



# Monthly Communicable Disease Surveillance Report

August 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: 77

Most frequently reported communicable diseases:

- Chronic hepatitis C (n=28)
- Chronic hepatitis B (n=14)
- Campylobacteriosis (n=6)
- Salmonellosis (n=6)
- Lyme Disease (n=5)

## Southwest Ohio (SWOH)

Number of Communicable Diseases Reported: 411

Most frequently reported communicable diseases:

- Chronic hepatitis C (n=186)
- Chronic hepatitis B (n=55)
- Campylobacteriosis (n=24)
- Lyme Disease (n=19)
- Salmonellosis (n=18)

## Summary

The overall rates of reported communicable diseases for HCPH, SWOH, and Ohio decreased in August by 13%, 7%, and 12% respectively (Figure 1). These rates are pro-rated to 30 days so they can be compared accurately. The Ohio rate (24.3) was the highest of the three rates, and the HCPH rate (15.6) was the lowest. The HCPH rate and SWOH rate (22.7) were both lower than the Ohio rate (Table 1).

Chronic hepatitis C was the most commonly reported communicable disease across SWOH, with chronic hepatitis B and Campylobacteriosis 2<sup>nd</sup> and 3<sup>rd</sup> respectively (Table 2). Chronic hepatitis (Hepatitis C and Hepatitis B combined) comprised 58.9% of the total communicable diseases reported during August. Southwest Ohio is currently on pace to have 2.6% less hepatitis cases than the previous year's average number of cases (240). The rate of chronic hepatitis within Hamilton County for July was 13.6 per 100,000 residents. This rate was 2% lower than the SWOH rate of 13.9 per 100,000 residents.

Campylobacteriosis was the third most frequently reported disease in SWOH (Table 2). Campylobacteriosis cases accounted for 5.8% of the total communicable diseases reported during August. The number of cases of Campylobacteriosis reported for SWOH in August (24) was lower than the number of cases in the previous month (37). The rate of Campylobacteriosis within Hamilton County for August was 1.4 per 100,000 residents. This rate was the same as the SWOH rate of 1.4 per 100,000 residents.

Lyme disease was the fourth most frequently reported disease in SWOH (Table 2). Lyme disease cases accounted for 4.6% of the total communicable diseases reported during August. The number of cases of Lyme Disease reported for SWOH in August (19) was lower than the number of cases reported in the previous month (23). The rate of Lyme Disease

within Hamilton County for August was 1.2 per 100,000 residents. This rate was higher than the SWOH rate of 1.1 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 August 1-31, 2021. Data was accessed from the Ohio Disease Reporting System on 9/6/2021.

†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, May 2021 - August 2021

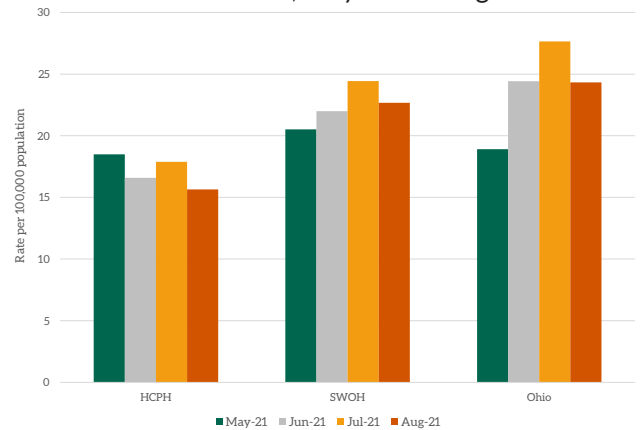


Table 1. Comparison of the Reported Cases of Notifiable Communicable Diseases by Location, August 2021

Location	Number of Reported Cases	Rate per 100,000	Rate Ratio†	Confidence Interval (99%)‡
HCPH	77	16.17	0.64	0.48 - 0.87
SWOH	411	23.42	0.93	0.81 - 1.07
Ohio	2,910	25.14	.	.-.

