Monthly Communicable Disease Surveillance Report

June 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: 79

Most frequently reported communicable diseases:

- Chronic hepatitis C (n=34)
- Tuberculosis (n=7)
- Chronic hepatitis B (n=5)
- Legionellosis (n=4)
- Campylobacteriosis (n=3)

Southwest Ohio (SWOH)

Number of Communicable Diseases Reported: 386

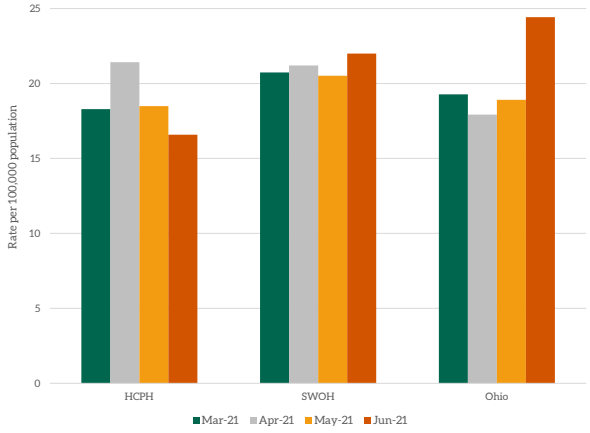
Most frequently reported communicable diseases:

- Chronic hepatitis C (n=173)
- Chronic hepatitis B (n=43)
- Campylobacteriosis (n=17)
- Salmonellosis (n=16)
- Lyme Disease (n=15)

Summary

The overall rates of reported communicable diseases for HCPH, SWOH, and Ohio changed in June by -10%, 7%, and 29% respectively (Figure 1). These rates are pro-rated to 30 days so they can be compared accurately. The Ohio rate (24.4) was the highest of the three rates, and the HCPH rate (16.6) was the lowest. The HCPH rate and SWOH rate (22.0) were both lower than the Ohio rate (Table 1).

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



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 56.0% of the total communicable diseases reported during June. Southwest Ohio is currently on pace to have 11% less hepatitis cases than the previous year's average number of cases (243). The rate of chronic hepatitis within Hamilton County for June was 13.6 per 100,000 residents. This rate was 9% higher than the SWOH rate of 12.4 per 100,000 residents.

Campylobacteriosis was the third most frequently reported disease in SWOH (Table 2). Campylobacteriosis cases accounted for 4.4% of the total communicable diseases reported during June. The number of cases of Campylobacteriosis reported for SWOH in June (17) was higher than the number of cases in the previous month (8). The rate of Campylobacteriosis within Hamilton County for June was 0.9 per 100,000 residents. This rate was lower than the SWOH rate of 1.0 per 100,000 residents.

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

Location	Number of Reported Cases	Rate per 100,000	Rate Ratio†	Confidence Interval (99%)‡
HCPH	79	16.59	0.68	0.51 - 0.91
SWOH	386	22.00	0.90	0.78 - 1.04
Ohio	2,827	24.42	.	. - .

Salmonellosis was the fourth most frequently reported disease in SWOH (Table 2). Salmonellosis cases accounted for 4.1% of the total communicable diseases reported during June. The number of cases of Salmonellosis reported for SWOH in June (16) was higher than the number of cases reported in the previous month (14). The rate of Salmonellosis within Hamilton County for June was 0.6 per 100,000 residents. This rate was higher than the SWOH rate of 0.9 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 June 1-30, 2021. Data was accessed from the Ohio Disease Reporting System on 7/6/2021.

†Ratio of local rate to the Ohio rate.

