



Monthly Communicable Disease Surveillance Report

August 2024

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NOTIFIABLE COMMUNICABLE DISEASES

Hamilton County Public Health (HCPH) Jurisdiction

Number of Communicable Diseases Reported: 89
 Most frequently reported communicable diseases:

- Chronic Hepatitis C (n=20)
- Criptosporidiosis (n=7)
- Chronic Hepatitis B (n=7)
- Lyme Disease (n=7)
- CPO (n=4)

Southwest Ohio (SWOH)

Number of Communicable Diseases Reported: 365
 Most frequently reported communicable diseases:

- Chronic Hepatitis C (n=102)
- Chronic Hepatitis B (n=28)
- Lyme Disease (n=26)
- Pertussis (n=21)
- Campylobacteriosis (n=16)

Summary

In August, the overall rates of reported communicable diseases for HCPH increased by 6%. SWOH and Ohio both decreased by 10% and 5% respectively. The Ohio rate (28.8) was the highest of the three rates, followed by the SWOH rate (21.5) and the HCPH rate (19.3) (Table 1). These rates are pro-rated to 30 days so they can be compared accurately.

Chronic hepatitis C was the most reported communicable disease across SWOH, with Chronic hepatitis B and Lyme disease the 2nd- and 3rd-most reported, respectively (Table 2). Chronic hepatitis B and C cases accounted for 35.6% of the total communicable diseases reported during August. Southwest Ohio is currently on pace for a 9.7% decrease in chronic hepatitis over the previous year's average of 149 cases. The number of chronic hepatitis cases reported for SWOH in August (130) was lower than the number of cases reported in the previous month (140). The rate of chronic hepatitis within Hamilton County for August was 7.7 per 100,000 residents. This rate was higher than the SWOH rate of 5.9 per 100,000 residents.

Lyme disease was the third most frequently reported disease in SWOH, accounting for 7.1% of the total communicable diseases reported during August. The number of Lyme disease cases reported during July (26) was lower than the number of cases reported in the previous month (45). The rate of Lyme disease cases within Hamilton County for August was 1.2 per 100,000 residents. This rate was lower than the SWOH rate of 1.5 per 100,000 residents.

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

Location	Number of Reported Cases	Rate per 100,000	Rate Ratio†	Confidence Interval (99%)‡
HCPH	89	18.69	0.67	0.51 - 0.88
SW OHIO	365	20.80	0.75	0.65 - 0.86
OHIO	3,228	27.89	.	.-.

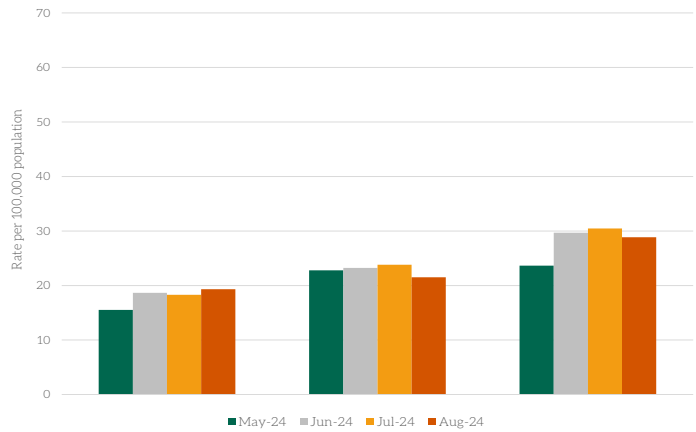
month (17). The rate of Pertussis cases within Hamilton County for August was 0.1 per 100,000 residents. This rate was lower than the SWOH rate of 1.2 per 100,000 residents.

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, 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 August 1-28, 2024. Data was accessed from the Ohio Disease Reporting System on 8/29/2024

†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 2024 - August 2024



Pertussis was the fourth most frequently reported disease in SWOH (Table 2). Pertussis cases accounted for 5.8% of the total communicable diseases reported during August. The number of Pertussis cases reported in August (21) was lower than the number of cases reported in the previous

Table 2. Cases of Notifiable Diseases in Southwest Ohio as Reported in ODRS by County, August 2024

