Escherichia coli O157 and other Shiga toxin producing Escherichia coli (STEC) infections

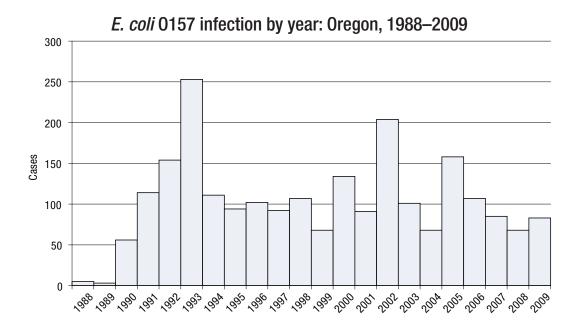
E. coli O157 (O157) has become one of the most feared common causes of infectious diarrhea. Oregon has been the setting for many O157 outbreaks, and investigations of those outbreaks combined with the analysis of other surveillance information have contributed greatly to our understanding of this pathogen. Spread by the fecal-oral route, O157 has a number of animal reservoirs, the most important of which are ruminants, including cattle, goats, sheep, deer and elk. Transmission often occurs from consumption of contaminated food or water, as well as direct person-to-person spread.

We identified two O157 outbreaks in 2008 and five in 2009. These included a nationwide outbreak associated with Nestlé

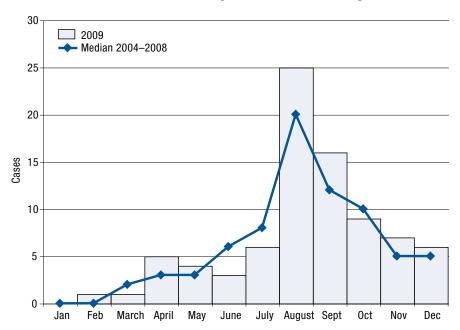
cookie dough, and multi-state outbreaks associated with organic spinach from Washington, a summer camp in Washington, and an Oregon rodeo —the latter with most cases among Washington residents. (Notice any theme here?)

Mid-to-late summer is the peak season for *E. coli* O157 infections. The statewide incidence has been more-or-less stable over the past few years.

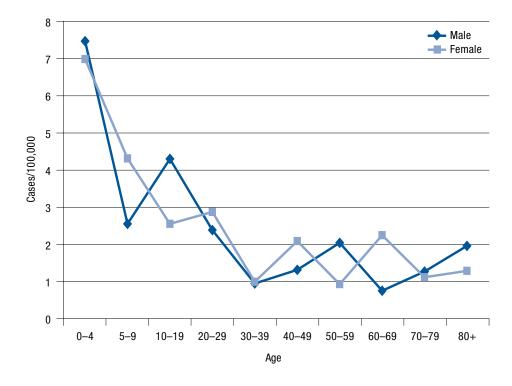
Non-O157 STEC are a small but growing proportion of the problem, with increasing use of Shiga-toxin screening tests driving that trend. For 2008–2009, 12% of STEC isolates were other than O157, with O26, O121, O111, and O103 leading the pack.



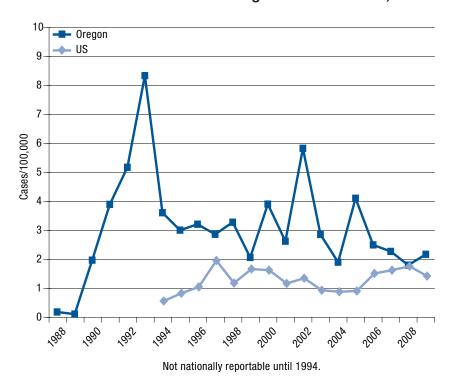
E. coli 0157 infection by onset month: Oregon, 2009



Incidence of E. coli 0157 infection by age and sex: Oregon, 2009



Incidence of E. coli 0157 infection: Oregon vs. nationwide, 1988-2009



Incidence of E. coli 0157 infection by county of residence: Oregon, 2000–2009

