

Central Oregon Communicable Disease Report

January 1, 2020 – September 30, 2020

Crook, Jefferson, and Deschutes Counties

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Summary

The Central Oregon Region (Crook, Deschutes, and Jefferson counties) has observed a decrease in the number of infectious disease cases being reported (not including COVID-19) from 2019 to 2020. The highest reported cases for the region were sexually transmitted infections (STI), including chlamydia and gonorrhea, and hepatitis C. An increased number of Campylobacteriosis (campy) was also reported for both Deschutes and Crook counties. The entire region saw a decrease in the number of reported hepatitis C infection, but Crook County had the largest drop in cases with 26 cases reported in 2019 and 7 cases reported in 2020 (from January 1, to September 30th). Jefferson County had the highest reported hepatitis C infections in Central Oregon, and their rate was also higher than the state's.

When comparing 2019 to 2020, the number of reported chlamydia and hepatitis C cases in Oregon decreased, and most counties in Oregon saw a decrease in the rate of reported chlamydia and hepatitis C infection from 2019 to 2020.

The novel coronavirus (COVID-19) could be impacting health seeking behavior, explaining the decrease in the number of communicable diseases being reported. This is concerning for two reasons: 1. The high transmission rate of hepatitis C, chlamydia, and gonorrhea; and 2. The health complications associated with hepatitis C, chlamydia, and gonorrhea if left untreated.

Date reported:

The data in this report was collected using the Oregon Public Health Epidemiologists' User System (Orpheus). Orpheus is an electronic disease surveillance system meant for local and state public health epidemiologists and disease investigators to help manage and create communicable disease reports.

The number of cases reported were compared using the following dates: January 1, 2019 to September 30, 2019 to January 1, 2020 to September 30, 2020.

Crook County

Table 1. shows the number of communicable disease cases (*not including COVID-19*) reported for Crook County from January 2020 – September 2020 compared to January 2019 – September 2019. Overall, there are less communicable disease cases reported in 2020 (**total cases: 104**) when compared to 2019 (**total cases: 143**) Campylobacteriosis (Campy), chlamydia, gonorrhea, and hepatitis C (*chronic*) were the most prevalent communicable diseases in Crook County in 2020 and 2019. There was a major decrease in Hepatitis C cases in Crook County from 2019 (**26 cases**) to 2020 (**7 cases**), but there was an increase in gonorrhea cases from 2019 (**7**) to 2020 (**17**). All other reported communicable disease cases had low case counts and ranged between zero and about three percent of all reported cases.

Table 1. Communicable disease cases in Crook County in January 2020 to September 2020 compared to 2019.				
Crook County	Case # 2020	% of all CD cases	Case # 2019	% of all CD cases
Campylobacteriosis	9	8.7%	11	7.7%
Chlamydia	62	59.6%	64	44.8%
Coccidioidomycosis	0	0.0%	1	0.7%
CRE	1	1.0%	3	2.1%
Cryptosporidiosis	1	1.0%	8	5.6%
E.Coli (ETEC)	0	0.0%	3	2.1%
E.Coli (STEC)	3	2.9%	7	4.9%
Elevated Blood Lead Level	0	0.0%	4	2.8%
Giardiasis	1	1.0%	1	0.7%
Gonorrhea	17	16.3%	7	4.9%
Hep B (acute)	0	0.0%	1	0.7%
Hep C (acute)	0	0.0%	0	0.0%
Hep C (chronic)	7	6.7%	26	18.2%
Legionellosis	0	0.0%	2	1.4%
Pertussis	0	0.0%	0	0.0%
Salmonellosis	2	1.9%	3	2.1%
Syphilis	0	0.0%	1	0.7%
Vibriosis	0	0.0%	0	0.0%
Yersiniosis	1	1.0%	1	0.7%
Total	104		143	

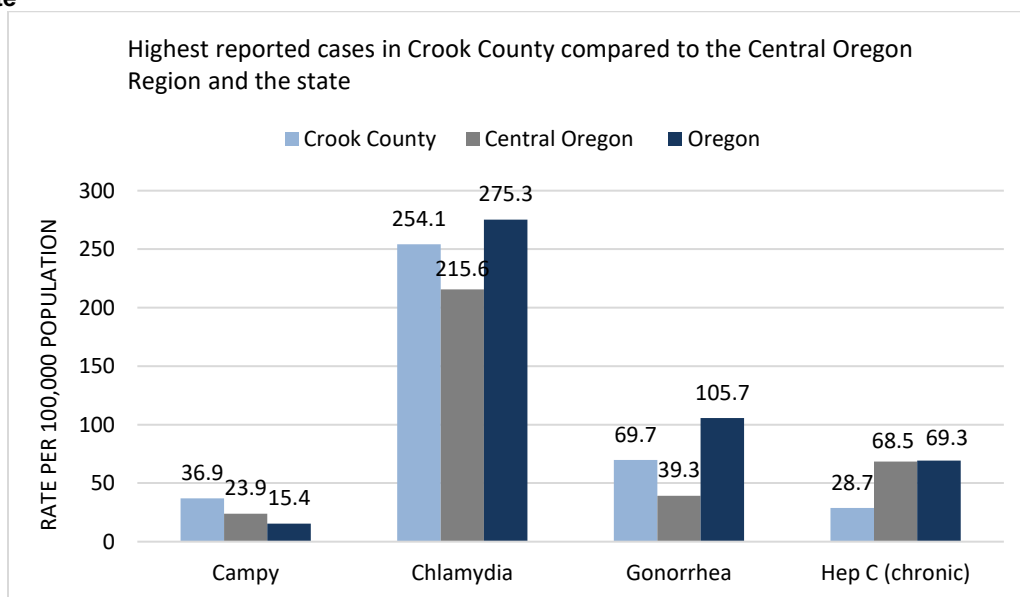
Table 2. and **Figure 1.** show the most commonly reported communicable diseases in Crook County compared to Oregon and Central Oregon (*rate per 100,000 population*) from January 1, 2020 to September 30, 2020.

