Salmonellosis

Salmonellosis is a bacterial illness characterized by acute abdominal pain, diarrhea and often fever that usually begins one to five days after exposure. Excretion of *Salmonella* may persist for several days or even months beyond the acute phase of illness. Antibiotics are not needed by most patients (the exceptions being those at high risk of invasive infection), and they may increase the duration of excretion.

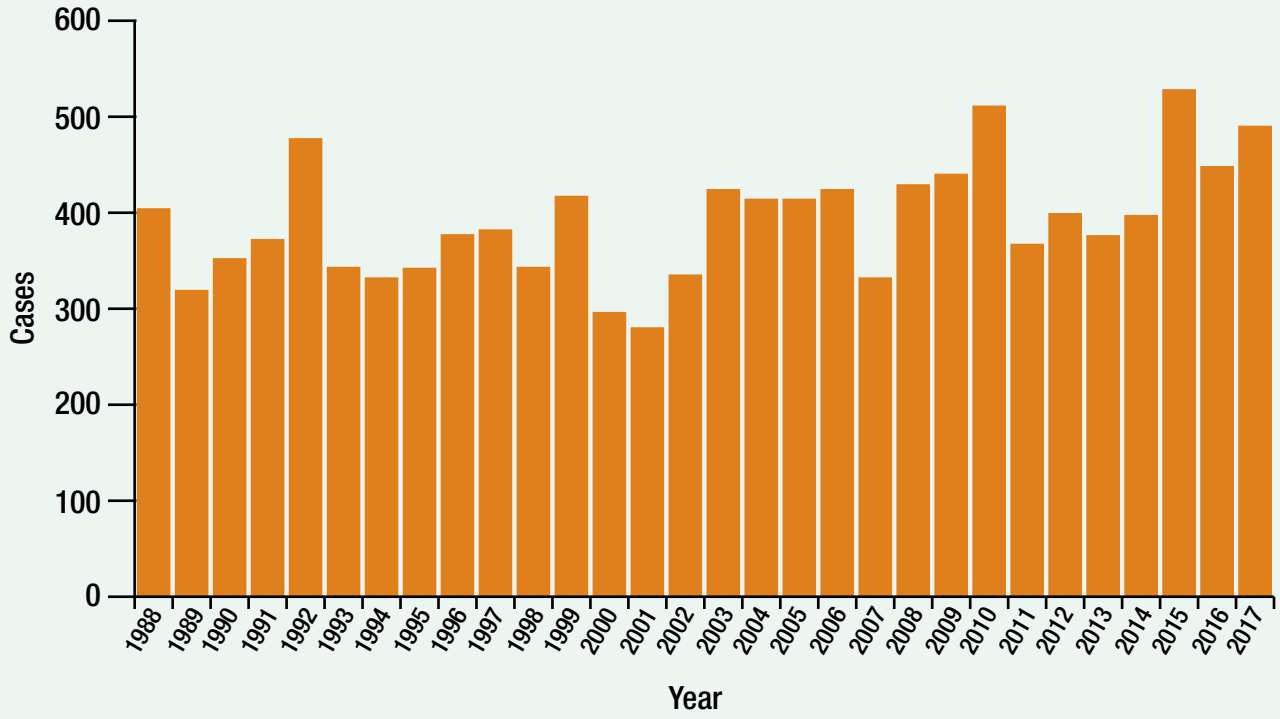
A wide range of domestic and wild animals are carriers of *Salmonella*, including poultry, swine, cattle, rodents, iguanas, tortoises, turtles, snakes, young poultry (e.g., baby chicks), dogs and cats. Most human infections are thought to come from consumption of fecally contaminated food or water, but other environmental exposures may be hard to document and, therefore, 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 *Escherichia coli* O157 infection, person-to-person transmission of salmonellosis is well documented. The incidence of reported infection is highest among children <5 years of age. In 2017, Oregon's incidence among children <5 years of age was 24 per 100,000.

