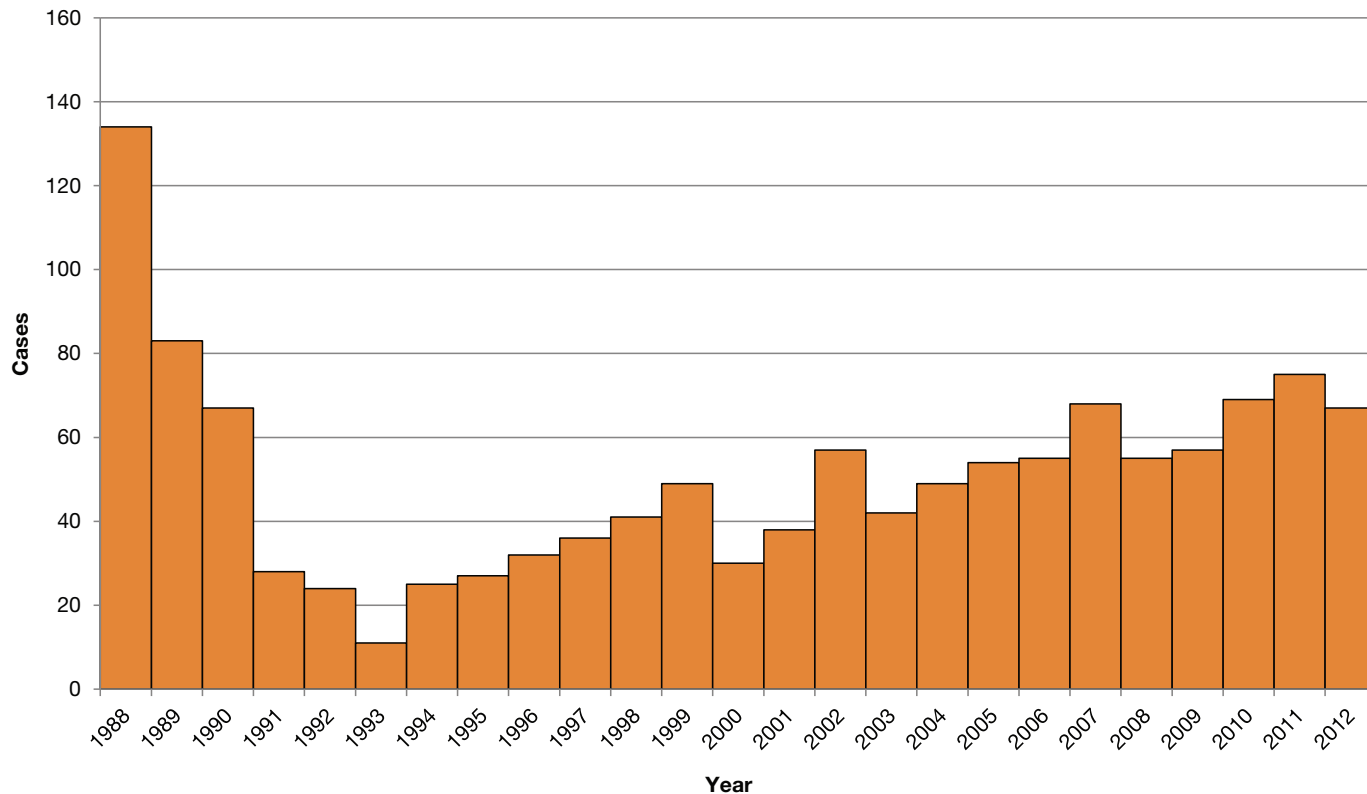
In 2011, Oregon participated in an extensive CDC-sponsored retrospective chart review of IHiD among persons >65 years of age to understand the burden of disease within this age group. This study found that 94% of cases had at least one underlying condition, and 63% had ≥ 3 underlying conditions. The most frequently reported underlying conditions were chronic obstructive pulmonary disease, coronary artery disease, congestive heart failure, atrial fibrillation, diabetes, hypertension, dementia, and smoking.

