

Monthly Communicable Disease Surveillance Report

March 2024

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NOTIFIABLE COMMUNICABLE DISEASES

Hamilton County Public Health (HCPH) Jurisdiction

Number of Communicable Diseases Reported: 175
 Most frequently reported communicable diseases:

- Influenza-associated Hospitalization (n=99)
- Chronic Hepatitis C (n=23)
- Chronic Hepatitis B (n=11)
- Streptococcal, Group A (invasive) (n=6)
- CPO (n=5)

Southwest Ohio (SWOH)

Number of Communicable Diseases Reported: 639
 Most frequently reported communicable diseases:

- Influenza-associated hospitalization (n=300)
- Chronic Hepatitis C (n=97)
- Chronic Hepatitis B (n=41)
- Streptococcal, Group A (invasive) (n=18)
- Streptococcal pneumonia (Invasive) (n=16)

Summary

In March, the overall rates of reported communicable diseases for HCPH decreased by 1%. SWOH and Ohio decreased by 23% and 15% respectively. The HCPH rate (40.8) was the highest of the three rates, followed by the SWOH rate (40.5) and the Ohio rate (38.5) (Table 1). These rates are pro-rated 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 2nd and 3rd respectively (Table 2). Influenza-associated hospitalization cases accounted for 47% of the total communicable diseases reported during March. The number of Influenza-associated hospitalizations reported for SWOH in March (300) was lower than the number of cases reported in the previous month (506). The rate of Influenza-associated hospitalizations within Hamilton County for March was 17.7 per 100,000 residents. This rate was higher than the SWOH rate of 17.2 per 100,000 residents.

Chronic Hepatitis (Hepatitis C and Hepatitis B combined) comprised 21.6% of the total communicable diseases reported during March. Southwest Ohio is currently on pace for a 7.4% decrease in hepatitis over the previous year's average number of cases (160). The rate of chronic hepatitis within Hamilton County for March was 8.4 per 100,000 residents. This rate was higher than the SWOH rate of 7.9 per 100,000 residents.

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

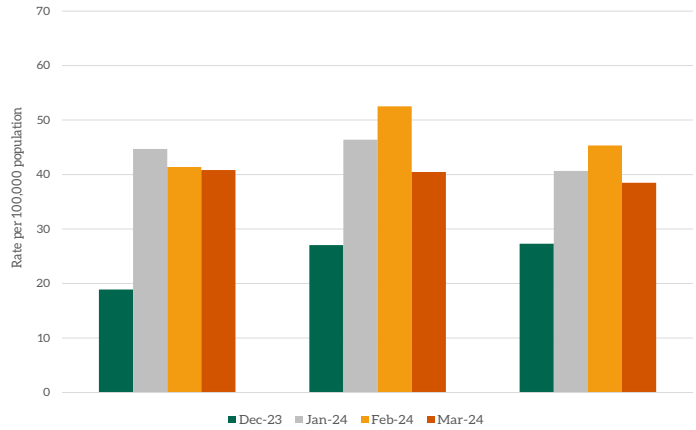


Table 1. Comparison of the Reported Cases of Notifiable Communicable Diseases by Location, March 2024

Location	Number of Reported Cases	Rate per 100,000	Rate Ratio†	Confidence Interval (99%)‡
HCPH	175	36.74	1.06	0.87 - 1.29
SW OHIO	639	36.42	1.05	0.94 - 1.17
OHIO	4,009	34.63	.	.-.

100,000 residents. This rate is higher than the SWOH rate of 1.0 per 100,000 residents.

Streptococcal, Group A (invasive) was the fourth most frequently reported disease in SWOH (Table 2). Streptococcal, Group A (invasive) cases accounted for 2.8% of the total communicable diseases reported during March. The number of Streptococcal, Group A (invasive) cases reported for SWOH in March (18) was higher than the number of cases reported in the previous month (15). The rate of Streptococcal, Group A (invasive) within Hamilton County for March was 1.4 per

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, 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 March 1-27 2024. Data was accessed from the Ohio Disease Reporting System on 3/28/2024

