

Salmonellosis

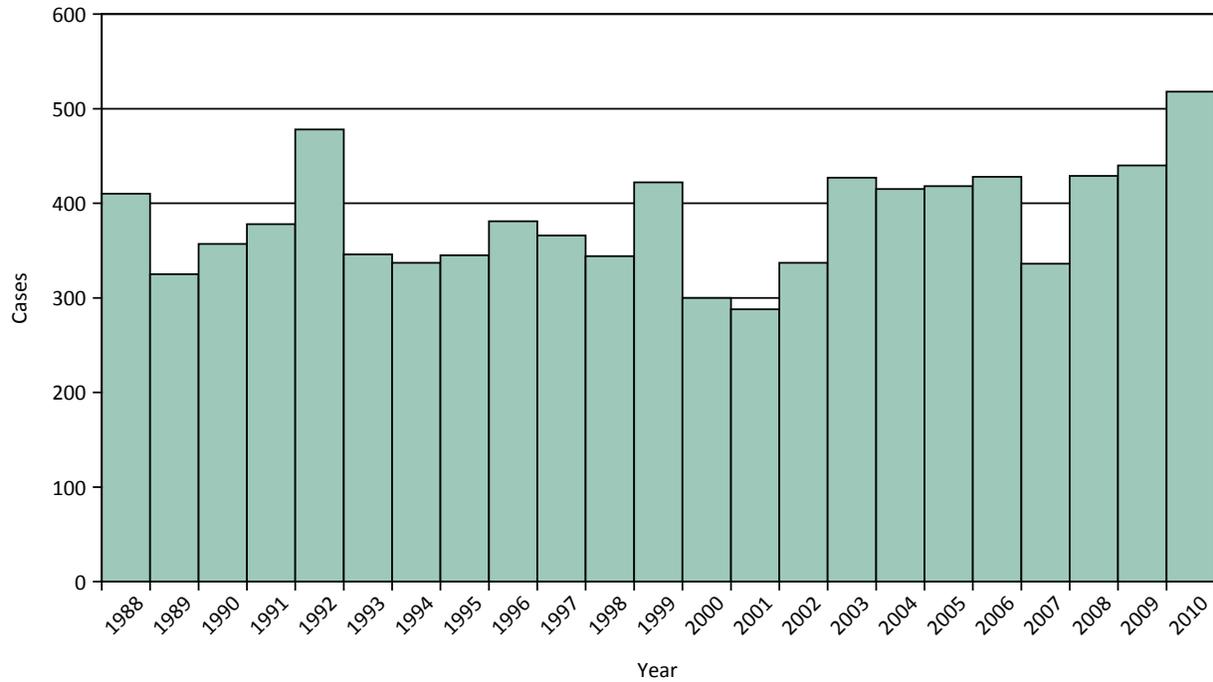
Salmonellosis is a bacterial illness characterized by acute abdominal pain, diarrhea, and often fever that usually begins one to five days after infection. Excretion of *Salmonella* may persist for several days or even months beyond the acute phase of illness. Antibiotics are contraindicated for most patients (the exceptions being those at high risk of invasive infection) and they may increase the duration of excretion.

A wide range of domestic and wild animals are carriers of *Salmonella*, including poultry, swine, cattle, rodents, iguanas, tortoises, turtles, young poultry, dogs and cats. Most human infections are thought to come from consumption of fecally contaminated food or water, but other environmental exposures may be hard to document and may be underappreciated. Raw or undercooked produce and products of animal origin, such as eggs, milk, meat and poultry, have been implicated as common sources of animal and human salmonellosis. Though not as common as with, say, *Escherichia coli* O157, person-to-person transmission is well documented. The incidence of infection is highest among young children.

