



# Monthly Communicable Disease Surveillance Report

February 2024

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# NOTIFIABLE COMMUNICABLE DISEASES

## Hamilton County Public Health (HCPH) Jurisdiction

Number of Communicable Diseases Reported: 184  
 Most frequently reported communicable diseases:

- Influenza-associated Hospitalization (n=128)
- Chronic Hepatitis C (n=19)
- Chronic Hepatitis B (n=9)
- C. auris (n=3)
- CPO (n=3)

## Southwest Ohio (SWOH)

Number of Communicable Diseases Reported: 860  
 Most frequently reported communicable diseases:

- Influenza-associated hospitalization (n=506)
- Chronic Hepatitis C (n=119)
- Chronic Hepatitis B (n=47)
- Streptococcus pneumoniae (invasive) (n=19)
- Streptococcal, Group A (n=15)

## Summary

In February, the overall rates of reported communicable diseases for HCPH decreased by 7%. SWOH and Ohio increased by 13% and 12% respectively. The SWOH rate (52.5) was the highest of the three rates, followed by the Ohio rate (45.3) and the HCPH rate (41.4) (Table 1). These rates are prorated to 30 days so they can be compared accurately.

Influenza-associated hospitalization was the most commonly reported communicable disease across SWOH, with Chronic Hepatitis C and Chronic Hepatitis B 2<sup>nd</sup> and 3<sup>rd</sup> respectively (Table 2). Influenza-associated hospitalization cases accounted for 59% of the total communicable diseases reported during February. The number of Influenza-associated hospitalizations reported for SWOH in February (506) was higher than the number of cases reported in the previous month (440). The rate of Influenza-associated hospitalizations within Hamilton County for February was 33.2 per 100,000 residents. This rate was higher than the SWOH rate of 29.1 per 100,000 residents.

Chronic Hepatitis (Hepatitis C and Hepatitis B combined) comprised 19.4% of the total communicable diseases reported during February. Southwest Ohio is currently on pace for a 11.9% increase in hepatitis over the previous year's average number of cases (160). The rate of chronic hepatitis within Hamilton County for February was 92 per 100,000 residents. This rate was lower than the SWOH rate of 9.5 per 100,000 residents.

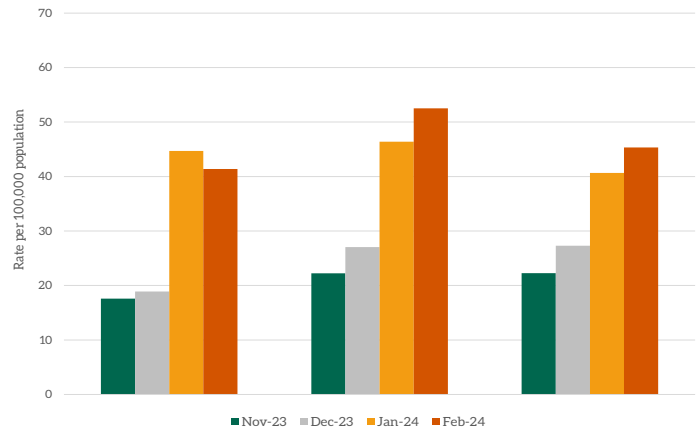
**Table 1. Comparison of the Reported Cases of Notifiable Communicable Diseases by Location, January 2024**

Location	Number of Reported Cases	Rate per 100,000	Rate Ratio†	Confidence Interval (99%)‡
HCPH	184	38.63	0.91	0.75 - 1.11
SW OHIO	860	49.01	1.16	1.05 - 1.27
OHIO	4,899	42.32	.	.-.

Streptococcus pneumoniae (invasive) within Hamilton County for February was 0.6 per 100,000 residents. This rate is higher than the SWOH rate of 1.1 per 100,000 residents.

