



Monthly Communicable Disease Surveillance Report

May 2021

Sara Cannon, MPH, Epidemiologist



PREVENT. PROMOTE. PROTECT.



NOTIFIABLE COMMUNICABLE DISEASES

Hamilton County Public Health (HCPH) Jurisdiction

Number of Communicable Diseases Reported: 91

Most frequently reported communicable diseases:

- Chronic hepatitis C (n=47)
- Chronic hepatitis B (n=8)
- Giardiasis (n=4)
- Lyme Disease (n=4)
- Streptococcal pneumoniae (n=4)

Southwest Ohio (SWOH)

Number of Communicable Diseases Reported: 372

Most frequently reported communicable diseases:

- Chronic hepatitis C (n=193)
- Chronic hepatitis B (n=46)
- Salmonellosis (n=14)
- Streptococcal pneumoniae (n=13)
- Giardiasis (n=12)

Summary

The overall rates of reported communicable diseases for HCPH, SWOH, and Ohio changed in May by -14%, -3%, and 6% respectively (Figure 1). These rates are pro-rated to 30 days so they can be compared accurately. The SWOH rate (20.5) was the highest of the three rates, and the HCPH rate (18.5) was the lowest. The HCPH rate was consistent with the Ohio rate (18.9) while the SWOH rate was higher. (Table 1).

Chronic hepatitis C was the most commonly reported communicable disease across SWOH, with chronic hepatitis B and Salmonellosis 2nd and 3rd respectively (Table 2). Chronic hepatitis (Hepatitis C and Hepatitis B combined) comprised 64.5% of the total communicable diseases reported during May. Southwest Ohio is currently on pace to have 1.4% less hepatitis cases than the previous year's average number of cases (236). The rate of chronic hepatitis within Hamilton County for May was 14.6 per 100,000 residents. This rate was 6% higher than the SWOH rate of 13.7 per 100,000 residents.

Salmonellosis was the third most frequently reported disease in SWOH (Table 2). Salmonellosis cases accounted for 3.8% of the total communicable diseases reported during May. The number of cases of Salmonellosis reported for SWOH in May (14) was higher than the number of cases in the previous month (13). The rate of Salmonellosis within Hamilton County for May was 0.4 per 100,000 residents. This rate was lower than the SWOH rate of 0.8 per 100,000 residents.

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

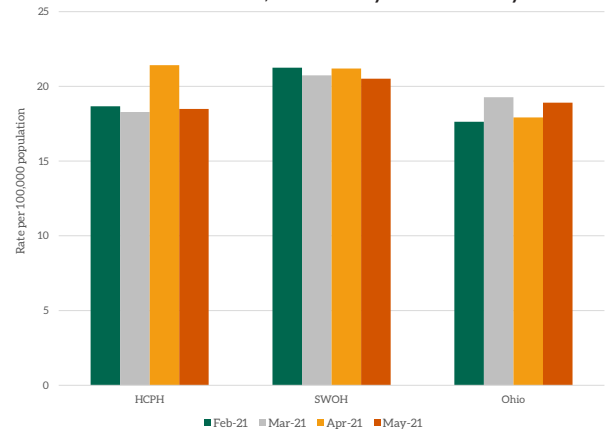


Table 1. Comparison of the Reported Cases of Notifiable Communicable Diseases by Location, May 2021

Location	Number of Reported Cases	Rate per 100,000	Rate Ratio†	Confidence Interval (99%)‡
HCPH	91	19.11	0.98	0.74 - 1.29
SWOH	372	21.20	1.08	0.94 - 1.25
Ohio	2,262	19.54	.	.-.

Streptococcal pneumoniae was the fourth most frequently reported disease in SWOH (Table 2). Streptococcal pneumoniae cases accounted for 3.5% of the total communicable diseases reported during May. The number of cases of Streptococcal pneumoniae reported for SWOH in May (13) was higher than the number of cases reported in the previous month (11). The rate of Streptococcal pneumoniae within Hamilton County for May was 0.9 per 100,000 residents. This rate was higher than

the SWOH rate of 0.7 per 100,000 residents.