Table 2. Rate (per 100,000) of the top reported cases in Crook County compared to Oregon and Central Oregon			
	Crook County	Oregon	**Central Oregon
Campylobacteriosis	36.9	15.4	23.9
Chlamydia	254.1	275.3	215.6
Gonorrhea	69.7	105.7	39.3
Hep C (chronic)	28.7	69.3	68.5

*Rates calculated using 2019 American Community Survey 2019 populations estimates

**Central Oregon Counties: Jefferson, Crook, Deschutes

Figure 1. Rate per 100,000 population of highest reported cases in Crook County (Campy, Chlamydia, Gonorrhea, and Hep C) from January 1, 2020 to September 30, 2020 compared the Central Oregon and the state



*Rates calculated using 2019 American Community Survey 2018 5-year estimates

**Central Oregon Counties: Jefferson, Crook, Deschutes

Crook County’s case rates for Chlamydia, Gonorrhea, and Hep C are lower than the state, while Campy cases are higher than both the state and Central Oregon. Chlamydia and Gonorrhea are higher in Crook County than the rest of the Central Oregon Region, and Crook County’s Hep C rates are much lower than the state and Central Oregon.

Jefferson County

Table 3. shows the number of communicable disease cases (*not including COVID-19*) reported for Jefferson County from January 2020 – September 2020 compared to January 2019 – September 2019. The most commonly reported communicable diseases in Jefferson County in 2020 and 2019 were chlamydia, gonorrhea, and hepatitis C (*chronic*). Similar to Crook County, Jefferson County observed a decrease in overall communicable disease cases from 2019 (**total cases: 238**) to 2020 (**total cases:**

199). There was a decrease among all of the top reported cases (chlamydia, gonorrhea, and hep C) in Jefferson County from 2019 to 2020. Chlamydia had a slight decrease in cases from 2019 (**130 cases**) to 2020 (**118 cases**), as well as a decrease in gonorrhea cases from 2019 (**24 cases**) to 2020 (**34 cases**). Jefferson County did not observe as big of a case decrease in Hep C as Crook County, but there was a decrease in Hep C cases from 2019 (**37 cases**) to 2020 (**24 cases**). All other reported communicable disease cases had low cases counts and ranged between zero and three percent of all reported cases.

Table 3. Communicable disease reported in Jefferson County in January 2020 to September 2020 compared to 2019.				
Jefferson County	Case # 2020	% of all CD cases	Case # 2019	% of all CD cases
Campylobacteriosis	6	3.0%	9	3.8%
Chlamydia	118	59.3%	130	54.6%
Coccidioidomycosis	0	0.0%	1	0.4%
Colorado Tick Fever	0	0.0%	1	0.4%
CRE	2	1.0%	0	0.0%
Cryptosporidiosis	1	0.5%	4	1.7%
E.Coli (ETEC)	0	0.0%	2	0.8%
E.Coli (STEC)	3	1.5%	0	0.0%
Giardiasis	5	2.5%	2	0.8%
Gonorrhea	24	12.1%	34	14.3%
Hep B (acute)	1	0.5%	1	0.4%
Hep B (chronic)	1	0.5%	0	0.0%
Hep C (chronic)	24	12.1%	37	15.5%
Elevated Blood Lead Level	3	1.5%	4	1.7%
Neisseria meningitidis	0	0.0%	1	0.4%
Non-TB Mycobacteria	0	0.0%	1	0.4%
Pertussis	3	1.5%	0	0.0%
Salmonellosis	2	1.0%	3	1.3%
Scombroid	0	0.0%	5	2.1%
Shigellosis	0	0.0%	0	0.0%
Syphilis	3	1.5%	1	0.4%
Vibriosis	2	1.0%	1	0.4%
Yersiniosis	1	0.5%	1	0.4%
Total	199		238	

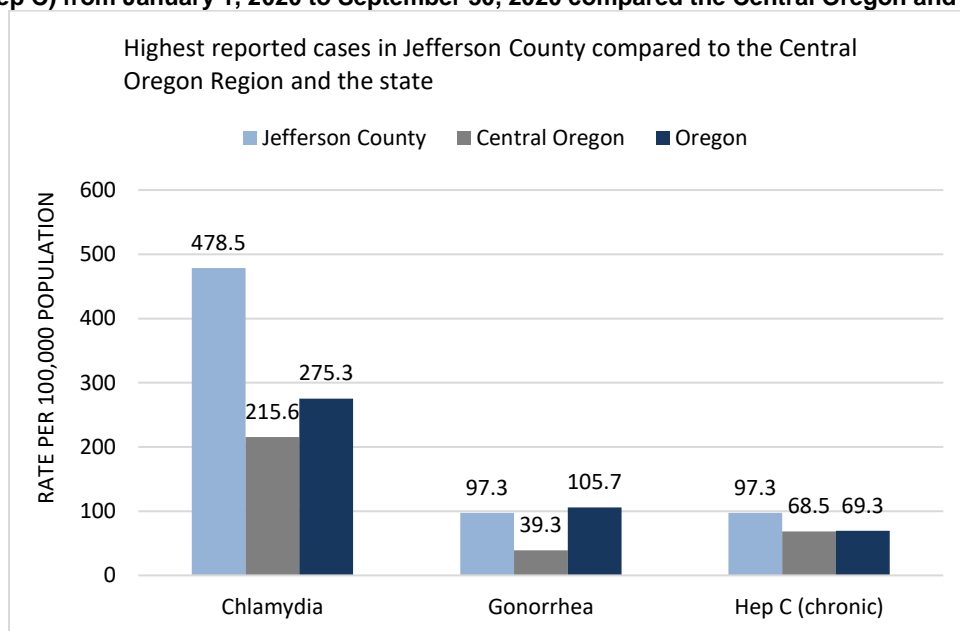
Table 4. and **Figure 2.** show the top reported communicable diseases in Jefferson County compared to Oregon and Central Oregon (*rate per 100,000 population*) from January 1, 2020 to September 30, 2020.

