



# Monthly Communicable Disease Surveillance Report

September 2023

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# NOTIFIABLE COMMUNICABLE DISEASES

## Hamilton County Public Health (HCPH) Jurisdiction

Number of Communicable Diseases Reported: 82

Most frequently reported communicable diseases:

- Chronic Hepatitis C (n=17)
- Chronic Hepatitis B (n=13)
- CPO (n=9)
- Salmonellosis (n=7)
- Streptococcal pneumonia (invasive) (n=6)

## Southwest Ohio (SWOH)

Number of Communicable Diseases Reported: 366

Most frequently reported communicable diseases:

- Chronic Hepatitis C (n=78)
- Chronic Hepatitis B (n=34)
- Campylobacteriosis (n=29)
- CPO (n=27)
- C. auris -Colonization Screening (n=21)

## Summary

In September, the overall rates of reported communicable diseases for HCPH, SWOH, and Ohio decreased by 20%, 26%, and 33% respectively. The Ohio rate (23.6) was the highest of the three rates, followed by the SWOH rate (23.2) and the HCPH rate (19.1) (Table 1). These rates are pro-rated to 30 days so they can be compared accurately.

Chronic Hepatitis C was the most commonly reported communicable disease across SWOH, with Chronic Hepatitis B and Campylobacteriosis 2<sup>nd</sup> and 3<sup>rd</sup> respectively (Table 2). Chronic Hepatitis (Hepatitis C and Hepatitis B combined) comprised 30.6% of the total communicable diseases reported during September. Southwest Ohio is currently on pace to have a 25.4% decrease in hepatitis cases over the previous year's average number of cases (167). The rate of chronic hepatitis within Hamilton County for September was 7.6 per 100,000 residents. This rate was higher than the SWOH rate of 6.4 per 100,000 residents.

Campylobacteriosis was the third most frequently reported disease in SWOH (Table 2). Campylobacteriosis cases accounted for 7.9% of the total communicable diseases reported during September. The number of cases of Campylobacteriosis reported for SWOH in September (29) was higher than the number of cases reported in the previous month (22). The rate of Campylobacteriosis within Hamilton County for September was 0.7 per 100,000 residents. This rate was 55% lower than the SWOH rate of 1.7 per 100,000 residents.

**Table 1. Comparison of the Reported Cases of Notifiable Communicable Diseases by Location, September 2023**

Location	Number of Reported Cases	Rate per 100,000	Rate Ratio†	Confidence Interval (99%)‡
HCPH	82	17.22	0.81	0.61 - 1.08
SW OHIO	366	20.86	0.98	0.85 - 1.14
OHIO	2,456	21.22	.	. - .

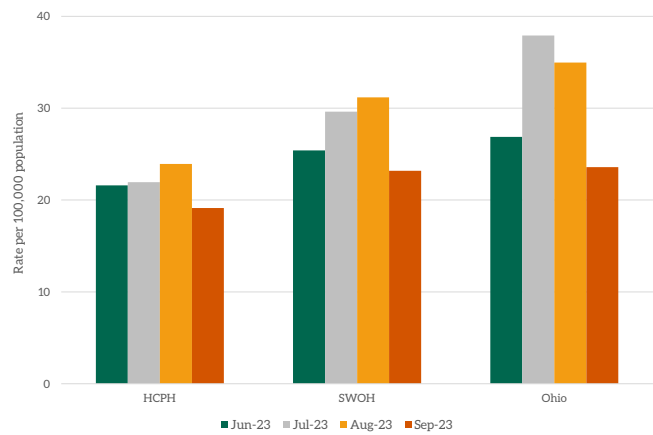
residents.

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, 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 1-27 2023. Data was accessed from the Ohio Disease Reporting System on 9/27/2023

†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, June 2023 - September 2023**



CPO was the fourth most frequently reported disease in SWOH (Table 2). CPO cases accounted for 7.4% of the total communicable diseases reported during September. The number of CPO cases reported for SWOH in September (27) was higher than the number of cases reported in the previous month (6). The rate of CPO within Hamilton County for September was 1.6 per 100,000 residents. This rate was the same as the SWOH rate of 1.6 per 100,000

Table 2. Cases of Notifiable Diseases in Southwest Ohio as Reported in ODRS by County, September 2023