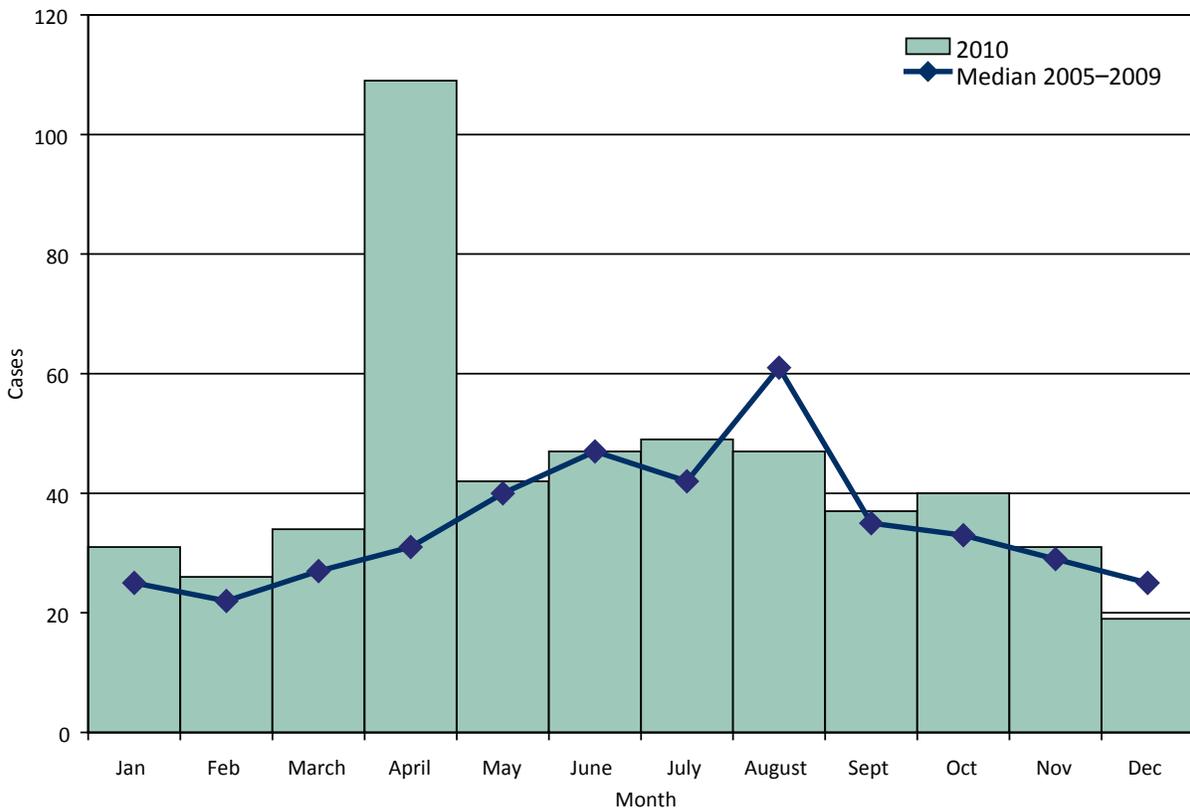
Of approximately 2,500 known serotypes, only about 200 are detected in the United States in any given year. In Oregon, *S. Typhimurium* and *S. Enteritidis* are the two most commonly reported serotypes.

In 2010, 518 cases of *Salmonella* were reported, up from 441 in 2009. A whopping 21 salmonellosis clusters were investigated in 2010. Most of these were very small; only four involved more than five Oregon cases. The largest outbreak (73 cases) involved a Roseburg restaurant, and the most interesting involved a Roseburg dairy (25 cases). After a long and frustrating investigation, a seven-month long trickle of *Salmonella* Braenderup infections was pinned on an environmental reservoir of *Salmonella* (viz., the plumbing of an outdoor crate washing machine) that was causing intermittent, low-level contamination of the external surfaces of milk cartons and jugs. This contamination led to about one confirmed illness for every million containers that came from the plant. Other noteworthy outbreak sources in 2010 included African dwarf frogs, baby chicks, Marie Callender frozen entrees, sprouts, Taco Bell, ground turkey, chicken, and sprouts (again). Several outbreaks were never solved.