Table 4. Rate (per 100,000) for the top reported cases in Jefferson County compared to Oregon and Central Oregon			
	Jefferson County	Oregon	**Central Oregon
Chlamydia	478.5	275.3	215.6
Gonorrhea	97.3	105.7	39.3
Hep C (chronic)	97.3	69.3	68.5

*Rates calculated using 2019 American Community Survey 2019 populations estimates

**Central Oregon Counties: Jefferson, Crook, Deschutes

Figure 2. Rate per 100,000 population of highest reported cases in Jefferson County (Chlamydia, Gonorrhea, and Hep C) from January 1, 2020 to September 30, 2020 compared the Central Oregon and the state



*Rates calculated using 2019 American Community Survey 2018 5-year estimates

**Central Oregon Counties: Jefferson, Crook, Deschutes

Jefferson County's chlamydia rate is higher than the state and Central Oregon region rates. Their gonorrhea and Hep C rates are both higher than the rest of the Central Oregon region, with gonorrhea being much higher than Central Oregon, but lower than the state. Jefferson County's Hep C cases have decreased, but their rate per 100,000 population is still higher than both the state and Central Oregon.

Deschutes County

Table 5. shows the number of communicable disease cases (*not including COVID-19*) reported for Deschutes County from January 2020 – September 2020 compared to January 2019 – September 2019. Like Crook County, the top cases for Deschutes County in 2020 and 2019 were Campylobacteriosis (Campy), chlamydia, gonorrhea, and hepatitis C (*chronic*). Deschutes County also had a decrease in the number of overall communicable disease cases reported in 2020 (**total cases: 710**) compared to 2019 (**total cases: 961**). There was a major drop in the number of chlamydia cases

reported in 2020 (**352 cases**) compared to 2019 (**517 cases**), while the number of gonorrhea cases reported in 2020 (**56 cases**) increased slightly, they were still similar when compared to 2019 (**50**). Similar to the rest of the Central Oregon region, Deschutes county witnessed a decrease in Hep C cases in 2020 (**138 cases**) when compared to 2019 (**150 cases**). All other reported communicable disease cases had low case counts, ranging between zero and three percent of all reported cases.

Table 5. Communicable disease prevalence in Deschutes County in January 2020 to September 2020 compared to 2019.

Deschutes County	Case # 2020	% of all CD cases	Case # 2019	% of all CD cases
Campylobacteriosis	44	6.2%	68	7.1%
Chlamydia	352	49.6%	517	53.8%
CRE	7	1.0%	3	0.3%
Cryptosporidiosis	6	0.8%	9	0.9%
E.Coli (ETEC)	11	1.5%	19	2.0%
E.Coli (STEC)	29	4.1%	18	1.9%
Giardiasis	14	2.0%	16	1.7%
Gonorrhea	56	7.9%	50	5.2%
Hep B (chronic)	4	0.6%	5	0.5%
Hep C (chronic)	138	19.4%	150	15.6%
Elevated Blood Lead Level	2	0.3%	3	0.3%
Legionellosis	2	0.3%	3	0.3%
Lyme Disease	4	0.6%	3	0.3%
Pertussis	1	0.1%	49	5.1%
Salmonellosis	22	3.1%	21	2.2%
Shigellosis	6	0.8%	3	0.3%
Syphilis	10	1.4%	8	0.8%
Vibriosis	2	0.3%	5	0.5%
Yersiniosis	0	0.0%	11	1.1%
Total	710		961	

Table 6. and **Figure 3.** show the highest reported communicable diseases in Deschutes County compared to Oregon and Central Oregon (*rate per 100,000 population*) from January 1, 2020 to September 30, 2020.

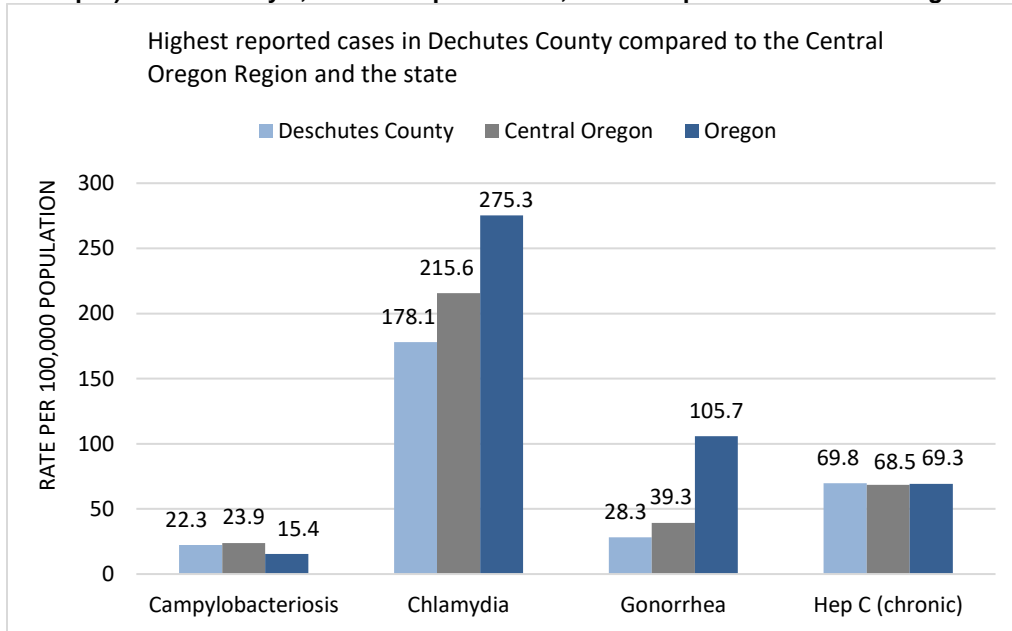
Table 6. Rate (per 100,000) for the top reported cases in Deschutes County compared to Oregon and Central Oregon