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

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

Reportable Condition	County								Total
	Adams	Brown	Butler	Clermont	Clinton	Hamilton	Highland	Warren	
CP-CRE	.	.	1	1	.	2	.	.	4
Campylobacteriosis	.	2	3	2	.	7	2	1	17
Coccidioidomycosis	.	.	.	.	.	3	.	2	5
Cryptosporidiosis	.	1	.	.	.	1	.	.	2
Cyclosporiasis	.	.	.	.	.	1	.	.	1
E.Coli (shiga toxin producing)	.	.	2	.	.	3	.	1	6
Giardiasis	.	.	2	1	.	2	.	.	5
Haemophilus influenzae (invasive)	.	.	2	.	.	3	.	.	5
Hepatitis A	.	.	.	.	1	1	.	1	3
Hepatitis B (acute)	.	.	.	.	.	1	.	1	2
Hepatitis B (chronic)	3	1	9	1	1	18	1	9	43
Hepatitis C (acute)	4	.	.	.	.	.	1	.	5
Hepatitis C (chronic)	6	9	28	20	4	91	1	14	173
Hepatitis C - Perinatal Infection	.	.	.	.	.	1	1	.	2
Legionellosis	.	.	4	.	.	6	.	2	12
Listeriosis	.	.	.	.	.	2	.	.	2
Lyme Disease	1	1	1	5	.	4	1	2	15
MIS-C associated with COVID-19	.	.	.	.	.	1	.	.	1
Meningitis (aseptic/viral)	.	.	5	3	.	3	.	1	12
Meningitis (bacterial)	.	.	.	.	.	3	.	.	3
Q fever (acute)	.	.	.	.	.	1	.	.	1
Salmonellosis	.	.	4	3	.	5	2	2	16
Shigellosis	.	.	.	.	.	1	.	.	1
Spotted Fever Rickettsiosis	.	2	.	1	.	1	.	2	6
Streptococcal pneumoniae (invasive)	.	2	2	1	1	1	1	.	8
Streptococcal, Group A (invasive)	.	1	3	.	.	2	.	2	8
Syphilis	.	.	.	.	.	7	.	.	7
Tuberculosis	.	.	1	2	.	9	1	1	14
Varicella	1	.	1	.	.	2	.	1	5
Vibriosis	.	.	.	.	.	1	.	.	1
Yersiniosis	.	.	.	.	.	1	.	.	1
Total	**15**	**19**	**68**	**40**	**7**	**184**	**11**	**42**	**386**

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

Reportable Condition	County								Total
	Adams	Brown	Butler	Clermont	Clinton	Hamilton	Highland	Warren	
Amebiasis	0	0	0	1	0	0	0	0	**1**
Brucellosis	0	0	2	0	0	0	0	0	**2**
CP-CRE	2	0	5	3	0	11	1	2	**24**
Campylobacteriosis	1	4	8	14	2	21	7	9	**66**
Chancroid	0	0	1	0	0	0	0	0	**1**
Coccidioidomycosis	1	1	0	1	0	4	0	7	**14**
Creutzfeldt-Jakob Disease	0	0	1	0	0	3	0	0	**4**
Cryptosporidiosis	0	1	1	2	0	2	1	0	**7**
Cyclosporiasis	0	0	0	0	0	1	0	0	**1**
Dengue	0	0	1	0	0	0	0	0	**1**
E.Coli (shiga toxin producing)	0	0	7	0	0	10	1	1	**19**
Ehrlichiosis/Anaplasmosis	1	0	0	0	0	1	0	0	**2**
Giardiasis	1	0	6	13	0	33	3	5	**61**
Haemophilus influenzae (invasive)	0	0	3	0	0	6	0	0	**9**
Hemolytic uremic syndrome	0	0	1	0	0	0	0	0	**1**
Hepatitis A	1	3	16	0	1	25	2	11	**59**
Hepatitis B (acute)	0	0	1	3	0	5	0	1	**10**
Hepatitis B (chronic)	11	10	64	9	8	142	8	42	**294**
Hepatitis C (acute)	4	0	1	1	0	6	1	0	**13**
Hepatitis C (chronic)	34	57	225	122	34	493	28	89	**1082**
Hepatitis C - Perinatal Infection	0	0	1	1	1	4	1	1	**9**
Influenza-associated hospitalization	1	0	3	1	0	6	0	2	**13**
Legionellosis	2	0	6	3	1	11	0	6	**29**
Listeriosis	0	0	0	0	0	3	0	0	**3**
Lyme Disease	5	1	3	14	0	22	1	6	**52**
MIS-C associated with COVID-19	0	1	7	7	0	19	0	10	**44**
Malaria	0	0	0	0	0	5	0	0	**5**
Meningitis (aseptic/viral)	0	0	7	6	0	20	0	3	**36**
Meningitis (bacterial)	0	0	1	0	1	9	0	3	**14**