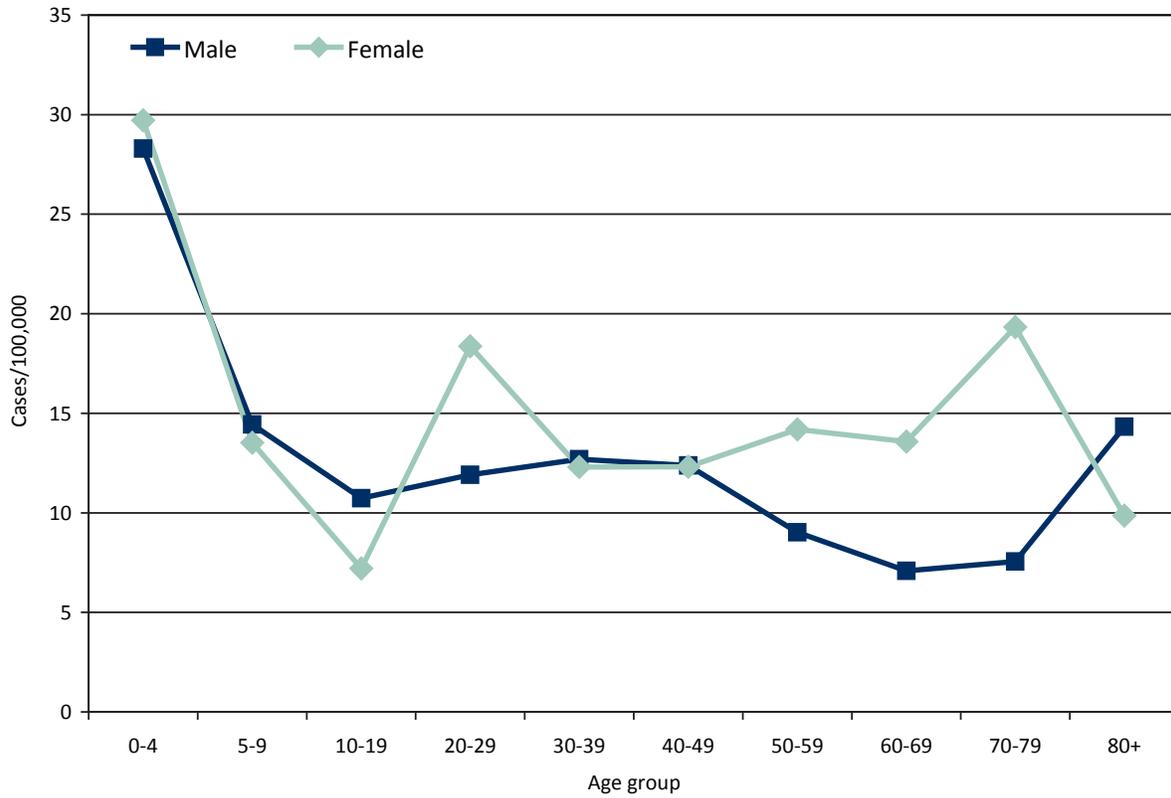
Salmonellosis by year: Oregon, 1988–2010



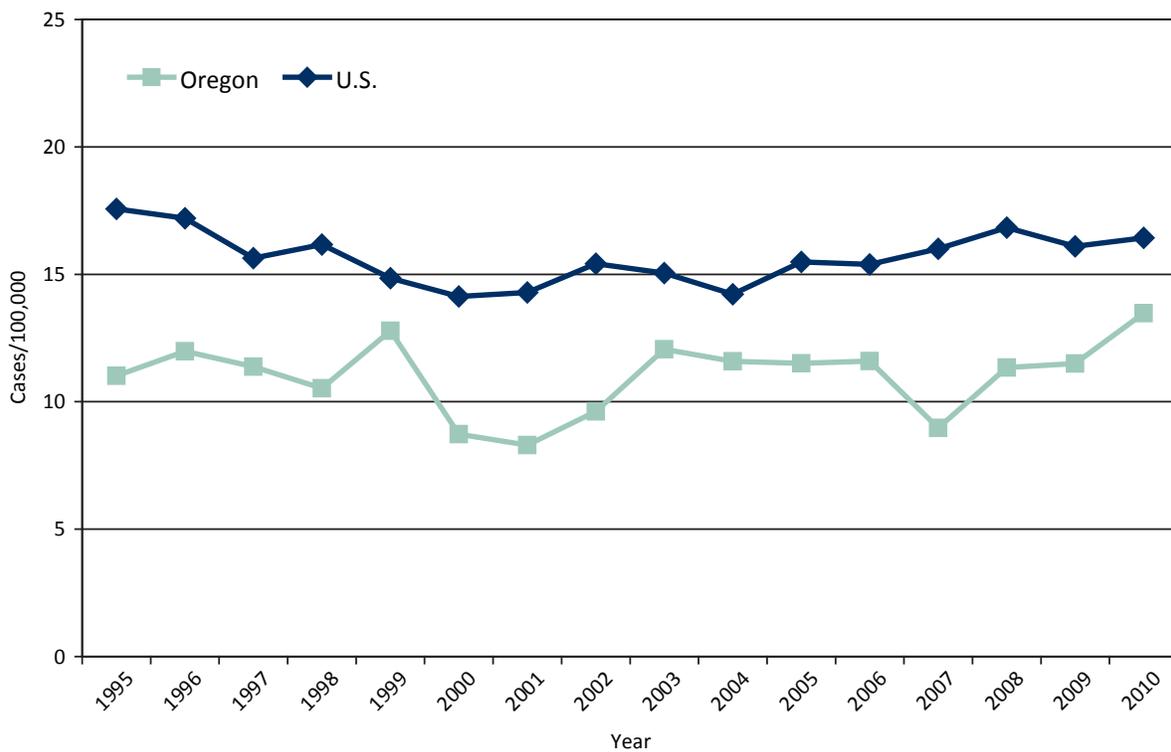
Salmonellosis by onset month: Oregon, 2010