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

Reportable Condition	County										Total
	Adams	Brown	Butler	Clermont	Clinton	Hamilton	Highland	Warren			
Brucellosis	.	.	.	.	.	1	.	.	.	1	
C. auris	.	.	.	.	.	3	.	.	.	3	
Campylobacteriosis	.	3	4	2	.	11	1	3		24	
Coccidioidomycosis	.	.	.	1	.	1	.	.	.	2	
Cryptosporidiosis	.	.	.	1	.	3	1	.	.	5	
E.Coli (shiga toxin producing)	.	1	2	4	.	3	1	.	.	11	
Giardiasis	.	.	2	1	.	4	.	2		9	
Hepatitis A	.	.	5	.	.	2	.	.	.	7	
Hepatitis B (acute)	.	.	.	.	.	1	.	.	.	1	
Hepatitis B (chronic)	.	1	15	2	3	25	4	5		55	
Hepatitis C (chronic)	4	12	33	24	5	84	6	18		186	
Legionellosis	.	.	1	.	.	1	.	2		4	
Listeriosis	.	.	.	.	.	2	.	1		3	
Lyme Disease	3	1	.	2	.	10	2	1		19	
MIS-C associated with COVID-19	.	.	2	.	.	.	.	.		2	
Malaria	.	.	.	.	.	1	.	.		1	
Meningitis (aseptic/viral)	.	.	1	1	.	.	.	3		5	
Meningitis (bacterial)	.	.	.	.	.	3	.	.		3	
Meningococcal disease	.	.	.	.	.	1	.	.		1	
Pertussis	.	.	.	2	.	.	.	.		2	
Salmonellosis	.	1	5	3	.	9	.	.		18	
Shigellosis	.	.	.	.	.	1	.	1		2	
Spotted Fever Rickettsiosis	1	1	.	.	.	3	.	.		5	
Streptococcal pneumoniae (invasive)	.	.	2	.	.	3	3	2		10	
Streptococcal, Group A (invasive)	.	.	2	2	.	5	.	2		11	
Streptococcal, Group B (in newborn)	.	.	.	.	.	1	.	.		1	
Syphilis	.	.	2	.	.	6	.	1		9	
Tuberculosis	.	.	1	.	.	1	.	2		4	
Typhus fever	.	.	.	.	.	1	.	.		1	
Varicella	.	.	.	1	1	1	1	2		6	
<b>Total</b>	<b>8</b>	<b>20</b>	<b>77</b>	<b>46</b>	<b>9</b>	<b>187</b>	<b>19</b>	<b>45</b>		<b>411</b>	

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

Reportable Condition	County										Total
	Adams	Brown	Butler	Clermont	Clinton	Hamilton	Highland	Warren			
Amebiasis	0	0	1	1	0	1	0	0	0	0	3
Brucellosis	0	0	2	0	0	1	0	0	0	0	3
C. auris	0	0	0	0	0	5	0	0	0	0	5
CP-CRE	3	1	8	4	1	18	1	3	3	3	39
Campylobacteriosis	2	8	19	20	4	50	8	16	16	127	
Coccidioidomycosis	1	1	0	2	0	6	0	7	7	17	
Creutzfeldt-Jakob Disease	0	0	1	1	0	3	0	0	0	5	
Cryptosporidiosis	1	1	3	3	0	6	2	0	0	16	
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	10	5	0	19	2	2	2	40	
Ehrlichiosis/Anaplasmosis	1	0	1	0	0	2	0	0	0	4	
Giardiasis	1	0	12	16	0	41	4	7	7	81	
Haemophilus influenzae (invasive)	0	0	3	0	0	8	0	0	0	11	
Hantavirus	0	0	0	0	0	1	0	0	0	1	
Hemolytic uremic syndrome (HUS)	0	0	1	0	0	0	0	0	0	1	
Hepatitis A	1	3	23	2	1	32	2	14	14	78	
Hepatitis B (acute)	0	0	1	3	0	4	0	1	1	9	
Hepatitis B (chronic)	16	12	95	14	11	198	13	55	55	414	
Hepatitis C (acute)	0	0	2	1	0	6	0	0	0	9	
Hepatitis C (chronic)	44	73	299	169	41	653	40	121	121	1440	
Hepatitis C - Perinatal Infection	0	0	1	1	1	4	1	1	1	9	
Hepatitis E	0	0	0	0	1	0	0	0	0	1	
Influenza A - novel virus infection	1	0	0	0	0	0	0	0	0	1	
Influenza-associated hospitalization	1	0	3	1	0	7	0	3	3	15	
Legionellosis	2	0	7	4	1	16	0	10	10	40	
Listeriosis	0	0	0	0	0	5	0	2	2	7	
Lyme Disease	9	4	3	24	0	39	4	10	10	93	
MIS-C associated with COVID-19	0	1	9	7	0	21	0	10	10	48	

