



Monthly Communicable Disease Surveillance Report

July 2024

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NOTIFIABLE COMMUNICABLE DISEASES

Hamilton County Public Health (HCPH) Jurisdiction

Number of Communicable Diseases Reported: 90
 Most frequently reported communicable diseases:

- Chronic Hepatitis C (n=19)
- Campylobacteriosis (n=10)
- Chronic Hepatitis B (n=8)
- Lyme Disease (n=7)
- CPO (n=4)

Southwest Ohio (SWOH)

Number of Communicable Diseases Reported: 432
 Most frequently reported communicable diseases:

- Chronic Hepatitis C (n=107)
- Lyme Disease (n=45)
- Chronic Hepatitis B (n=40)
- Campylobacteriosis (n=37)
- Salmonellosis (n=21)

Summary

In July, the overall rates of reported communicable diseases for HCPH decreased by 2%. SWOH and Ohio both increased by 3%. The Ohio rate (30.5) was the highest of the three rates, followed by the SWOH rate (23.8) and the HCPH rate (18.3) (Table 1). These rates are pro-rated to 30 days so they can be compared accurately.

Chronic hepatitis C was the most commonly reported communicable disease across SWOH, with Lyme disease and Chronic Hepatitis B the 2nd- and 3rd-most reported, respectively (Table 2). Chronic hepatitis B and C cases accounted for 34.0% of the total communicable diseases reported during July. Southwest Ohio is currently on pace for a 6.8% decrease in chronic hepatitis over the previous year's average of 153 cases. The number of chronic hepatitis cases reported for SWOH in July (147) was lower than the number of cases reported in the previous month (156). The rate of chronic hepatitis within Hamilton County for July was 9.5 per 100,000 residents. This rate was higher than the SWOH rate of 8.5 per 100,000 residents.

Lyme disease was the second most frequently reported disease in SWOH, accounting for 10.4% of the total communicable diseases reported during July. The number of Lyme disease cases reported during July (45) was higher than the number of cases reported in the previous month (43). The rate of Lyme disease cases within Hamilton County for July was 1.1 per 100,000 residents. This rate was lower than the SWOH rate of 2.6 per 100,000 residents.

Figure 1. 30-Day Rates of Reported Communicable Diseases in Ohio, Southwest Ohio, and Hamilton County Public Health Jurisdiction, April 2024 - July 2024

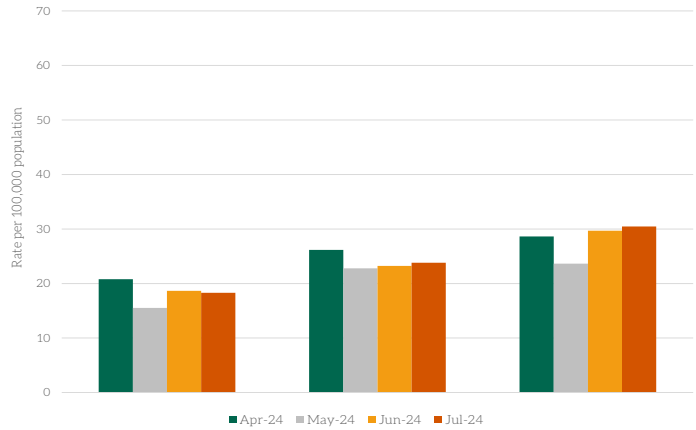


Table 1. Comparison of the Reported Cases of Notifiable Communicable Diseases by Location, July 2024

Location	Number of Reported Cases	Rate per 100,000	Rate Ratio†	Confidence Interval (99%)‡
HCPH	90	18.90	0.60	0.46 - 0.79
SW OHIO	432	24.62	0.78	0.69 - 0.89
OHIO	3,644	31.48	.	.-.

of cases reported in the previous month (14). The rate of campylobacteriosis cases within Hamilton County for July was 1.7 per 100,000 residents. This rate was lower than the SWOH rate of 2.1 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, gonorrhea, HIV, and syphilis 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 July 1-31 2024. Data was accessed from the Ohio Disease Reporting System on 8/1/2024