	Deschutes County	Oregon	**Central Oregon
Campylobacteriosis	22.3	15.4	23.9
Chlamydia	178.1	275.3	215.6
Gonorrhea	28.3	105.7	39.3
Hep C (chronic)	69.8	69.3	68.5

*Rates calculated using 2019 American Community Survey 2019 populations estimates

**Central Oregon Counties: Jefferson, Crook, Deschutes

Figure 3. Rate per 100,000 population of highest reported cases in Deschutes County (Campy, Chlamydia, Gonorrhea, and Hep C) from January 1, 2020 to September 30, 2020 compared the Central Oregon and the state



*Rates calculated using 2019 American Community Survey 2018 5-year estimates

**Central Oregon Counties: Jefferson, Crook, Deschutes

Deschutes County’s highest reported cases, when compared to the state and the rest of Central Oregon, were either lower or relatively similar per 100,000 population. Campy’s rate was just slightly higher than the state, while both Deschutes County’s chlamydia and gonorrhea rates were lower than both the state and the Central Oregon region. Hep C was relatively similar when compared between the state and Central Oregon.

Spotlight – Sexually Transmitted Infections and Chronic Hepatitis C infections across Central Oregon and the state, January 1, 2020 – September 30, 2020

Chlamydia, Gonorrhea, and Hepatitis C (*chronic*) were the most common communicable diseases reported for all Central Oregon counties (*Crook, Deschutes, and Jefferson Counties*). Deschutes and Crook Counties had lower chlamydia rates than the state, while Jefferson County had much higher chlamydia rates when compared to the state’s rate. All counties in Central Oregon observed a decreased in Hepatitis C cases, but Crook County had the most noticeable drop in cases. Both Deschutes and Crook County had lower or similar Hepatitis C rates when compared to the state, but Jefferson County’s Hepatitis C rate was higher than the state. Below, **Figures 4.-14.** compare chlamydia and gonorrhea cases for Crook, Jefferson, and Deschutes counties by age and sex. **Figures 15.-17.** compare Chlamydia and Hepatitis C rates across the state from January to September 2020 compared to 2019.

Crook County Chlamydia and Gonorrhea cases by age and sex January 01, 2020 – September 30, 2020

Figure 4. Chlamydia cases in Crook County by age from January 1, 2020 – September 30, 2020

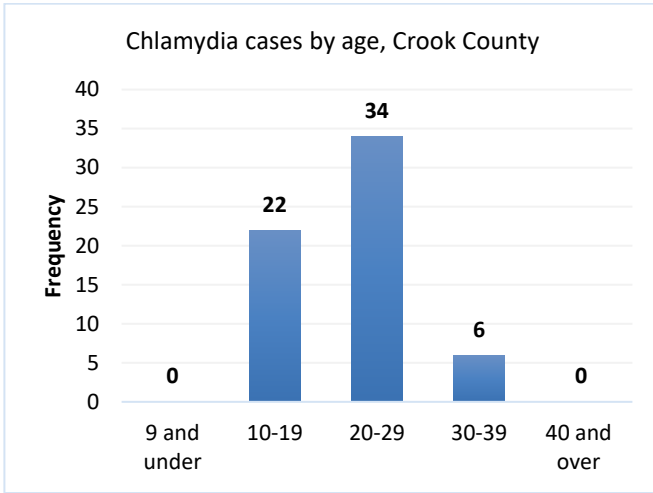


Figure 5. Chlamydia cases in Crook County by sex from January 1, 2020 – September 30, 2020

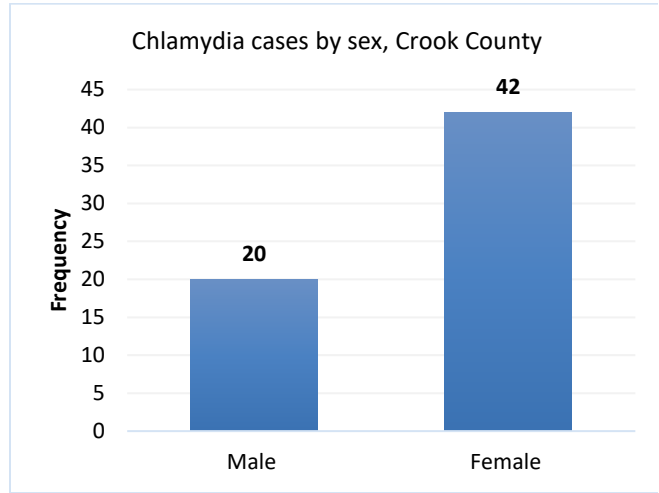


Figure 6. Gonorrhea cases in Crook County by age from January 1, 2020 – September 30, 2020