Peak incidence tends to occur in late winter and early spring.

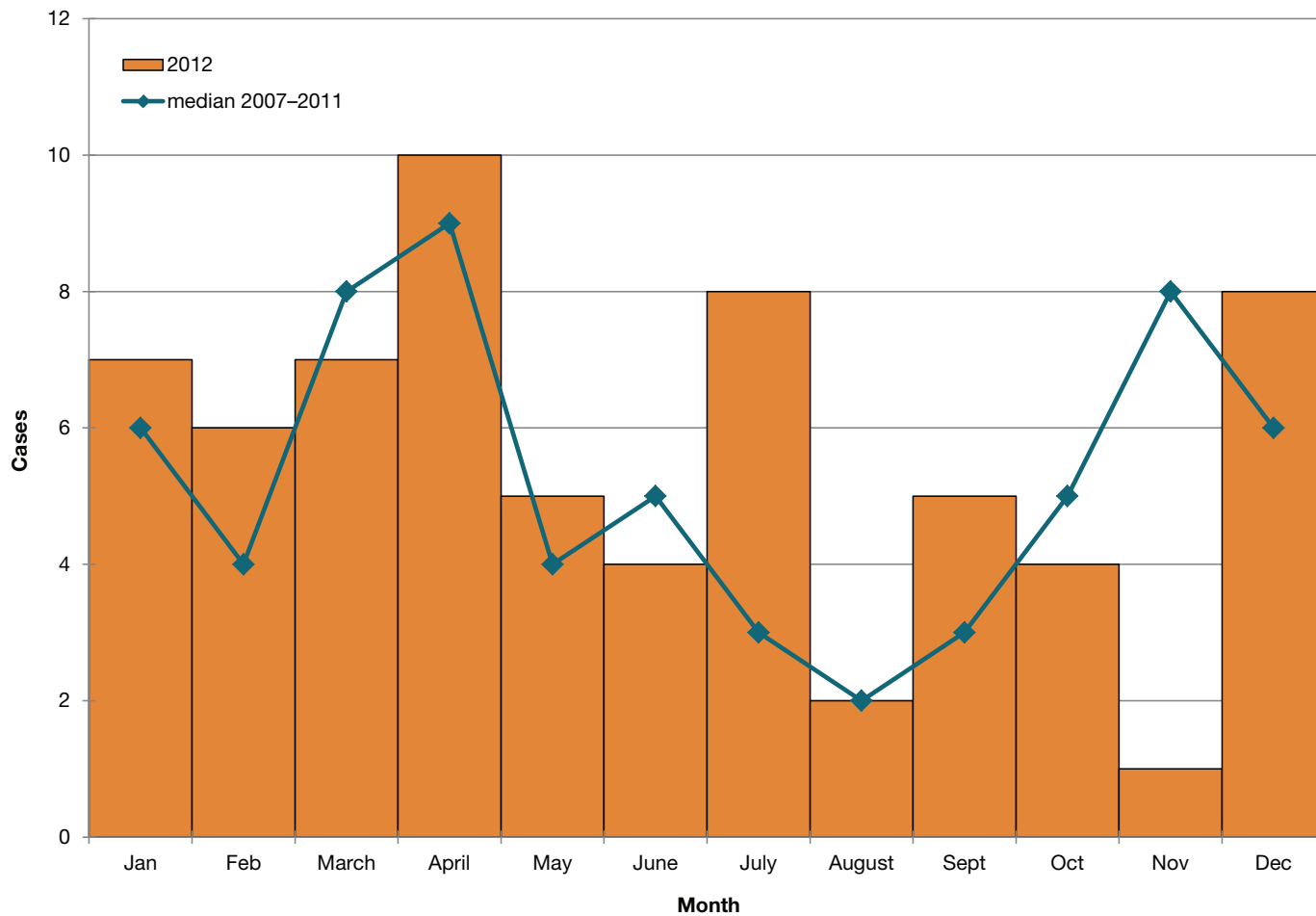
Prevention

- Vaccinate all children against Hib at 2, 4, 6, and 12–15 months of age.
- Cover your cough and wash your hands.
- Close contacts of Hib cases can be treated prophylactically to prevent infection.