Of approximately 2,500 known serotypes, only about 200 are detected in the United States in any given year. In Oregon, *S.* enteritidis and *S.* typhimurium have historically been the two most commonly reported serotypes, comprising 18% and 15% of all lab-confirmed isolates in 2017, respectively. Sixty-two percent of cases were sporadic, 16% associated with an outbreak, and 2% documented transmission within a household.

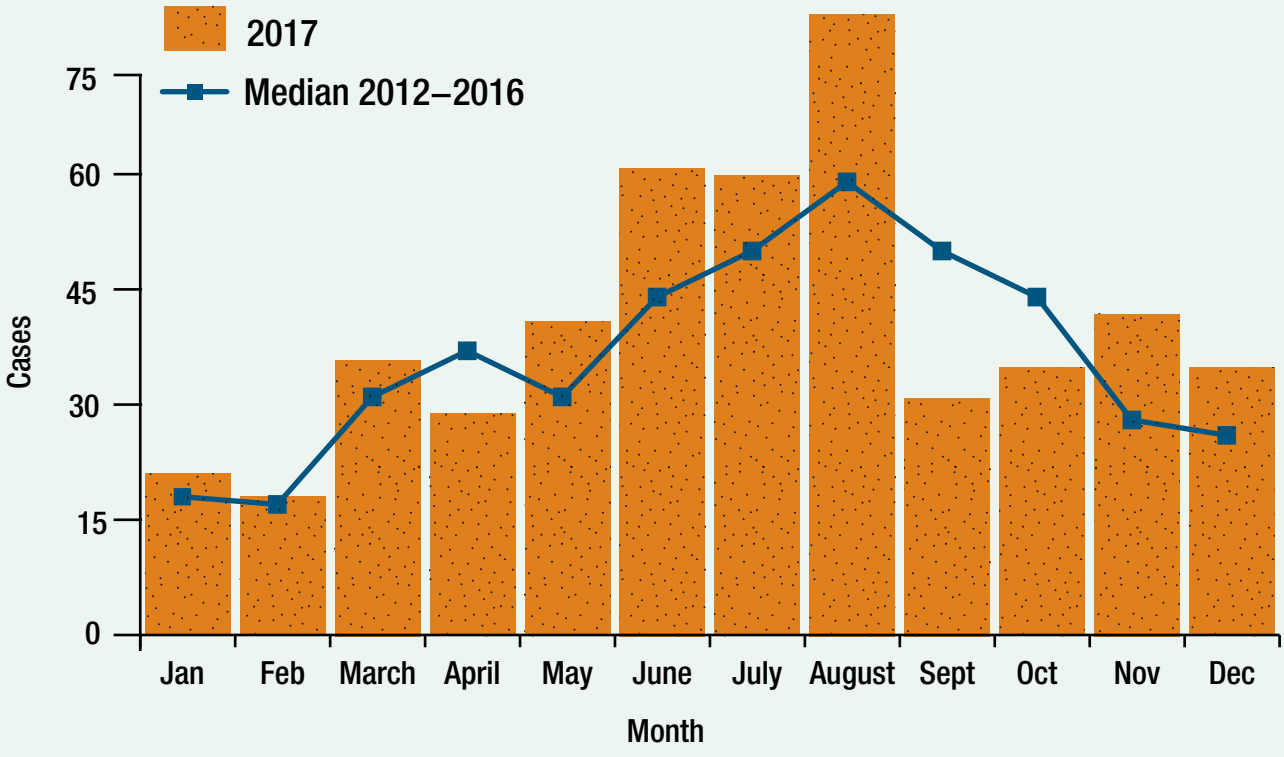
In 2017, 490 salmonellosis cases were reported in Oregon. Fifteen outbreaks of salmonellosis were reported. These outbreaks accounted for 81 cases. One large outbreak with 18 Oregon cases was associated with eating seafood, most notably fresh tuna sushi. Another national outbreak with seven confirmed Oregon cases was associated with mangos. Outbreaks of multiple *Salmonella* serotypes (Muenchen, Braenderup, Indiana, Hadar and Typhimurium) were related to contact with baby poultry.