†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, July 2024

Reportable Condition	County										Total
	Hamilton	Adams	Brown	Butler	Clermont	Clinton	Highland	Warren			
Babesiosis	.	.	.	.	1	.	.	.	.	.	1
C. auris	6	.	.	.	1	.	.	.	1	.	8
C. auris - Colonization	5	.	.	1	.	.	.	.	1	.	7
CPO	8	.	.	3	.	.	.	.	1	.	12
CPO - Colonization	.	.	.	.	1	.	.	.	.	.	1
Campylobacteriosis	14	2	1	8	2	.	1	9	.	.	37
Coccidioidomycosis	1	.	.	.	.	.	.	1	.	.	2
Creutzfeldt-Jakob Disease	1	.	.	.	.	.	.	.	.	.	1
Cryptosporidiosis	2	1	.	1	1	.	.	1	.	.	6
Cyclosporiasis	2	.	.	.	.	.	.	2	.	.	4
E.Coli (shiga toxin producing)	3	.	.	2	1	.	.	.	.	.	6
Ehrlichiosis/Anaplasmosis	3	.	.	.	.	.	.	1	.	.	4
Giardiasis	2	.	.	.	1	.	.	1	.	.	4
Haemophilus influenzae (invasive)	5	.	.	.	2	.	.	2	.	.	9
Hepatitis A	2	.	2	.	1	1	.	1	.	.	7
Hepatitis B (acute)	2	.	.	.	.	1	.	1	.	.	4
Hepatitis B (chronic)	23	1	1	7	1	1	.	6	.	.	40
Hepatitis C (acute)	.	.	.	1	.	.	.	1	.	.	2
Hepatitis C (chronic)	53	1	5	23	8	1	4	12	.	.	107
Hepatitis E	1	.	.	.	.	.	.	.	.	.	1
Influenza-associated hospitalization	2	.	.	2	1	.	.	2	.	.	7
Legionnaires' Disease	1	.	.	1	.	.	1	2	.	.	5
Lyme Disease	9	5	5	3	14	.	5	4	.	.	45
Malaria	3	.	.	.	.	.	.	.	.	.	3
Measles	.	.	.	1	.	.	.	1	.	.	2
Meningitis (aseptic/viral)	4	.	.	4	3	.	.	4	.	.	15
Meningitis (bacterial)	3	.	.	.	1	.	.	1	.	.	5
Mumps	2	.	.	.	.	.	.	.	.	.	2
Pertussis	2	.	4	5	1	.	1	4	.	.	17
Q fever (acute)	.	.	1	.	.	.	.	.	.	.	1

Table 3. YTD Cases of Notifiable Diseases in Southwest Ohio as Reported in ODRS by County, July 2024

Reportable Condition	County										Total
	Hamilton	Adams	Brown	Butler	Clermont	Clinton	Highland	Warren			
Amebiasis	3	.	.	1	.	.	1	.	.	.	5
Babesiosis	1	1	.	.	3	.	.	.	.	.	5
Brucellosis	1	1	.	.	.	.	.	.	.	.	2
C. auris	49	.	.	1	3	.	.	.	.	3	56
C. auris - Colonization Screening	46	.	1	17	14	.	.	.	8	.	86
CPO	57	4	3	27	13	5	9	19	.	.	137
CPO - Colonization Screening	2	.	.	9	1	.	3	1	.	.	16
Campylobacteriosis	44	3	5	22	7	1	5	19	.	.	106
Chikungunya virus	1	.	.	.	.	.	.	.	.	.	1
Coccidioidomycosis	4	.	2	2	1	.	.	2	.	.	11
Creutzfeldt-Jakob Disease	3	.	.	1	1	.	.	.	.	.	5
Cryptosporidiosis	8	1	.	6	5	.	.	4	.	.	24
Cyclosporiasis	3	.	.	1	.	.	.	2	.	.	6
Dengue	6	.	.	1	.	.	.	.	.	.	7
E.Coli (shiga toxin producing)	13	1	1	7	2	1	1	1	.	.	27
Ehrlichiosis/Anaplasmosis	6	1	.	.	4	.	.	2	.	.	13
Giardiasis	19	1	.	2	6	1	.	7	.	.	36
Haemophilus influenzae (invasive)	19	.	5	11	5	2	2	8	.	.	52
Hepatitis A	19	1	8	4	1	1	1	5	.	.	40
Hepatitis B (acute)	13	2	1	4	2	1	.	2	.	.	25
Hepatitis B (chronic)	142	9	4	64	13	6	7	46	.	.	291
Hepatitis C (acute)	2	.	.	1	2	.	.	1	.	.	6
Hepatitis C (chronic)	375	33	37	156	56	15	28	80	.	.	780
Hepatitis C - Perinatal Infection	5	.	.	1	1	2	1	.	.	.	10
Hepatitis E	1	.	1	.	.	.	.	.	.	.	2
Influenza-associated hospitalization	665	4	38	310	156	23	33	146	.	.	1375
LaCrosse Virus Disease (LCVD)	.	.	.	.	1	.	.	.	.	.	1
Legionnaires' Disease	12	.	.	5	3	.	1	4	.	.	25

