

Monthly Communicable Disease Surveillance Report

November 2021

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**HAMILTON COUNTY
PUBLIC HEALTH**

PREVENT. PROMOTE. PROTECT.



NOTIFIABLE COMMUNICABLE DISEASES

Hamilton County Public Health (HCPH) Jurisdiction

Number of Communicable Diseases Reported: 61

Most frequently reported communicable diseases:

- Chronic hepatitis C (n=17)
- Chronic hepatitis B (n=11)
- Campylobacteriosis (n=5)
- Hepatitis A (n=4)
- Legionellosis (n=3)

Southwest Ohio (SWOH)

Number of Communicable Diseases Reported: 306

Most frequently reported communicable diseases:

- Chronic hepatitis C (n=110)
- Chronic hepatitis B (n=52)
- Campylobacteriosis (n=22)
- Hepatitis A (n=17)
- Streptococcal pneumoniae (n=12)

Summary

The overall rates of reported communicable diseases for HCPH, SWOH, and Ohio decreased in November by 28%, 36%, and 25% respectively (Figure 1). These rates are pro-rated to 30 days so they can be compared accurately. The SWOH rate (17.4) was the highest of the three rates, and the HCPH rate (12.8) was the lowest. The Ohio rate (17.2) was higher than the HCPH rate and lower than the SWOH rate. (Table 1).

Chronic hepatitis C was the most commonly reported communicable disease across SWOH, with chronic hepatitis B and Campylobacteriosis 2nd and 3rd respectively (Table 2). Chronic hepatitis (Hepatitis C and Hepatitis B combined) comprised 52.9% of the total communicable diseases reported during November. Southwest Ohio is currently on pace to have 28.4% less hepatitis cases than the previous year's average number of cases (230). The rate of chronic hepatitis within Hamilton County for November was 8.4 per 100,000 residents. This rate was 10% lower than the SWOH rate of 9.3 per 100,000 residents.

Campylobacteriosis was the third most frequently reported disease in SWOH (Table 2). Campylobacteriosis cases accounted for 7.2% of the total communicable diseases reported during November. The number of cases of Campylobacteriosis reported for SWOH in November (22) was higher than the number of cases in the previous month (19). The rate of Campylobacteriosis within Hamilton County for November was 0.6 per 100,000 residents. This rate was lower than the SWOH rate of 1.3 per 100,000 residents.

Table 1. Comparison of the Reported Cases of Notifiable Communicable Diseases by Location, November 2021

Location	Number of Reported Cases	Rate per 100,000	Rate Ratio†	Confidence Interval (99%)‡
HCPH	61	12.81	0.74	0.53 - 1.04
SWOH	306	17.44	1.01	0.87 - 1.19
Ohio	1,991	17.20	.	.-.

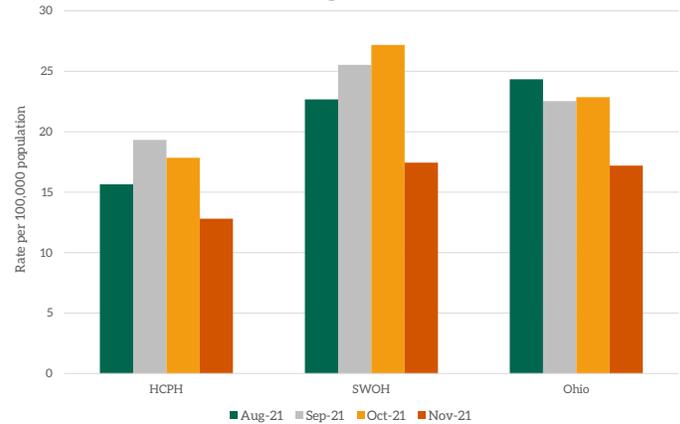
Hepatitis A within Hamilton County for November was 0.7 per 100,000 residents. This rate was lower than the SWOH rate of 1.0 per 100,000 residents.

