



# Monthly Communicable Disease Surveillance Report

October 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: 85

Most frequently reported communicable diseases:

- Chronic hepatitis C (n=34)
- Syphilis (n=8)
- Campylobacteriosis (n=7)
- Salmonella (n=5)
- Chronic hepatitis B (n=4)

## Southwest Ohio (SWOH)

Number of Communicable Diseases Reported: 477

Most frequently reported communicable diseases:

- Chronic hepatitis C (n=196)
- Chronic hepatitis B (n=42)
- Syphilis (n=36)
- C. auris - Investigation (n=21)
- Campylobacteriosis (n=19)

## Summary

The overall rates of reported communicable diseases for HCPH, SWOH, and Ohio changed in October by -8%, 6%, and 1% respectively (Figure 1). These rates are pro-rated to 30 days so they can be compared accurately. The SWOH rate (27.2) was the highest of the three rates, and the HCPH rate (17.8) was the lowest. The HCPH rate and the Ohio rate (22.9) were both lower than the SWOH rate (Table 1).

Chronic hepatitis C was the most commonly reported communicable disease across SWOH, with chronic hepatitis B and Syphilis 2<sup>nd</sup> and 3<sup>rd</sup> respectively (Table 2). Chronic hepatitis (Hepatitis C and Hepatitis B combined) comprised 49.9% of the total communicable diseases reported during October. Southwest Ohio is currently on pace to have a 1.0% increase in hepatitis cases over the previous year's average number of cases (236). The rate of chronic hepatitis within Hamilton County for October was 12.7 per 100,000 residents. This rate was 7% lower than the SWOH rate of 13.7 per 100,000 residents.

Syphilis was the third most frequently reported disease in SWOH (Table 2). Syphilis cases accounted for 7.6% of the total communicable diseases reported during October. The number of cases of Syphilis reported for SWOH in October (36) was lower than the number of cases in the previous month (45). The rate of Syphilis within Hamilton County for October was 3.0 per 100,000 residents. This rate was higher than the SWOH rate of 2.1 per 100,000 residents.

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

Location	Number of Reported Cases	Rate per 100,000	Rate Ratio <sup>†</sup>	Confidence Interval (99%) <sup>‡</sup>
HCPH	85	17.85	0.78	0.59 - 1.04
SWOH	477	27.18	1.19	1.05 - 1.35
Ohio	2,646	22.86	.	.-.

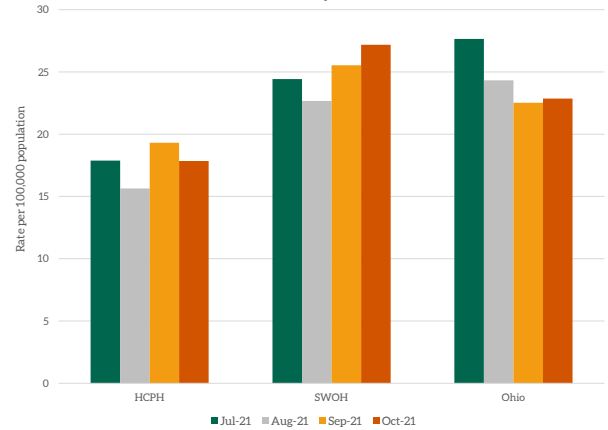
auris within Hamilton County for October was 2.5 per 100,000 residents. This rate was higher than the SWOH rate of 1.2 per 100,000 residents.

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 October 1-30, 2021. Data was accessed from the Ohio Disease Reporting System on 11/2/2021.

<sup>†</sup>Ratio of local rate to the Ohio rate.

<sup>‡</sup>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, July 2021 - October 2021**



C. auris cases associated with an ongoing investigation in Hamilton County were the fourth most frequently reported disease in SWOH (Table 2). C. auris cases accounted for 4.4% of the total communicable diseases reported during October. The number of cases of C. auris reported for SWOH in October (20) was higher than the number of cases reported in the previous month (19). The rate of C.