NOTES: Data are provisional and are subject to change as data becomes finalized. Suspected, probably and confirmed cases are included in counts except for arboviral encephalitis and Zika virus diseases, of which only probably 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 May 1-31, 2021. Data was accessed from the Ohio Disease Reporting System on 6/3/2021.

†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, May 2021

Reportable Condition	County										Total
	Adams	Brown	Butler	Clermont	Clinton	Hamilton	Highland	Warren			
Campylobacteriosis	.	1	1	1	.	3	1	1	1	1	8
Coccidioidomycosis	.	.	.	.	.	.	.	.	.	2	2
Creutzfeldt-Jakob Disease	.	.	.	.	.	1	.	.	.	.	1
Cryptosporidiosis	.	.	.	.	.	.	.	1	.	.	1
E.Coli (shiga toxin producing)	.	.	2	.	.	2	1	1	.	.	5
Ehrlichiosis/Anaplasmosis	1	.	.	.	.	1	.	.	.	.	2
Giardiasis	1	.	2	3	.	5	1	.	.	.	12
Hepatitis A	.	.	5	.	.	2	.	.	1	.	8
Hepatitis B (acute)	.	.	.	1	.	1	.	.	.	.	2
Hepatitis B (chronic)	4	3	10	1	2	17	1	1	8	.	46
Hepatitis C (acute)	.	.	.	1	.	1	.	.	.	.	2
Hepatitis C (chronic)	4	11	41	23	2	100	1	11	.	.	193
Hepatitis C - Perinatal Infection	.	.	.	.	.	.	.	.	1	.	1
Legionellosis	.	.	1	1	.	1	.	1	1	.	4
Listeriosis	.	.	.	.	.	1	.	.	.	.	1
Lyme Disease	2	.	.	4	.	4	.	.	2	.	12
MIS-C associated with COVID-19	.	.	1	1	.	.	.	.	.	.	2
Meningitis (aseptic/viral)	.	.	.	.	.	4	.	.	.	.	4
Meningitis (bacterial)	.	.	.	.	.	1	.	.	2	.	3
Mumps	.	.	.	.	.	1	.	.	.	.	1
Salmonella Typhi	.	.	1	.	.	.	.	.	.	.	1
Salmonellosis	.	2	3	2	2	3	.	2	2	.	14
Spotted Fever Rickettsiosis	.	.	.	1	.	2	1	.	.	.	4
Streptococcal pneumoniae (invasive)	.	1	5	.	.	7	.	.	.	.	13
Streptococcal, Group A (invasive)	1	.	3	1	.	3	.	2	2	.	10
Syphilis	.	1	1	.	.	7	1	1	1	.	11
Tuberculosis	.	.	.	.	.	4	.	.	.	.	4
Varicella	.	.	1	.	.	2	1	.	.	.	4
Yersiniosis	.	.	.	1	.	.	.	.	.	.	1
Total	13	19	77	41	6	173	9	34	9	34	372

