Meningococcal disease

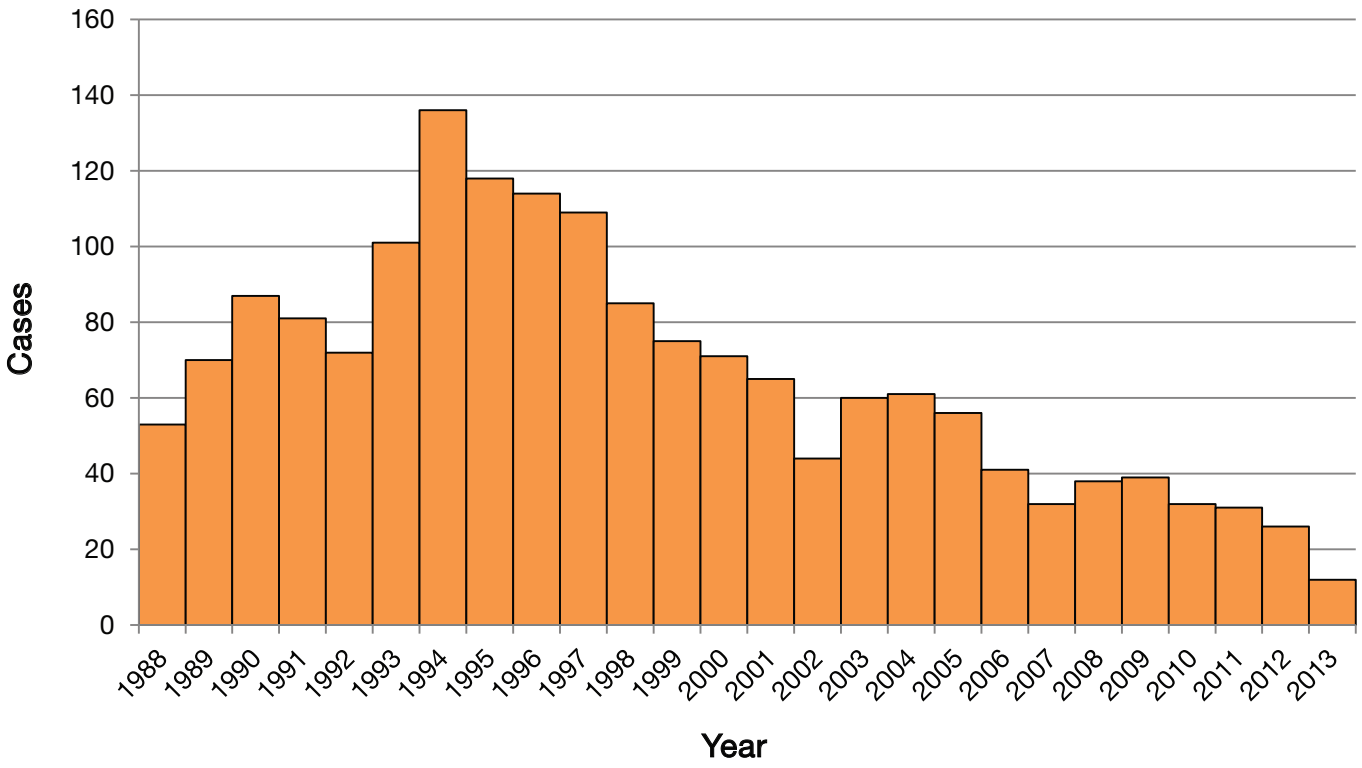
Reported cases of invasive meningococcal infections, including sepsis and meningitis, have declined from the hyperendemic levels seen in 1993–1997 attributable to a clonal strain of serogroup B *Neisseria meningitidis*. Respiratory secretions and droplets continue to be shared among Oregonians and predispose us to secondary cases.

In 2013, there were 12 reported cases and two deaths from meningococcal disease in Oregon. From the early 1990s through 2011, serogroup B predominated in Oregon, but in 2011 and again in 2013, other serogroups have been more prominent. In 2013 serogroup C accounted for 50% (5) of the serogrouped cases, whereas 30% (3) of cases were serogroup B.