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

Reportable Condition	County										Total	
	Adams	Brown	Butler	Clermont	Clinton	Hamilton	Highland	Warren				
Babesiosis	.	.	1	.	.	.	.	.	.	.	.	1
C. auris	.	.	.	.	.	6	.	.	.	.	.	6
C. auris - Investigation	1	.	.	.	.	20	.	.	.	.	.	21
CP-CRE	.	.	3	.	.	1	.	.	.	1	.	5
Campylobacteriosis	.	.	4	2	1	8	2	2	.	.	.	19
Coccidioidomycosis	.	.	1	.	.	1	.	.	.	.	.	2
Cryptosporidiosis	.	.	1	.	1	2	.	.	.	1	.	5
E.Coli (shiga toxin producing)	.	.	.	3	.	1	.	.	.	1	.	5
Giardiasis	.	.	3	.	.	7	.	.	.	3	.	13
Haemophilus influenzae (invasive)	.	.	.	.	.	3	.	.	.	.	.	3
Hemolytic uremic syndrome (HUS)	.	.	.	.	.	1	.	.	.	.	.	1
Hepatitis A	1	.	5	.	.	4	.	.	.	3	.	13
Hepatitis B (acute)	.	.	.	1	1	2	.	.	.	.	.	4
Hepatitis B (chronic)	1	2	7	2	.	15	3	12	.	.	.	42
Hepatitis C (acute)	.	.	2	.	.	.	.	.	.	.	.	2
Hepatitis C (chronic)	3	6	43	25	2	87	4	26	.	.	.	196
Hepatitis C - Perinatal Infection	.	1	.	1	.	.	.	.	.	.	.	2
Influenza-associated hospitalization	.	.	.	.	1	1	.	3	.	.	.	5
Legionellosis	.	1	2	2	.	5	.	1	.	1	.	11
Listeriosis	.	.	.	.	.	1	.	.	.	.	.	1
Lyme Disease	2	.	.	1	.	6	.	1	.	1	.	10
MIS-C associated with COVID-19	.	1	2	.	.	1	.	1	.	1	.	5
Malaria	.	.	.	.	.	1	.	.	.	.	.	1
Meningitis (aseptic/viral)	.	.	3	.	.	5	.	1	.	1	.	9
Meningitis (bacterial)	.	.	.	.	.	2	.	.	.	.	.	2
Mumps	.	.	.	.	.	1	.	.	.	.	.	1
Pertussis	.	.	2	.	.	.	.	.	.	.	.	2
Salmonellosis	.	.	3	2	1	8	.	4	.	.	.	18
Spotted Fever Rickettsiosis	.	.	.	1	.	.	.	.	.	.	.	1