Reportable Condition	County										Total
	Hamilton	Adams	Brown	Butler	Clermont	Clinton	Highland	Warren			
Amebiasis	1	.	.	.	.	.	.	.	.	.	1
Botulism (Infant)	.	.	.	.	.	1	.	.	.	.	1
Brucellosis	1	.	.	.	.	.	.	.	.	.	1
C. auris	2	.	.	.	2	.	.	3	.	.	7
C. auris - Colonization	3	.	.	1	1	.	.	2	.	.	7
CPO	5	.	.	2	2	.	1	1	.	.	11
CPO - Colonization	4	.	.	1	.	.	.	.	.	.	5
Campylobacteriosis	3	1	.	7	2	.	.	3	.	.	16
Coccidioidomycosis	1	.	.	.	.	.	.	.	.	.	1
Cryptosporidiosis	10	.	.	2	1	1	.	.	.	.	14
Cyclosporiasis	2	.	.	.	.	.	.	.	.	.	2
E.Coli (shiga toxin producing)	2	.	.	1	2	.	.	.	.	.	5
Ehrlichiosis/Anaplasmosis	.	1	.	.	.	.	1	1	.	.	3
Giardiasis	5	1	.	.	.	.	.	.	.	.	6
Haemophilus influenzae (invasive)	1	.	1	.	1	.	.	.	.	.	3
Hepatitis A	2	.	.	.	1	1	.	.	.	.	4
Hepatitis B (acute)	.	.	.	.	.	.	.	1	.	.	1
Hepatitis B (chronic)	16	.	.	10	.	.	.	2	.	.	28
Hepatitis C (chronic)	46	.	6	25	9	2	1	13	.	.	102
Hepatitis C - Perinatal Infection	.	2	.	.	1	.	.	.	.	.	3
Influenza-associated hospitalization	1	.	.	2	.	.	.	.	.	.	3
Legionnaires' Disease	4	.	.	2	.	.	.	1	.	.	7
Lyme Disease	10	2	1	2	5	1	1	4	.	.	26
Malaria	1	.	.	.	.	.	.	.	.	.	1
Meningitis (aseptic/viral)	5	.	3	1	1	.	.	1	.	.	11
Meningitis (bacterial)	8	.	.	2	3	.	.	.	.	.	13
Mumps	1	.	.	.	.	.	.	.	.	.	1
Pertussis	1	.	2	4	4	.	1	9	.	.	21
Psittacosis	1	.	.	.	.	.	.	.	.	.	1
Q fever (acute)	.	.	.	.	1	.	.	.	.	.	1

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

Reportable Condition	County										Total
	Hamilton	Adams	Brown	Butler	Clermont	Clinton	Highland	Warren			
Amebiasis	4	.	.	1	.	.	1	.	.	.	6
Babesiosis	1	1	.	.	3	.	.	.	.	.	5
Botulism (Infant)	.	.	.	.	.	1	.	.	.	.	1
Brucellosis	2	.	.	.	.	.	.	.	.	.	2
C. auris	50	.	.	2	5	.	.	.	6	.	63
C. auris - Colonization	49	.	1	18	15	.	.	10	.	.	93
CPO	66	4	3	28	15	5	10	23	.	.	154
CPO - Colonization	6	.	.	10	1	.	3	1	.	.	21
Campylobacteriosis	47	4	5	29	9	1	5	22	.	.	122
Chikungunya virus	1	.	.	.	.	.	.	.	.	.	1
Coccidioidomycosis	5	.	2	2	.	.	.	2	.	.	11
Creutzfeldt-Jakob Disease	3	.	.	1	1	.	.	.	.	.	5
Cryptosporidiosis	18	1	.	8	6	1	.	4	.	.	38
Cyclosporiasis	5	.	.	1	.	.	.	2	.	.	8
Dengue	6	.	.	1	.	.	.	.	.	.	7
E.Coli (shiga toxin producing)	15	1	1	8	4	1	1	1	1	1	32
Ehrlichiosis/Anaplasmosis	6	2	.	.	4	.	1	3	.	.	16
Giardiasis	24	2	.	2	6	1	.	7	.	.	42
Haemophilus influenzae (invasive)	20	.	6	11	6	2	2	8	.	.	55
Hepatitis A	21	1	8	4	2	2	1	5	.	.	44
Hepatitis B (acute)	13	2	1	4	2	1	.	3	.	.	26
Hepatitis B (chronic)	158	9	4	75	13	6	7	48	.	.	320
Hepatitis C (acute)	2	.	.	.	2	.	.	.	.	.	4
Hepatitis C (chronic)	418	33	42	179	64	16	29	93	.	.	874
Hepatitis C - Perinatal Infection	5	2	.	1	2	2	1	.	.	.	13
Hepatitis E	1	.	1	.	.	.	.	.	.	.	2
Influenza-associated hospitalization	666	4	38	312	156	23	33	146	.	.	1378
LaCrosse Virus Disease (LCVD)	.	.	.	.	1	.	.	.	.	.	1