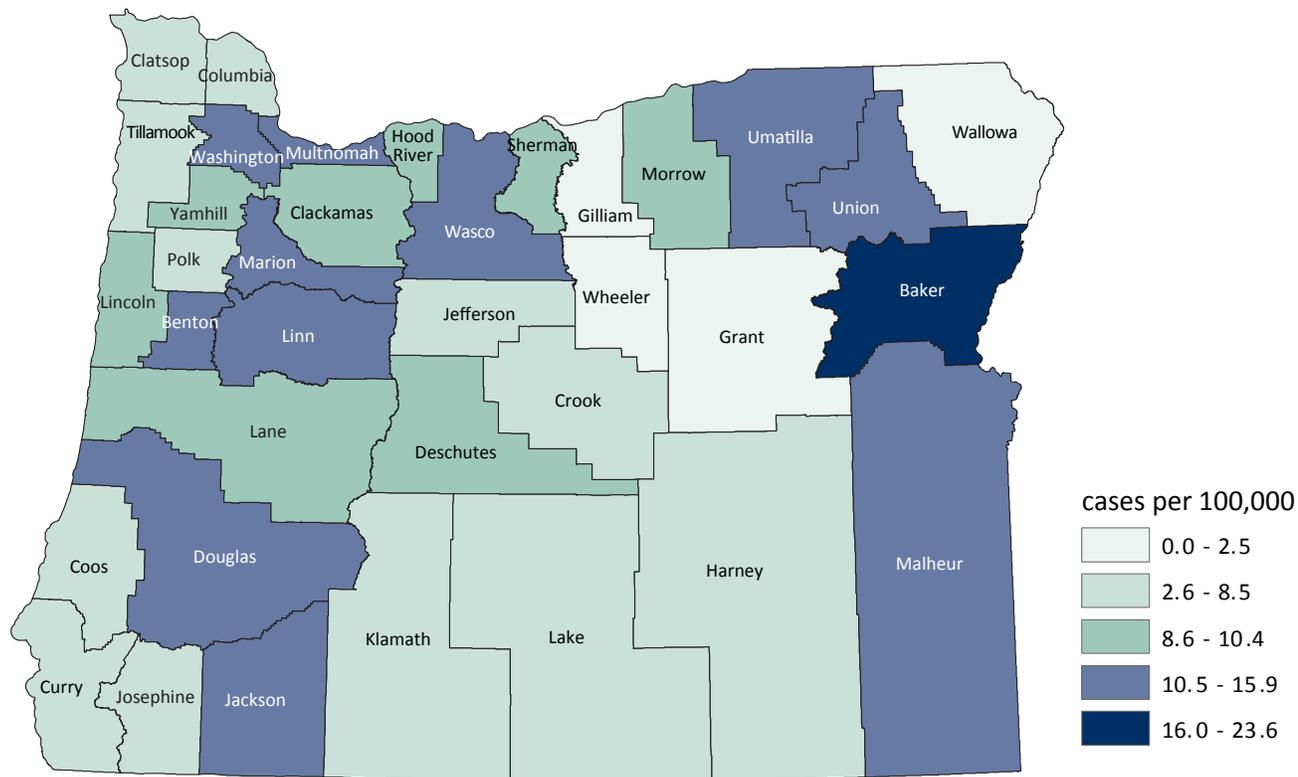
Incidence of salmonellosis by age and sex: Oregon, 2010



Incidence of salmonellosis: Oregon vs. nationwide, 1995–2010



Incidence of salmonellosis by county of residence: Oregon, 2000–2010



Selected* *Salmonella* by serotype, Oregon, 2001–2010

	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010
Braenderup	7	4	1	2	1	11	8	1	21	36
Enteritidis	34	43	78	64	86	74	54	76	61	123
Heidelberg	26	27	12	42	51	19	26	23	44	28
Montevideo	13	17	16	15	15	13	12	15	22	12
Muenchen	8	10	5	7	8	8	9	9	10	10
Newport	16	31	38	14	17	16	17	15	15	24
Oranienburg	10	12	13	6	8	5	8	8	6	8
Saintpaul	4	18	36	16	7	10	3	23	10	13
Typhimurium	86	67	83	86	84	90	52	65	81	40

*Selected because at least one case was reported in 2010 and it is a more common serotype.