In total, 11 outbreaks were foodborne, one was associated with animal contact and, despite investigation, three other outbreaks remained indeterminate.

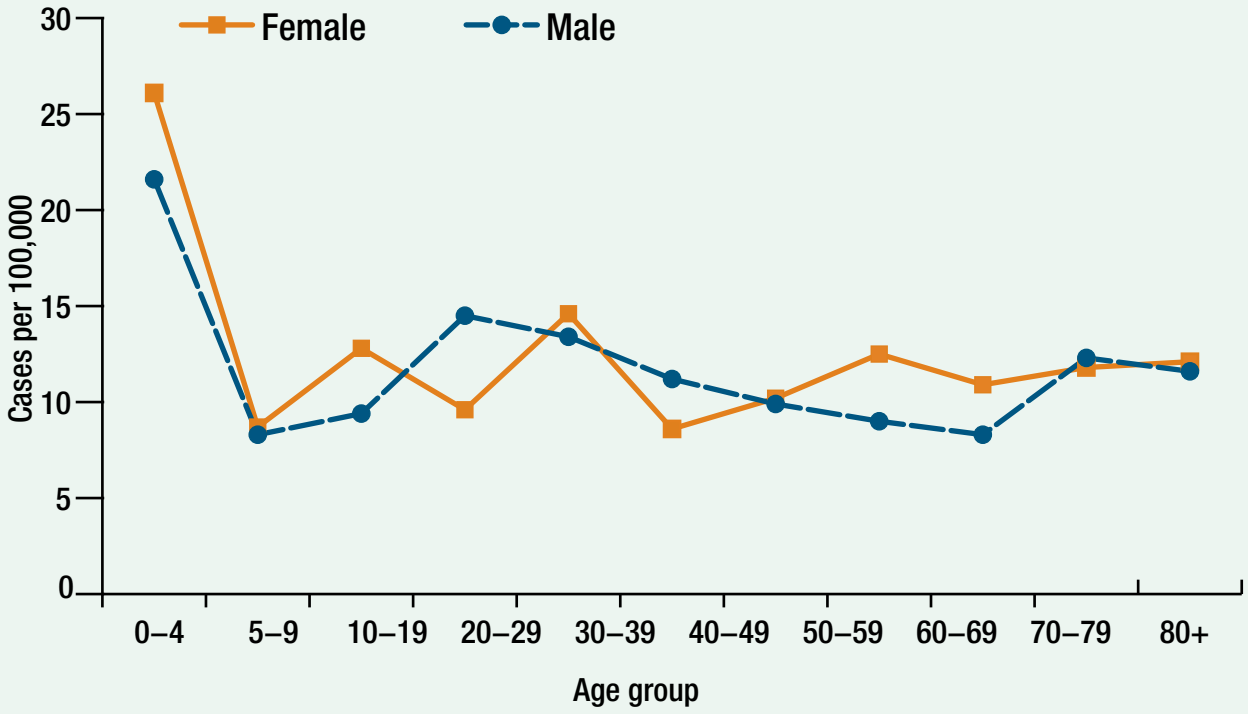
Salmonellosis by year: Oregon, 1988–2017