Table 3. YTD Cases of Notifiable Diseases in Southwest Ohio as Reported in ODRS by County, July 2024, Continued

Reportable Condition	County										Total	
	Hamilton	Adams	Brown	Butler	Clermont	Clinton	Highland	Warren				
Listeriosis	1	.	.	.	.	.	.	.	.	.	.	1
Lyme Disease	45	20	16	16	43	1	15	11				167
Malaria	12	.	.	3	.	.	.	.	.	.	.	15
Measles	1	.	.	6	3	2	4	8				24
Meningitis (aseptic/viral)	23	.	3	16	6	1	1	11				61
Meningitis (bacterial, not N. meningitidis)	19	.	.	7	2	.	1	5				34
Meningococcal disease	1	.	.	3	.	.	.	.				4
Mpox	3	.	.	.	.	.	.	.				3
Mumps	13	.	.	2	1	1	.	1				18
Pertussis	22	1	9	31	11	1	1	36				112
Q fever (acute)	.	.	1	.	.	.	.	.				1
Rubella (not congenital)	1	.	.	.	.	.	.	.				1
Salmonella Typhi	1	.	.	2	.	.	.	.				3
Salmonellosis	51	3	2	21	14	.	3	17				111
Shigellosis	21	.	1	10	1	.	.	3				36
Spotted Fever Rickettsiosis (including Rocky Mountain spotted fever (RMSF))	2	2	.	.	4	1	1	2				12
Streptococcal pneumoniae (invasive)	49	2	4	31	10	3	3	10				112
Streptococcal, Group A (invasive)	53	3	1	26	16	.	1	15				115
Streptococcal, Group B (in newborn)	5	.	.	.	2	.	.	2				9
Tetanus	.	.	.	1	.	.	.	.				1
Tuberculosis	23	1	.	14	.	.	.	3				41
Tularemia	1	.	.	.	.	.	.	2				3
Varicella	22	.	.	17	2	3	1	9				54
Vibriosis	3	.	.	1	1	.	.	.				5
West Nile virus infection (WNV)	1	.	.	.	.	.	.	.				1
Yersiniosis	13	.	.	.	4	.	.	3				20
Total	1905	94	143	860	420	71	123	498				4114

SYNDROMIC SURVEILLANCE

Emergency Department Visits

Number of EpiCenter alerts received: 12

Types of EpiCenter alerts:

- Infectious Disease Symptoms (n=11)
- Syndromic Symptoms (n=1)

The alerts received for Hamilton County from July 1 - July 31 are summarized in Table 5 below. Four of the anomalies received in EpiCenter were dispositioned as indeterminate and four were dispositioned as seasonal illness - GI. At the time of this report, six anomaly investigations are still active. There was one syndromic anomaly in Hamilton County for the month of July. Constitutional, Botulinic, and Gastrointestinal syndrome charts are shown in Figures 6, 7, and 8, respectively.

Table 5. Emergency Department Visit Anomalies for Hamilton County, July 2024

Anomaly Classifier	Event Date	Alert Category	Analysis Method	Aggregated By	Actual Value	Predicted Value	Threshold Value	Final Disposition
Botulinic	7/26/2024	Syndromic	Recursive Least Squares	Facility Location	22	9.926	20.41	Active
Diarrhea - Watery/Bloody	7/26/2024	Infectious Disease	Exponential Moving Average	Home Location	10	2.92	9.47	Active
Diarrhea - Watery/Bloody	7/26/2024	Infectious Disease	Recursive Least Squares	Home Location	10	2.44	9.80	Active
Diarrhea - Not Watery/Bloody	7/25/2024	Infectious Disease	Exponential Moving Average	Facility Location	21	8.68	19.82	Active
Stiff Neck	7/19/2024	Infectious Disease	Recursive Least Squares	Home Location	16	7.34	15.84	Indeterminate
Stiff Neck	7/19/2024	Infectious Disease	Recursive Least Squares	Facility Location	18	8.90	16.67	Indeterminate
Diarrhea - Watery/Bloody	7/15/2024	Infectious Disease	Recursive Least Squares	Facility Location	12	4.46	11.02	Seasonal Illness - GI
Diarrhea - Watery/Bloody	7/15/2024	Infectious Disease	Exponential Moving Average	Facility Location	12	3.88	10.98	Seasonal Illness - GI
Diarrhea - Watery/Bloody	7/15/2024	Infectious Disease	Recursive Least Squares	Home Location	11	2.89	9.59	Seasonal Illness - GI
Diarrhea - Watery/Bloody	7/15/2024	Infectious Disease	Exponential Moving Average	Home Location	11	3.08	10.20	Seasonal Illness - GI
Congestion	7/15/2024	Infectious Disease	Exponential Moving Average	Home Location	11	3.40	10.92	Indeterminate
Shock	7/9/2024	Infectious Disease	Recursive Least Squares	Home Location	12	3.93	11.85	Indeterminate

