Haemophilus influenzae infection

Until the advent of an effective vaccine against serotype b (Hib) organisms, Haemophilus influenzae (H. influenzae) was the leading cause of bacterial meningitis in children under 5 years of age in Oregon and elsewhere. It has dropped down in the rankings, and Streptococcus pneumoniae is now in the lead. In 2010, Hib was cultured from sterile body fluids in three persons, two over the age of 50 and one under the age of 5. Until September 2010, there had been no cases of Hib in this young age group since 2004. Appropriate use of conjugate vaccine will help ensure that Hib occurrence 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.

Concurrent with the decline in serotype “b” infections is an increase in other serotypes. In 2010, 70% of cases were non-typeable, 14% were identified as serotype f, and the remainder were other serotypes. This shift in dominant strains changes the clinical manifestations of illness. During the five-year period (2006–2010), clinical manifestations of Oregon cases included pneumonia (58%), followed by bacteremia (28%), and meningitis (7%). Concurrent with the changes in clinical manifestations is a shift in age distribution from infants to older persons. The majority of cases in 2010 continue to be among those aged 50 and over.

Peak incidence occurs in late winter and early spring. Sixty-nine cases were reported in 2010.

H. influenzae infection by year: Oregon, 1988–2010
H. influenzae infection by onset month: Oregon, 2010

Incidence of H. influenzae infection by age and sex: Oregon, 2010
**H. influenzae** infection by year and serotype: Oregon, 2000–2010

Incidence of **H. influenzae** infection: Oregon vs. nationwide, 1995–2010
Incidence of *H. influenzae* infection by county of residence: Oregon, 2000–2010