Escherichia coli O157 infection

E. coli O157 ("O157") has become one of the most feared of the 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.

After a spike in 2005 of 149 cases, the yearly total fell back to a more typical 92 reports for 2006 — a phenomenon known as "regression to the mean." nationwide, however, reported case counts drifted upwards for the second year in a row.

We identified five O157 outbreaks in 2006. These included a small cluster at a Portland sushi restaurant — specific source uncertain, but possibly daikon radish sprouts; a small cluster associated with visiting a county fairgrounds; another restaurant outbreak traced to salad; and a threeperson blip affecting adult women in the Portland area that proved impossible to figure out. And oh, yes, there was a good-sized national outbreak (five Oregon cases) involving spinach. Summer sees more outbreaks of *E. coli* than other seasons.





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E. coli O157 infection by onset month - Oregon, 2006

Incidence of E. coli O157 infection by age and sex - Oregon, 2006



Cases/100,000

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Incidence of E. coli O157 infection - Oregon vs. nationwide, 1997–2006





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