Reportable Condition	County										Total	
	Hamilton	Adams	Brown	Butler	Clermont	Clinton	Highland	Warren				
Amebiasis	.	.	1	.	.	.	.	.	.	.	.	1
C. auris	7	.	.	.	.	.	.	.	1	.	.	8
C. auris - Colonization Screening	9	.	.	8	4	.	.	.	.	.	.	21
CPO	13	1	2	6	1	.	.	.	4	.	.	27
CPO - Colonization Screening	.	.	.	16	1	.	.	.	3	.	.	20
Campylobacteriosis	6	.	5	7	3	.	5	3	3	.	.	29
Coccidioidomycosis	2	.	.	.	1	.	.	.	.	.	.	3
Cryptosporidiosis	7	.	.	.	.	.	.	.	1	.	.	8
Cyclosporiasis	.	.	.	1	.	.	.	.	.	.	.	1
E.Coli (shiga toxin producing)	.	1	.	5	1	.	.	.	.	.	.	7
Giardiasis	2	.	1	2	.	.	1	3	.	.	.	9
Haemophilus influenzae (invasive)	1	.	.	1	1	.	.	.	.	.	.	3
Hemolytic uremic syndrome (HUS)	.	.	.	1	.	.	.	.	.	.	.	1
Hepatitis A	1	1	.	3	.	.	.	.	.	.	.	5
Hepatitis B (acute)	1	.	.	.	.	.	.	.	.	.	.	1
Hepatitis B (chronic)	19	.	2	5	2	.	1	5	.	.	.	34
Hepatitis C (acute)	.	.	.	1	.	.	.	.	.	.	.	1
Hepatitis C (chronic)	42	5	4	13	8	.	.	6	.	.	.	78
Hepatitis C - Perinatal Infection	.	.	.	.	.	.	.	1	.	.	.	1
Hepatitis E	.	.	1	.	.	1	.	.	.	.	.	2
Influenza-associated hospitalization	1	.	.	.	.	.	.	.	.	.	.	1
Legionellosis	1	.	.	1	.	.	.	.	.	.	.	2
Listeriosis	.	.	.	1	.	.	.	.	.	.	.	1
Lyme Disease	4	4	1	2	1	.	4	2	.	.	.	18
Meningitis (aseptic/viral)	5	.	.	2	1	.	.	.	.	.	.	8
Meningitis (bacterial)	2	.	.	1	2	.	.	1	.	.	.	6
Meningococcal disease	1	.	.	.	.	.	.	.	.	.	.	1
Mumps	.	.	.	.	.	.	.	1	.	.	.	1
Pertussis	2	.	.	.	.	.	.	.	.	.	.	2
Salmonellosis	9	.	.	4	4	.	.	.	.	.	1	18
Shigellosis	2	.	.	.	1	.	.	1	.	.	.	4



Table 3. YTD Cases of Notifiable Diseases in Southwest Ohio as Reported in ODRS by County, September 2023

Reportable Condition	County										Total
	Hamilton	Adams	Brown	Butler	Clermont	Clinton	Highland	Warren			
Amebiasis	3	.	1	1	1	.	.	.	.	.	6
Babesiosis	1	.	.	.	.	.	1	.	.	.	2
Botulism (Infant)	1	.	.	.	.	.	.	.	.	.	1
Brucellosis	1	.	.	.	.	.	.	1	.	.	2
C. auris	54	.	.	5	1	1	.	1	1	1	62
C. auris - Colonization Screening	82	.	2	19	6	.	.	3	.	.	112
C. auris - Investigation	3	.	.	.	.	.	.	.	.	.	3
CPO	76	9	3	35	11	7	11	14	.	.	166
CPO - Colonization Screening	.	.	.	45	1	1	23	11	.	.	81
Campylobacteriosis	72	9	11	32	28	3	15	21	.	.	191
Coccidioidomycosis	13	1	.	3	3	.	.	.	.	.	20
Creutzfeldt-Jakob Disease	.	.	.	.	1	.	.	.	.	.	1
Cryptosporidiosis	31	.	.	6	2	.	1	10	.	.	50
Cyclosporiasis	3	.	.	3	1	.	.	3	.	.	10
Dengue	1	.	.	.	1	.	.	.	.	.	2
E.Coli (shiga toxin producing)	23	3	3	10	7	1	.	5	.	.	52
Ehrlichiosis/Anaplasmosis	2	1	.	.	1	1	.	5	.	.	10
Giardiasis	25	.	1	12	4	.	2	9	.	.	53
Haemophilus influenzae (invasive)	61	.	6	15	7	.	3	3	.	.	95
Hemolytic uremic syndrome (HUS)	.	.	.	1	.	.	.	.	.	.	1
Hepatitis A	24	3	.	19	.	1	7	3	.	.	57
Hepatitis B (acute)	8	.	.	4	1	.	.	1	.	.	14
Hepatitis B (chronic)	181	12	14	98	20	8	10	31	.	.	374
Hepatitis C (acute)	.	.	.	2	1	.	.	.	.	.	3
Hepatitis C (chronic)	515	42	59	222	92	24	33	107	.	.	1094
Hepatitis C - Perinatal Infection	1	.	2	1	1	1	.	1	.	.	7
Hepatitis E	2	.	1	.	.	1	.	.	.	.	4
Influenza-associated hospitalization	61	3	12	33	26	2	12	12	.	.	161
Influenza-associated pediatric mortality	.	.	.	.	.	.	.	1	.	.	1
Legionellosis	16	.	.	10	3	1	3	7	.	.	40

