

Monthly Communicable Disease Surveillance Report

September 2024

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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: 69
 Most frequently reported communicable diseases:

- Chronic Hepatitis C (n=18)
- Hepatitis B (Chronic) (n=7)
- C. auris - Colonization(n=4)
- Salmonellosis (n=4)
- Cryptosporidiosis (n=3)

Southwest Ohio (SWOH)

Number of Communicable Diseases Reported: 294
 Most frequently reported communicable diseases:

- Hepatitis C (Chronic) (n=77)
- Hepatitis B (Chronic) (n=28)
- C. auris - Colonization (n=20)
- Lyme Disease (n=20)
- Pertussis (n=14)

Summary

In September, the overall rates of reported communicable diseases for HCPH, SWOH, and Ohio decreased by 25%, 22%, and 34% respectively. The Ohio rate (19.0) was the highest of the three rates, followed by the SWOH rate (16.8) and the HCPH rate (14.5) (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 C. auris - Colonization the 2nd- and 3rd-most reported, respectively (Table 2). Chronic hepatitis B and C cases accounted for 35.7% of the total communicable diseases reported during September. Southwest Ohio is currently on pace for a 29.1% decrease in chronic hepatitis over the previous year's average of 148 cases. The number of chronic hepatitis cases reported for SWOH in September (105) was lower than the number of cases reported in the previous month (130). The rate of chronic hepatitis within Hamilton County for September was 8.0 per 100,000 residents. This rate was higher than the SWOH rate of 6.0 per 100,000 residents.

C. auris - Colonization was the third most frequently reported disease in SWOH, accounting for 6.8% of the total communicable diseases reported during September. The number of C. auris - Colonization cases reported during September (20) was lower than the number of cases reported in the previous month (7). The rate of C. auris - Colonization cases within Hamilton County for September was 0.7 per 100,000 residents. This rate was lower than the SWOH rate of 1.1 per 100,000 residents.

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

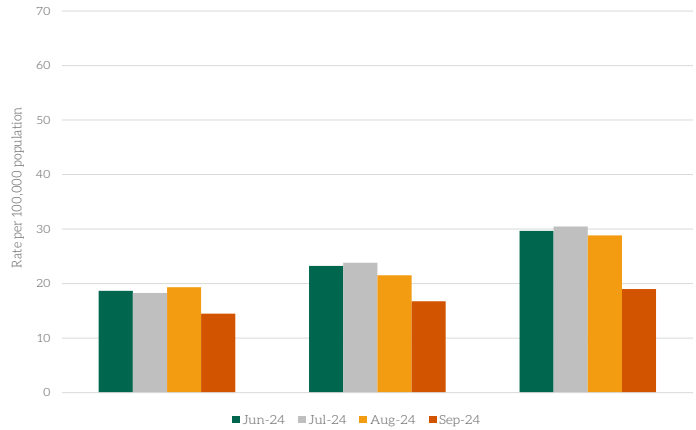


Table 1. Comparison of the Reported Cases of Notifiable Communicable Diseases by Location, September 2024

Location	Number of Reported Cases	Rate per 100,000	Rate Ratio†	Confidence Interval (99%)‡
HCPH	69	14.49	0.76	0.56 - 1.04
SW OHIO	294	16.75	0.88	0.75 - 1.03
OHIO	2,199	19.00	.	.-.

reported in September (20) was lower than the number of cases reported in the previous month (26). The rate of Lyme Disease cases within Hamilton County for September was 0.4 per 100,000 residents. This rate was lower than the SWOH rate of 1.1 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 September 1-30, 2024. Data was accessed from the Ohio Disease Reporting System on 10/03/2024