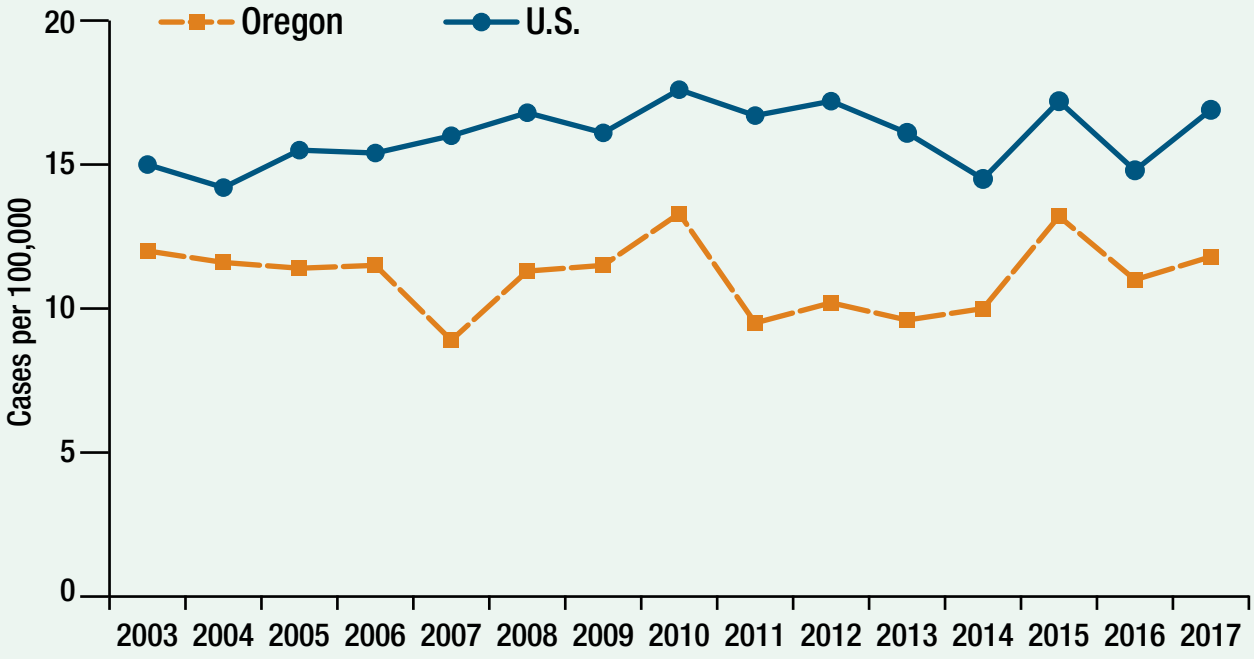
Salmonellosis by onset month: Oregon, 2017