Table 3. YTD Cases of Notifiable Diseases in Southwest Ohio as Reported in ODRS by County, September 2023, Continued

Reportable Condition	County										Total	
	Hamilton	Adams	Brown	Butler	Clermont	Clinton	Highland	Warren				
Listeriosis	1	1	1	1	1	1	1	1	1	1	1	2
Lyme Disease	65	26	15	19	39	2	18	15				199
MIS-C associated with COVID-19	1	1	1	1	1	1	1	1	1	1	1	2
Malaria	6	1	1	3	1	1	1	1	1	1	1	9
Measles	1	1	1	1	1	1	1	1	1	1	1	1
Meningitis (aseptic/viral)	30	1	1	8	10	1	3	2	2	2	2	54
Meningitis (bacterial, not N. meningitidis)	12	1	1	8	5	2	2	4	4	4	4	34
Meningococcal disease	2	1	1	1	1	1	1	1	1	1	1	3
Mpox	2	1	1	1	1	1	1	1	1	1	1	2
Mumps	3	1	1	1	3	1	1	1	1	1	1	8
Pertussis	3	1	1	4	4	1	4	1	1	1	1	18
Q fever (acute)	1	1	1	1	1	1	1	1	1	1	1	3
Salmonella Paratyphi Infection	1	1	1	1	1	1	1	1	1	1	1	1
Salmonella Typhi	63	4	4	43	26	4	5	22	22	22	22	171
Salmonellosis	26	1	1	7	6	1	1	2	2	2	2	42
Spotted Fever Rickettsiosis (including Rocky Mountain spotted fever (RMSF))	4	5	2	1	2	1	4	4	4	4	4	22
Staphylococcal aureus (intermediate resistance to vancomycin (VISA))	1	1	1	1	1	1	1	1	1	1	1	1
Streptococcal pneumoniae (invasive)	94	1	11	26	21	8	3	15	15	15	15	178
Streptococcal toxic shock syndrome (STSS)	2	1	1	1	1	1	1	1	1	1	1	3
Streptococcal, Group A (invasive)	79	1	6	36	23	1	8	24	24	24	24	177
Streptococcal, Group B (in newborn)	6	1	1	1	1	1	1	1	1	1	1	6
Tuberculosis	12	1	1	4	1	1	1	2	2	2	2	19
Tularemia	2	1	1	1	1	1	1	1	1	1	1	3
Varicella	18	1	1	12	2	1	4	7	7	7	7	44
Vibriosis	4	1	1	3	1	1	1	2	2	2	2	9
West Nile virus infection (WNV)	1	1	1	1	1	1	1	1	1	1	1	2
Yersiniosis	16	1	1	4	4	1	1	2	2	2	2	27
<b>Total</b>	<b>1713</b>	<b>124</b>	<b>154</b>	<b>760</b>	<b>365</b>	<b>71</b>	<b>173</b>	<b>359</b>	<b>173</b>	<b>359</b>	<b>359</b>	<b>3719</b>

# 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 27 are summarized in Table 5 below. Two of the anomalies received in EpiCenter were dispositioned as Not a health event, three anomalies were dispositioned as Seasonal Illness, two ILI, and one GI. Two EpiCenter anomalies were dispositioned as indeterminate and one alert is still under investigation. 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, September 2023

Anomaly Classifier	Event Date	Alert Category	Analysis Method	Aggregated By	Actual Value	Predicted Value	Threshold Value	Final Disposition
Lymphadenitis	9/24/2023	Infectious Disease	Recursive Least Squares	Home Location	10	3.1	9.9	Active
Hemorrhaging	9/9/2023	Infectious Disease	Recursive Least Squares	Home Location	32	19.8	31.8	Indeterminate
Lymphadenitis	9/8/2023	Infectious Disease	Exponential Moving Average	Home Location	11	2.6	10.2	Not a health event
Lymphadenitis	9/8/2023	Infectious Disease	Recursive Least Squares	Home Location	10	2.6	8.1	Not a health event
Ear, Nose, Throat	9/6/2023	Infectious Disease	Cusum EMA	Home Location	75	49.7	74.3	Seasonal Illness - ILI/Respiratory
Vomiting	9/6/2023	Infectious Disease	Recursive Least Squares	Facility Location	92	58.1	84.1	Seasonal Illness - GI
Exacerbation	9/4/2023	Infectious Disease	Exponential Moving Average	Facility Location	21	10.7	20.2	Indeterminate
Ear, Nose, Throat	9/1/2023	Infectious Disease	Cusum EMA	Home Location	58	44.2	52.1	Seasonal Illness - ILI/Respiratory