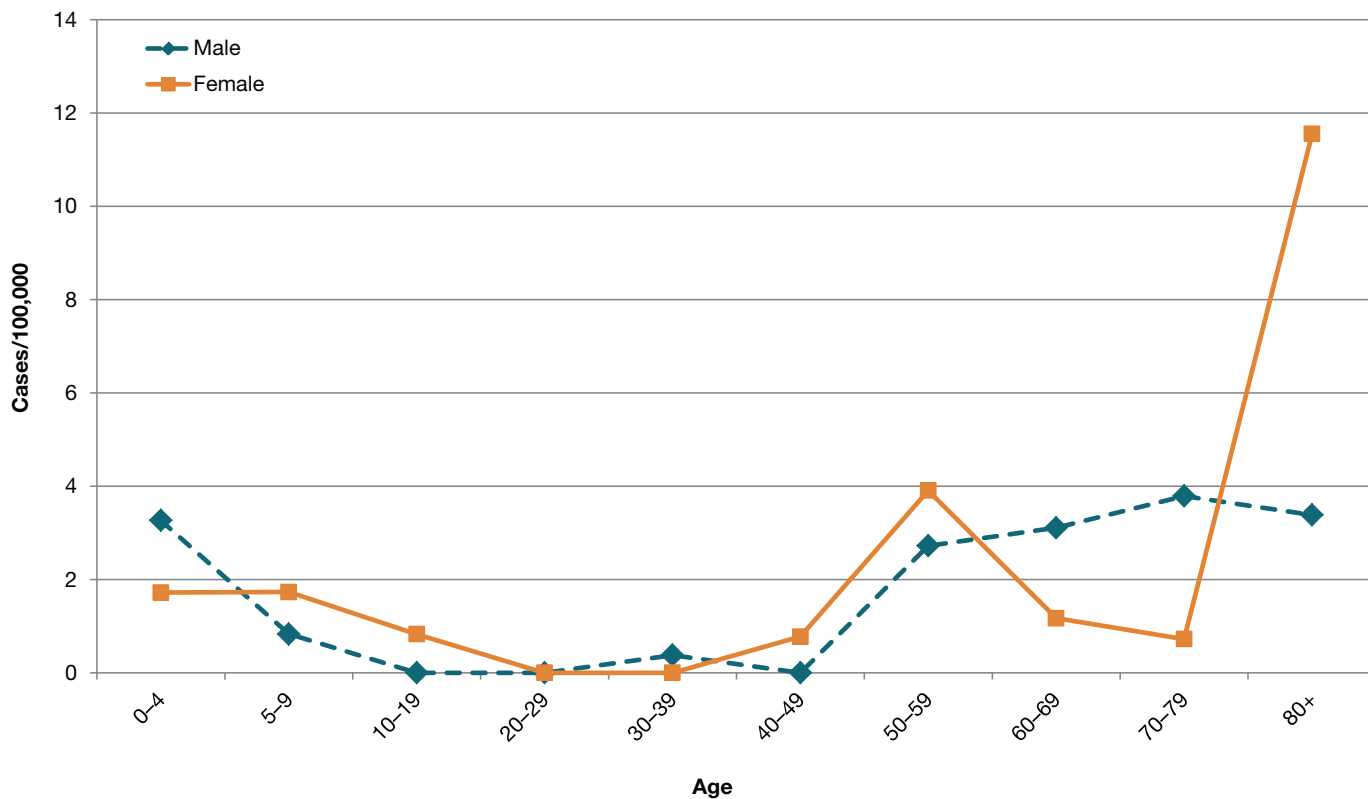
H. influenzae infection by year: Oregon, 1988–2012



