



Monthly Communicable Disease Surveillance Report

January 2025

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NOTIFIABLE COMMUNICABLE DISEASES

Hamilton County Public Health (HCPH) Jurisdiction

Number of Communicable Diseases Reported: 182
 Most frequently reported communicable diseases:

- Influenza-associated Hospitalization (n=111)
- Chronic Hepatitis C (n=21)
- Chronic Hepatitis B (n=9)
- Pertussis (n=9)
- Invasive Streptococcal Group A (n=6)

Southwest Ohio (SWOH)

Number of Communicable Diseases Reported: 784
 Most frequently reported communicable diseases:

- Influenza-associated Hospitalization (n=379)
- Chronic Hepatitis C (n=113)
- Pertussis (n=64)
- Chronic Hepatitis B (n=50)
- Invasive Streptococcal pneumoniae (n=25)

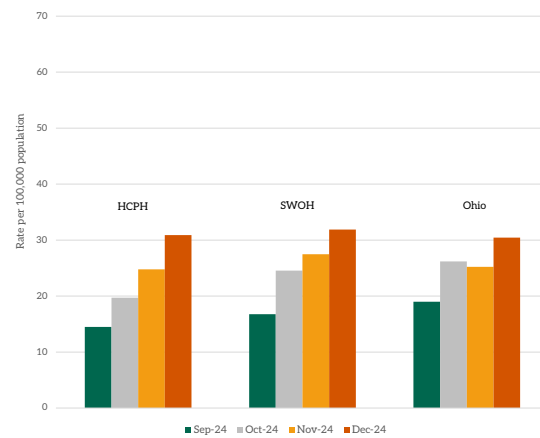
Summary

In January, the overall rates of reported communicable diseases for HCPH, SWOH, and Ohio increased by 20%, 36%, and 59%, respectively. The Ohio rate (50.1) was the highest of the three rates, followed by the SWOH rate (44.7) and the HCPH rate (38.2) (Table 1).

Influenza-associated hospitalization was the most reported communicable disease across SWOH, with Chronic Hepatitis C and Chronic Hepatitis B the 2nd- and 3rd-most reported, respectively (Table 2). Chronic Hepatitis B and C cases accounted for 20.8% of the total communicable diseases reported during January. The number of chronic hepatitis cases seen in Southwest Ohio during January was 11.2% higher than the 12-month average of 147 cases seen between January 2024 and December 2024. The number of chronic hepatitis cases reported in SWOH in January (163) was higher than the number of cases reported in the previous month (133). The rate of chronic hepatitis within Hamilton County for January was 10.3 per 100,000 residents. This rate was higher than the SWOH rate of 9.4 per 100,000 residents.

Influenza-associated hospitalization was the most frequently reported disease in SWOH, accounting for 48% of the total communicable diseases reported during January. The number of influenza-associated hospitalizations reported during January

Figure 1. 30-Day Rates of Reported Communicable Diseases in Ohio, Southwest Ohio, and Hamilton County Public Health Jurisdiction, October 2024 - January 2025



(379) was much higher than the number of cases reported in the previous month (148); this is expected during flu season. The rate of influenza-associated hospitalizations within Hamilton County for January was 22.2 per 100,000 residents. This rate was higher than the SWOH rate of 21.8 per 100,000 residents.

Pertussis was the fourth most frequently reported disease in SWOH (Table 2). Pertussis cases accounted for 8.2% of the total communicable diseases reported during January. The number of

Pertussis cases reported in January (64) was lower than the number of cases reported in the previous month (100). The rate of pertussis cases within Hamilton County for January was 3.1 per 100,000 residents. This rate was lower than the SWOH rate of 3.7 per 100,000 residents.

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

Location	Number of Reported Cases	Rate per 100,000	Rate Ratio†	Confidence Interval (99%)‡
HCPH	182	38.21	0.76	0.63 - 0.93
SW OHIO	784	44.68	0.89	0.81 - 0.98
OHIO	5,795	50.06	.	. - .

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 January 1-31, 2025. Data was accessed from the Ohio Disease Reporting System on 01/31/2025.