†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, September 2024

Reportable Condition	County										Total	
	Hamilton	Adams	Brown	Butler	Clermont	Clinton	Highland	Warren				
Babesiosis	1	.	.	.	.	.	.	.	.	.	.	1
C. auris	5	.	.	2	.	.	.	.	.	.	.	7
C. auris - Colonization	6	.	.	7	2	1	.	4				20
CPO	4	.	.	2	.	.	.	1				7
CPO - Colonization	1	.	.	.	1	.	.	.				2
Campylobacteriosis	3	.	.	7	.	.	.	1				11
Coccidioidomycosis	1	.	.	.	.	.	.	.				1
Cryptosporidiosis	5	.	.	.	.	.	.	1				6
E.Coli (shiga toxin producing)	1	.	.	.	1	.	.	1				3
Ehrlichiosis/Anaplasmosis	.	.	1	.	.	.	.	.				1
Giardiasis	2	.	.	2	.	.	.	.				4
Haemophilus influenzae (invasive)	1	.	.	.	.	.	.	.				1
Hepatitis A	.	.	1	1	.	.	.	.				2
Hepatitis B (acute)	2	.	1	.	.	.	.	.				3
Hepatitis B (chronic)	11	1	1	12	.	.	.	3				28
Hepatitis C (chronic)	53	2	2	9	3	.	1	7				77
Hepatitis C - Perinatal Infection	1	.	.	.	.	.	.	.				1
Influenza-associated hospitalization	1	.	.	.	.	.	.	1				2
Legionnaires' Disease	2	.	.	.	.	.	.	.				2
Lyme Disease	3	2	.	3	9	1	1	1				20
Malaria	1	.	.	.	.	.	.	.				1
Meningitis (aseptic/viral)	5	.	.	3	2	.	.	1				11
Meningitis (bacterial)	4	.	.	2	.	.	.	1				7
Mpox	1	.	.	.	.	.	.	.				1
Pertussis	6	.	.	.	6	.	.	2				14
Rubella (not congenital)	.	.	.	.	.	.	1	.				1
Salmonella Typhi	.	.	.	1	.	.	.	.				1
Salmonellosis	6	.	2	2	1	.	.	1				12
Shigellosis	5	.	.	1	.	.	.	.				6
Spotted Fever Rickettsiosis (RMSF)	.	1	.	.	1	.	2	.				4

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

Reportable Condition	County										Total
	Hamilton	Adams	Brown	Butler	Clermont	Clinton	Highland	Warren			
Amebiasis	4	.	.	1	.	.	1	.	.	.	6
Babesiosis	2	1	.	.	3	.	.	.	.	.	6
Botulism (Infant)	.	.	.	.	.	1	.	.	.	.	1
Brucellosis	2	.	.	.	.	.	.	.	.	.	2
C. auris	57	.	.	4	4	.	.	.	3	.	68
C. auris - Colonization	55	.	1	25	17	1	.	15	.	.	114
CPO	74	4	4	32	18	6	10	25	.	.	173
CPO - Colonization	7	.	.	10	2	.	3	1	.	.	23
Campylobacteriosis	50	4	5	37	9	1	5	23	.	.	134
Chikungunya virus	2	.	.	.	.	.	.	2	.	.	4
Coccidioidomycosis	6	.	2	2	1	.	.	2	.	.	13
Creutzfeldt-Jakob Disease	3	.	.	1	1	.	.	.	.	.	5
Cryptosporidiosis	25	1	.	8	6	1	.	6	.	.	47
Cyclosporiasis	5	.	.	1	.	.	.	2	.	.	8
Dengue	7	.	.	1	.	.	.	.	.	.	8
E.Coli (shiga toxin producing)	16	1	1	8	5	1	1	2	2	.	35
Ehrlichiosis/Anaplasmosis	6	2	1	.	4	.	1	3	.	.	17
Giardiasis	26	2	.	4	6	1	.	7	.	.	46
Haemophilus influenzae (invasive)	21	.	6	11	6	2	2	8	.	.	56
Hepatitis A	21	1	9	5	2	2	1	5	.	.	46
Hepatitis B (acute)	15	2	2	4	2	1	.	3	.	.	29
Hepatitis B (chronic)	171	10	5	86	13	6	7	51	.	.	349
Hepatitis C (acute)	2	.	.	.	2	.	.	.	.	.	4
Hepatitis C (chronic)	478	36	43	181	65	16	30	103	.	.	952
Hepatitis C - Perinatal Infection	6	2	.	1	1	2	1	.	.	.	13
Hepatitis E	1	.	1	.	.	.	.	.	.	.	2
Influenza-associated hospitalization	668	4	38	312	156	23	33	147	.	.	1381
LaCrosse Virus Disease (LCVD)	.	.	.	.	1	.	.	.	.	.	1