Incidence of salmonellosis by age and sex: Oregon, 2017

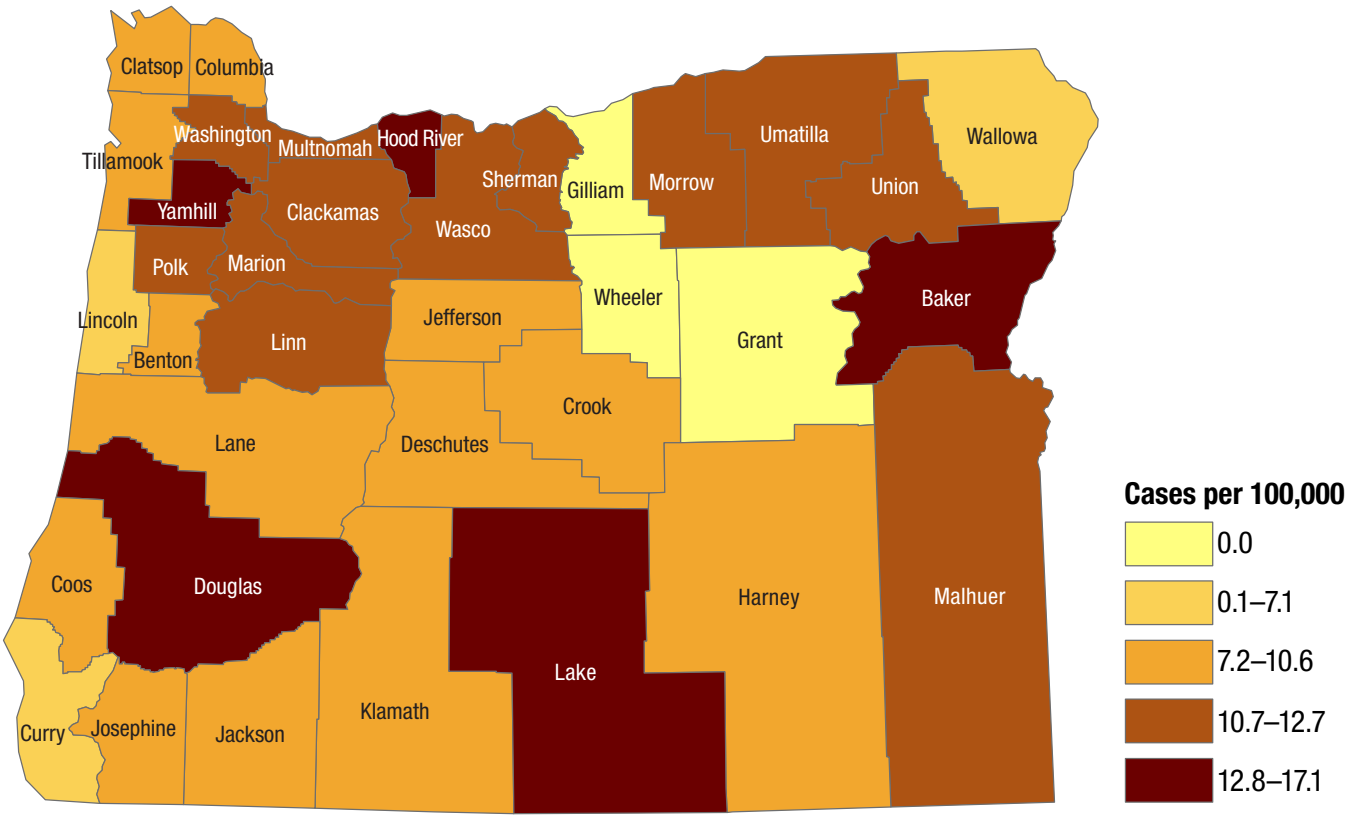


Incidence of salmonellosis: Oregon vs. nationwide: 2003–2017



Oregon	12.0	11.6	11.4	11.5	8.9	11.3	11.5	13.3	9.5	10.2	9.6	10.0	13.2	11.0	11.8
U.S.	15.0	14.2	15.5	15.4	16.0	16.8	16.1	17.6	16.7	17.2	16.1	14.5	17.2	14.8	16.9

Incidence of salmonellosis by county of residence: Oregon, 2008–2017



Selected* salmonellosis cases by serotype, Oregon, 2008–2017

	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017
Agona	15	4	7	4	7	3	5	4	6	6
Braenderup	1	21	36	9	10	7	12	9	9	9
Enteritidis	75	61	123	67	74	80	103	129	111	81
Hadar	3	7	8	8	11	6	4	14	3	6
Heidelberg	24	44	28	13	57	23	21	8	10	6
Infantis	8	9	9	13	15	10	6	11	7	21
Javiana	1	1	9	2	4	4	5	10	13	22
Montevideo	16	22	12	17	13	5	4	20	13	15
Muenchen	9	10	9	5	5	3	5	8	13	15
Newport	15	15	24	13	8	15	18	14	30	21
Oranienburg	8	6	8	11	8	9	12	13	13	8
Poona	7	2	0	2	3	3	2	29	3	5
Saintpaul	23	10	13	8	3	12	10	19	12	6
Thompson	5	12	14	14	9	12	18	6	13	13
Typhimurium	65	81	53	47	50	82	61	80	48	66
I 4,[5],12:i:-	9	11	8	9	9	18	22	40	21	28

*Selected because at least one case was reported in 2017 and it is a more common serotype.