Central Oregon Public Health Quarterly

Communicable Disease Update for Crook, Deschutes, and Jefferson Counties
First Quarter Report, 2022

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

2021 Communicable Diseases Year-in-Review

The table below summarizes 2021 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 2021. Five-year rates and average annual case counts for 2016-2020 are also provided for comparison.

Communicable Disease Case Counts and Rates

Reportable Disease or Condition	2021				2016-2020			
	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	15,607	365.8	768	314.0	18,047.2	430.6	824.0	350.8
Gonorrhea	6,222	145.8	254	103.9	5,571.4	132.9	120.6	51.3
Hepatitis C (chronic)	3,851	90.3	180	73.6	5,240.0	125.0	278.8	118.7
Campylobacteriosis	1,083	25.4	110	45.0	979.0	23.4	95.0	40.4
Giardiasis	342	8.0	60	24.5	309.8	7.4	28.0	11.9
Early Syphilis	1,420	33.3	40	15.8	724.6	17.3	10.2	4.3
E. coli (STEC)*	291	6.8	35	13.8	256.4	6.1	28.6	12.2
E. coli (ETEC)*	67	1.6	26	10.2	29.6	0.7	14.4	6.1
Salmonella (non-typhoidal)	334	7.8	25	9.9	488.4	11.7	29.6	12.6
Cyclosporiasis	14	0.3	13	5.1	2.0	0.0	0.8	0.3
CRE*	150	3.5	11	4.3	215.4	5.1	14.0	6.0
Yersinia	56	1.3	11	4.3	41.6	1.0	5.8	2.5
Cryptococcus	53	1.2	10	3.9	56.8	1.4	8.2	3.5
Hepatitis B (chronic)	370	8.7	9	3.5	400.6	9.6	7.6	3.2
Shigellosis	122	2.9	8	3.2	174.0	4.2	7.4	3.2
Lead poisoning	284	6.7	7	2.8	438.0	10.4	9.0	3.8
Cryptosporidiosis	125	2.9	7	2.8	251.4	6.0	16.0	6.8
Lyme disease	79	1.9	6	2.4	65.8	1.6	3.4	1.4
HIV*	200	4.7	6	2.4	209.6	5.0	6.4	2.7
Vibriosis	45	1.1	5	2.0	38.2	0.9	6.0	2.6
Cocciodioidomycosis	32	0.8	5	2.0	36.8	0.9	4.2	1.8

Case counts include both confirmed and presumptive cases. Case counts and rates are preliminary as of April 19, 2022. 2021 rates calculated using 2021 mid-year population estimates from the *Population Research Center at Portland State University*. 2016-2020 rates calculated using *American Community Survey* population estimates.

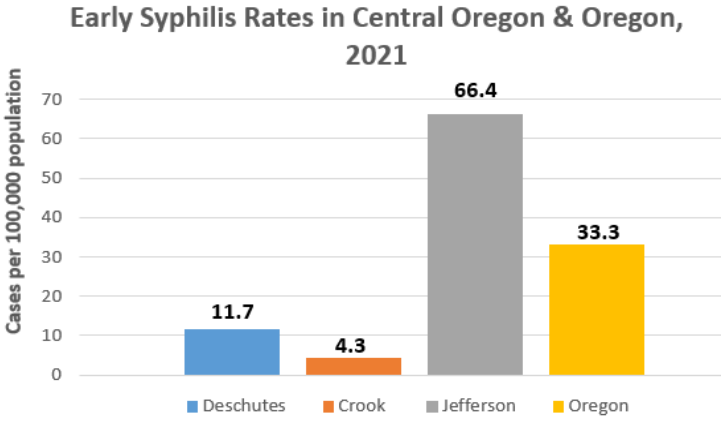
Abbreviations: E. coli=Escherichia coli bacteria. STEC=Shiga-toxin producing E. coli, and ETEC=Enterotoxigenic E. coli (**Note:** This condition was newly reportable in 2018). CRE=Carbapenem-resistant Enterobacteriaceae.