Table 3. YTD Cases of Notifiable Diseases in Southwest Ohio as Reported in ODRS by County, January - October 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
Babesiosis	0	0	1	0	0	0	0	0	0	0	1
Brucellosis	0	0	2	0	0	1	0	0	0	0	3
C. auris	0	0	0	0	0	14	0	0	0	0	14
C. auris - Investigation	1	0	0	0	0	39	0	0	0	0	40
CP-CRE	6	1	13	4	1	24	3	5	5	5	57
Campylobacteriosis	2	8	26	27	5	63	13	22	22	22	166
Coccidioidomycosis	1	1	2	3	0	8	0	8	8	8	23
Creutzfeldt-Jakob Disease	0	0	1	1	0	3	0	0	0	0	5
Cryptosporidiosis	1	1	4	5	1	9	2	1	1	1	24
Cyclosporiasis	0	0	0	0	0	3	0	1	1	1	4
Dengue	0	0	1	0	0	0	0	0	0	0	1
E.Coli (shiga toxin producing)	1	1	13	10	0	25	2	3	3	3	55
Ehrlichiosis/Anaplasmosis	1	0	1	1	0	2	0	0	0	0	5
Giardiasis	1	1	16	16	0	51	4	10	10	10	99
Haemophilus influenzae (invasive)	0	0	5	1	0	14	0	0	0	0	20
Hantavirus	0	0	0	0	0	1	0	0	0	0	1
Hemolytic uremic syndrome (HUS)	0	0	1	2	0	1	0	0	0	0	4
Hepatitis A	4	3	32	2	1	42	2	18	18	18	104
Hepatitis B (acute)	0	0	3	4	1	5	0	1	1	1	14
Hepatitis B (chronic)	20	15	113	16	13	239	19	73	73	73	508
Hepatitis C (acute)	0	0	5	3	0	6	0	0	0	0	14
Hepatitis C (chronic)	50	85	376	216	48	793	51	166	166	166	1785
Hepatitis C - Perinatal Infection	0	1	1	2	1	4	1	1	1	1	11
Hepatitis E	0	0	0	0	1	0	0	0	0	0	1
Influenza-associated hospitalization	1	0	3	2	1	8	0	7	7	7	22
Legionellosis	2	1	9	7	2	23	1	11	11	11	56
Listeriosis	0	0	0	1	0	6	0	2	2	2	9
Lyme Disease	11	4	4	28	0	55	4	11	11	11	117



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

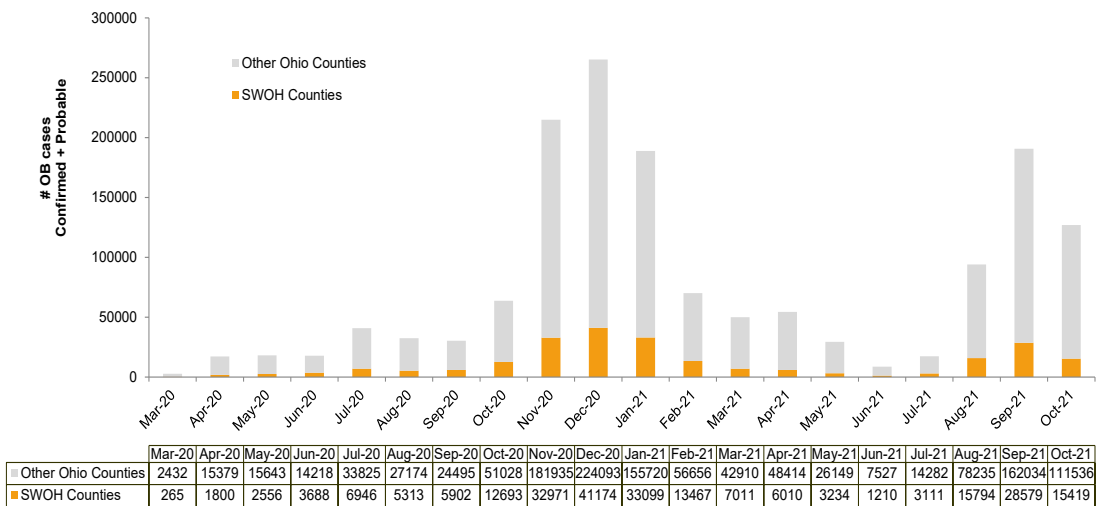
Reportable Disease	October 2020	YTD 2020	October 2021	YTD 2021	Reportable Disease	October 2020	YTD 2020	October 2021	YTD 2021
Amebiasis	0	2	0	1	Leptospirosis	0	1	0	0
Botulism (Infant)	0	2	0	0	Listeriosis	0	1	1	6
Bruceellosis	0	1	0	1	Lyme Disease	6	37	6	55
C. auris	0	1	6	14	MIS-C associated with COVID-19	1	4	1	25
C. auris - Investigation	0	0	20	39	Malaria	0	2	1	7
CP-CRE	4	13	1	19	Meningitis (aseptic/viral)	7	36	5	29
Campylobacteriosis	8	66	8	63	Meningitis (bacterial)	1	19	2	17
Coccidioidomycosis	0	10	1	8	Meningococcal disease	0	0	0	2
Creutzfeldt-Jakob Disease	0	2	0	3	Mumps	0	0	1	2
Cryptosporidiosis	0	10	2	9	Pertussis	0	73	0	2
Cyclosporiasis	1	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)	1	17	1	25	Salmonellosis	12	82	8	57
Ehrlichiosis/Anaplasmosis	1	4	0	2	Shigellosis	1	11	0	15
Giardiasis	3	29	7	51	Spotted Fever Rickettsiosis	1	7	0	11
Haemophilus influenzae (invasive)	0	19	3	14	Staphylococcal aureus (VISA)	0	0	0	1
Hantavirus	0	0	0	1	Streptococcal pneumoniae (invasive)	3	61	3	37
Hemolytic uremic syndrome (HUS)	0	1	1	1	Streptococcal, Group A (invasive)	4	58	5	37
Hepatitis A	8	60	4	42	Streptococcal, Group B (in newborn)	0	4	1	3
Hepatitis B (acute)	0	9	2	5	Syphilis	15	176	24	254
Hepatitis B (chronic)	23	228	15	239	Toxic shock syndrome (TSS)	0	1	0	0
Hepatitis C (acute)	0	14	0	6	Tuberculosis	1	14	2	30
Hepatitis C (chronic)	123	765	87	793	Typhus fever	0	1	0	1
Hepatitis C - Perinatal Infection	1	3	0	4	Varicella	1	15	2	19
Influenza-associated hospitalization	2	703	1	8	Vibriosis	1	3	1	5
LaCrosse Virus Disease (LCVD)	1	1	0	0	Yersiniosis	2	7	0	2
Legionellosis	2	24	5	23					