NOTES: Data are provisional and are subject to change as data becomes finalized. Suspected, probable and confirmed cases are included in counts except for arboviral encephalitis and Zika virus diseases, of which only probable and confirmed cases are reported. Novel Influenza A cases are only confirmed cases. COVID-19, chlamydia and gonorrhea are not reported within this report. The completeness of reporting varies by region and can impact the incidences of reported diseases. This report reflects the time period of November 1-30, 2021. Data was accessed from the Ohio Disease Reporting System on 12/2/2021.

†Ratio of local rate to the Ohio rate.

‡Confidence intervals that do not contain the value of one are considered statistically significant.

Figure 1. 30-Day Rates of Reported Communicable Diseases in Ohio, Southwest Ohio, and Hamilton County Public Health Jurisdiction, August 2021 - November 2021



Hepatitis A was the fourth most frequently reported disease in SWOH (Table 2). Hepatitis A cases accounted for 5.6% of the total communicable diseases reported during November. The number of cases of Hepatitis A reported for SWOH in November (17) was higher than the number of cases reported in the previous month (13). The rate of

Table 2. Cases of Notifiable Diseases in Southwest Ohio as Reported in ODRS by County, November 2021

Reportable Condition	County										Total
	Adams	Brown	Butler	Clermont	Clinton	Hamilton	Highland	Warren			
C. auris	3	.	.	.	3	
C. auris - Investigation	6	.	.	.	6	
CP-CRE	.	1	.	.	.	.	.	.	.	1
Campylobacteriosis	1	1	5	3	3	5	1	3	3	22	
Cryptosporidiosis	.	.	1	.	.	.	.	.	.	1
E.Coli (shiga toxin producing)	.	.	1	.	.	3	.	.	.	4	
Giardiasis	.	.	2	1	.	2	.	.	.	5	
Haemophilus influenzae (invasive)	.	.	.	1	.	3	.	.	.	4	
Hepatitis A	.	.	8	.	.	6	.	3	3	17	
Hepatitis B (acute)	.	1	.	.	.	1	.	.	.	2	
Hepatitis B (chronic)	.	.	17	4	1	22	2	6	6	52	
Hepatitis C (chronic)	2	3	31	12	4	45	4	9	9	110	
Hepatitis C - Perinatal Infection	.	.	.	1	.	.	.	.	.	1
Hepatitis E	1	.	.	.	1	
Influenza-associated hospitalization	.	.	1	1	.	5	.	1	1	8	
Legionellosis	3	.	1	1	4	
Lyme Disease	.	.	.	3	.	4	1	2	2	10	
MIS-C associated with COVID-19	.	.	2	.	.	1	.	2	2	5	
Meningitis (aseptic/viral)	.	.	3	.	.	2	.	.	.	5	
Meningitis (bacterial)	.	.	.	1	.	2	.	.	.	3	
Pertussis	1	.	.	.	.	.	.	.	.	1
Salmonellosis	.	.	2	.	.	3	1	1	1	7	
Shigellosis	2	.	.	.	2	
Streptococcal pneumoniae (invasive)	1	.	2	2	4	3	.	.	.	12	
Streptococcal, Group A (invasive)	.	.	2	2	2	4	.	1	1	11	
Streptococcal, Group B (in newborn)	1	.	.	.	1	
Syphilis	.	.	2	.	.	1	.	.	.	3	
Tuberculosis	2	.	.	.	2	
Varicella	1	.	.	.	1	
Yersiniosis	.	.	1	.	.	1	.	.	.	2	
Total	5	6	80	31	14	132	9	29	9	306	

Table 3. YTD Cases of Notifiable Diseases in Southwest Ohio as Reported in ODRS by County, January - November 2021