†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, January 2025

Reportable Condition	County											Total
	Hamilton	Adams	Brown	Butler	Clermont	Clinton	Highland	Warren				
Amebiasis	1	.	.	.	.	.	.	.	.	.	.	1
C. auris	8	.	.	.	.	.	.	.	.	.	1	9
C. auris - Colonization Screening	6	.	.	1	.	.	.	.	.	.	2	9
CPO	1	1	.	2	2	2	.	.	.	.	2	10
CPO - Colonization Screening	.	.	.	.	2	.	.	.	.	.	.	2
Campylobacteriosis	7	1	.	4	2	1	.	.	.	.	3	18
Coccidioidomycosis	.	.	.	.	.	.	.	.	.	.	2	2
Cyclosporiasis	1	.	.	.	.	.	.	.	.	.	.	1
Giardiasis	.	1	.	.	.	.	.	.	.	.	.	1
Haemophilus influenzae (invasive)	3	.	1	1	.	1	.	.	.	1	1	7
Hepatitis A	.	.	1	3	.	.	.	.	.	.	2	6
Hepatitis B (acute)	.	.	.	1	.	.	.	.	.	1	.	2
Hepatitis B (chronic)	25	.	.	11	1	2	2	2	9	.	.	50
Hepatitis C (chronic)	58	1	1	19	11	6	2	15	.	.	.	113
Influenza-associated hospitalization	178	1	10	65	50	7	12	56	.	.	.	379
Legionnaires' Disease	3	.	.	6	1	.	.	1	1	1	.	11
Listeriosis	.	.	.	.	.	.	.	.	.	.	1	1
Lyme Disease	2	1	.	.	2	1	1	1	1	1	.	8
Malaria	1	.	.	.	.	.	.	.	.	.	.	1
Measles	.	.	.	.	.	1	.	.	.	.	.	1
Meningitis (aseptic/viral)	2	.	1	.	1	1	1	.	.	.	.	6
Meningitis (bacterial, not N. meningitidis)	1	.	.	1	1	.	.	.	.	.	.	3
Mumps	.	.	.	.	1	.	.	.	.	.	.	1
Pertussis	25	.	.	21	4	1	.	13	.	.	.	64
Salmonellosis	6	.	.	6	1	2	1	2	1	2	.	18
Shigellosis	2	.	.	.	.	.	.	.	.	.	.	2
Spotted Fever Rickettsiosis (including Rocky Mountain spotted fever (RMSF))	.	.	1	.	.	.	.	.	.	.	.	1
Streptococcal pneumoniae (invasive)	14	1	.	4	5	.	.	1	.	.	1	25

Table 2. Cases of Notifiable Diseases in Southwest Ohio as Reported in ODRS by County, January 2025, Continued

Reportable Condition	County										Total
	Hamilton	Adams	Brown	Butler	Clermont	Clinton	Highland	Warren			
Streptococcal, Group A (invasive)	11	.	2	3	1	1	.	1			19
Varicella	3	.	.	1	.	1	.	2			7
Vibriosis	2	.	.	.	.	.	.	.			2
Yersiniosis	3	.	.	1	.	.	.	.			4
Total	363	7	17	150	85	27	19	116			784

Table 3. YTD Cases of Notifiable Diseases in Southwest Ohio as Reported in ODRS by County, January 2025

Reportable Condition	County										Total	
	Hamilton	Adams	Brown	Butler	Clermont	Clinton	Highland	Warren				
Amebiasis	1	.	.	.	.	.	.	.	.	.	.	1
C. auris	8	.	.	.	.	.	.	.	.	.	1	9
C. auris - Colonization Screening	6	.	.	1	.	.	.	.	.	.	2	9
CPO	1	1	.	2	2	2	.	.	.	.	2	10
CPO - Colonization Screening	.	.	.	.	2	.	.	.	.	.	.	2
Campylobacteriosis	7	1	.	4	2	1	.	.	.	3	3	18
Coccidioidomycosis	.	.	.	.	.	.	.	.	.	.	2	2
Cyclosporiasis	1	.	.	.	.	.	.	.	.	.	.	1
Giardiasis	.	1	.	.	.	.	.	.	.	.	.	1
Haemophilus influenzae (invasive)	3	.	1	1	.	1	.	.	.	1	1	7
Hepatitis A	.	.	1	3	.	.	.	.	.	2	.	6
Hepatitis B (acute)	.	.	.	1	.	.	.	.	.	1	.	2
Hepatitis B (chronic)	25	.	.	11	1	2	2	2	9	.	.	50
Hepatitis C (chronic)	58	1	1	19	11	6	2	15	.	.	.	113
Influenza-associated hospitalization	178	1	10	65	50	7	12	56	.	.	.	379
Legionnaires' Disease	3	.	.	6	1	.	.	1	1	1	.	11
Listeriosis	.	.	.	.	.	.	.	.	.	.	.	1
Lyme Disease	2	1	.	.	2	1	1	1	1	1	.	8
Malaria	1	.	.	.	.	.	.	.	.	.	.	1
Measles	.	.	.	.	.	1	.	.	.	.	.	1
Meningitis (aseptic/viral)	2	.	1	.	1	1	1	.	.	.	.	6
Meningitis (bacterial, not N. meningitidis)	1	.	.	1	1	.	.	.	.	.	.	3
Mumps	.	.	.	.	1	.	.	.	.	.	.	1
Pertussis	25	.	.	21	4	1	.	13	.	.	.	64
Salmonellosis	6	.	.	6	1	2	1	2	1	2	.	18
Shigellosis	2	.	.	.	.	.	.	.	.	.	.	2
Spotted Fever Rickettsiosis (including Rocky Mountain spotted fever (RMSF))	.	.	1	.	.	.	.	.	.	.	.	1
Streptococcal pneumoniae (invasive)	14	1	.	4	5	.	.	1	.	1	.	25