Streptococcus pneumoniae (invasive) was the fourth most frequently reported disease in SWOH (Table 2). Streptococcus pneumoniae (invasive) cases accounted for 2.2% of the total communicable diseases reported during February. The number of Streptococcus pneumoniae (invasive) cases reported for SWOH in February (19) was lower than the number of cases reported in the previous month (35). The rate of

**Figure 1. 30-Day Rates of Reported Communicable Diseases in Ohio, Southwest Ohio, and Hamilton County Public Health Jurisdiction, November 2023 - February 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, February 2024

Reportable Condition	County										Total	
	Hamilton	Adams	Brown	Butler	Clermont	Clinton	Highland	Warren				
Amebiasis	.	.	.	.	.	.	.	.	.	.	1	1
C. auris	10	.	.	1	1	.	.	.	.	.	12	12
C. auris - Colonization Screening	7	.	1	2	.	.	.	.	.	1	11	11
CPO	4	.	.	2	1	.	.	.	.	1	8	8
CPO - Colonization Screening	.	.	.	.	.	.	1	.	.	.	1	1
Campylobacteriosis	5	.	.	1	1	.	.	.	1	.	8	8
Coccidioidomycosis	1	.	1	.	.	.	.	.	.	.	2	2
Creutzfeldt-Jakob Disease	2	.	.	.	.	.	.	.	.	.	2	2
Dengue	1	.	.	1	.	.	.	.	.	.	2	2
E.Coli (shiga toxin producing)	1	.	.	.	1	.	.	.	.	.	2	2
Ehrlichiosis/Anaplasmosis	.	.	.	.	.	.	.	.	.	1	1	1
Giardiasis	3	.	.	.	1	1	.	.	.	.	5	5
Haemophilus influenzae (invasive)	1	.	1	3	.	.	1	.	.	.	6	6
Hepatitis A	3	1	.	.	.	.	.	.	.	1	5	5
Hepatitis B (acute)	.	1	.	.	.	.	.	.	.	.	1	1
Hepatitis B (chronic)	20	3	1	10	2	2	3	6	.	.	47	47
Hepatitis C (chronic)	54	4	3	28	11	4	3	12	.	.	119	119
Hepatitis C - Perinatal Infection	1	.	.	.	.	.	.	.	.	.	1	1
Hepatitis E	.	.	1	.	.	.	.	.	.	.	1	1
Influenza-associated hospitalization	267	3	6	88	79	8	3	52	.	.	506	506
Legionnaires' Disease	1	.	.	.	.	.	.	.	.	.	1	1
Lyme Disease	2	.	2	1	1	.	.	.	.	.	6	6
Malaria	4	.	.	.	.	.	.	.	.	.	4	4
Measles	.	.	.	3	4	.	.	6	.	.	13	13
Meningitis (aseptic/viral)	3	.	.	2	.	.	.	2	.	.	7	7
Meningitis (bacterial)	1	.	.	2	.	.	.	1	.	.	4	4
Meningococcal disease	.	.	.	1	.	.	.	.	.	.	1	1
Mumps	7	.	.	.	.	.	.	.	.	.	7	7
Pertussis	1	.	.	2	.	.	.	3	.	.	6	6
Salmonellosis	2	.	.	5	2	.	1	1	.	.	11	11