Figure 6. Respiratory-related ED Visits, Hamilton County, Ohio, September 2023

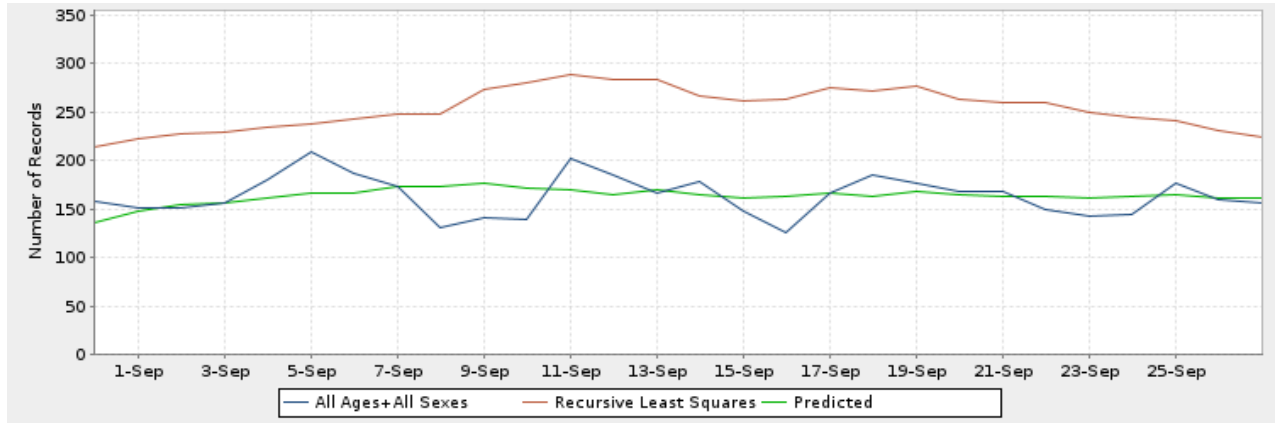


Figure 7. Gastrointestinal-related ED Visits, Hamilton County, Ohio, September 2023

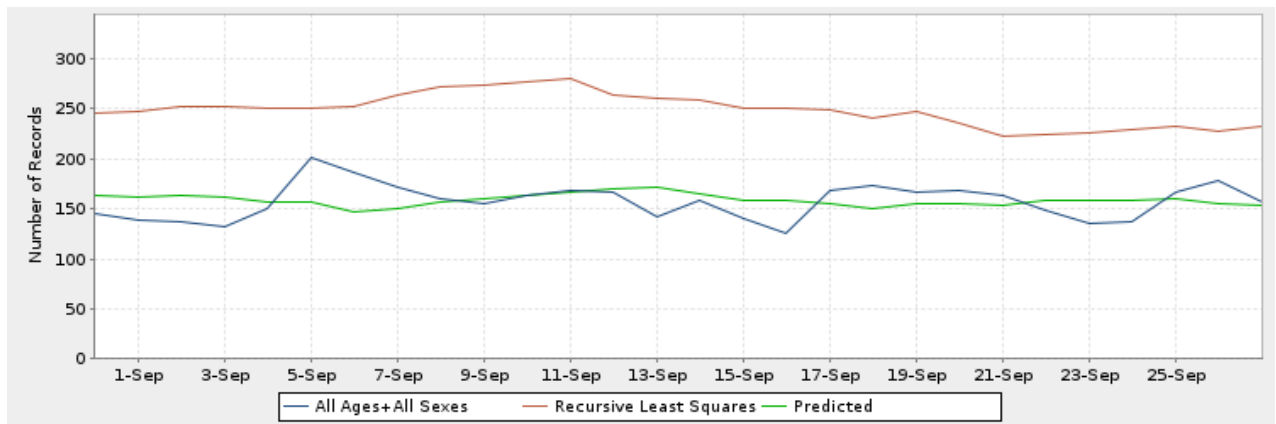


Figure 8. Constitutional-related ED Visits, Hamilton County, Ohio, September 2023