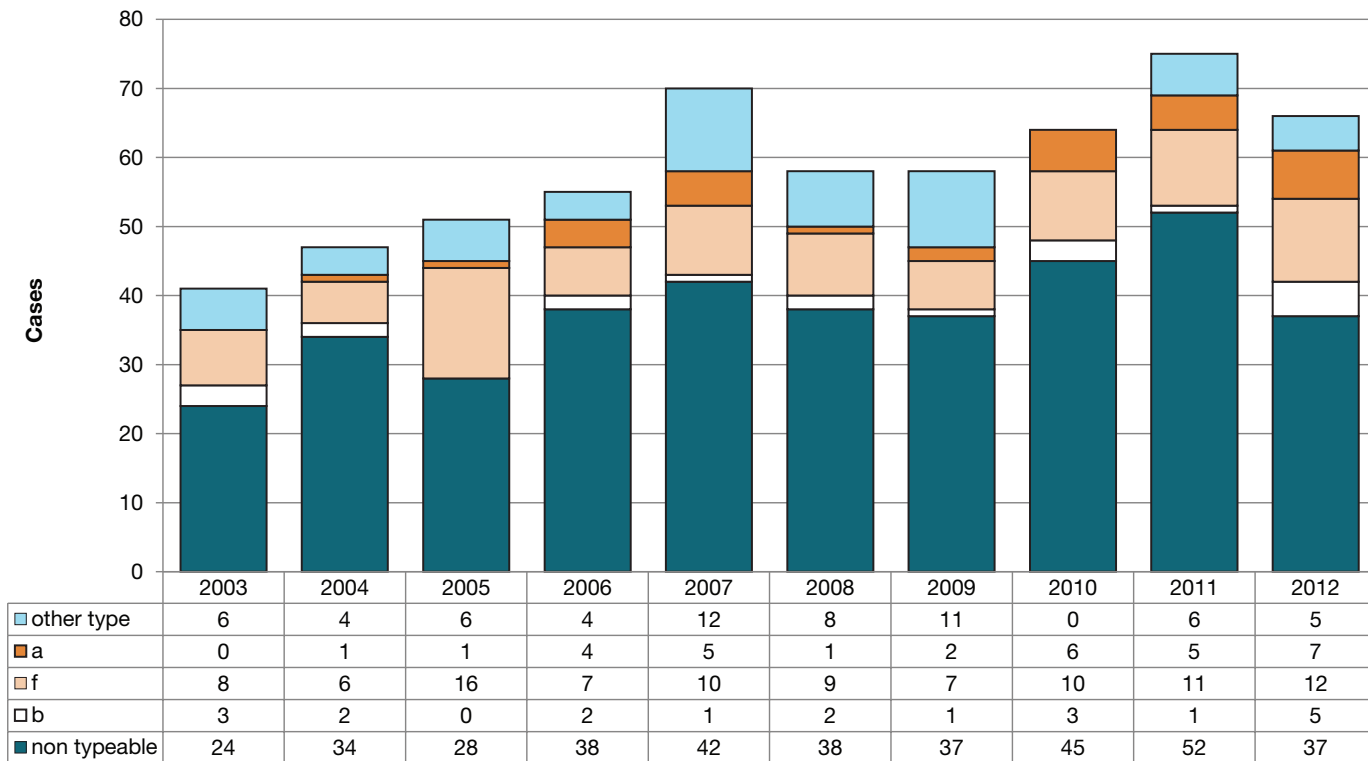
H. influenzae infection by onset month: Oregon, 2012