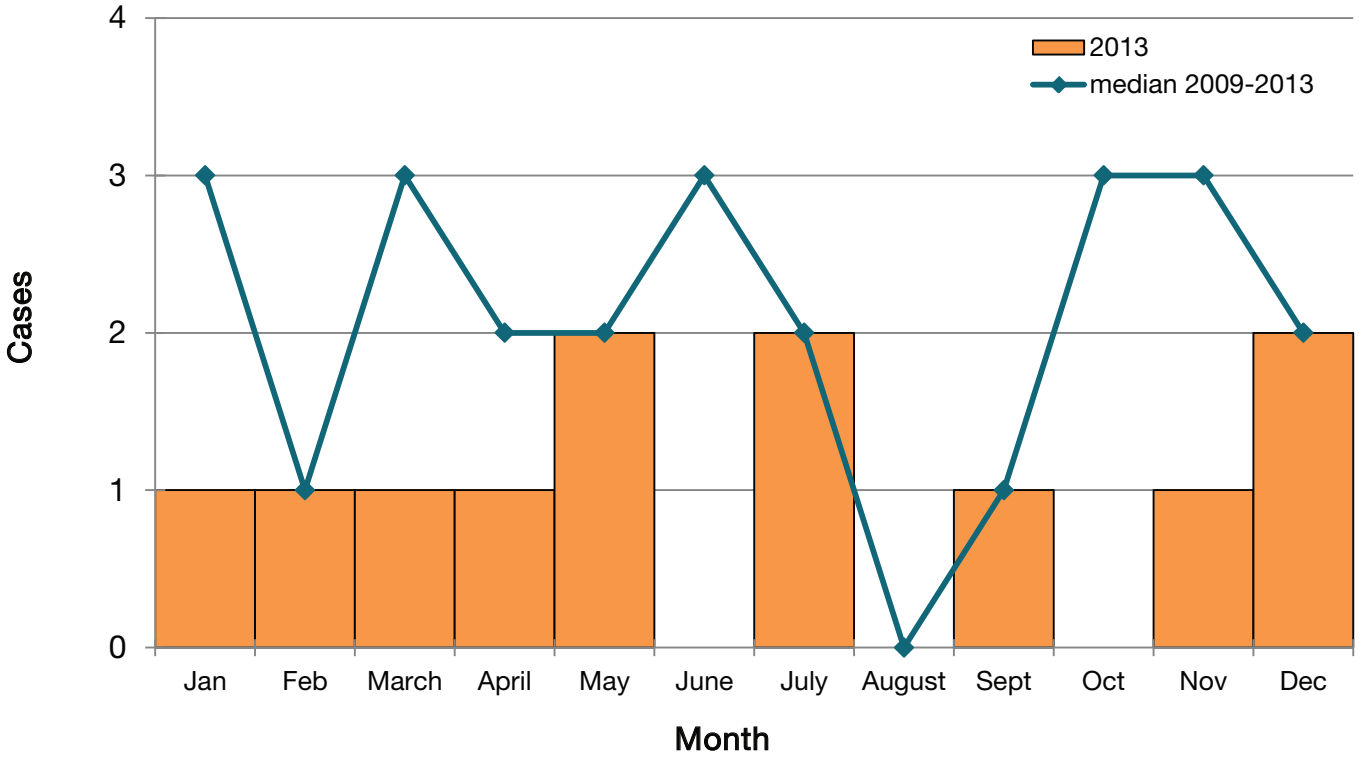
The burden of meningococcal disease was highest in those >5 years of age (41/100,000), followed by those aged >80 years (22 /100,000). Meningococcal disease is treated with intravenous antibiotics.

The quadrivalent (serogroups A, C, Y and W-135) meningococcal conjugate vaccine is recommended routinely for adolescents 11–18 years of age and for other persons at high risk for meningococcal disease. The vaccine does not protect against serogroup B disease.