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

Reportable Condition	County										Total
	Adams	Brown	Butler	Clermont	Clinton	Hamilton	Highland	Warren			
Amebiasis	0	0	0	1	0	0	0	0	0	0	1
Brucellosis	0	0	2	0	0	0	0	0	0	0	2
CP-CRE	2	0	4	2	0	8	0	0	2	2	18
Campylobacteriosis	1	2	5	12	2	14	5	8	8	8	49
Chancroid	0	0	1	0	0	0	0	0	0	0	1
Coccidioidomycosis	1	1	0	1	0	1	0	5	5	9	
Creutzfeldt-Jakob Disease	0	0	1	0	0	3	0	0	0	4	
Cryptosporidiosis	0	0	1	2	0	1	1	0	0	5	
Dengue	0	0	1	0	0	0	0	0	0	1	
E.Coli (shiga toxin producing)	0	0	5	0	0	7	1	0	0	13	
Ehrlichiosis/Anaplasmosis	1	0	0	0	0	1	0	0	0	2	
Giardiasis	1	0	4	12	0	32	3	5	5	57	
Haemophilus influenzae (invasive)	0	0	1	0	0	3	0	0	0	4	
Hemolytic uremic syndrome	0	0	1	0	0	0	0	0	0	1	
Hepatitis A	1	3	16	0	0	24	2	10	10	56	
Hepatitis B (acute)	0	0	1	3	0	4	0	0	0	8	
Hepatitis B (chronic)	8	9	55	8	7	127	7	32	32	253	
Hepatitis C (acute)	0	0	1	1	0	6	0	0	0	8	
Hepatitis C (chronic)	29	48	200	102	30	407	27	75	75	918	
Hepatitis C - Perinatal Infection	0	0	1	1	1	3	0	1	1	7	
Influenza-associated hospitalization	1	0	3	1	0	6	0	2	2	13	
Legionellosis	2	0	2	4	1	5	0	3	3	17	
Listeriosis	0	0	0	0	0	1	0	0	0	1	
Lyme Disease	4	0	2	9	0	18	0	4	4	37	
MIS-C associated with COVID-19	0	1	7	7	0	18	0	10	10	43	
Malaria	0	0	0	0	0	5	0	0	0	5	
Meningitis (aseptic/viral)	0	0	2	3	0	17	0	3	3	25	
Meningitis (bacterial)	0	0	1	0	1	6	0	3	3	11	
Meningococcal disease	1	0	0	1	0	1	0	0	0	3	

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

Reportable Condition	County										Total
	Adams	Brown	Butler	Clermont	Clinton	Hamilton	Highland	Warren			
Mumps	0	0	0	0	0	1	0	0	0	0	1
Pertussis	0	0	1	2	0	1	0	0	0	0	4
Psittacosis	0	0	0	0	0	1	0	0	0	0	1
Q fever (acute)	1	0	0	0	0	0	0	0	0	0	1
Salmonella Typhi	0	0	1	0	0	0	0	0	0	0	1
Salmonellosis	1	4	4	12	3	18	3	5	5	5	50
Shigellosis	0	0	1	1	0	6	0	0	1	1	9
Spotted Fever Rickettsiosis	0	0	0	1	0	6	1	0	0	0	8
Staphylococcal aureus (VISA)	0	0	0	0	0	1	0	0	0	0	1
Streptococcal pneumoniae (invasive)	0	2	13	4	3	23	0	5	5	5	50
Streptococcal, Group A (invasive)	1	0	16	3	1	22	0	6	6	6	49
Streptococcal, Group B (in newborn)	0	0	0	0	0	1	1	0	0	0	2
Syphilis	2	1	5	1	1	38	1	2	2	2	51
Tuberculosis	0	1	3	0	0	20	1	2	2	2	27
Varicella	0	2	2	1	0	11	1	2	2	2	19
Vibriosis	0	0	1	0	0	2	0	1	1	1	4
West Nile virus infection	0	0	0	0	0	1	0	0	0	0	1
Yersiniosis	0	0	0	1	0	0	0	2	2	2	3
											0
											0
											0
											0
											0
											0
											0
											0
											0
Total	57	74	364	196	50	870	54	189	54	189	1854

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 May 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 May 31, 2021, the SWOH counties account for 175,343 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 16.0 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 - May 31, 2021

