

Monthly Communicable Disease Surveillance Report

November 2024

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NOTIFIABLE COMMUNICABLE DISEASES

Hamilton County Public Health (HCPH) Jurisdiction

Number of Communicable Diseases Reported: 118
 Most frequently reported communicable diseases:

- Pertussis (n=34)
- Chronic Hepatitis C (n=25)
- Salmonellosis (n=9)
- Invasive Streptococcal Pneumoniae (n=6)
- Chronic Hepatitis B (n=6)

Southwest Ohio (SWOH)

Number of Communicable Diseases Reported: 482
 Most frequently reported communicable diseases:

- Chronic Hepatitis C (n=124)
- Pertussis (n=117)
- Chronic Hepatitis B (n=31)
- Salmonellosis (n=18)
- Lyme Disease (n=17)

Summary

In November, the overall rates of reported communicable diseases for HCPH and SWOH, increased by 26% and 12%, respectively, while the Ohio rate decreased by 4%. The SWOH rate (27.5) was the highest of the three rates, followed by the Ohio rate (25.2) and the HCPH rate (24.48) (Table 1).

Chronic Hepatitis C was the most reported communicable disease across SWOH, with Pertussis and Chronic Hepatitis B the 2nd- and 3rd-most reported, respectively (Table 2). Chronic Hepatitis B and C cases accounted for 32% of the total communicable diseases reported during November. The number of chronic hepatitis cases seen in Southwest Ohio during November was 3.6% greater than the 12-month average of 150 cases seen between November 2023 and 2024. The number of chronic hepatitis cases reported in SWOH in November (155) was lower than the number of cases reported in the previous month (161). The rate of chronic hepatitis within Hamilton County for November was 11.2 per 100,000 residents. This rate was higher than the SWOH rate of 8.9 per 100,000 residents.

Pertussis was the second most frequently reported disease in SWOH, accounting for 24.3% of the total communicable diseases reported during November. The number of Pertussis cases reported during November (117) was higher than the number of cases reported in the previous month (72). The rate of Pertussis cases within Hamilton County for November was 5.6 per 100,000 residents. This rate was lower than the SWOH rate of 6.7 per 100,000 residents.

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

Location	Number of Reported Cases	Rate per 100,000	Rate Ratio†	Confidence Interval (99%)‡
HCPH	118	24.78	0.98	0.77 - 1.25
SW OHIO	482	27.47	1.09	0.96 - 1.24
OHIO	2,921	25.23	.	. - .

Salmonellosis was the fourth most frequently reported disease in SWOH (Table 2). Salmonellosis cases accounted for 3.7% of the total communicable diseases reported during November. The number of salmonellosis cases reported in November (18) was greater than the number of cases reported in the previous month (11). The rate of salmonellosis cases within Hamilton County for November was 1.2 per 100,000 residents. This rate was higher than the SWOH rate of 1.0 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 November 1-30, 2024. Data was accessed from the Ohio Disease Reporting System on 12/02/2024.

†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, August 2024 - November 2024

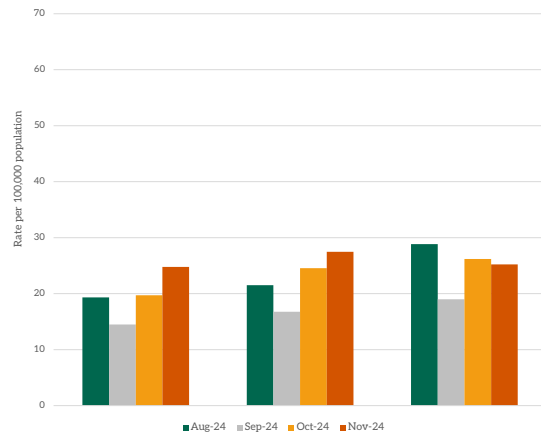


Table 2. Cases of Notifiable Diseases in Southwest Ohio as Reported in ODRS by County, November 2024