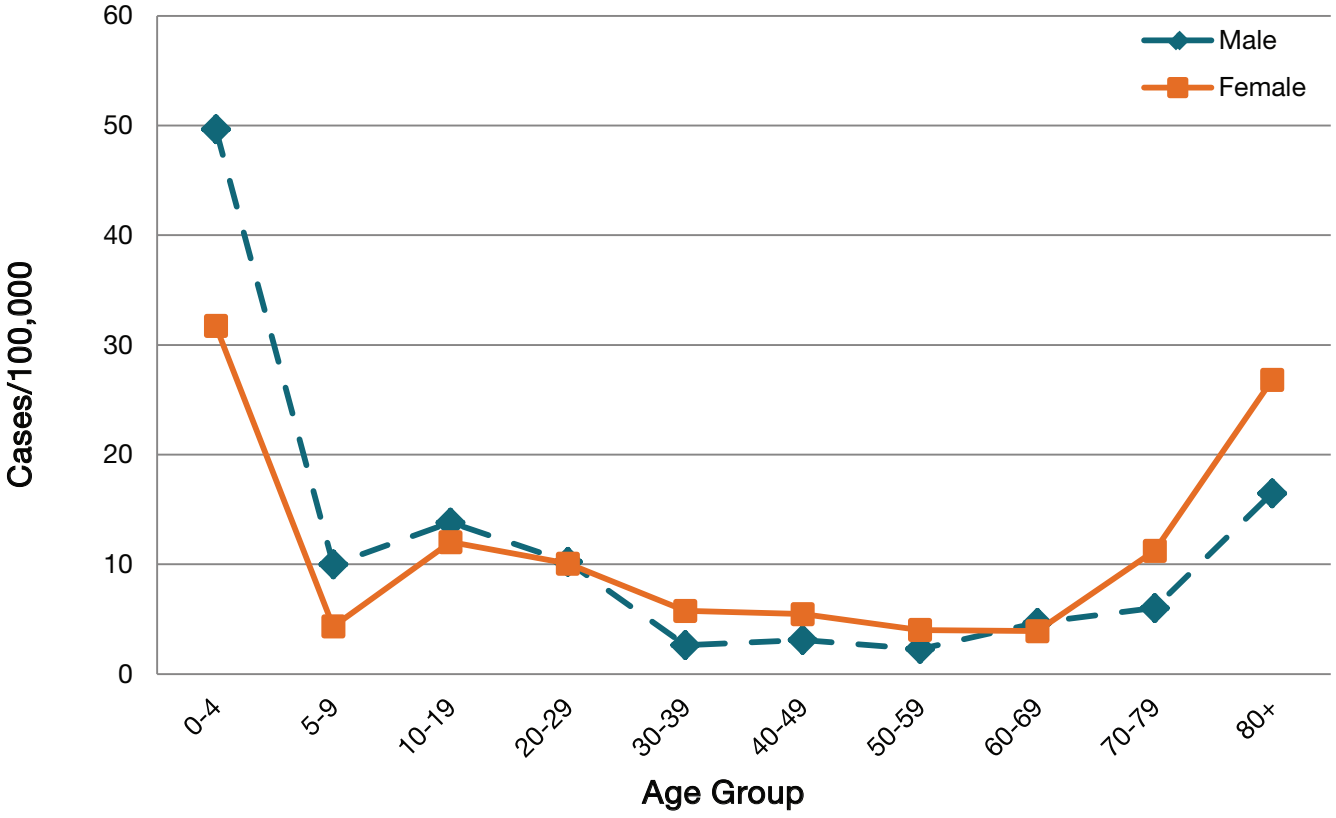
Meningococcal disease by year: Oregon, 1988–2013