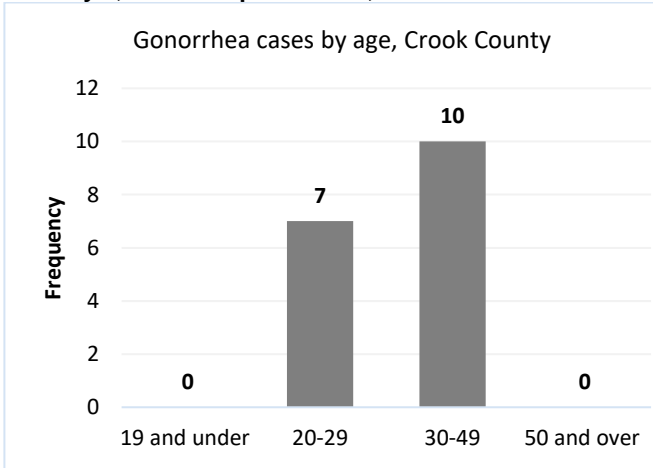
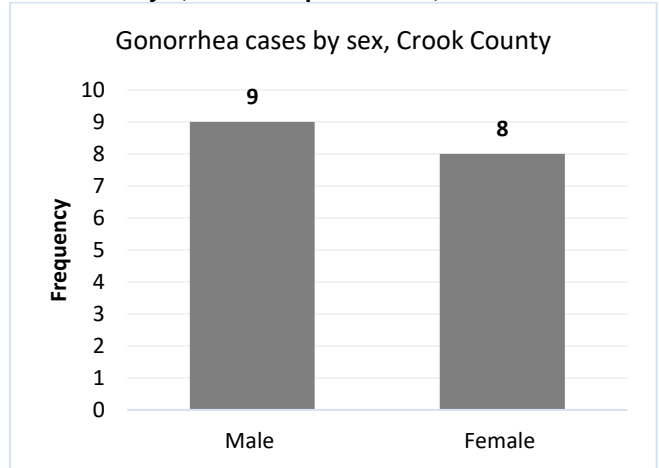


Figure 7. Gonorrhea cases in Crook County by sex from January 1, 2020 – September 30, 2020



*Age groups with less than 5 cases were combined with other age groups

As **Figures 4.-7.** illustrate, from January 2020-September 2020 Crook County had higher chlamydia rates than gonorrhea for all ages and genders (*male and female identifying genders were included in the data*). Females had a much higher number of chlamydia cases reported, while males had a slightly higher number of gonorrhea cases reported. Chlamydia was highest among those ages 20-29, while gonorrhea was slightly higher among those ages 30-49. No chlamydia cases were reported for those 9 years old and younger and those ages 40 and older. Gonorrhea cases were not observed among those ages 19 and younger or 50 years and older.

Deschutes County Chlamydia and Gonorrhea cases by age and sex January 01, 2020 – September 30, 2020

Figure 8. Chlamydia cases in Deschutes County by age from January 1, 2020 – September 30, 2020

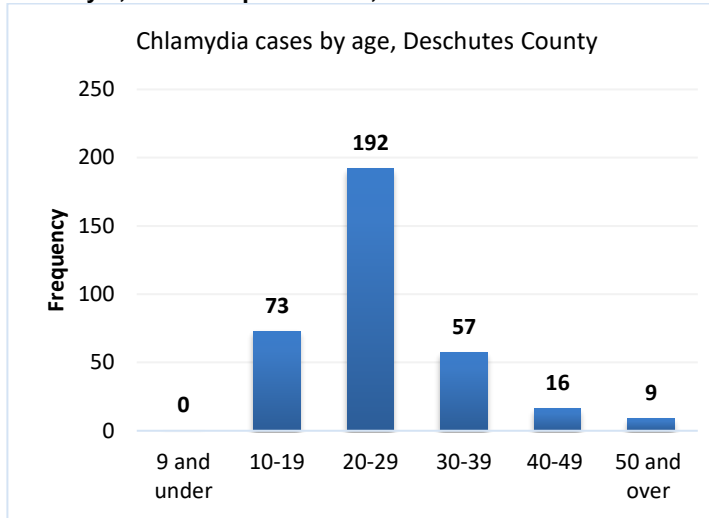


Figure 9. Chlamydia cases in Deschutes County by sex from January 1, 2020 – September 30, 2020

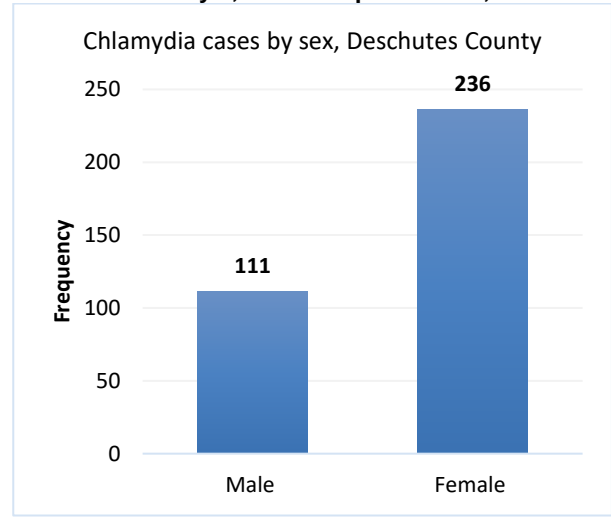


Figure 10. Gonorrhea cases in Deschutes County by age from January 1, 2020 – September 30, 2020