Reportable Condition	County										Total
	Hamilton	Adams	Brown	Butler	Clermont	Clinton	Highland	Warren			
Brucellosis	0	0	0	1	0	0	0	0	0	0	1
C. auris	5	0	0	1	0	0	0	0	0	1	7
C. auris - Colonization Screening	8	0	0	3	1	0	0	0	0	2	14
CPO	6	2	0	1	1	0	1	0	0	1	12
CPO - Colonization Screening	2	1	0	0	1	0	0	0	0	0	4
Campylobacteriosis	7	0	1	1	0	0	2	0	0	3	14
Coccidioidomycosis	0	0	0	0	0	0	0	0	0	1	1
Creutzfeldt-Jakob Disease	1	0	0	1	0	0	0	0	0	0	2
Cryptosporidiosis	3	0	0	0	1	0	0	0	0	0	4
Cyclosporiasis	0	0	0	0	0	0	0	0	0	1	1
Dengue	1	0	0	0	0	0	0	0	0	0	1
E.Coli (shiga toxin producing)	2	0	1	3	0	0	0	0	0	3	9
Ehrlichiosis/Anaplasmosis	0	0	0	0	0	0	0	0	0	1	1
Giardiasis	1	0	0	0	1	0	0	0	0	0	2
Haemophilus influenzae (invasive)	0	0	0	1	2	0	1	0	0	0	4
Hepatitis A	4	1	1	5	0	0	0	0	0	0	11
Hepatitis B (acute)	4	0	0	0	0	1	1	0	0	0	6
Hepatitis B (chronic)	22	0	2	6	1	0	0	0	0	0	31
Hepatitis C (acute)	0	0	0	0	1	0	0	0	0	0	1
Hepatitis C (chronic)	68	3	4	18	14	2	3	12	0	0	124
Hepatitis C - Perinatal Infection	1	0	0	0	1	0	0	0	0	0	2
Influenza-associated hospitalization	2	0	0	3	1	0	0	0	0	0	6
Legionnaires' Disease	0	0	0	1	2	0	0	0	0	0	3
Leprosy	0	0	0	0	0	0	0	0	0	1	1
Lyme Disease	4	1	0	2	6	1	1	2	0	0	17
Malaria	1	0	0	0	0	0	0	0	0	0	1
Meningitis (aseptic/viral)	7	1	0	2	2	0	0	0	0	1	13
Meningitis (bacterial, not N. meningitidis)	0	0	0	1	0	0	0	0	0	1	2

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

Reportable Condition	County										Total
	Hamilton	Adams	Brown	Butler	Clermont	Clinton	Highland	Warren			
Pertussis	45	1	3	18	9	.	2	39			117
Salmonellosis	10	.	.	3	2	.	.	3			18
Shigellosis	2	.	.	.	.	.	.	.			2
St. Louis encephalitis virus disease	.	.	.	.	.	.	1	.			1
Streptococcal pneumoniae (invasive)	9	.	.	3	2	.	.	1			15
Streptococcal, Group A (invasive)	5	.	.	2	1	.	.	1			9
Tuberculosis	14	.	.	1	.	.	.	1			16
Varicella	2	.	.	1	.	.	.	2			5
Vibriosis	.	.	.	1	.	.	.	.			1
Yersiniosis	1	.	.	1	1	.	.	.			3
Total	237	10	12	80	50	4	12	77			482

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

Reportable Condition	County										Total
	Hamilton	Adams	Brown	Butler	Clermont	Clinton	Highland	Warren			
Amebiasis	6	.	.	1	.	.	1	.	.	8	
Babesiosis	2	1	.	.	3	.	.	.	.	6
Botulism (Infant)	.	.	.	.	.	1	.	.	.	1
Brucellosis	2	.	.	1	.	.	.	.	.	3
C. auris	70	.	.	8	4	.	.	4	.	86	
C. auris - Colonization Screening	83	.	1	32	22	1	.	19	.	158	
CPO	99	6	5	42	27	6	12	23	.	220	
CPO - Colonization Screening	10	1	.	12	6	.	3	1	.	33	
Campylobacteriosis	65	4	7	40	13	1	9	27	.	166	
Chikungunya virus	3	.	.	.	.	.	.	2	.	5
Coccidioidomycosis	8	.	2	2	1	.	.	3	.	16	
Creutzfeldt-Jakob Disease	5	.	.	2	1	.	.	.	.	8
Cryptosporidiosis	36	1	.	9	7	3	.	6	.	62	
Cyclosporiasis	6	.	.	1	.	.	.	3	.	10	
Dengue	8	.	.	1	.	.	.	.	.	9
E.Coli (shiga toxin producing)	19	1	2	11	6	1	1	6	6	47	
Ehrlichiosis/Anaplasmosis	7	2	1	.	4	.	1	4	.	19	
Giardiasis	30	2	1	7	7	2	.	7	.	56	
Haemophilus influenzae (invasive)	23	.	6	12	9	2	3	8	.	63	
Hepatitis A	28	2	10	10	3	2	2	5	.	62	
Hepatitis B (acute)	22	3	3	4	2	3	1	3	.	41	
Hepatitis B (chronic)	214	10	8	104	14	6	10	54	.	420	
Hepatitis C (acute)	2	1	.	.	3	.	.	.	.	6
Hepatitis C (chronic)	620	44	52	217	85	22	36	133	.	1209	
Hepatitis C - Perinatal Infection	7	2	.	3	2	2	1	.	.	17	
Hepatitis E	1	.	1	.	.	.	.	.	.	2
Influenza-associated hospitalization	679	4	38	318	157	23	33	147	.	1399	
LaCrosse Virus Disease (LCVD)	.	.	.	.	1	.	.	.	.	1
Legionnaires' Disease	20	.	.	11	7	.	.	7	.	45	
Leprosy	.	.	.	.	.	.	.	1	.	1