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

Reportable Condition	County										Total
	Hamilton	Adams	Brown	Butler	Clermont	Clinton	Highland	Warren			
Legionnaires' Disease	16	.	.	7	3	.	1	5			32
Listeriosis	1	.	.	.	.	.	.	.			1
Lyme Disease	55	22	17	18	48	2	16	15			193
Malaria	13	.	.	3	.	.	.	.			16
Measles	1	.	.	6	3	2	4	8			24
Meningitis (aseptic/viral)	28	.	6	17	7	1	1	12			72
Meningitis (bacterial)	27	.	.	9	5	.	1	5			47
Meningococcal disease	1	.	.	3	.	.	.	.			4
Mpox	3	.	.	.	.	.	.	.			3
Mumps	13	.	.	2	1	1	.	1			18
Pertussis	23	1	11	35	15	1	2	45			133
Psittacosis	1	.	.	.	.	.	.	.			1
Q fever (acute)	.	.	1	.	1	.	.	.			2
Rubella (not congenital)	1	.	.	.	.	.	.	.			1
Salmonella Paratyphi Infection	1	.	.	.	.	.	.	.			1
Salmonella Typhi	1	.	.	2	.	.	.	1			4
Salmonellosis	54	4	2	26	14	.	3	20			123
Shigellosis	24	.	1	11	1	.	.	4			41
Spotted Fever Rickettsiosis (RMSF)	3	3	2	.	4	1	2	2			17
Staphylococcal aureus (VRSA)	1	.	.	.	.	.	.	.			1
Streptococcal pneumoniae (invasive)	53	2	4	32	10	3	4	11			119
Streptococcal, Group A (invasive)	57	3	1	29	17	.	1	17			125
Streptococcal, Group B (in newborn)	5	.	.	.	2	.	.	2			9
Tetanus	.	.	.	1	.	.	.	.			1
Tuberculosis	28	.	.	15	.	.	1	3			47
Tularemia	1	.	.	.	.	.	.	2			3
Varicella	24	.	.	17	2	3	1	10			57
Vibriosis	4	.	.	1	1	.	.	.			6
West Nile virus infection (WNV)	1	.	.	.	.	.	.	.			1
Yersiniosis	15	.	.	.	4	.	.	4			23
Total	2067	101	157	931	455	76	131	551			4469

SYNDROMIC SURVEILLANCE

Emergency Department Visits

Number of EpiCenter alerts received: 10

Types of EpiCenter alerts:

- Infectious Disease Symptoms (n=9)
- Syndromic Symptoms (n=1)

The alerts received for Hamilton County from August 1 - August 28 are summarized in Table 5 below. Three of the anomalies received in EpiCenter were dispositioned as Not a Health Event and four were dispositioned as Seasonal Illness - GI. At the time of this report, three anomaly investigations are still active. There was one syndromic alert for constitutional. The syndromic surveillance charts for Constitutional, Gastrointestinal, and Respiratory ED visits are shown in Figures 6, 7, and 8, respectively.

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

Anomaly Classifier	Event Date	Alert Category	Analysis Method	Aggregated By	Actual Value	Predicted Value	Threshold Value	Final Disposition
Constitutional	8/27/2024	Syndromic	Recursive Least Squares	Home Location	121	79.430	104.86	Active
Vision	8/22/2024	Infectious Disease	Recursive Least Squares	Home Location	18	7.55	16.25	Active
Vision	8/22/2024	Infectious Disease	Exponential Moving Average	Home Location	18	7.48	16.26	Active
Diarrhea - Not Watery/Bloody	8/13/2024	Infectious Disease	Exponential Moving Average	Facility Location	28	10.27	25.01	Seasonal Illness - GI
Diarrhea - Not Watery/Bloody	8/13/2024	Infectious Disease	Exponential Moving Average	Home Location	23	8.04	20.43	Seasonal Illness - GI
Diarrhea - Not Watery/Bloody	8/13/2024	Infectious Disease	Cusum EMA	Home Location	21	8.05	20.56	Seasonal Illness - GI
Paralysis	8/12/2024	Infectious Disease	Recursive Least Squares	Facility Location	26	14.41	25.64	Not a health event
Diarrhea - Not Watery/Bloody	8/8/2024	Infectious Disease	Exponential Moving Average	Home Location	16	6.11	14.46	Seasonal Illness - GI
Nausea	8/3/2024	Infectious Disease	Cusum EMA	Home Location	43	23.68	41.74	Not a health event
Congestion	8/2/2024	Infectious Disease	Recursive Least Squares	Home Location	10	2.78	9.78	Not a health event