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

Reportable Condition	County										Total
	Hamilton	Adams	Brown	Butler	Clermont	Clinton	Highland	Warren			
Amebiasis	1	.	.	.	.	.	1	.	.	.	2
Brucellosis	1	.	.	.	.	.	.	.	.	.	1
C. auris	16	.	.	2	1	.	.	.	.	.	19
C. auris - Colonization Screening	13	.	1	3	.	.	.	.	1	.	18
CPO	14	2	2	6	1	1	3	7	.	.	36
CPO - Colonization Screening	.	.	.	1	.	.	1	.	.	.	2
Campylobacteriosis	8	.	.	1	2	.	1	2	.	.	14
Chikungunya virus	1	.	.	.	.	.	.	.	.	.	1
Coccidioidomycosis	3	.	1	2	.	.	.	1	.	.	7
Creutzfeldt-Jakob Disease	2	.	.	1	1	.	.	.	.	.	4
Cryptosporidiosis	2	.	.	1	.	.	.	.	.	.	3
Dengue	4	.	.	1	.	.	.	.	.	.	5
E.Coli (shiga toxin producing)	3	.	.	1	1	.	.	.	.	.	5
Ehrlichiosis/Anaplasmosis	1	.	.	.	.	.	.	1	.	.	2
Giardiasis	5	.	.	.	1	1	.	.	.	.	7
Haemophilus influenzae (invasive)	5	.	4	5	1	.	2	2	.	.	19
Hepatitis A	9	1	1	.	.	.	.	2	.	.	13
Hepatitis B (acute)	1	1	.	.	1	.	.	.	.	.	3
Hepatitis B (chronic)	53	3	1	19	3	2	5	9	.	.	95
Hepatitis C (chronic)	108	10	11	49	15	5	9	23	.	.	230
Hepatitis C - Perinatal Infection	2	.	.	.	.	.	.	.	.	.	2
Hepatitis E	.	.	1	.	.	.	.	.	.	.	1
Influenza-associated hospitalization	469	4	28	179	123	15	19	107	.	.	944
Legionnaires' Disease	4	.	.	.	.	.	.	.	.	.	4
Lyme Disease	4	.	2	3	2	.	1	.	.	.	12
Malaria	5	.	.	2	.	.	.	.	.	.	7
Measles	.	.	.	4	4	.	.	6	.	.	14
Meningitis (aseptic/viral)	4	.	.	4	1	1	.	3	.	.	13
Meningitis (bacterial)	4	.	.	4	1	.	1	2	.	.	12
Meningococcal disease	.	.	.	2	.	.	.	.	.	.	2



# SYNDROMIC SURVEILLANCE

## Emergency Department Visits

**Number of EpiCenter alerts received: 11**

Types of EpiCenter alerts:

- Infectious Disease Symptoms (n=11)
- Syndromic Symptoms (n=0)

The alerts received for Hamilton County from February 1 - February 28 are summarized in Table 5 below. Four of the anomalies received in EpiCenter were dispositioned as Indeterminate. One investigation was dispositioned as Seasonal Illness - ILI/ Respiratory. At time of this report six anomaly investigations are still active. The syndromic anomalies are presented for the entire month for Hamilton County in Figures 6, 7, and 8 respectively.

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

Anomaly Classifier	Event Date	Alert Category	Analysis Method	Aggregated By	Actual Value	Predicted Value	Threshold Value	Final Disposition
Vision	2/28/2024	Infectious Disease	Cusum EMA	Facility Location	20	9.77	18.95	Active
Exacerbation	2/27/2024	Infectious Disease	Cusum EMA	Home Location	10	6.69	8.57	Active
Exacerbation	2/25/2024	Infectious Disease	Recursive Least Squares	Home Location	14	4.97	13.39	Active
Exacerbation	2/25/2024	Infectious Disease	Exponential Moving Average	Home Location	14	4.31	13.17	Active
Diarrhea - Not Watery/Bloody	2/20/2024	Infectious Disease	Exponential Moving Average	Home Location	21	8.95	19.54	Active
Diarrhea - Not Watery/Bloody	2/20/2024	Infectious Disease	Recursive Least Squares	Home Location	20	9.15	19.10	Active
Ear, Nose, Throat	2/8/2024	Infectious Disease	Cusum EMA	Home Location	67	45.71	60.42	Seasonal Illness - ILI/Respiratory
Lymphadenitis	2/8/2024	Infectious Disease	Recursive Least Squares	Home Location	11	2.49	8.34	Indeterminate
Lymphadenitis	2/8/2024	Infectious Disease	Exponential Moving Average	Home Location	11	2.43	9.07	Indeterminate
Lymphadenitis	2/8/2024	Infectious Disease	Exponential Moving Average	Facility Location	10	2.64	9.24	Indeterminate
Lymphadenitis	2/8/2024	Infectious Disease	Recursive Least Squares	Facility Location	10	3.06	7.95	Indeterminate