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

Reportable Condition	County								Total
	Adams	Brown	Butler	Clermont	Clinton	Hamilton	Highland	Warren	
Meningococcal disease	1	0	0	1	0	1	0	0	**3**
Mumps	0	0	0	0	0	1	0	0	**1**
Pertussis	0	0	1	2	0	1	0	0	**4**
Psittacosis	0	0	0	0	0	1	0	0	**1**
Q fever (acute)	1	0	0	0	0	1	0	0	**2**
Salmonella Typhi	0	0	1	0	0	0	0	0	**1**
Salmonellosis	1	4	8	15	3	23	5	7	**66**
Shigellosis	0	0	1	1	0	7	0	1	**10**
Spotted Fever Rickettsiosis	0	2	0	2	0	7	1	2	**14**
Staphylococcal aureus (VISA)	0	0	0	0	0	1	0	0	**1**
Streptococcal pneumoniae (invasive)	0	4	15	5	4	25	1	5	**59**
Streptococcal, Group A (invasive)	1	1	19	3	1	24	0	8	**57**
Streptococcal, Group B (in newborn)	0	0	0	0	0	1	1	0	**2**
Syphilis	2	1	5	1	1	47	1	2	**60**
Tuberculosis	0	1	4	4	0	28	2	3	**42**
Varicella	1	2	3	1	0	13	1	3	**24**
Vibriosis	0	0	1	0	0	3	0	1	**5**
West Nile virus infection (WNV)	0	0	0	0	0	1	0	0	**1**
Yersiniosis	0	0	0	1	0	1	0	2	**4**
									0
									0
									0
									0
									0
									0
									0
									0
Total	**71**	**93**	**429**	**237**	**57**	**1048**	**66**	**232**	**2233**

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

Reportable Disease	June 2020	YTD 2020	June 2021	YTD 2021
Amebiasis	1	1	0	0
Botulism (Infant)	1	1	0	0
Brucellosis	0	1	0	0
C. auris	0	1	0	0
CP-CRE	0	6	2	9
Campylobacteriosis	2	31	7	21
Coccidioidomycosis	2	9	3	4
Creutzfeldt-Jakob Disease	0	0	0	3
Cryptosporidiosis	0	7	1	2
Cyclosporiasis	0	0	1	1
Dengue	0	1	0	0
E.Coli (shiga toxin producing)	2	10	3	10
Ehrlichiosis/Anaplasmosis	1	1	0	1
Giardiasis	0	10	2	33
Haemophilus influenzae (invasive)	0	18	3	6
Hemolytic uremic syndrome	1	1	0	0
Hepatitis A	3	42	1	25
Hepatitis B (acute)	0	6	1	5
Hepatitis B (chronic)	27	129	18	142
Hepatitis C (acute)	1	11	0	6
Hepatitis C (chronic)	73	391	91	493
Hepatitis C - Perinatal Infection	1	2	1	4
Influenza-associated hospitalization	0	701	0	6
Legionellosis	6	15	6	11

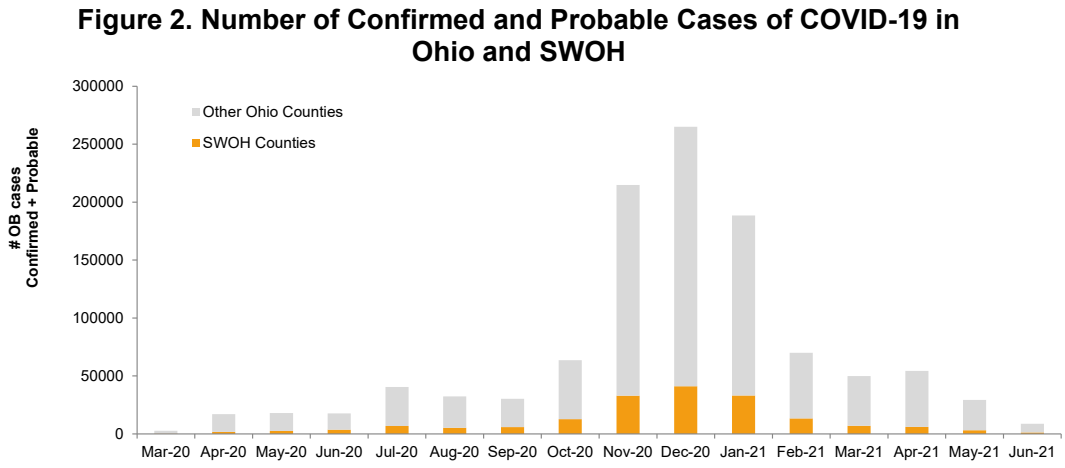
Reportable Disease	June 2020	YTD 2020	June 2021	YTD 2021
Listeriosis	1	1	2	3
Lyme Disease	0	11	4	22
MIS-C associated with COVID-19	0	0	1	19
Malaria	0	1	0	5
Meningitis (aseptic/viral)	4	21	3	20
Meningitis (bacterial)	3	13	3	9
Meningococcal disease	0	0	0	1
Mumps	0	0	0	1
Pertussis	1	70	0	1
Psittacosis	0	1	0	1
Q fever (acute)	0	0	1	1
Salmonellosis	6	30	5	23
Shigellosis	1	8	1	7
Spotted Fever Rickettsiosis	0	0	1	7
Staphylococcal aureus (VISA)	0	0	0	1
Streptococcal pneumoniae (invasive)	1	50	1	25
Streptococcal, Group A (invasive)	3	41	2	24
Streptococcal, Group B (in newborn)	1	1	0	1
Syphilis	14	79	7	47
Tuberculosis	2	10	9	28
Varicella	0	7	2	13
Vibriosis	0	0	1	3
Yersiniosis	0	2	1	1