Table 3. YTD Cases of Notifiable Diseases in Southwest Ohio as Reported in ODRS by County, January 2025, Continued

Reportable Condition	County										Total
	Hamilton	Adams	Brown	Butler	Clermont	Clinton	Highland	Warren			
Streptococcal, Group A (invasive)	11	.	2	3	1	1	.	1			19
Varicella	3	.	.	1	.	1	.	2			7
Vibriosis	2	.	.	.	.	.	.	.			2
Yersiniosis	3	.	.	1	.	.	.	.			4
Total	363	7	17	150	85	27	19	116			784

SYNDROMIC SURVEILLANCE

Emergency Department Visits

Number of EpiCenter alerts received: 19

Types of EpiCenter alerts:

- Infectious Disease Symptoms (n=15)
- Syndromic Symptoms (n=4)

The alerts received for Hamilton County from January 1 - January 31 are partially summarized in Table 5 below. EpiCenter generates more alerts during the winter respiratory disease season, so not all alerts are shown in the table. 3 of the anomalies received in EpiCenter were dispositioned as Not a Health Event, and 2 were dispositioned as seasonal illness. At the time of this report, 14 anomaly investigations are still active. There were 4 syndromic alerts in January. The syndromic surveillance charts for Gastrointestinal, Constitutional, and Respiratory ED visits are shown in Figures 6, 7, and 8, respectively.

Table 5. Emergency Department Visit Anomalies for Hamilton County, January 2025

Anomaly Classifier	Event Date	Alert Category	Analysis Method	Aggregated By	Actual Value	Predicted Value	Threshold Value	Final Disposition
Constitutional	1/31/2025	Syndromic	Cusum EMA	Home Location	144	113.56	132.15	Active
Fever	1/31/2025	Infectious Disease	Cusum EMA	Home Location	64	54.58	61.29	Active
Fever	1/30/2025	Infectious Disease	Cusum EMA	Home Location	64	51.94	63.22	Active
Constitutional	1/30/2025	Syndromic	Cusum EMA	Facility Location	152	123.13	147.04	Active
Fever	1/29/2025	Infectious Disease	Cusum EMA	Facility Location	69	59.00	66.38	Active
Headache	1/29/2025	Infectious Disease	Recursive Least Squares	Home Location	57	37.35	54.16	Active
Congestion	1/29/2025	Infectious Disease	Exponential Moving Average	Home Location	11	2.85	10.46	Active
Fever	1/28/2025	Infectious Disease	Cusum EMA	Facility Location	78	54.17	77.70	Active
Congestion	1/28/2025	Infectious Disease	Recursive Least Squares	Home Location	11	2.97	9.69	Active
Congestion	1/28/2025	Infectious Disease	Recursive Least Squares	Facility Location	14	3.91	12.20	Active
Constitutional	1/26/2025	Syndromic	Recursive Least Squares	Home Location	130	87.61	128.69	Active
Nausea	1/26/2025	Infectious Disease	Recursive Least Squares	Home Location	38	21.44	37.29	Active
Botulinic	1/25/2025	Syndromic	Recursive Least Squares	Facility Location	17	7.06	16.90	Active
Paralysis	1/25/2025	Infectious Disease	Recursive Least Squares	Home Location	13	6.50	12.31	Active
Stiff Neck	1/14/2025	Infectious	Recursive Least	Facility	15	6.86	14.74	Indeterminate