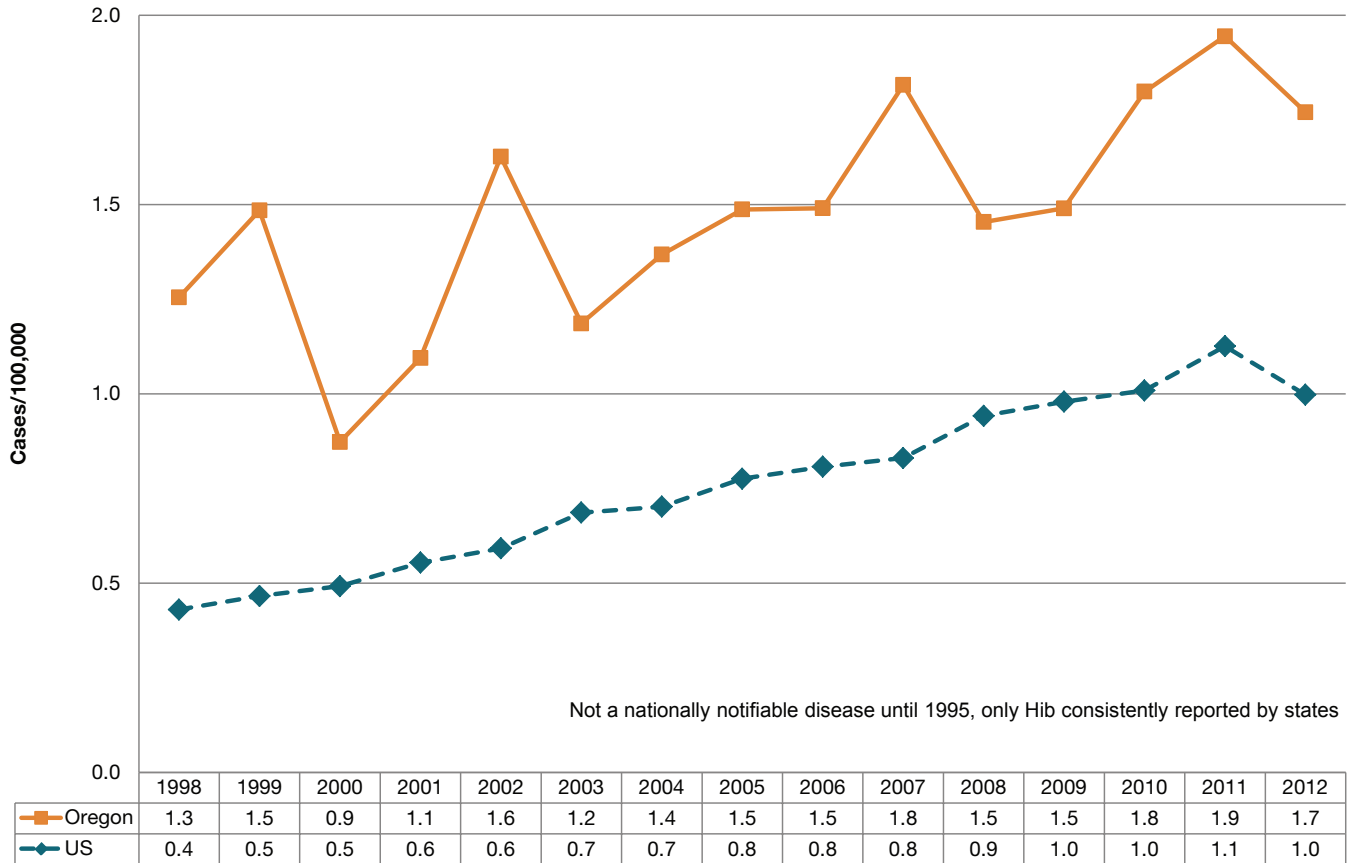
Incidence of *H. influenzae* infection by age and sex: Oregon, 2012



H. influenzae infection by year and serotype: Oregon, 2003–2012



Incidence of *H. influenzae* infection: Oregon vs. nationwide, 1998–2012



Incidence of *H. influenzae* infection by county of residence: Oregon, 2003–2012