Figure 2. Number of Confirmed and Probable Cases of COVID-19 in Ohio and SWOH

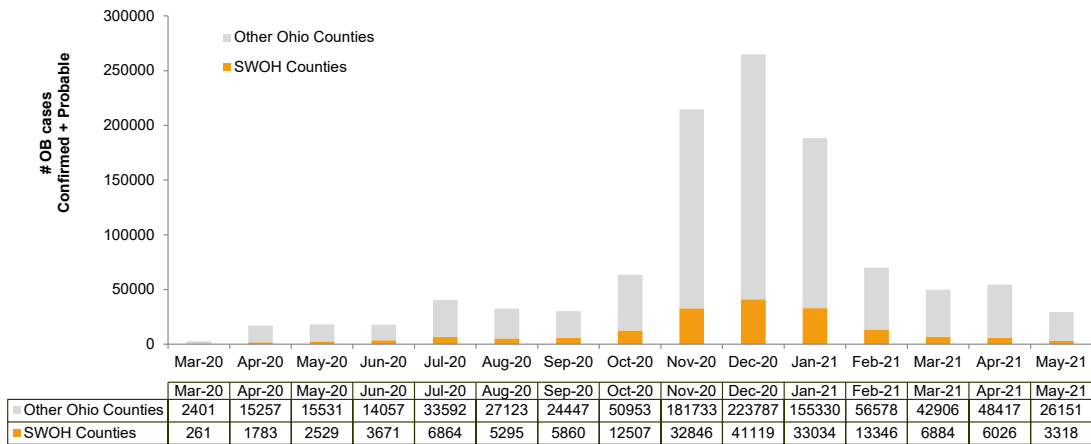
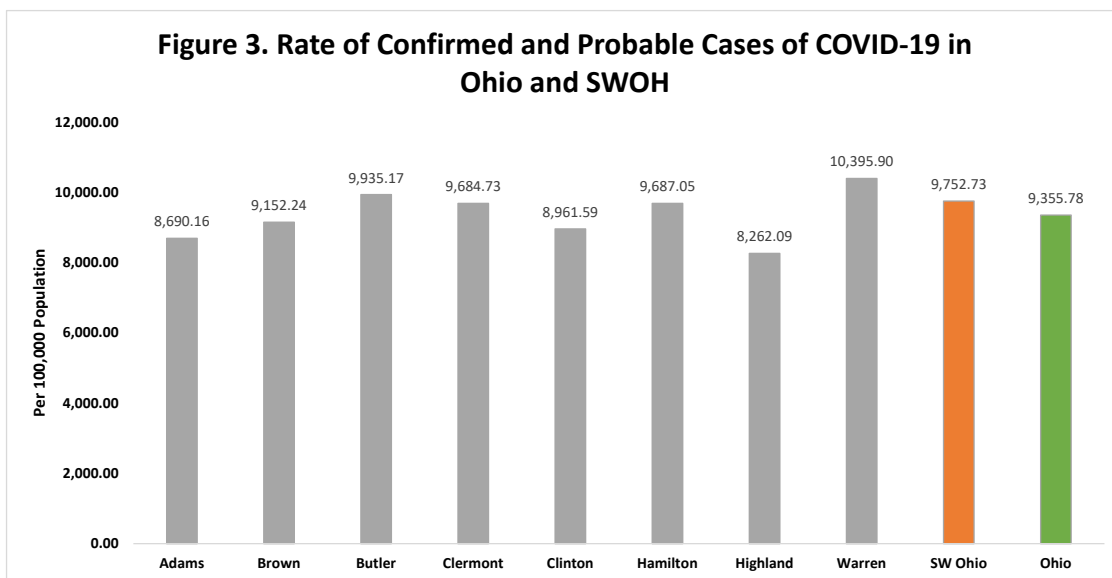


Figure 3. Rate of Confirmed and Probable Cases of COVID-19 in Ohio and Southwest Ohio Counties, March 9, 2020 - May 31, 2021