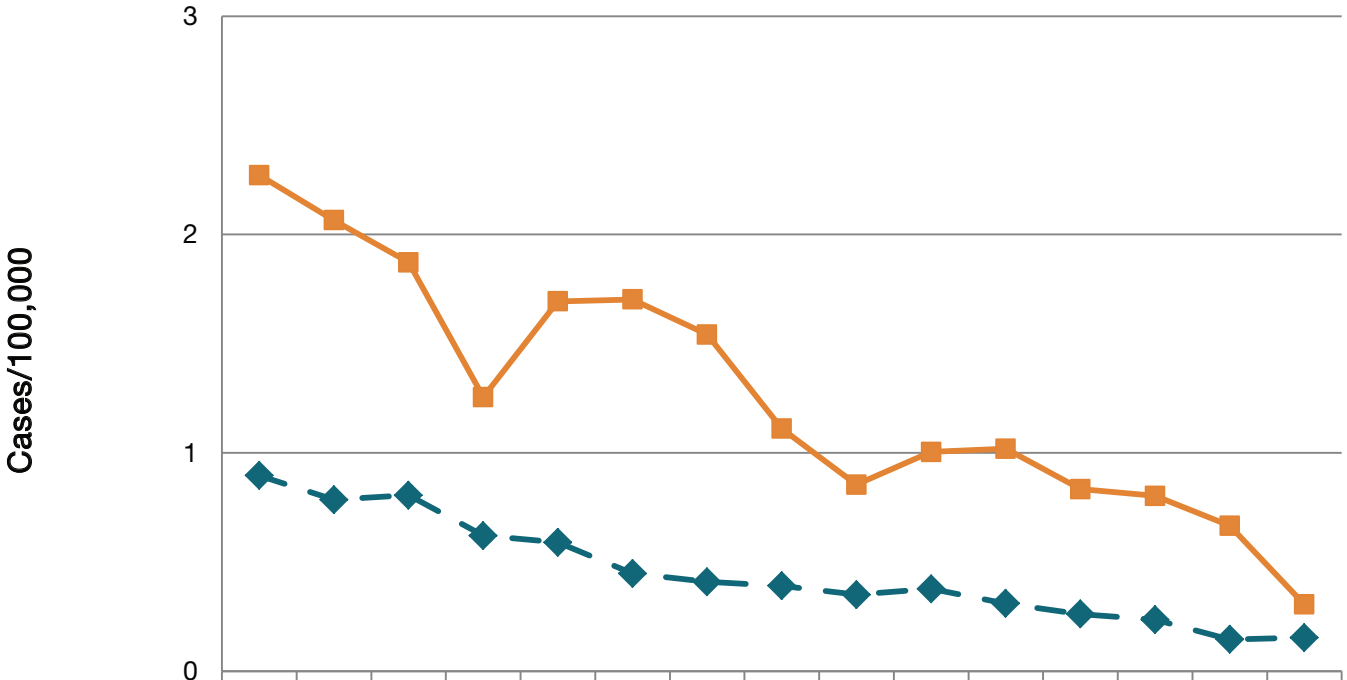
Meningococcal disease by onset month: Oregon, 2013