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

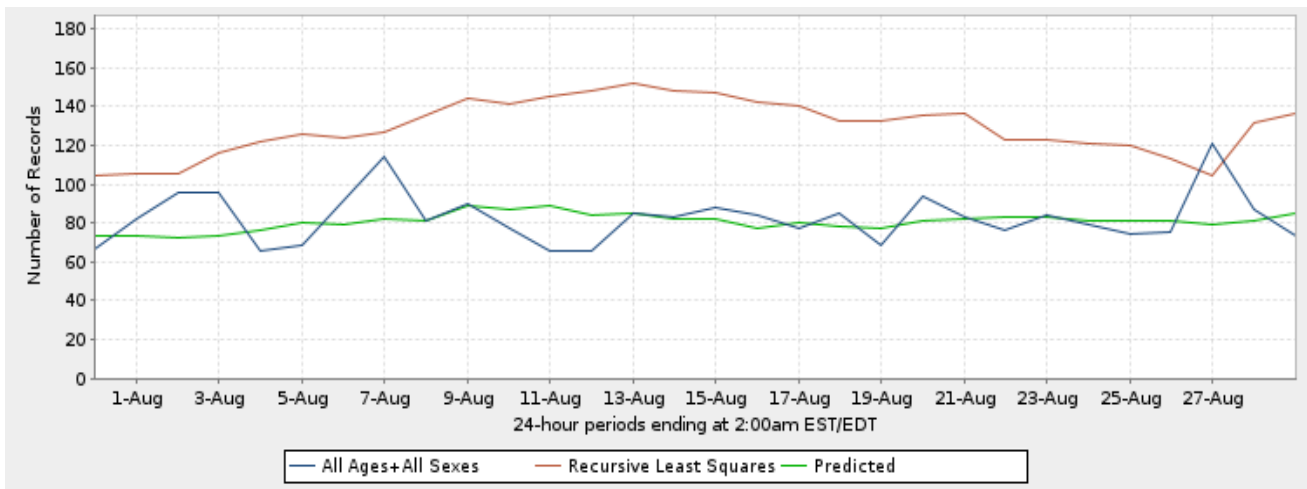


Figure 7. Gastrointestinal-related ED Visits, Hamilton County, Ohio, August 2024

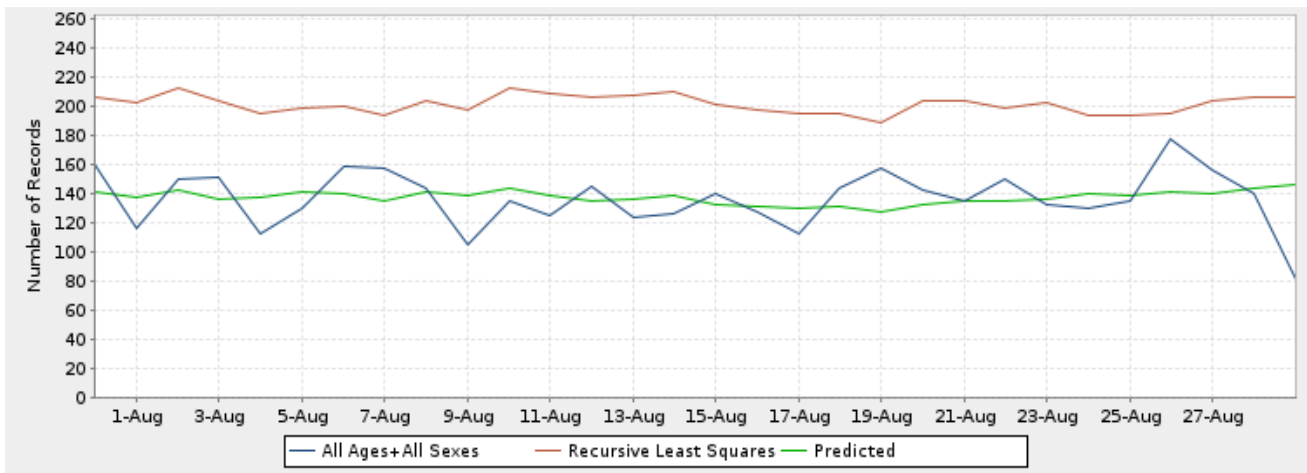


Figure 8. Respiratory-related ED Visits, Hamilton County, Ohio, August 2024