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

Reportable Condition	County										Total
	Hamilton	Adams	Brown	Butler	Clermont	Clinton	Highland	Warren			
Legionnaires' Disease	18	.	.	7	3	.	.	5			33
Listeriosis	1	.	.	.	.	.	.	.			1
Lyme Disease	58	23	17	21	57	3	18	16			213
Malaria	14	.	.	3	.	.	.	.			17
Measles	1	.	.	6	3	2	4	8			24
Meningitis (aseptic/viral)	33	.	6	21	9	1	1	13			84
Meningitis (bacterial)	31	.	.	11	5	.	1	6			54
Meningococcal disease	1	.	.	3	.	.	.	.			4
Mpox	4	.	.	.	.	.	.	.			4
Mumps	13	.	.	2	1	1	.	1			18
Pertussis	29	1	11	35	21	1	2	47			147
Q fever (acute)	.	.	1	.	1	.	.	.			2
Rubella (not congenital)	1	.	.	.	.	.	1	.			2
Salmonella Paratyphi Infection	1	.	.	1	.	.	.	.			2
Salmonella Typhi	1	.	.	3	.	.	.	1			5
Salmonellosis	60	4	4	27	15	.	3	21			134
Shigellosis	31	.	1	12	1	.	.	4			49
Spotted Fever Rickettsiosis (RMSF)	3	4	2	.	5	1	4	2			21
Staphylococcal aureus (VRSA)	1	.	.	.	.	.	.	.			1
Streptococcal pneumoniae (invasive)	54	2	4	33	11	3	4	14			125
Streptococcal, Group A (invasive)	58	3	1	33	19	.	2	19			135
Streptococcal, Group B (in newborn)	5	.	.	.	2	.	.	2			9
Tetanus	.	.	.	1	.	.	.	.			1
Tuberculosis	40	.	.	14	.	.	1	3			58
Tularemia	1	.	.	.	.	.	.	2			3
Varicella	27	1	.	18	2	3	1	11			63
Vibriosis	4	.	.	1	1	.	.	.			6
West Nile virus infection (WNV)	4	.	.	.	.	.	.	.			4
Yersiniosis	16	.	.	.	4	.	.	4			24
Total	2240	108	165	986	484	79	137	587			4786

SYNDROMIC SURVEILLANCE

Emergency Department Visits

Number of EpiCenter alerts received: 8

Types of EpiCenter alerts:

- Infectious Disease Symptoms (n=8)
- Syndromic Symptoms (n=0)

The alerts received for Hamilton County from September 1 - September 30 are summarized in Table 5 below. Three of the anomalies received in EpiCenter were dispositioned as Not a Health Event. At the time of this report, five anomaly investigations are still active. There were no syndromic alerts in September. 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, September 2024

Anomaly Classifier	Event Date	Alert Category	Analysis Method	Aggregated By	Actual Value	Predicted Value	Threshold Value	Final Disposition
Nausea	9/26/2024	Infectious Disease	Cusum EMA	Home Location	38	24.551	34.63	Active
Nausea	9/26/2024	Infectious Disease	Cusum EMA	Facility Location	51	31.84	47.81	Active
Vision	9/23/2024	Infectious Disease	Recursive Least Squares	Facility Location	24	9.35	21.96	Active
Vision	9/23/2024	Infectious Disease	Exponential Moving Average	Facility Location	24	8.51	21.56	Active
Vision	9/23/2024	Infectious Disease	Exponential Moving Average	Home Location	20	6.58	18.89	Active
Lymphadenitis	9/19/2024	Infectious Disease	Cusum EMA	Home Location	10	4.95	7.66	Not a health event
Headache	9/9/2024	Infectious Disease	Recursive Least Squares	Facility Location	64	42.48	63.02	Not a health event
Cough	9/4/2024	Infectious Disease	Cusum EMA	Facility Location	50	34.16	49.07	Not a health event