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

Reportable Condition	County											Total
	Adams	Brown	Butler	Clermont	Clinton	Hamilton	Highland	Warren				
Malaria	0	0	1	0	0	6	0	0	0	0	0	7
Meningitis (aseptic/viral)	0	1	9	7	0	23	0	0	0	8	0	48
Meningitis (bacterial)	0	0	1	0	1	15	0	0	0	3	0	20
Meningococcal disease	1	0	0	1	0	2	0	0	0	0	0	4
Mumps	0	0	1	0	0	1	0	0	0	0	0	2
Pertussis	0	0	2	6	0	2	0	0	0	0	0	10
Psittacosis	0	0	0	0	0	1	0	0	0	0	0	1
Q fever (acute)	1	0	0	0	0	1	0	0	0	0	0	2
Salmonella Typhi	0	0	1	0	0	0	0	0	0	0	0	1
Salmonellosis	1	6	17	20	3	38	5	11	0	0	0	101
Shigellosis	0	0	1	2	0	12	0	2	0	2	0	17
Spotted Fever Rickettsiosis	2	3	0	3	0	11	1	2	1	2	0	22
Staphylococcal aureus (VISA)	0	0	0	0	0	1	0	0	0	0	0	1
Streptococcal pneumoniae (invasive)	0	4	21	5	4	30	4	8	0	0	0	76
Streptococcal, Group A (invasive)	1	1	23	8	1	30	0	10	0	0	0	74
Streptococcal, Group B (in newborn)	0	0	0	0	0	2	1	1	1	1	0	4
Syphilis	2	1	11	1	2	74	1	3	1	3	0	95
Tuberculosis	0	0	7	3	0	28	3	3	3	3	0	44
Typhus fever	0	0	0	0	0	1	0	0	0	0	0	1
Varicella	1	2	5	2	1	16	2	6	2	6	0	35
Vibriosis	0	0	2	1	0	3	0	1	0	1	0	7
West Nile virus infection (WNV)	0	0	0	0	0	1	0	0	0	0	0	1
Yersiniosis	0	0	0	2	0	2	0	2	0	2	0	6
<b>Total</b>	<b>93</b>	<b>123</b>	<b>607</b>	<b>339</b>	<b>73</b>	<b>1449</b>	<b>94</b>	<b>323</b>	<b>94</b>	<b>323</b>	<b>94</b>	<b>3101</b>

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

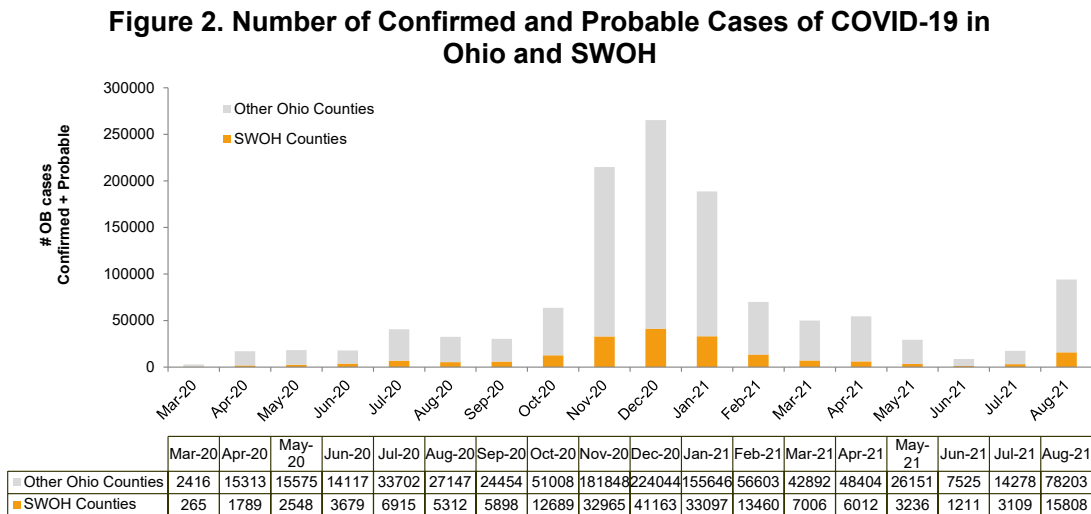
Reportable Disease	August 2020	YTD 2020	August 2021	YTD 2021	Reportable Disease	August 2020	YTD 2020	August 2021	YTD 2021
Amebiasis	1	2	0	1	Listeriosis	0	1	2	5
Botulism (Infant)	0	2	0	0	Lyme Disease	10	25	10	39
Bruceellosis	0	1	1	1	MIS-C associated with COVID-19	2	3	0	21
C. auris	0	1	3	5	Malaria	1	2	1	6
CP-CRE	0	7	0	14	Meningitis (aseptic/viral)	0	24	0	23
Campylobacteriosis	6	49	11	50	Meningitis (bacterial)	1	16	3	15
Coccidioidomycosis	1	10	1	6	Meningococcal disease	0	0	1	2
Creutzfeldt-Jakob Disease	1	2	0	3	Mumps	0	0	0	1
Cryptosporidiosis	1	9	3	6	Pertussis	1	73	0	2
Cyclosporiasis	1	1	0	3	Psittacosis	0	1	0	1
Dengue	0	1	0	0	Q fever (acute)	1	1	0	1
E.Coli (shiga toxin producing)	3	15	3	19	Salmonellosis	11	58	9	38
Ehrlichiosis/Anaplasmosis	1	2	0	2	Shigellosis	1	9	1	12
Giardiasis	3	16	4	41	Spotted Fever Rickettsiosis	3	5	3	11
Haemophilus influenzae (invasive)	1	19	0	8	Staphylococcal aureus (VISA)	0	0	0	1
Hantavirus	0	0	0	1	Streptococcal pneumoniae (invasive)	3	57	3	30
Hemolytic uremic syndrome (HUS)	0	1	0	0	Streptococcal, Group A (invasive)	8	52	5	30
Hepatitis A	5	50	2	32	Streptococcal, Group B (in newborn)	2	4	1	2
Hepatitis B (acute)	0	8	1	4	Syphilis	10	100	6	74
Hepatitis B (chronic)	28	179	25	198	Toxic shock syndrome (TSS)	0	1	0	0
Hepatitis C (acute)	3	14	0	6	Tuberculosis	1	12	1	28
Hepatitis C (chronic)	93	569	84	653	Typhus fever	0	0	1	1
Hepatitis C - Perinatal Infection	0	2	0	4	Varicella	2	11	1	16
Influenza-associated hospitalization	0	701	0	7	Vibriosis	1	1	0	3
Legionellosis	2	19	1	16	Yersiniosis	0	5	0	2
Leptospirosis	0	1	0	0					