Reportable Condition	County										Total
	Adams	Brown	Butler	Clermont	Clinton	Hamilton	Highland	Warren			
Amebiasis	0	0	1	2	0	1	0	0	0	0	4
Brucellosis	0	0	2	0	0	1	0	0	0	0	3
C. auris	0	0	0	0	0	16	0	0	0	0	16
C. auris - Investigation	0	0	0	0	0	44	0	0	0	0	44
CP-CRE	5	2	13	4	2	24	3	6	6	59	
Campylobacteriosis	3	9	31	30	8	68	14	25	25	188	
Coccidioidomycosis	1	1	3	3	0	8	0	8	0	24	
Creutzfeldt-Jakob Disease	0	0	1	1	0	3	0	0	0	5	
Cryptosporidiosis	1	1	5	5	1	9	2	1	1	25	
Cyclosporiasis	0	0	0	0	0	3	0	1	1	4	
Dengue	0	0	1	0	0	0	0	0	0	1	
E.Coli (shiga toxin producing)	1	1	14	10	0	28	2	3	3	59	
Ehrlichiosis/Anaplasmosis	1	0	1	1	0	2	0	0	0	5	
Giardiasis	1	1	18	17	0	53	4	10	10	104	
Haemophilus influenzae (invasive)	0	0	5	2	0	16	0	0	0	23	
Hantavirus	0	0	0	0	0	1	0	0	0	1	
Hemolytic uremic syndrome (HUS)	0	0	1	2	0	1	0	0	0	4	
Hepatitis A	4	3	40	2	1	48	2	21	21	121	
Hepatitis B (acute)	0	1	3	4	0	6	0	1	1	15	
Hepatitis B (chronic)	19	14	130	20	15	262	21	79	79	560	
Hepatitis C (acute)	0	0	4	3	0	6	0	1	1	14	
Hepatitis C (chronic)	53	88	406	216	52	834	56	174	174	1879	
Hepatitis C - Perinatal Infection	0	1	1	3	1	4	1	1	1	12	
Hepatitis E	0	0	0	0	1	1	0	0	0	2	
Influenza-associated hospitalization	1	0	4	3	1	13	0	7	7	29	
Legionellosis	2	1	9	7	2	26	1	12	12	60	
Listeriosis	0	0	0	1	0	6	0	2	2	9	
Lyme Disease	11	4	4	31	0	59	5	13	13	127	
MIS-C associated with COVID-19	0	2	14	7	0	26	0	13	13	62	

Table 4. YTD Cases of Notifiable Diseases in Hamilton County, January - November 2021