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

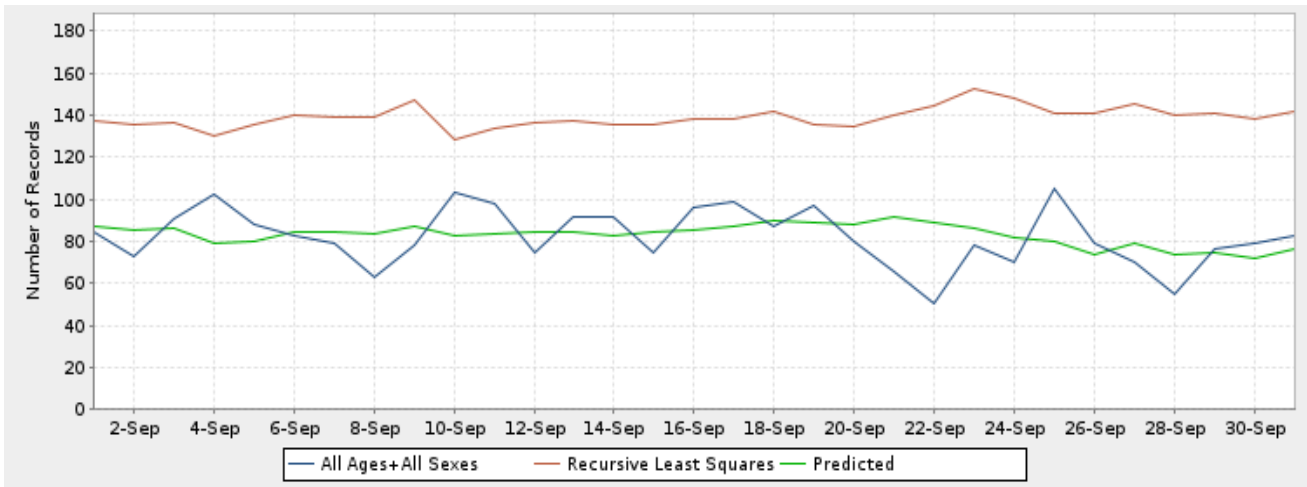


Figure 7. Gastrointestinal-related ED Visits, Hamilton County, Ohio, September 2024

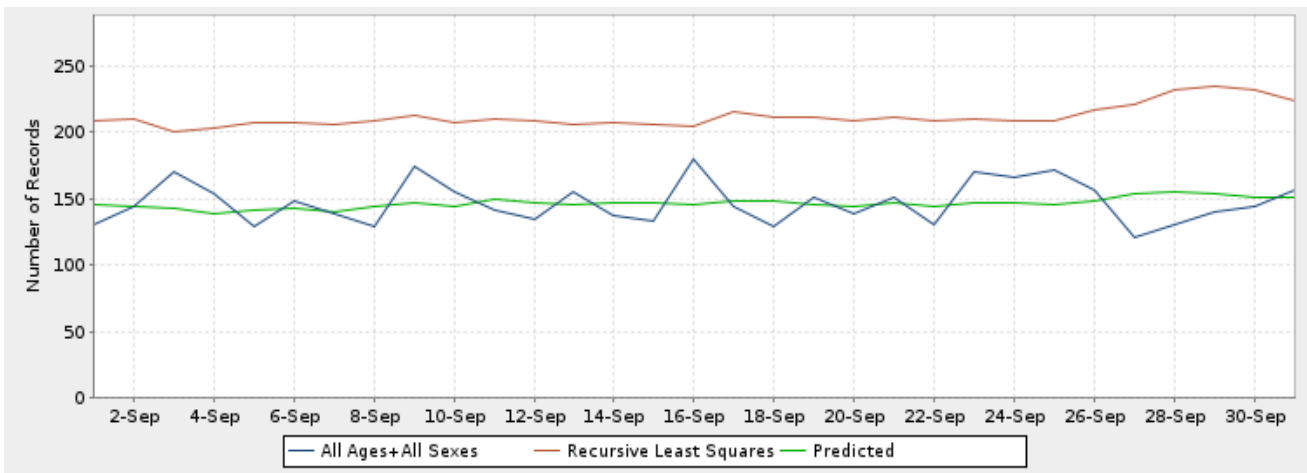


Figure 8. Respiratory-related ED Visits, Hamilton County, Ohio, September 2024