Incidence of meningococcal disease by age and sex: Oregon, 2004–2013

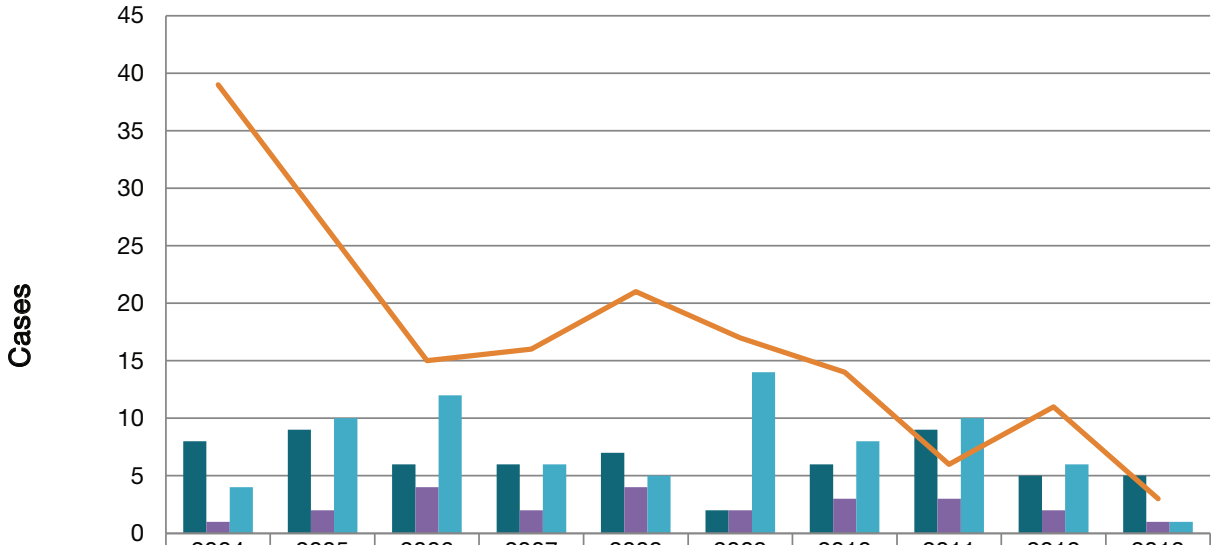


Incidence of meningococcal disease: Oregon vs. nationwide, 1999–2013



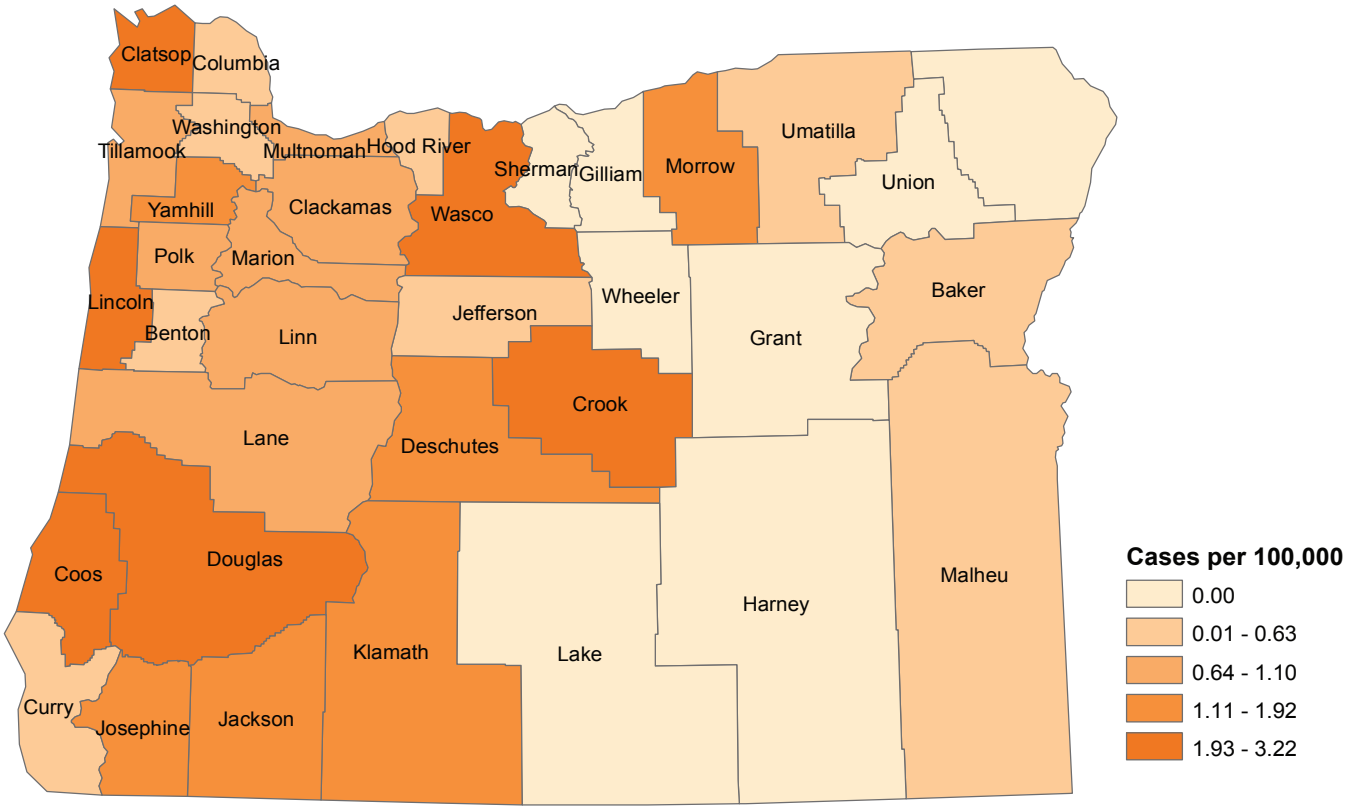
	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013
Oregon	2.3	2.1	1.9	1.3	1.7	1.7	1.5	1.1	0.9	1.0	1.0	0.8	0.8	0.7	0.3
U.S.	0.9	0.8	0.8	0.6	0.6	0.4	0.4	0.4	0.4	0.4	0.3	0.3	0.2	0.1	0.2

Meningococcal disease by serogroup: Oregon, 2004-2013



	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013
C	8	9	6	6	7	2	6	9	5	5
W135	1	2	4	2	4	2	3	3	2	1
Y	4	10	12	6	5	14	8	10	6	1
B	39	27	15	16	21	17	14	6	11	3

Incidence of meningococcal disease by county of residence: Oregon, 2004–2013



Prevention

- Vaccinate to prevent illness from serogroups A, C, Y and W-135.
- Identify and recommend prophylaxis of close contacts of confirmed and presumptive cases.
- Avoid smoking and exposing children to tobacco smoke, which have been associated with an increased risk of invasive meningococcal disease.