†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, March 2024

Reportable Condition	County										Total
	Hamilton	Adams	Brown	Butler	Clermont	Clinton	Highland	Warren			
Babesiosis	1	.	.	.	1	.	.	.	.	.	2
C. auris	5	.	.	.	.	.	.	.	.	.	5
C. auris - Colonization Screening	8	.	.	2	.	.	.	.	.	.	10
CPO	7	1	.	1	.	1	.	.	1	.	11
CPO - Colonization Screening	1	.	.	3	.	.	2	.	.	.	6
Campylobacteriosis	5	.	.	4	3	.	1	2	.	.	15
Coccidioidomycosis	1	.	.	.	.	.	.	.	.	.	1
Cryptosporidiosis	.	.	.	.	1	.	.	.	.	.	1
E.Coli (shiga toxin producing)	.	.	.	1	.	.	1	.	.	.	2
Ehrlichiosis/Anaplasmosis	1	.	.	.	1	.	.	.	.	.	2
Giardiasis	.	.	.	2	1	.	.	1	.	.	4
Haemophilus influenzae (invasive)	3	.	1	2	.	1	.	1	1	.	8
Hepatitis A	7	.	1	.	.	.	.	1	.	.	9
Hepatitis B (acute)	.	.	.	.	1	.	.	.	.	.	1
Hepatitis B (chronic)	20	2	.	9	1	3	.	6	.	.	41
Hepatitis C (chronic)	47	5	6	18	8	1	5	7	.	.	97
Hepatitis C - Perinatal Infection	1	.	.	1	.	1	1	.	.	.	4
Influenza-associated hospitalization	142	.	10	94	21	5	9	19	.	.	300
Lyme Disease	4	.	1	3	3	.	.	1	.	.	12
Malaria	1	.	.	.	.	.	.	.	.	.	1
Measles	3	.	.	2	.	1	3	1	.	.	10
Meningitis (aseptic/viral)	3	.	.	1	.	.	.	.	.	.	4
Meningitis (bacterial)	2	.	.	1	.	.	.	1	.	.	4
Meningococcal disease	1	.	.	.	.	.	.	.	.	.	1
Mpox	1	.	.	.	.	.	.	.	.	.	1
Mumps	1	.	.	2	1	.	.	.	.	.	4
Pertussis	.	.	1	4	1	.	.	1	.	.	7
Salmonellosis	8	.	1	2	3	.	.	1	.	.	15
Shigellosis	5	.	.	.	.	.	.	.	.	.	5
Spotted Fever Rickettsiosis (RMSF)	.	.	.	.	.	.	.	.	.	1	1

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

Reportable Condition	County										Total
	Hamilton	Adams	Brown	Butler	Clermont	Clinton	Highland	Warren	Warren	Warren	
Streptococcal pneumoniae (invasive)	3	.	.	6	3	1	.	.	3	16	
Streptococcal, Group A (invasive)	11	.	.	3	1	.	.	.	3	18	
Streptococcal, Group B (in newborn)	.	.	.	.	.	.	.	.	1	1
Tuberculosis	4	.	.	2	1	.	.	.	1	8	
Tularemia	.	.	.	.	.	.	.	.	1	1
Varicella	2	.	.	4	.	.	.	.	1	7
Vibriosis	2	.	.	.	.	.	.	.	.	2
Yersiniosis	2	.	.	.	.	.	.	.	.	2
Total	302	8	21	167	51	14	22	54	639		