Figure 6. Constitutional-related ED Visits, Hamilton County, Ohio, July 2024

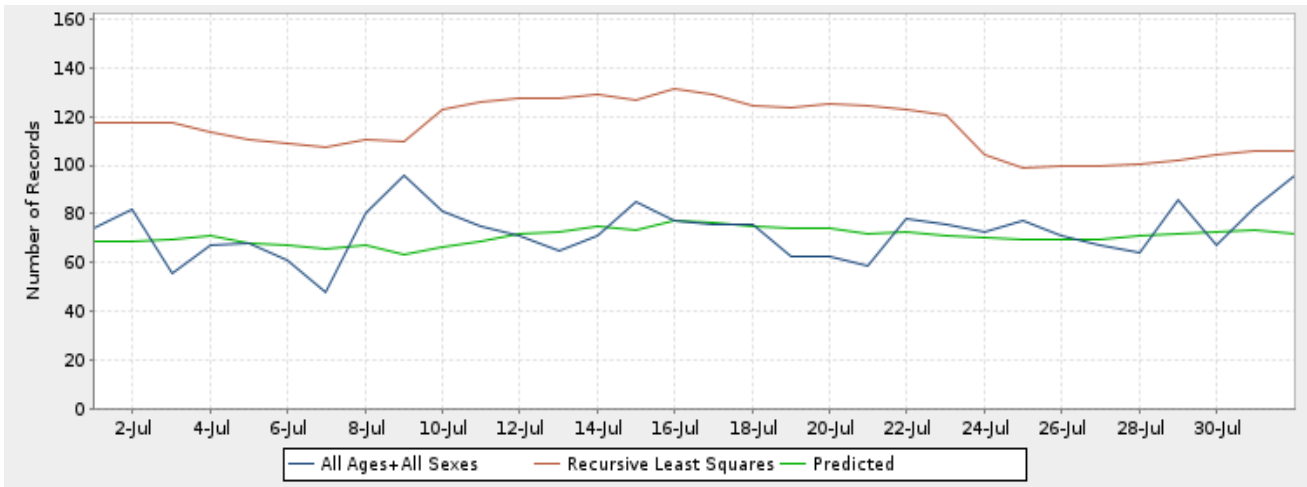


Figure 7. Botulinic-related ED Visits, Hamilton County, Ohio, July 2024

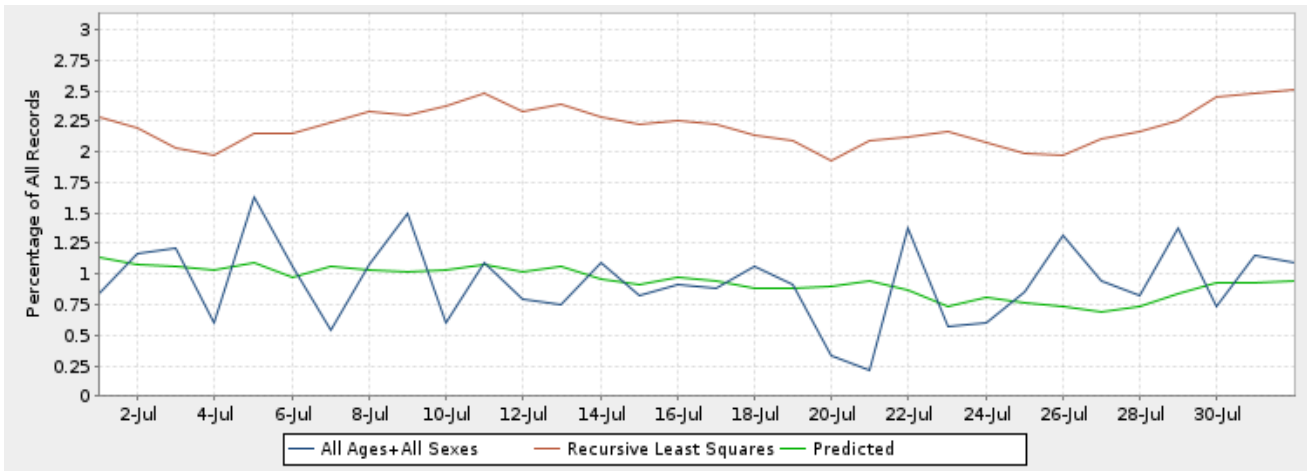


Figure 8. Gastrointestinal-related ED Visits, Hamilton County, Ohio, July 2024