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 and continued to decline through June 2021, with the exception of a slight increase in cases in April, 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 June 30, 2021, the SWOH counties account for 177,119 confirmed and probable cases (Figure 2).

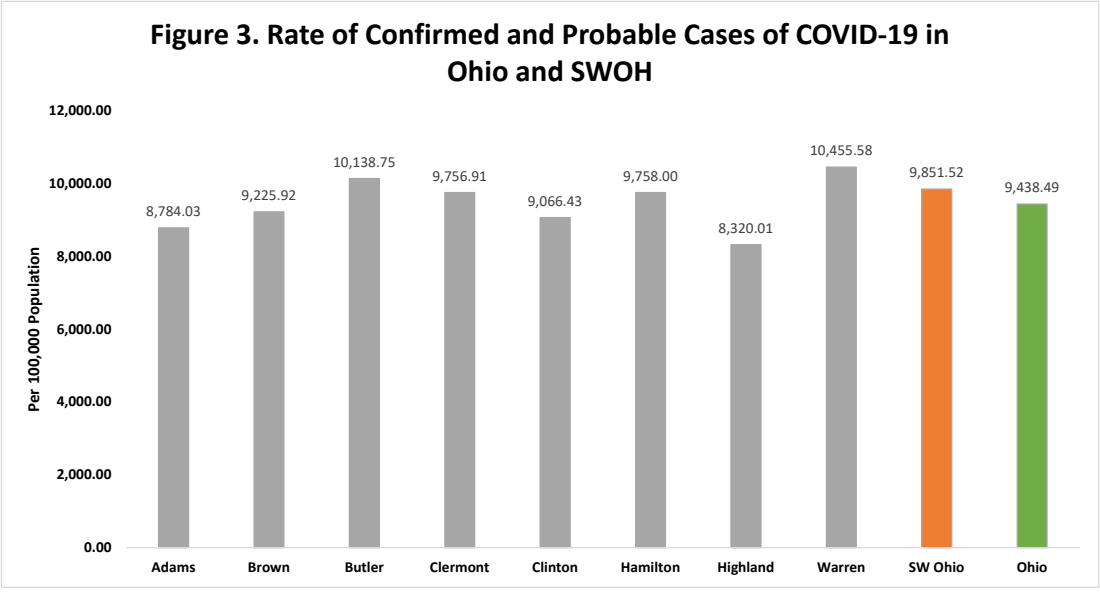
Overall, the rate of confirmed and probable outbreak cases in SWOH is higher than the Ohio rate (Figure 3). The SWOH region accounts for 16.1 percent of Ohio cases. The Warren County rate is the highest of the 8 SWOH counties, followed by Butler County and Hamilton County. Currently the Warren County, Butler County, Hamilton County and Clermont County rates are greater than that of Ohio, while the other SWOH counties' rates are 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 - June 30, 2021



	Mar-20	Apr-20	May-20	Jun-20	Jul-20	Aug-20	Sep-20	Oct-20	Nov-20	Dec-20	Jan-21	Feb-21	Mar-21	Apr-21	May-21	Jun-21
Other Ohio Counties	2403	15267	15532	14067	33617	27120	24449	50963	181797	223889	155471	56586	42908	48410	26152	7525
SWOH Counties	263	1786	2531	3672	6867	5308	5898	12688	32951	41159	33085	13444	7004	6012	3241	1210