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

Reportable Condition	County										Total
	Hamilton	Adams	Brown	Butler	Clermont	Clinton	Highland	Warren			
Listeriosis	1	.	.	.	.	.	.	.	.	.	1
Lyme Disease	62	24	17	24	67	3	20	18			235
Malaria	16	.	.	3	.	.	.	.	.	.	19
Measles	1	.	.	6	3	2	4	9			25
Meningitis (aseptic/viral)	42	1	6	24	13	1	1	15			103
Meningitis (bacterial, not N. meningitidis)	32	.	1	13	6	.	1	7			60
Meningococcal disease	1	.	.	3	.	.	.	.	.	.	4
Mpox	4	.	.	.	.	.	.	.	.	.	4
Mumps	13	1	.	2	2	1	.	1			20
Pertussis	100	3	15	68	40	2	5	112			345
Q fever (acute)	.	.	1	.	1	.	.	.	.	.	2
Rubella (not congenital)	1	.	.	.	.	.	1	.			2
Salmonella Paratyphi Infection	1	.	.	1	.	.	.	.			2
Salmonella Typhi	3	.	.	3	.	.	.	1			7
Salmonellosis	83	6	5	32	17	1	5	25			174
Shigellosis	41	.	1	12	2	.	.	5			61
Spotted Fever Rickettsiosis (including Rocky Mountain spotted fever (RMSF))	4	5	2	.	5	1	5	2			24
St. Louis encephalitis virus disease	.	.	.	.	.	.	1	.			1
Streptococcal pneumoniae (invasive)	71	2	5	38	13	3	4	16			152
Streptococcal, Group A (invasive)	68	3	1	37	20	1	2	21			153
Streptococcal, Group B (in newborn)	5	.	.	.	2	1	.	2			10
Tetanus	.	.	.	1	.	.	.	.			1
Tuberculosis	45	.	.	15	.	.	1	4			65
Tularemia	1	.	.	.	.	.	.	2			3
Varicella	32	2	1	21	3	3	2	14			78
Vibriosis	6	.	.	2	1	.	.	.			9
West Nile virus infection (WNV)	1	.	.	.	.	.	.	.			1
Yersiniosis	18	.	.	2	5	.	.	4			29
Total	2727	131	192	1155	584	94	165	721			5769

SYNDROMIC SURVEILLANCE

Emergency Department Visits

Number of EpiCenter alerts received: 9

Types of EpiCenter alerts:

- Infectious Disease Symptoms (n=7)
- Syndromic Symptoms (n=2)

The alerts received for Hamilton County from November 1 - November 30 are summarized in Table 5 below. Eight of the anomalies received in EpiCenter were dispositioned as Not a Health Event. At the time of this report, one anomaly investigation is still active. There were two syndromic alerts in November. The syndromic surveillance charts for Botulinic, Constitutional, and Respiratory ED visits are shown in Figures 6, 7, and 8, respectively.

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

Anomaly Classifier	Event Date	Alert Category	Analysis Method	Aggregated By	Actual Value	Predicted Value	Threshold Value	Final Disposition
Stiff Neck	11/21/2024	Infectious Disease	Recursive Least Squares	Facility Location	22	8.20	19.49	Active
Paralysis	11/14/2024	Infectious Disease	Recursive Least Squares	Facility Location	21	11.96	20.13	Not a health event
Vision	11/12/2024	Infectious Disease	Recursive Least Squares	Facility Location	25	10.62	22.90	Not a health event
Vision	11/12/2024	Infectious Disease	Exponential Moving Average	Facility Location	25	11.11	22.98	Not a health event
Vomiting	11/12/2024	Infectious Disease	Recursive Least Squares	Home Location	70	46.35	69.75	Not a health event
Botulinic	11/11/2024	Syndromic	Cusum EMA	Home Location	18	9.47	17.70	Not a health event
Vision	11/11/2024	Infectious Disease	Cusum EMA	Facility Location	24	10.54	23.68	Not a health event
Vision	11/11/2024	Infectious Disease	Cusum EMA	Home Location	17	8.48	16.55	Not a health event
Botulinic	11/11/2024	Syndromic	Cusum EMA	Facility Location	25	11.89	24.74	Not a health event