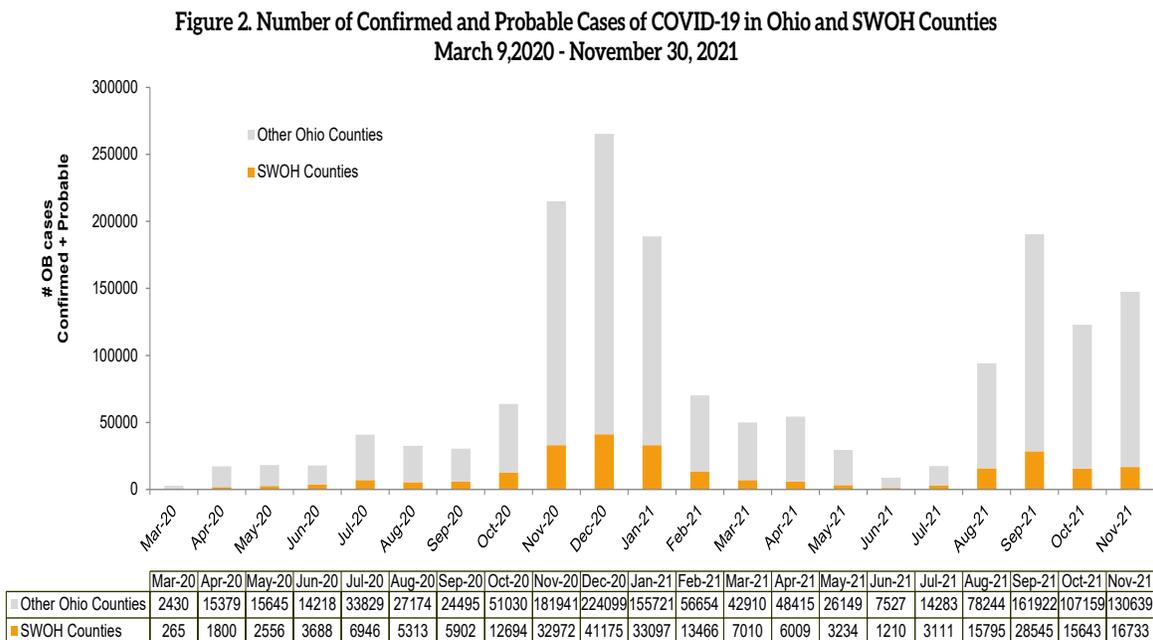
Reportable Disease	November 2020	YTD 2020	November 2021	YTD 2021	Reportable Disease	November 2020	YTD 2020	November 2021	YTD 2021
Amebiasis	0	2	0	1	Legionellosis	0	24	3	26
Botulism (Infant)	0	2	0	0	Leptospirosis	0	1	0	0
Brucellosis	0	1	0	1	Listeriosis	1	2	0	6
C. auris	0	1	3	16	Lyme Disease	0	37	4	59
C. auris - Investigation	0	0	6	44	MIS-C associated with COVID-19	2	6	1	26
CP-CRE	0	13	0	19	Malaria	0	2	0	7
CP-CRE - Investigation	1	1	0	0	Meningitis (viral)	0	36	2	31
Campylobacteriosis	3	69	5	68	Meningitis (bacterial)	0	19	2	19
Coccidioidomycosis	0	10	0	8	Meningococcal disease	0	0	0	2
Creutzfeldt-Jakob Disease	0	2	0	3	Mumps	0	0	0	2
Cryptosporidiosis	2	12	0	9	Pertussis	0	73	0	2
Cyclosporiasis	0	4	0	3	Psittacosis	0	1	0	2
Dengue	0	1	0	0	Q fever (acute)	0	1	0	1
E.Coli (shiga toxin producing)	0	17	3	28	Q fever (chronic)	1	1	0	0
Ehrlichiosis/Anaplasmosis	0	4	0	2	Salmonellosis	4	86	3	60
Giardiasis	0	29	2	53	Shigellosis	0	11	2	17
Haemophilus influenzae (invasive)	0	19	3	16	Spotted Fever Rickettsiosis	0	7	0	11
Hantavirus	0	0	0	1	Staphylococcal aureus (VISA)	0	0	0	1
Hemolytic uremic syndrome (HUS)	0	1	0	1	Streptococcal pneumoniae (invasive)	1	62	3	41
Hepatitis A	3	63	6	48	Streptococcal, Group A (invasive)	2	60	4	41
Hepatitis B (acute)	0	9	1	6	Streptococcal, Group B (in newborn)	1	5	1	4
Hepatitis B (chronic)	19	247	22	262	Syphilis	9	185	1	258
Hepatitis C (acute)	1	15	0	6	Toxic shock syndrome (TSS)	0	1	0	0
Hepatitis C (chronic)	88	852	45	834	Tuberculosis	2	16	2	32
Hepatitis C - Perinatal Infection	2	5	0	4	Typhus fever	0	1	0	1
Hepatitis E	0	0	1	1	Varicella	0	15	1	20
Influenza-associated hospitalization	1	704	5	13	Vibriosis	0	3	0	5
LaCrosse Virus Disease (LCVD)	0	1	0	0	Yersiniosis	0	7	1	3

SARS-CoV-2 (COVID-19) Outbreak

Chinese Health Officials identified the novel coronavirus, now known as SARS-CoV-2 or COVID-19, in December, 2019. Due to rapid global spread of disease, the World Health Organization declared COVID-19 a pandemic March 11, 2020. The United States identified its first case of COVID-19 January 21, 2020 and declared COVID-19 a national emergency March 13, 2020. Outbreak confirmed and probable cases increased rapidly between March and April, 2020. After remaining steady through May and June, 2020, Ohio experienced a spike in confirmed and probable cases in July, 2020. After a decrease in cases through August and September, 2020, Ohio experienced a significant spike in November and December, 2020. Cases began to decrease in January, 2021 and continued to decline through June, 2021, with the exception of a slight increase in cases in April, 2021. From July through September 2021 Ohio experienced an increase in confirmed and probable cases, followed by a decline in October 2021. The Southwest Ohio (SWOH) counties recognize the same pattern of confirmed and probable cases as Ohio through November 2021 with the exception of April 2021, when SWOH continued to experience a decline in cases. As of November 30, 2021 the SWOH counties account for 257,164 confirmed and probable cases (Figure 1).