Figure 3. Rate of Confirmed and Probable Cases of COVID-19 in Ohio and Southwest Ohio Counties, March 9, 2020 - June 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 June 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 July 6, 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 4. Notifiable Communicable Diseases in Southwest Ohio by Disease Category as Reported in ODRS, June 2020 - June 2021*

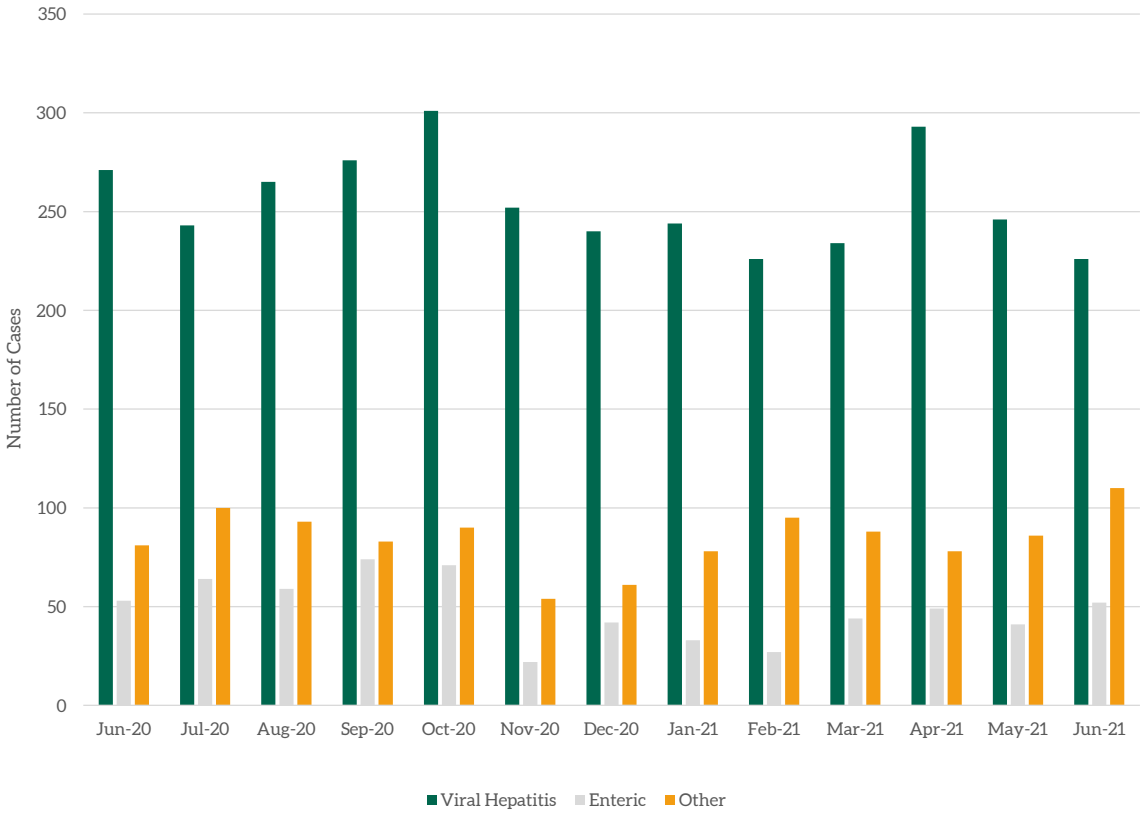


Table 5. Tuberculosis Clinical Services, Hamilton County Public Health, June 2021†

TB Clinical Services	June 2020	YTD 2020	June 2021	YTD 2021
# New Confirmed TB Cases	0	6	3	17
# New TB Suspected Cases	0	9	5	16
# New Patients	14	53	3	45
# TB Skin Tests Done	89	352	34	237
# TB Readings	72	309	24	202
# Positive Skin Tests	6	23	1	5
% Positive Skin Tests	8.3%	7.4%	4.2%	2.5%
# MD Clinic Visits	28	182	12	118
# LTBI Nurse Visits	19	170	14	83
# Nurse Clinic Visits	42	187	28	127
# Chest X-Rays Done	23	130	22	121
# Prescriptions Filled	79	469	65	380
# Direct Observed Therapies ♦	312	2269	245	1122

*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.

†Figure reflects service statistics as of 6/21/2021

^This data was not available for the month at the time of this report.

♦This is a new metric that started on June 2018, therefore historical data is not available