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

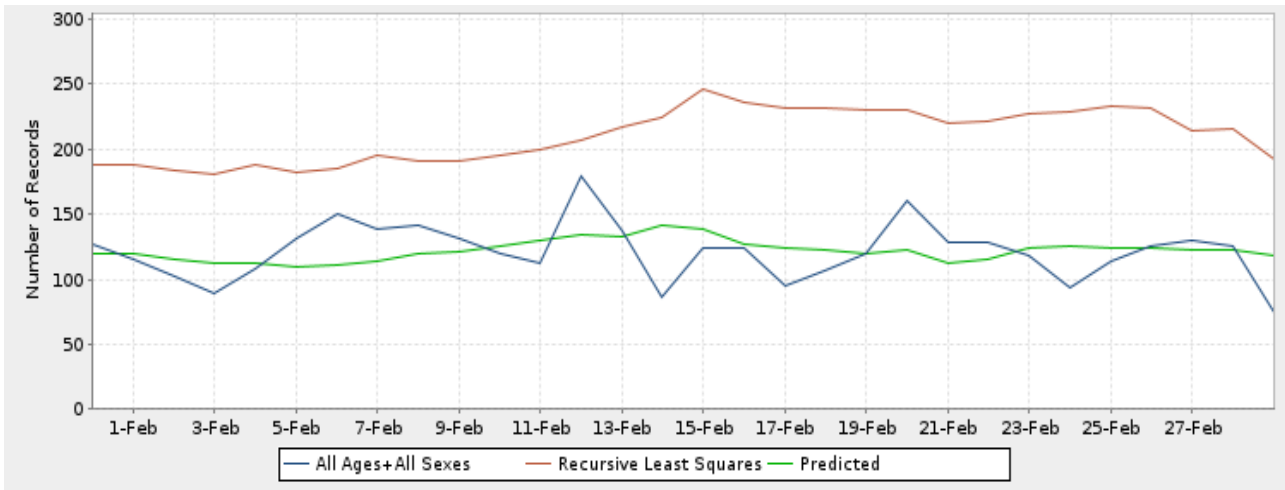


Figure 7. Respiratory-related ED Visits, Hamilton County, Ohio, February 2024

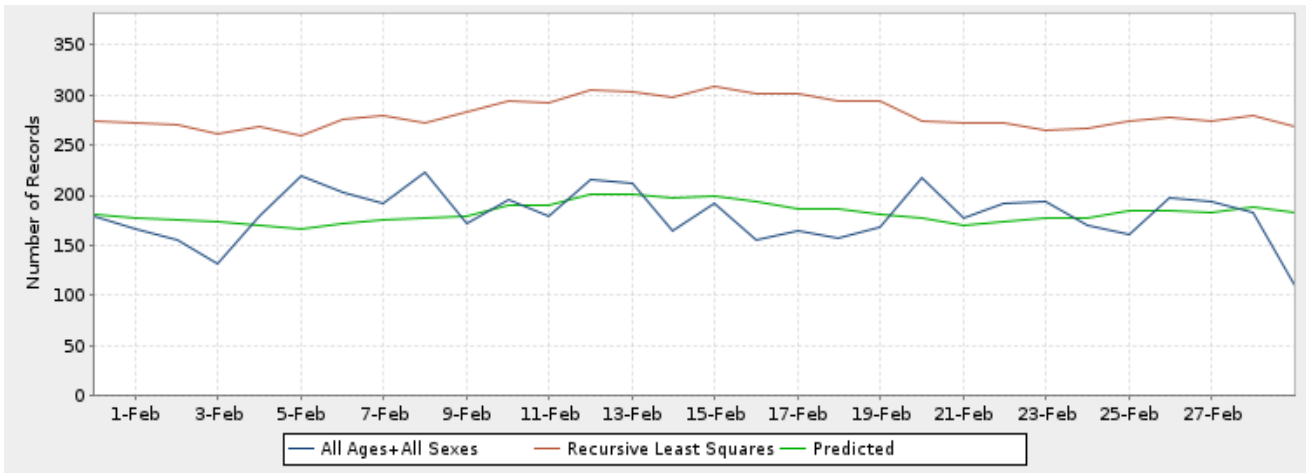


Figure 8. Botulinic-related ED Visits, Hamilton County, Ohio, February 2024