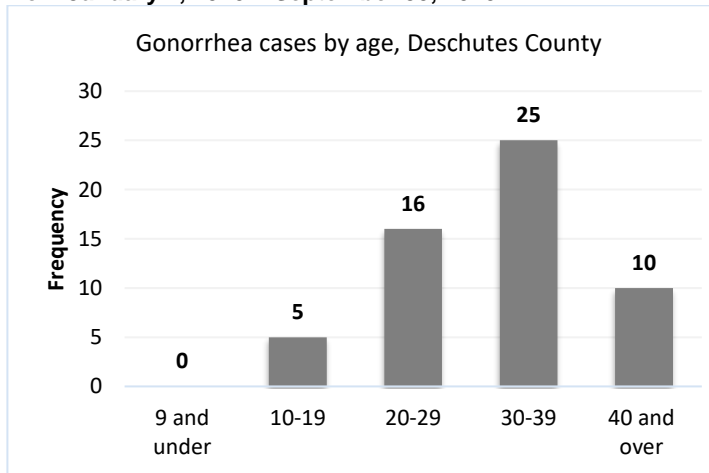
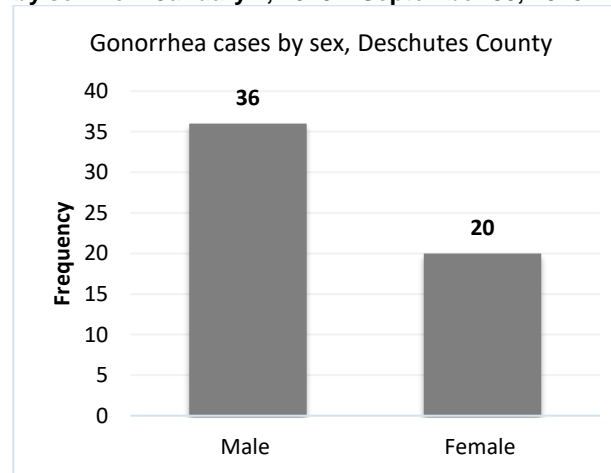


Figure 11. Gonorrhea cases in Deschutes County by sex from January 1, 2020 – September 30, 2020



Figures 8.-10. depict that from January 2020-September 2020 Deschutes County had higher chlamydia rates than gonorrhea for all ages and genders (*male and female identifying genders were included in the data*). Females had a much higher number of chlamydia cases reported, while males had a higher number of gonorrhea cases reported. Chlamydia cases were highest among those ages 20 to 29, while gonorrhea cases were highest among those ages 30 to 39. No gonorrhea or chlamydia cases were reported for those 9 years old and younger.

Jefferson County Chlamydia and Gonorrhea cases by age and sex January 01, 2020 – September 30, 2020

Figure 12. Chlamydia cases in Jefferson County by age from January 1, 2020 – September 30, 2020

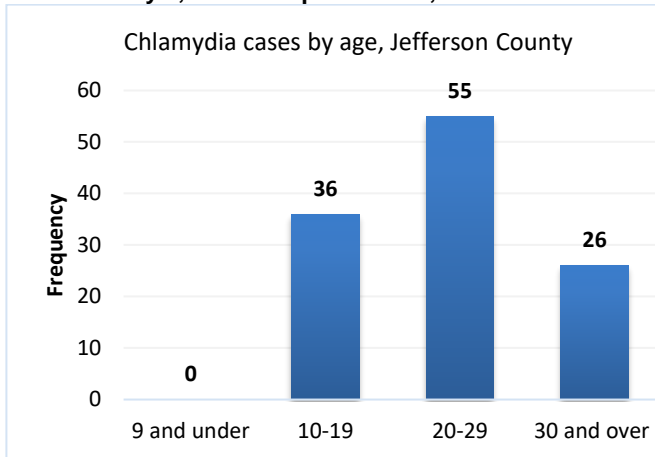


Figure 13. Chlamydia cases in Jefferson County by sex from January 1, 2020 – September 30, 2020

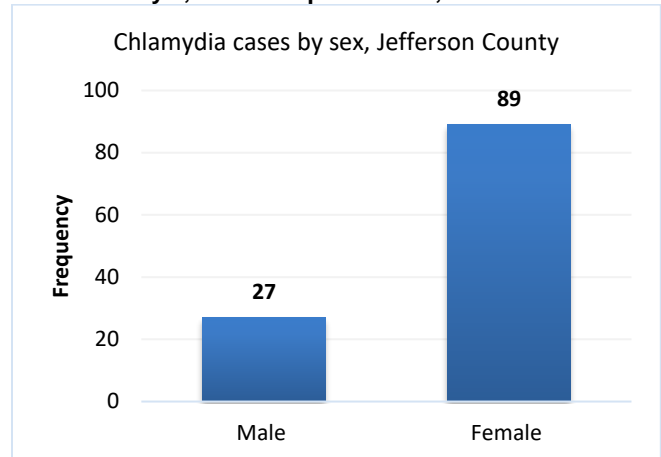


Figure 14. Gonorrhea cases in Jefferson County by age from January 1, 2020 – September 30, 2020

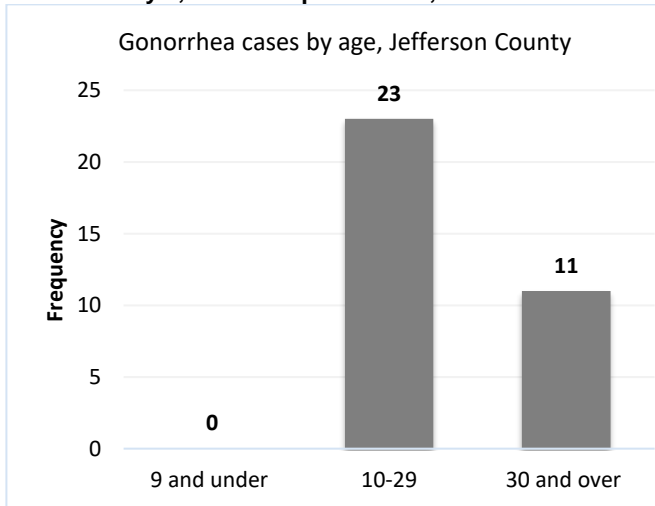
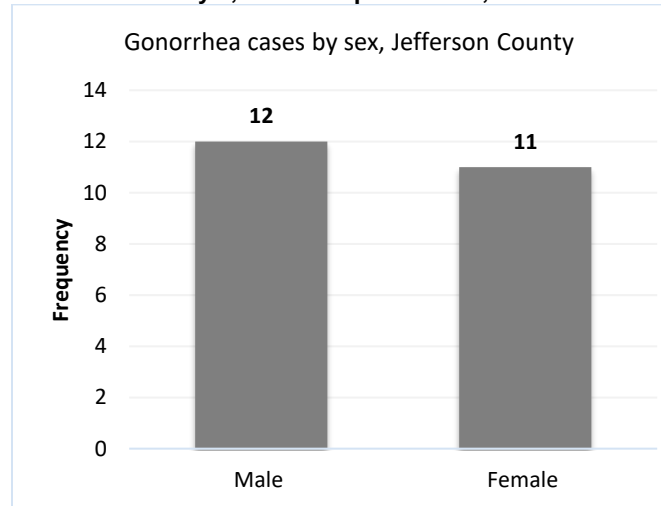