## 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. Cases remained steady through May and June, 2020 before experiencing a spike in July, 2020. After a slight decrease in cases through August and September, 2020, Ohio experienced an increase in confirmed and probable cases in October 2020 followed by a significant spike in November 2020 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. Ohio experienced increases in confirmed and probable cases in July 2021 and August 2021. The Southwest Ohio (SWOH) counties recognize the same pattern of confirmed and probable cases as Ohio with the exception of April 2021, when SWOH continued to experience a decline in cases. As of August 31, 2021, the SWOH counties account for 196,162 confirmed and probable cases (Figure 2).

Overall, the rate of confirmed and probable outbreak cases in SWOH is higher than the Ohio rate (Figure 3). The SWOH region accounts for 16.1 percent of Ohio cases. The Warren County rate is the highest of the 8 SWOH counties, followed by Butler County and Clermont County. Currently the Warren County, Butler County, Clermont County, Hamilton County, Clinton County, Brown County, and Adams County rates are greater than that of Ohio, while the Highland County rate is less than that of Ohio.

Figure 2. Number of Confirmed and Probable Cases of COVID-19 in Ohio and Southwest Ohio Counties, March 9, 2020 - August 31, 2021



NOTES: This data is provisional and subject to change when additional information is gained. Outbreak confirmed positive cases between March 9, 2020 and August 31, 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 September 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 - August 31, 2021

