Central Oregon Public Health Quarterly

Communicable Disease Update for Crook, Deschutes, and Jefferson Counties First Quarter Report, 2020

24/7 Communicable Disease reporting lines:		Crook County: 541-447-5165	:	Deschutes County: 541-322-7418	:	Jefferson County: 541-475-4456
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2019 Communicable Diseases Year-in-Review

The table below summarizes 2019 case counts and estimated rates for select reportable communicable diseases with Central Oregon regional case counts of 5 or higher. Diseases are listed in order of prevalence in Central Oregon in 2019. Five-year rates and average annual case counts for 2014-2018 are also provided for comparison.

Communicable Disease Case Counts and Rates													
Reportable Disease or Condition	2019				2014-2018								
	Oregon		Central Oregon		Oregon		Central Oregon						
	Case count	Rate per 100,000 population	Case count	Rate per 100,000 population	Average annual case count	5-year rate per 100,000 population	Average annual case count	5-year rate per 100,000 population					
Chlamydia	19,248	454.3	923	384.1	17,323.6	424.0	780.4	350.5					
Hepatitis C (chronic)	5,127	121.0	268	111.5	5,794.8	141.8	300.0	134.8					
Gonorrhea	6,134	144.8	128	53.3	4,169.6	102.0	91.4	41.1					
Campylobacteriosis	1,024	24.2	113	47.0	967.2	23.7	81.0	36.4					
Pertussis	426	10.1	72	30.0	387.8	9.5	26.6	11.9					
Salmonella (non-typhoidal)	460	10.9	37	15.4	489.0	12.0	26.0	11.7					
E. coli (STEC)	354	8.4	31	12.9	227.6	5.6	24.6	11.0					
E. coli (ETEC)	70	3.9	30	12.5	Newly Reportable in 2018								
Cryptosporidiosis	253	6.0	27	11.2	250.2	6.1	10.2	4.6					
Giardiasis	291	6.9	24	10.0	340.8	8.3	26.4	11.9					
Yersinia	53	1.3	15	6.2	118.0	2.9	11.4	5.1					
CRE	164	3.9	7	2.9	118.0	2.9	11.4	5.1					
Hepatitis B (chronic)	374	8.8	6	2.5	467.4	11.4	8.2	3.7					
Vibriosis	37	0.8	6	2.5	35.2	0.9	4.6	2.1					
Legionellosis	73	1.7	5	2.1	45.0	1.1	1.2	0.5					

Case counts include both confirmed and presumptive cases. Case counts are preliminary as of February 1, 2020. 2019 rates calculated using 2019 mid-year population estimates from the Population Research Center at Portland State University. 2014-2018 rates calculated using American Community Survey population estimates.

Note: E. coli is the abbreviation for Escherichia coli bacteria. STEC is the abbreviation for Shiga-toxin producing E. coli and ETEC is the abbreviation for Enterotoxigenic E. coli. CRE is the abbreviation for Carbapenem-resistant Enterobacteriaceae.

Central Oregon Year-in-Review Highlights

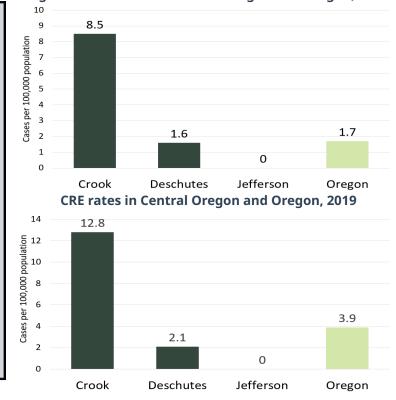
- In 2019, over a quarter of all statewide cases of Yersiniosis occurred in Central Oregon.
- Chlamydia and gonorrhea rates in Central Oregon rose 10% and 29% respectively compared to the 2014-2018 5-year rates. Despite this increase, Central Oregon rates are still below Oregon rates for both diseases.
- Campylobacteriosis is the fourth most common reportable disease in Central Oregon. The rate (47.0 cases per 100,000) in Central Oregon was nearly double the Oregon Rate (24.2 cases per 100,000) and has increased from the Central Oregon 5-year rate (36.4 cases per 100,000).
- E. coli (ETEC) became reportable in 2018. Central Oregon had 30 cases which represent 43% of all cases reported across Oregon. The Central Oregon rate of E. coli (ETEC) (12.5 cases per 100,000) was around 3 times the Oregon rate (3.9 cases per 100,000).
- The Central Oregon Pertussis rate in 2019 (30.0 cases per 100,000) is more than double the Central Oregon 5-year rate (11.9 cases per 100,000). **Please refer to the back of this page for more information on Pertussis.**

Notable Disease Differences by County - 2019

Legionellosis and CRE rates are higher in Crook County than in Deschutes and Jefferson Counties (see graphs to the right). Crook County's CRE rate is lower than Oregon but its Salmonella rate is ~23% higher than Oregon. Legionellosis rates in increased in Crook County between 2018 and 2019, but Deschutes and Jefferson Counties' rates remained the same. CRE rates decreased in all three counties between 2018 and 2019.

Other notable differences between the three Central Oregon counties this year were seen for Salmonellosis and Cryptosporidiosis. The rate of Salmonellosis in Jefferson County (38.2 cases per 100,000) is more than double the rate in Deschutes County (14.3 cases per 100,000). Crook County had too few cases to estimate a reliable rate in 2018.

The rate of Cryptosporidiosis in Crook County (26.4 cases per 100,000) is more than 3 times the rate in Deschutes County (7.4 cases per 100,000). Jefferson County had too few cases to estimate a reliable rate in 2018.



Disease Spotlight: Pertussis

Pertussis (whooping cough), is a highly contagious respiratory disease characterized by a persistent cough that last over 2 weeks, a "whooping" sound at the end of a coughing fit, and known exposure to a confirmed case. Pertussis is a nationally notifiable disease, although not all cases are diagnosed and therefore not reported.

Prior to 2019, pertussis rates in Central Oregon were typically lower than Oregon with exception of 2014-2015. In 2019, the Central Oregon rate (30.0 cases per 100,000) is almost three times the Oregon rate (10.1 cases per 100,000). A similar disparity was observed in 2014.

Pertussis rates by year, 2008-2019 35 31.5 -Oregon —Central Oregon 30.0 30 Case per 100,0000 population 01 21 25 25 23.4 20.514 11 10.1 8.5 7.4 6.7 6.0 4.6 4.5 5 2.0 1.5 1.5 .8 .0 0.9 0 2008 2020 2012 2013 2024 2026 2027 2009 2011 2015 2018 2019

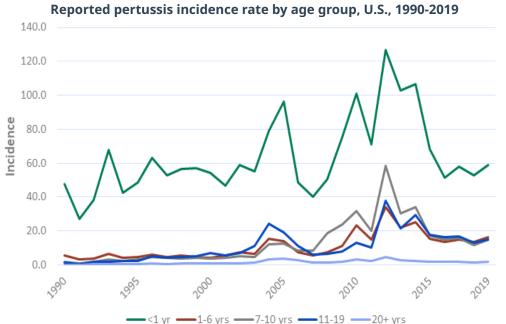


Figure from: https://www.cdc.gov/pertussis/surv-reporting.html

Pertussis is transmitted person to person through respiratory droplets containing a type of bacteria (*Bordetella pertussis*).

The graph to the left shows the nationwide incidence of reported pertussis cases per 100,000 by age group from 1990-2019.

Infants aged under 1 year are the most at risk for serious disease and mortality, also consistently have the highest incidence of reported pertussis cases.

Legionellolisis rates in Central Oregon and Oregon, 2019