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

Reportable Condition	County										Total
	Hamilton	Adams	Brown	Butler	Clermont	Clinton	Highland	Warren			
Amebiasis	1	.	.	.	.	.	1	.	.	.	2
Babesiosis	1	.	.	.	1	.	.	.	.	.	2
Brucellosis	1	.	.	.	.	.	.	.	.	.	1
C. auris	20	.	.	2	1	.	.	.	.	.	23
C. auris - Colonization Screening	21	.	1	6	.	.	.	1	.	.	29
CPO	23	3	2	9	2	3	3	8	.	.	53
CPO - Colonization Screening	1	.	.	4	.	.	3	.	.	.	8
Campylobacteriosis	13	.	.	5	5	.	2	4	.	.	29
Chikungunya virus	1	.	.	.	.	.	.	.	.	.	1
Coccidioidomycosis	3	.	1	2	.	.	.	1	.	.	7
Creutzfeldt-Jakob Disease	2	.	.	1	1	.	.	.	.	.	4
Cryptosporidiosis	2	.	.	1	1	.	.	.	.	.	4
Dengue	4	.	.	1	.	.	.	.	.	.	5
E.Coli (shiga toxin producing)	3	.	.	2	1	.	1	.	.	.	7
Ehrlichiosis/Anaplasmosis	2	.	.	.	1	.	.	1	.	.	4
Giardiasis	5	.	.	2	2	1	.	1	.	.	11
Haemophilus influenzae (invasive)	8	.	5	7	1	1	2	3	.	.	27
Hepatitis A	16	1	2	.	.	.	.	3	.	.	22
Hepatitis B (acute)	1	1	.	.	2	.	.	.	.	.	4
Hepatitis B (chronic)	72	5	1	29	3	5	5	16	.	.	136
Hepatitis C (chronic)	159	16	18	64	22	6	13	30	.	.	328
Hepatitis C - Perinatal Infection	3	.	.	1	.	1	1	.	.	.	6
Hepatitis E	.	.	1	.	.	.	.	.	.	.	1
Influenza-associated hospitalization	619	4	38	275	144	21	31	124	.	.	1256
Legionnaires' Disease	4	.	.	.	.	.	.	.	.	.	4
Lyme Disease	8	.	3	6	6	.	1	1	.	.	25
Malaria	6	.	.	2	.	.	.	.	.	.	8
Measles	3	.	.	6	3	1	3	7	.	.	23
Meningitis (aseptic/viral)	7	.	.	5	1	1	.	3	.	.	17
Meningitis (bacterial)	6	.	.	5	1	.	1	3	.	.	16

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

Reportable Condition	County										Total
	Hamilton	Adams	Brown	Butler	Clermont	Clinton	Highland	Warren			
Meningococcal disease	1	.	.	2	.	.	.	.	.	.	3
Mpox	3	.	.	.	.	.	.	.	.	.	3
Mumps	9	.	.	2	1	.	.	.	.	.	12
Pertussis	1	.	1	17	2	1	.	12	.	.	34
Salmonella Typhi	.	.	.	2	.	.	.	.	.	.	2
Salmonellosis	13	.	1	9	6	.	1	5	.	.	35
Shigellosis	14	.	.	5	.	.	.	1	.	.	20
Spotted Fever Rickettsiosis (including Rocky Mountain spotted fever (RMSF))	1	1	.	.	.	.	.	2	.	.	4
Streptococcal pneumoniae (invasive)	31	1	3	17	7	2	1	7	.	.	69
Streptococcal, Group A (invasive)	26	.	1	17	6	.	.	6	.	.	56
Streptococcal, Group B (in newborn)	1	.	.	.	1	.	.	1	.	.	3
Tetanus	.	.	.	1	.	.	.	.	.	.	1
Tuberculosis	7	.	.	6	1	.	.	2	.	.	16
Tularemia	.	.	.	.	.	.	.	1	.	.	1
Varicella	8	.	.	16	1	2	.	2	.	.	29
Vibriosis	3	.	.	.	.	.	.	.	.	.	3
West Nile virus infection (WNV)	1	.	.	.	.	.	.	.	.	.	1
Yersiniosis	5	.	.	.	1	.	.	1	.	.	7

SYNDROMIC SURVEILLANCE

Emergency Department Visits

Number of EpiCenter alerts received: 4

Types of EpiCenter alerts:

- Infectious Disease Symptoms (n=4)
- Syndromic Symptoms (n=0)

The alerts received for Hamilton County from March 1 - March 27 are summarized in Table 5 below. One of the anomalies received in EpiCenter was dispositioned as Indeterminate. At the time of this report three anomaly investigations are still active. There were no syndromic anomalies in Hamilton County for the month of March. Constitutional, Respiratory, and Rash syndrome charts are shown in Figures 6, 7, and 8 respectively.

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

Anomaly Classifier	Event Date	Alert Category	Analysis Method	Aggregated By	Actual Value	Predicted Value	Threshold Value	Final Disposition
Diarrhea - Watery/Bloody	3/12/2024	Infectious Disease	Recursive Least Squares	Facility Location	11	3.17	9.29	Active
Diarrhea - Watery/Bloody	3/12/2024	Infectious Disease	Exponential Moving Average	Facility Location	11	2.67	9.49	Active
Diarrhea - Watery/Bloody	3/12/2024	Infectious Disease	Recursive Least Squares	Home Location	10	2.61	8.84	Active
Edema	3/3/2024	Infectious Disease	Recursive Least Squares	Home Location	32	21.51	31.97	Indeterminate