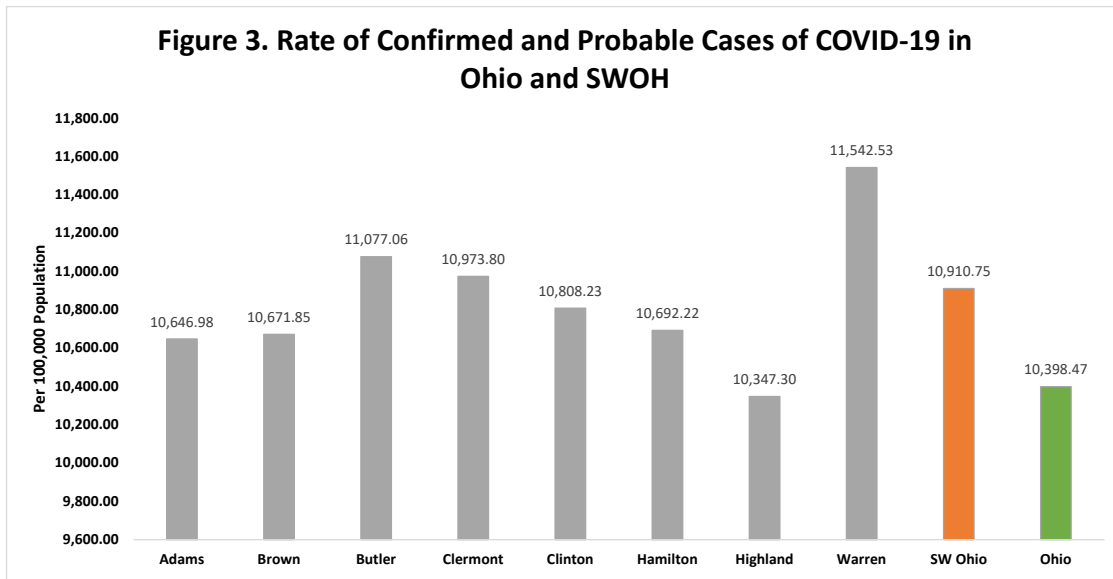
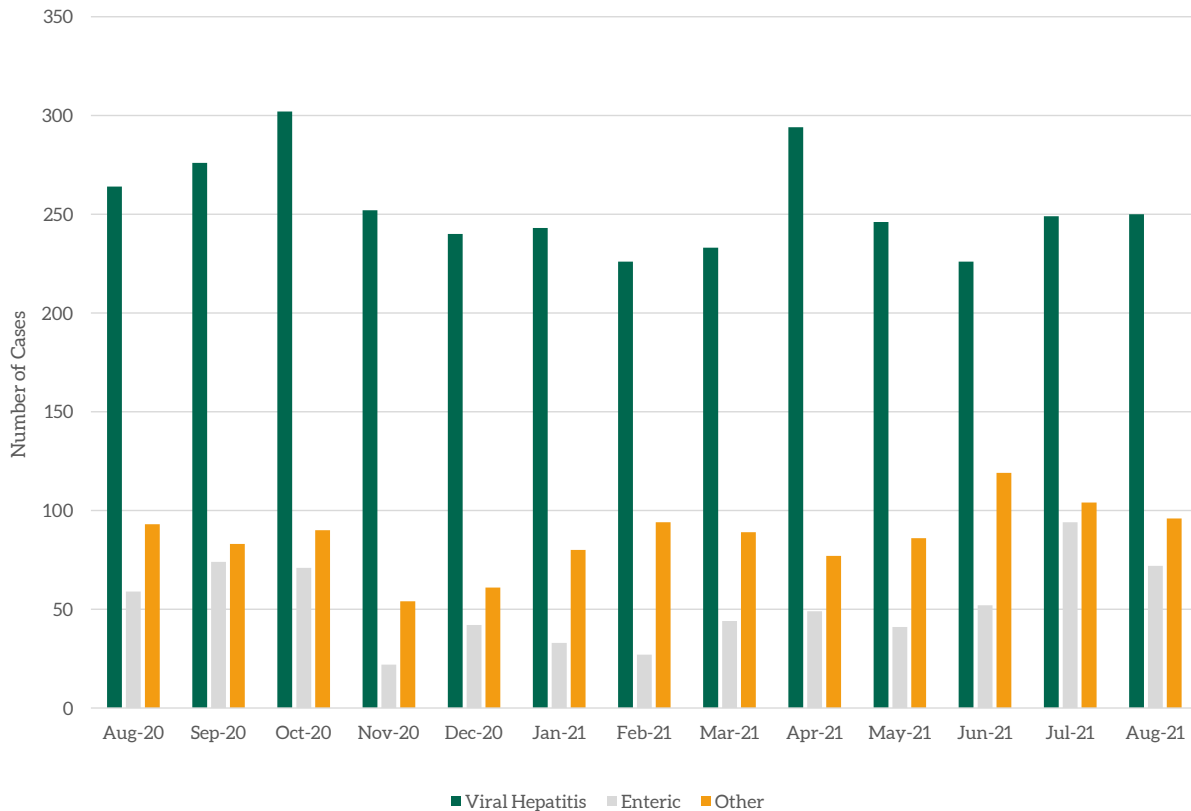


Figure 4. Notifiable Communicable Diseases in Southwest Ohio by Disease Category as Reported in ODRS, August 2020 - 2021\*



\*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.