## SARS-CoV-2 (COVID-19) Outbreak

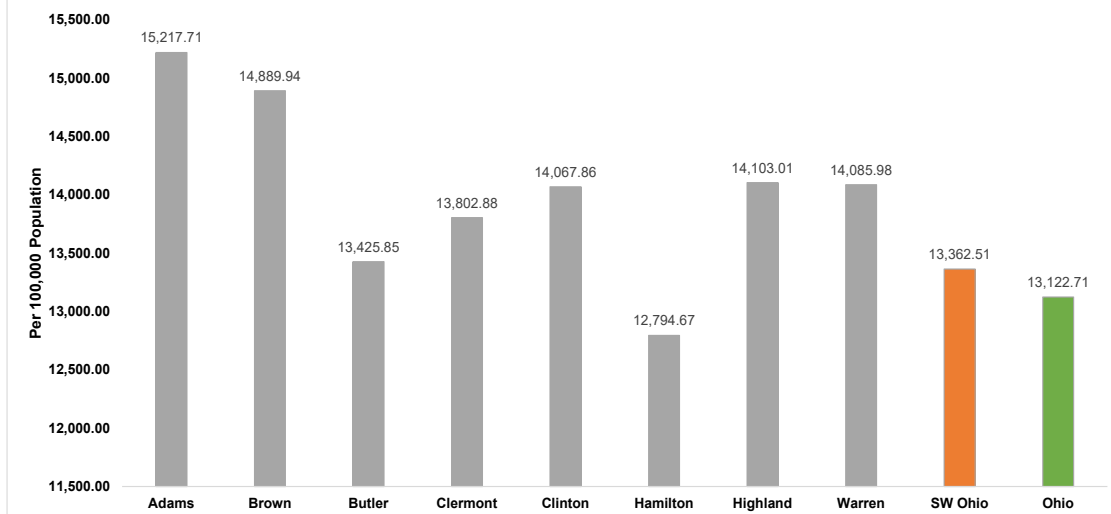
Chinese Health Officials identified the novel coronavirus, now known as SARS-CoV-2 or COVID-19, in December, 2019. Due to rapid global spread of disease, the World Health Organization declared COVID-19 a pandemic March 11, 2020. The United States identified its first case of COVID-19 January 21, 2020 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. From July through September 2021 Ohio experienced an increase in confirmed and probable cases. 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 October 30, 2021, the SWOH counties account for 240,242 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 15.7 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 the Ohio rate, while all other counties in the SouthWest Ohio region have rates that are higher than the Ohio rate.