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

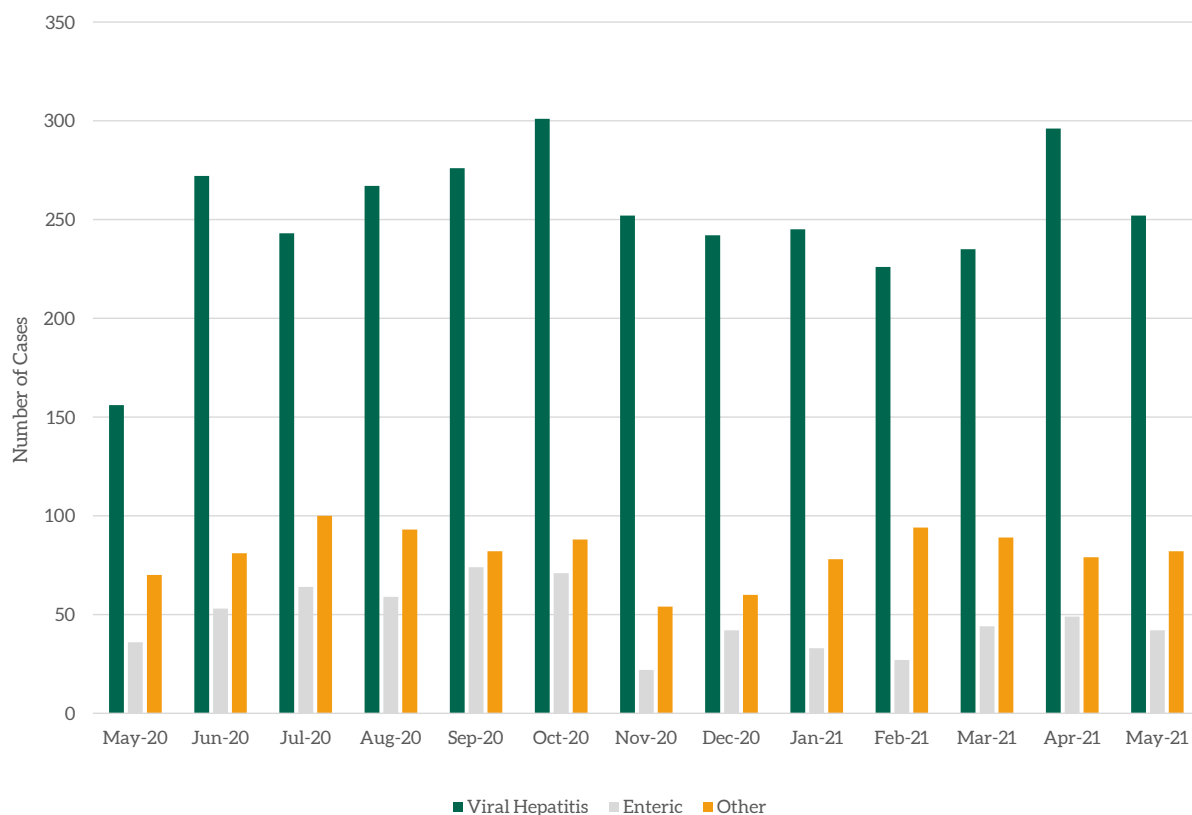


Table 5. Tuberculosis Clinical Services, Hamilton County Public Health, May 2021†

TB Clinical Services	May 2020	YTD 2020	May 2021	YTD 2021
# New Confirmed TB Cases	0	10	4	14
# New TB Suspected Cases	0	24	3	11
# New Patients	3	108	6	42
# TB Skin Tests Done	35	587	50	203
# TB Readings	34	543	46	178
# Positive Skin Tests	2	31	1	4
% Positive Skin Tests	5.9%	5.7%	2.2%	2.2%
# MD Clinic Visits	20	328	23	106
# LTBI Nurse Visits	23	261	13	69
# Nurse Clinic Visits	24	402	29	99
# Chest X-Rays Done	7	228	24	99
# Prescriptions Filled	87	820	61	315
# Direct Observed Therapies ♦	440	3770	247	877

*Suspected, Probably 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 5/27/2021

^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