Figure 6. Botulinic-related ED Visits, Hamilton County, Ohio, November 2024

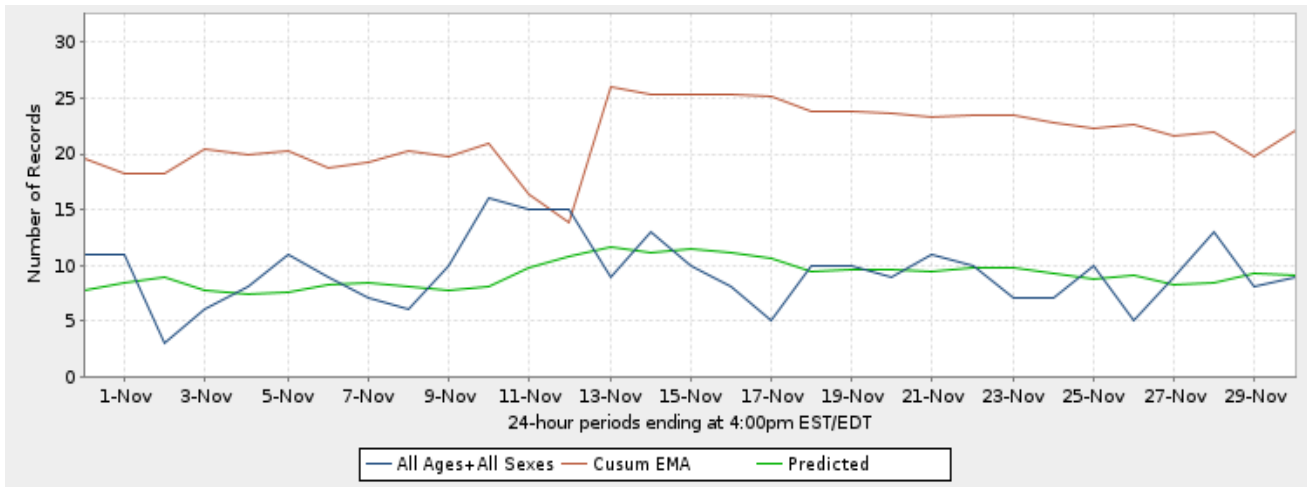


Figure 7. Constitutional-related ED Visits, Hamilton County, Ohio, November 2024

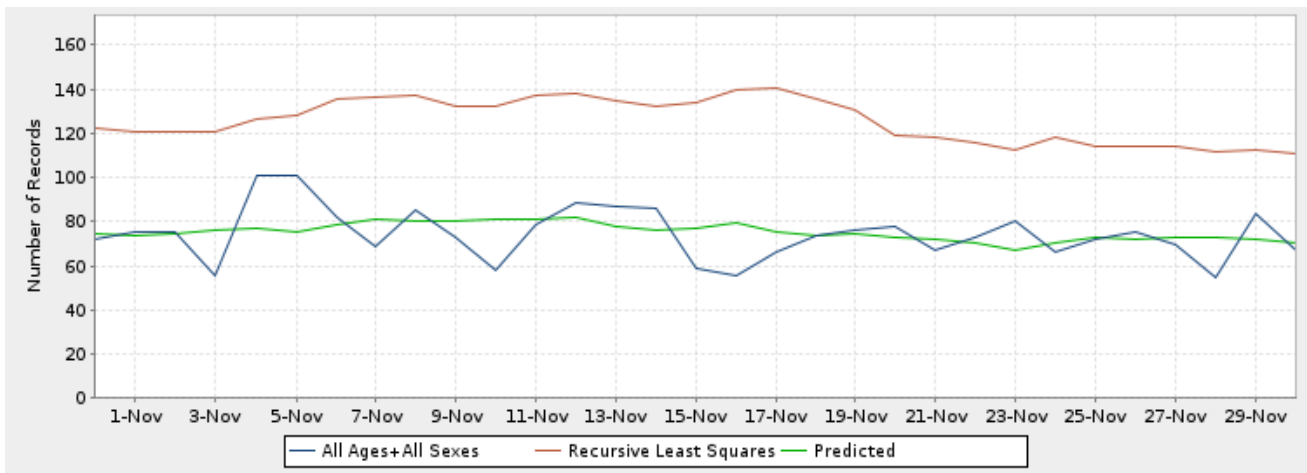


Figure 8. Respiratory-related ED Visits, Hamilton County, Ohio, November 2024