Overall, the rate of confirmed and probable outbreak cases in SWOH is lower than the Ohio rate (Figure 3). The SWOH region accounts for 15.3 percent of Ohio cases. The Adams County rate is the highest of the 8 SWOH counties, followed by Brown County and Highland County. Currently the Hamilton County rate is less than that of Ohio, while all other counties in the SWOH region have rates that are higher than the Ohio rate.

Figure 2. Number of Confirmed and Probable Cases of COVID-19 in Ohio and Southwest Ohio Counties, March 9, 2020 - November 30, 2021



NOTES: This data is provisional and subject to change when additional information is gained. Outbreak confirmed positive cases between March 9, 2020 and November 30, 2021 were used for analysis. Cases were selected based on address at diagnosis. Confirmed and probable cases determined by date reported to local health department.

Source: Ohio Department of Health, Ohio Disease Reporting System. Data reported as of December 2, 2021. Outbreak confirmed and probable cases have to meet the criteria set by ODH. Detailed information regarding the statewide COVID-19 outbreak is available at: <https://coronavirus.ohio.gov/wps/portal/gov/covid-19/home>

Figure 3. Rate of Confirmed and Probable Cases of COVID-19 in Ohio and Southwest Ohio Counties, March 9, 2020 - November 30, 2021

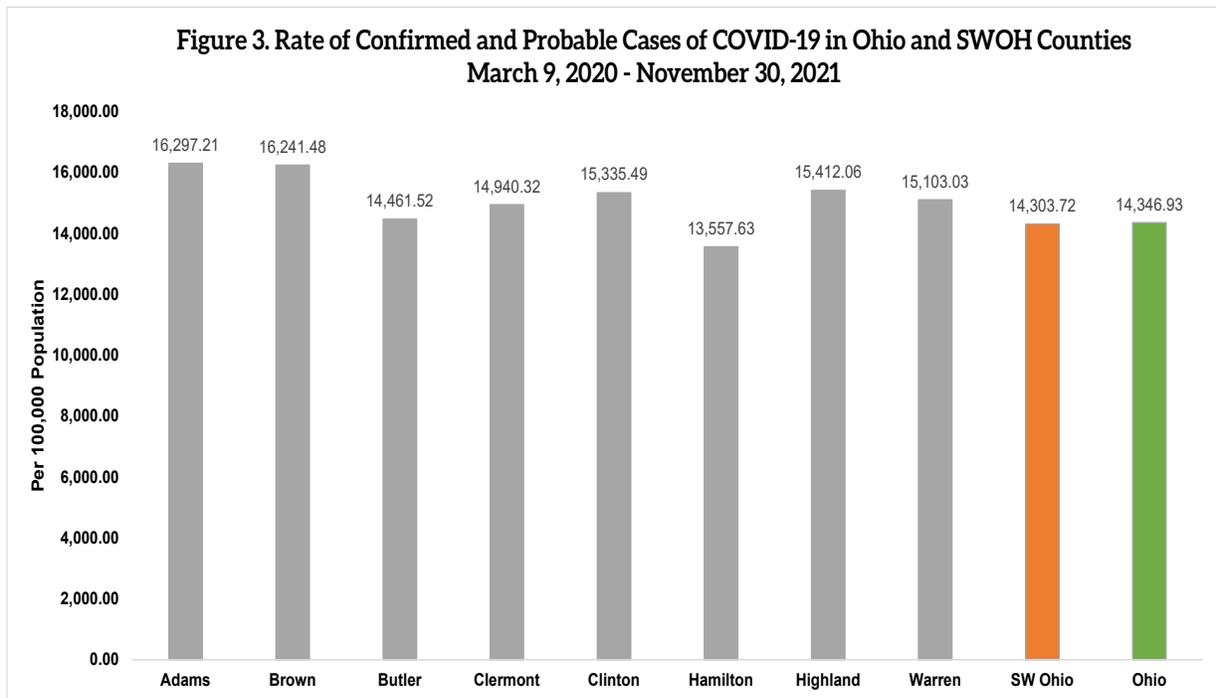
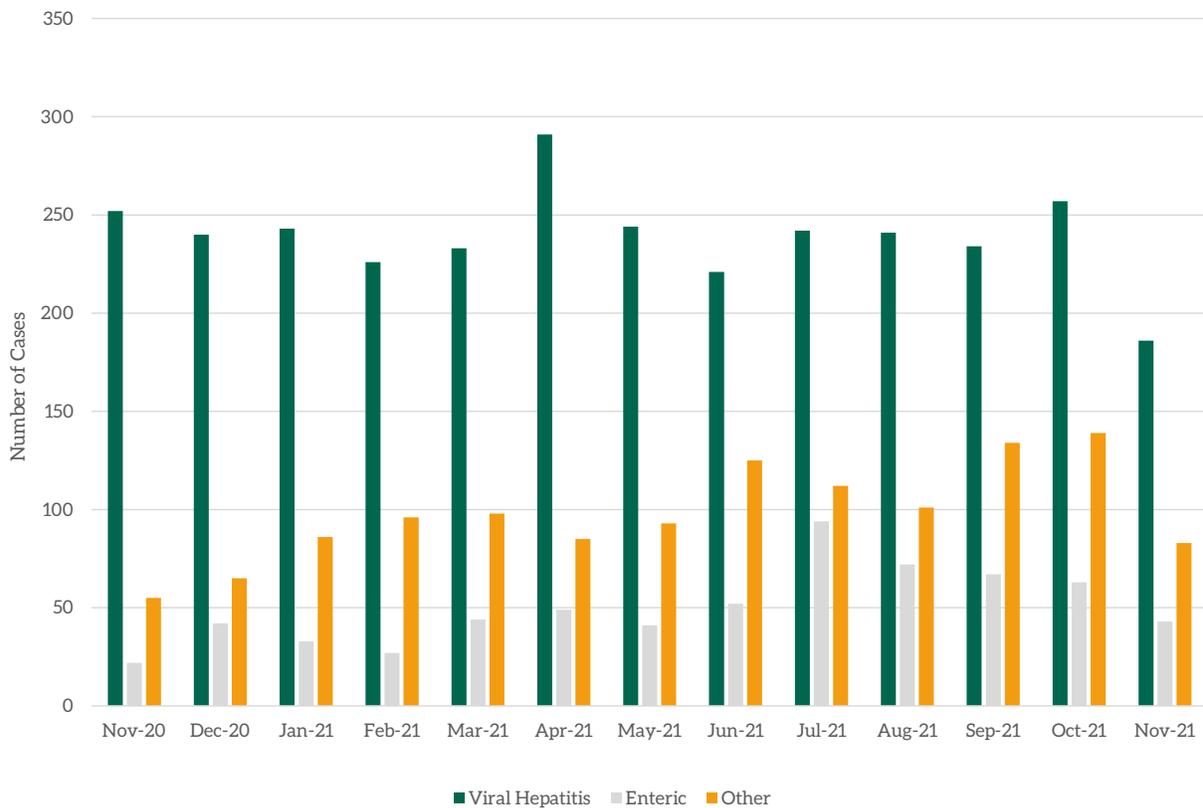


Figure 4. Notifiable Communicable Diseases in Southwest Ohio by Disease Category as Reported in ODRS, November 2020 - 2021*



*Suspected, Probable and Confirmed cases included in the counts. Cases counted by month reported to the local health department. STIs (i.e., Chlamydia, Gonorrhea, and Syphilis) are excluded from the analysis. Diseases are assigned to mutually exclusive categories, this means that disease cases are NOT included in more than one category shown in Figure 4. All cases are assigned to one of the categories.