Figure 15. Gonorrhea cases in Deschutes County by sex from January 1, 2020 – September 30, 2020



Figures 11.-14. Illustrate that from January 2020-September 2020 Jefferson County had higher chlamydia rates than gonorrhea for all ages and genders (*male and female identifying genders were included in the data*). Females had a much higher number of chlamydia cases reported, while males had a slightly higher number of gonorrhea cases reported. Unlike Crook or Deschutes counties, Jefferson county’s chlamydia and gonorrhea cases were highest among those ages 20 to 29; however, like Deschutes and Crook counties, no gonorrhea or chlamydia cases were reported in Jefferson County for those 9 years old and younger.

Chlamydia and Chronic Hepatitis C Infections Statewide January 1, 2020 – September 30, 2020 compared to 2019.

As **Figure 15**. Illustrates, there has been a decrease in reported chlamydia and chronic hepatitis C infections in Oregon (*January 2020-September 2020/January 2019-September 2019*).

Figure 15. The number of Hepatitis C (chronic) and Chlamydia cases in Oregon from January 1, 2020 to September 30, 2020, compared to January 1, 2019 to September 30, 2019.

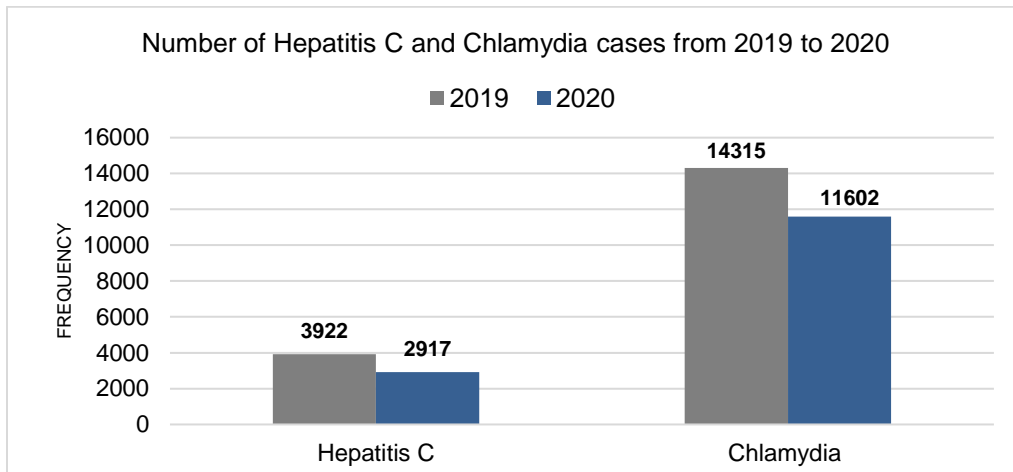
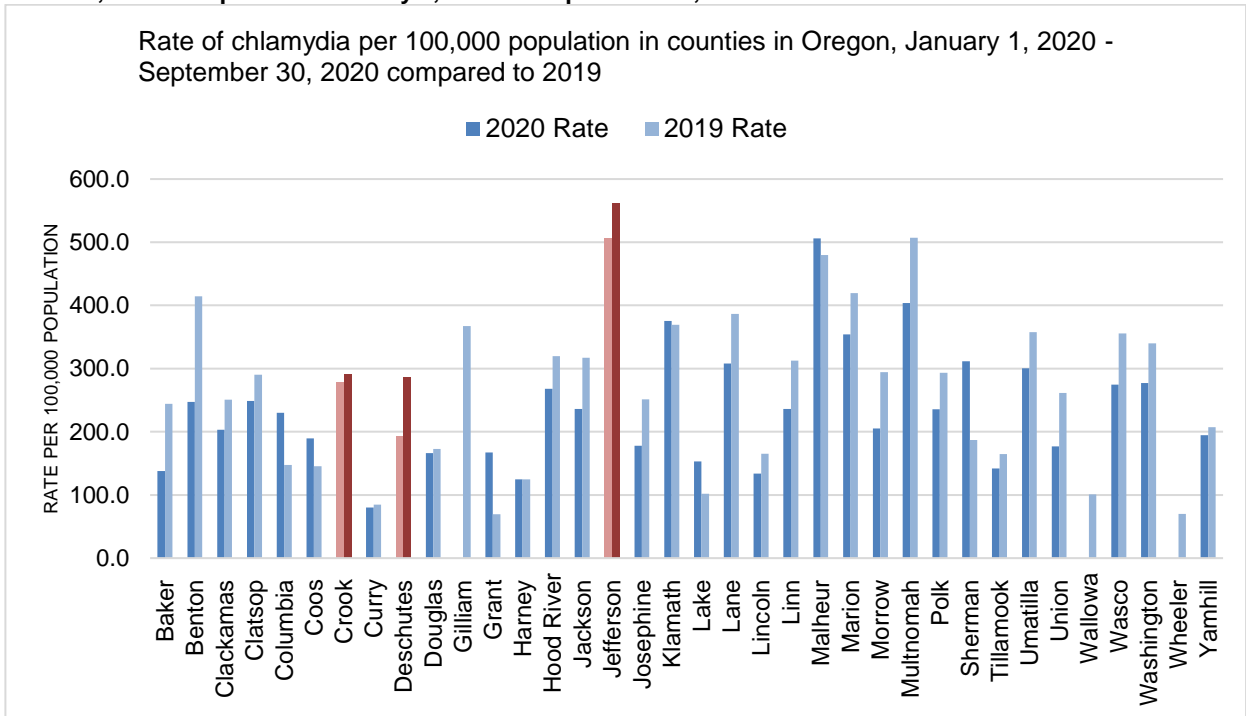