Figure 6. Botulinic-related ED Visits, Hamilton County, Ohio, January 2025

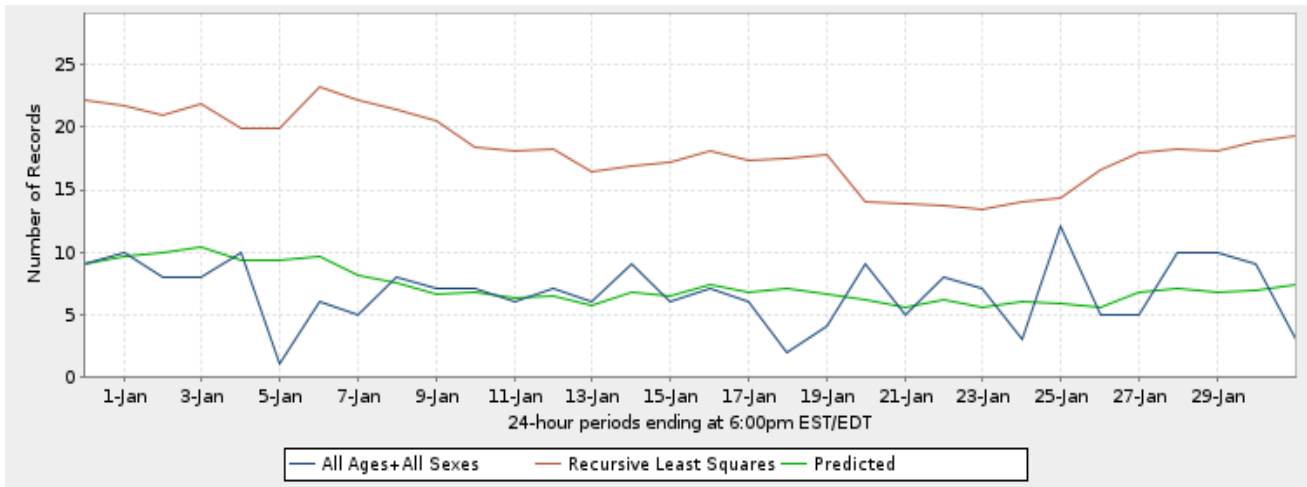


Figure 7. Constitutional-related ED Visits, Hamilton County, Ohio, January 2025

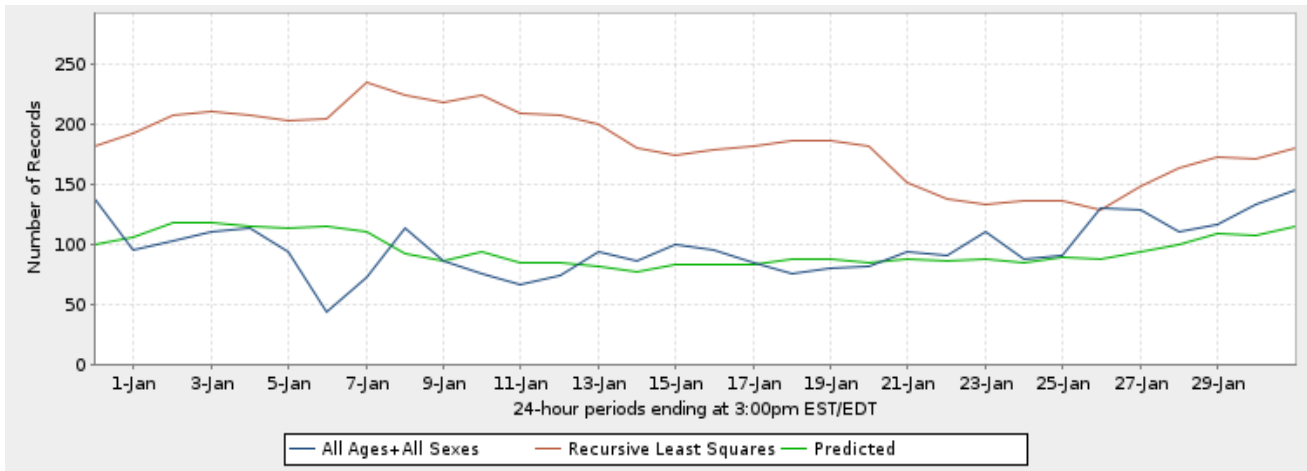


Figure 8. Respiratory-related ED Visits, Hamilton County, Ohio, January 2025