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



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



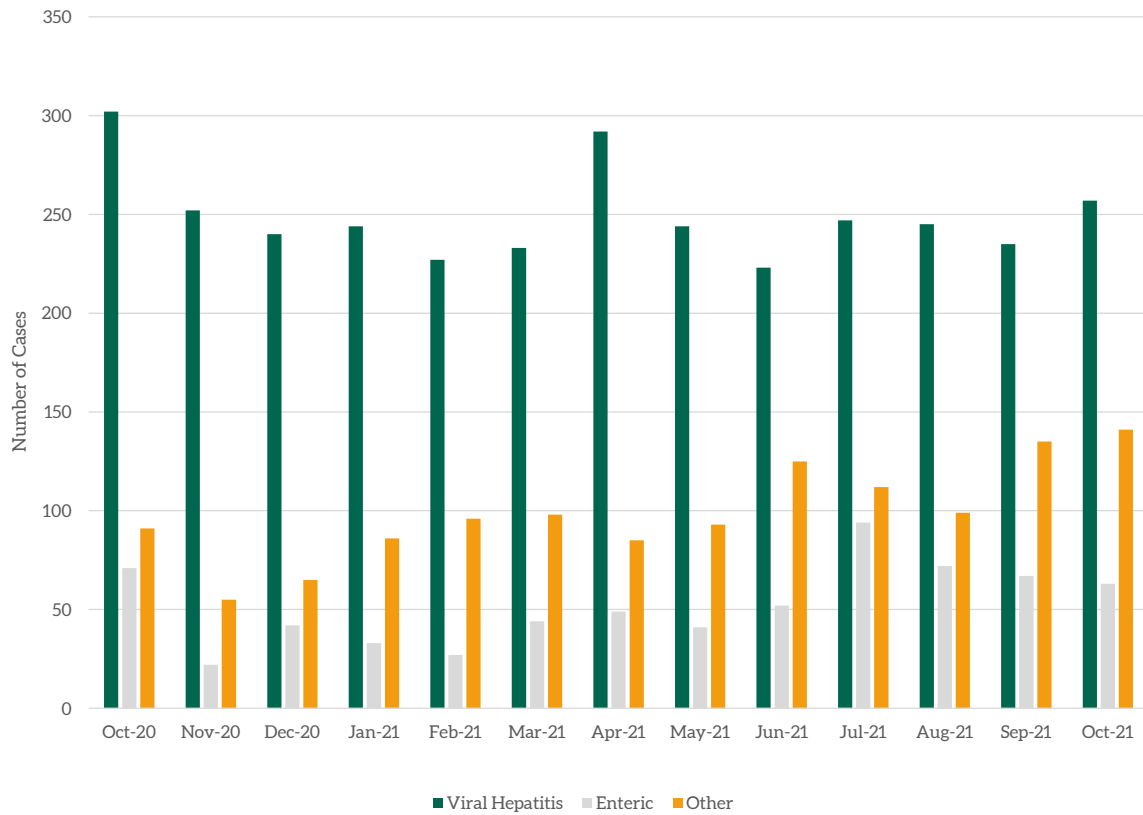
NOTES: This data is provisional and subject to change when additional information is gained. Outbreak confirmed positive cases between March 9, 2020 and October 30, 2021 were used for analysis. Cases were selected based on address at diagnosis. Confirmed and probable cases determined by date reported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

Source: Ohio Department of Health, Ohio Disease Reporting System. Data reported as of November 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 4. Notifiable Communicable Diseases in Southwest Ohio by Disease Category as Reported in ODRS  
July 2020 - October 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.