Figure 16. The rate of chlamydia cases by county in Oregon (rate per 100,000 population) from January 1, 2020 to September 30, 2020 compared to January 1, 2019 to September 30, 2019



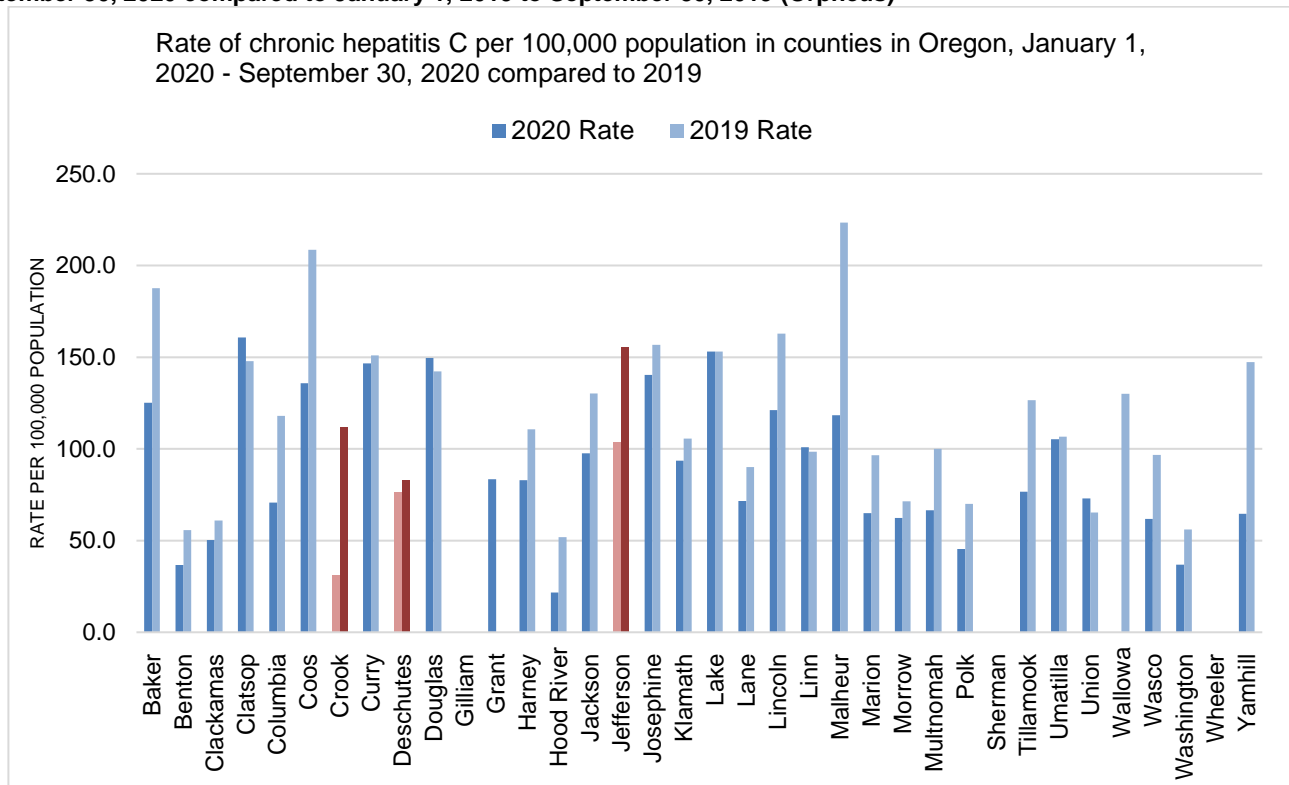
*Rate was calculated using American Community Survey 2018 5-year estimates (not all Oregon counties had 2019 population estimates)

**Counties with cases less than 5 were marked as 0.0, this includes Gilliam, Wallowa, and Wheeler Counties

Figure 16. compares the rate of chlamydia cases in Oregon by county from 2020 to 2019; Crook, Deschutes, and Jefferson counties are outlined in red. Jefferson County had one of the highest Chlamydia rates in the state from January 1, 2020 to September 30, 2020 and in January 1, 2019 to September 30, 2019. Similar to Central Oregon counties, other counties in the state have observed a decrease in the rate of chlamydia infections.

Figure 17. compares the rate of chronic hepatitis C cases in Oregon by county from 2020 to 2019; Crook, Deschutes, and Jefferson counties are outlined in red. Similar to Central Oregon counties, most counties in Oregon have observed a decrease in the rate of reported chronic hepatitis C infections. Many counties have witnessed a significant drop in reported chronic hepatitis C infections.

Figure 17. The rate of chronic hepatitis C cases by county in Oregon (rate per 100,000 population) from January 1, 2020 to September 30, 2020 compared to January 1, 2019 to September 30, 2019 (Orpheus)



*Rate was calculated using American Community Survey 2018 5-year estimates (not all Oregon counties had 2019 population estimates)

**Counties with cases less than 5 were marked as 0.0, this includes Gilliam, Grant, Sherman, Wallowa, and Wheeler Counties

Conclusion

The novel coronavirus (COVID-19) could be impacting health seeking behavior, explaining the decrease in the number of communicable diseases being reported. This is concerning for two reasons:

1. The high person-to-person transmission rate of hepatitis C, chlamydia, and gonorrhea
2. The health complications associated with hepatitis C, chlamydia, and gonorrhea if left untreated