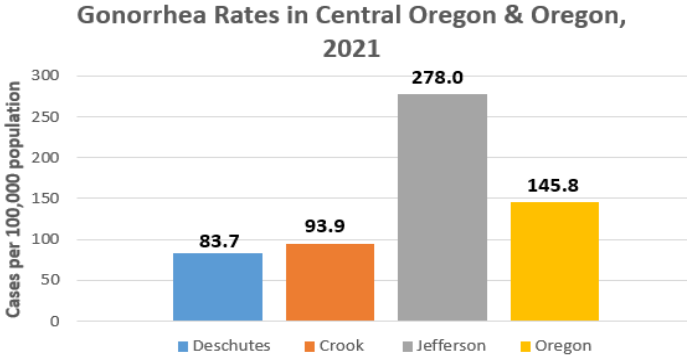
2021 Central Oregon (CO) Year-in-Review Highlights

- **Top 3 Communicable Diseases (CDs) in 2021: 1)** chlamydia; **2)** gonorrhea; **3)** hepatitis C (chronic)--rates of which were all lower in CO vs. entire state
- **2021 vs. Prior 5 Years (2016-2020):** In total, 11/21 (**52%**) of the CDs (with annual case counts ≥5) were elevated in 2021 compared to the previous 5 year period: gonorrhea, campylobacteriosis, early syphilis, E. coli (STEC & ETEC), cyclosporiasis, Yersinia, cryptococcus, hepatitis B (chronic), Lyme disease, and cocciodioidomycosis
  - **CDs with especially high rates (>30% difference) included:** gonorrhea; giardiasis; early syphilis; E. Coli (ETEC); cyclosporiasis; Yersinia; Lyme disease
- **CO vs. Overall State Rates**
  - In 2021, 13/21 (62%) of CDs (case counts ≥ 5) had lower rates compared to the overall state rates (i.e. campylobacteriosis; giardiasis; E. coli (STEC & ETEC); salmonella (non-typhoidal); cyclosporiasis; CRE; Yersinia; Cryptococcus; Shigellosis; Lyme disease; Vibriosis; cocciodioidomycosis)

Notable Disease Differences by CO County & State - 2021

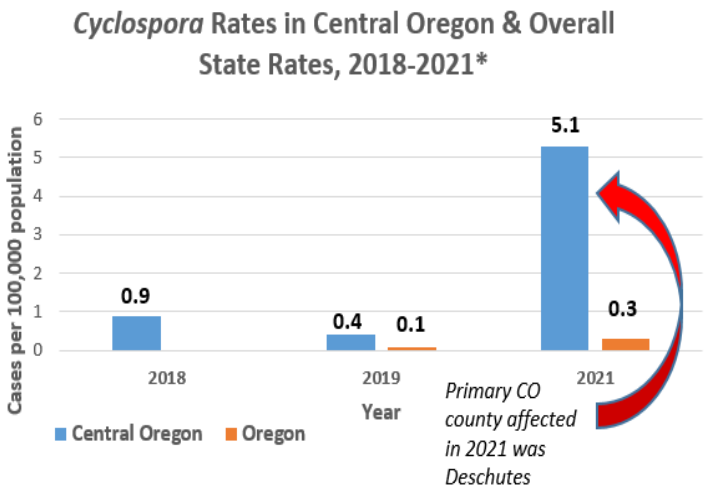
- **In 2021**, there were **noted differences in sexually transmitted diseases (STD) rates** across our 3 CO counties (*see graphs to right*)
- **Jefferson County** rates for early syphilis & gonorrhea were particularly high compared to other CO counties (& ~50% higher than the overall state rates)
- Other notable differences in 2021:
  - **Giardia rates higher in Deschutes & Crook counties compared to Jefferson** or overall state rate
- Crook & Jefferson counties had 0 cases of cyclosporiasis reported in 2021, whereas **Deschutes county had a rate of 6.6 per 100,000 population**
- While **Lyme Disease** rates overall remained relatively low, rates in **Deschutes & Jefferson** counties were higher than the state rate (with 2.5 and 4.1 per 100,000 population reported, respectively)