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

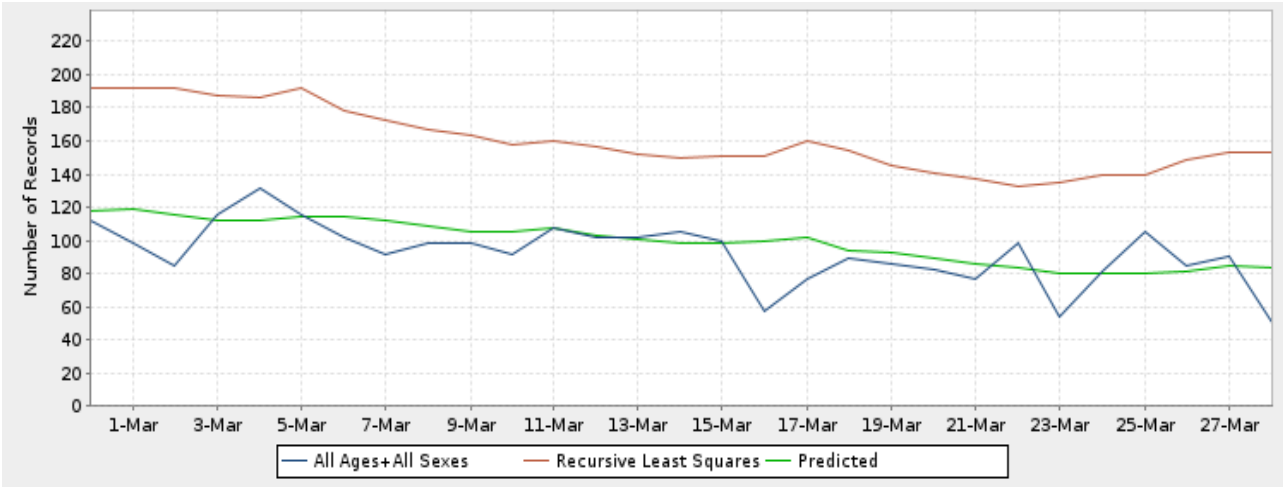


Figure 7. Respiratory-related ED Visits, Hamilton County, Ohio, March 2024

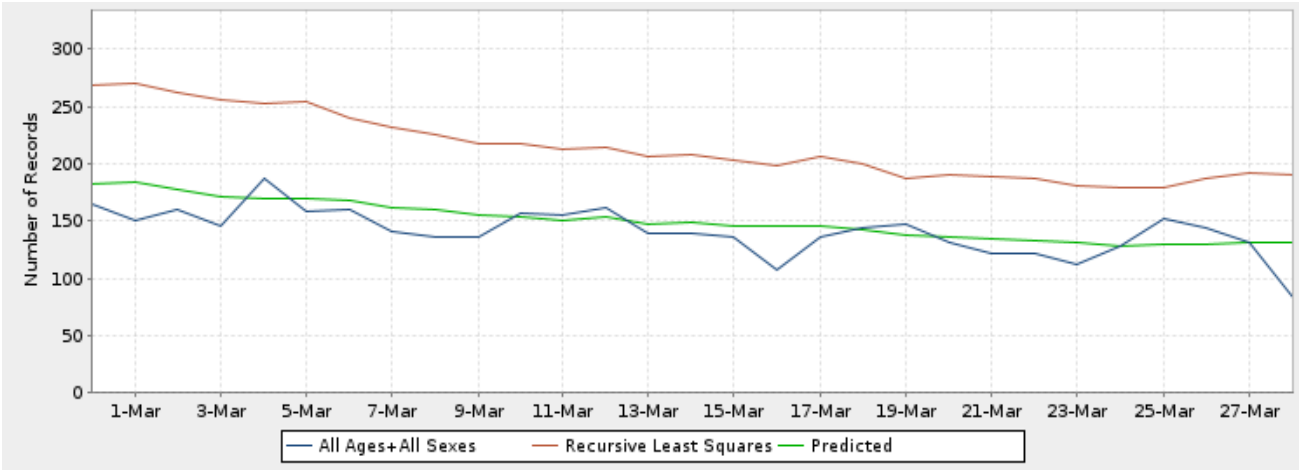


Figure 8. Rash-related ED Visits, Hamilton County, Ohio, March 2024