Disease Mini-Spotlight: Cyclosporiasis

- **What is Cyclosporiasis?** A disease caused by infection from *Cyclospora cayetanensis*, a pathogenic protozoan
- **How is it transmitted?** From feces or feces-contaminated food & water
- **Are outbreaks common?** While *Cyclospora* outbreaks were historically confined to tropical regions, outbreaks are becoming more frequent in North America. Since the 1990s, 11 outbreaks have occurred in the U.S. & Canada.
- **What have recent outbreaks in the U.S. been linked to?** *cilantro* (2015: Texas); *bagged lettuce* (2020; Midwestern States); *unidentified source* (2021; 36 states affected, including OR) Cyclosporiasis Outbreak Investigations — United States, 2021 (cdc.gov)
- **How do I protect myself?** While no vaccine currently exists, infections can be treated with Bactrim or co-trimoxazole. *Always cook food thoroughly, wash hands after touching fruit & veggies, rinse fruit & veggies before eating, and avoid drinking from streams*



***Note:** Rates from 2020 were '0' for both CO & OR

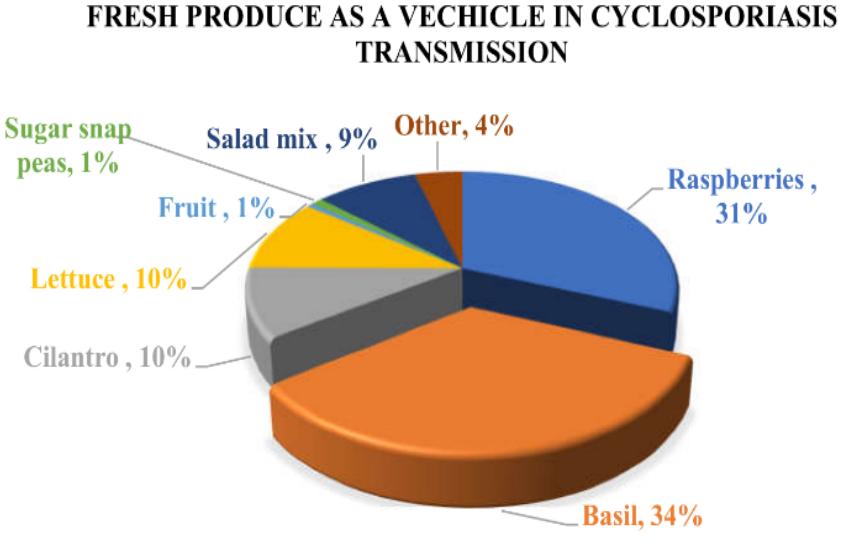


Figure from: Hadjilouka A, Tsaltas D. Cyclospora Cayetanensis—Major Outbreaks from Ready to Eat Fresh Fruits and Vegetables. *Foods*. 2020; 9(11):1703. https://doi.org/10.3390/foods9111703

Life Cycle of *Cyclospora*

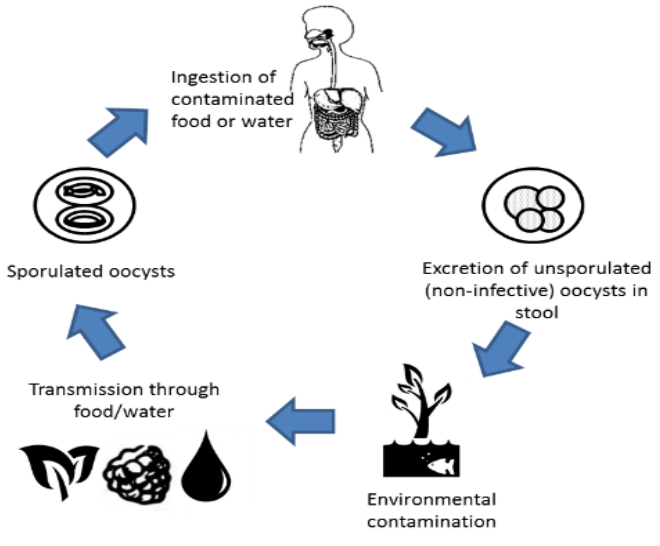


Figure from: https://www.ifst.org/resources/information-statements/cyclospora