



Monthly Communicable Disease Surveillance Report

October 2023

CJ Crawford, MPH, Epidemiologist



NOTIFIABLE COMMUNICABLE DISEASES

Hamilton County Public Health (HCPH) Jurisdiction

Number of Communicable Diseases Reported: 68

Most frequently reported communicable diseases:

- Chronic Hepatitis C (n=15)
- C. auris - Colonization Screening (n=6)
- CPO (n=5)
- Chronic Hepatitis B (n=4)
- Legionellosis (n=4)

Southwest Ohio (SWOH)

Number of Communicable Diseases Reported: 371

Most frequently reported communicable diseases:

- Chronic Hepatitis C (n=100)
- Chronic Hepatitis B (n=40)
- Campylobacteriosis (n=28)
- CPO (n=19)
- Lyme Disease (n=17)

Summary

In October, the overall rates of reported communicable diseases for HCPH, SWOH, and Ohio decreased by 28%, 12%, and 9% respectively. The Ohio rate (22.2) was the highest of the three rates, followed by the SWOH rate (21.1) and the HCPH rate (14.2) (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 2nd and 3rd respectively (Table 2). Chronic Hepatitis (Hepatitis C and Hepatitis B combined) comprised 37.7% of the total communicable diseases reported during October. Southwest Ohio is currently on pace to have a 15.9% decrease in hepatitis cases over the previous year's average number of cases (161). The rate of chronic hepatitis within Hamilton County for October was 7.9 per 100,000 residents. This rate was lower than the SWOH rate of 8.0 per 100,000 residents.

Campylobacteriosis was the third most frequently reported disease in SWOH (Table 2). Campylobacteriosis cases accounted for 7.5% of the total communicable diseases reported during October. The number of cases of Campylobacteriosis reported for SWOH in October (28) was lower than the number of cases reported in the previous month (29). The rate of Campylobacteriosis within Hamilton County for October was 0.5 per 100,000 residents. This rate was 69% lower than the SWOH rate of 1.6 per 100,000 residents.

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

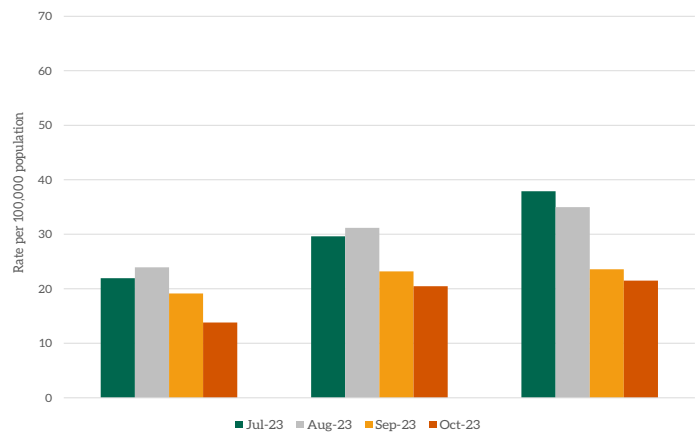
Location	Number of Reported Cases	Rate per 100,000	Rate Ratio†	Confidence Interval (99%)‡
HCPH	68	14.28	0.64	0.47 - 0.88
SW OHIO	371	21.14	0.95	0.82 - 1.10
OHIO	2,572	22.22	.	. - .

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 October 1-31 2023. Data was accessed from the Ohio Disease Reporting System on 11/02/2023

†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, July 2023 - October 2023



CPO was the fourth most frequently reported disease in SWOH (Table 2). CPO cases accounted for 5.1% of the total communicable diseases reported during October. The number of CPO cases reported for SWOH in October (19) was higher than the number of cases reported in the previous month (27). The rate of CPO within Hamilton County for October was 1.1 per 100,000 residents. This rate was the same as the SWOH rate of 1.1 per 100,000 residents.

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

Reportable Condition	County										Total	
	Hamilton	Adams	Brown	Butler	Clermont	Clinton	Highland	Warren				
Brucellosis	.	.	.	2	.	.	.	.	.	.	.	2
C. auris	7	.	.	2	.	.	.	.	.	.	.	9
C. auris - Colonization Screening	12	.	.	3	.	.	.	.	.	.	.	15
CPO	9	1	1	3	2	1	.	2	.	.	.	19
CPO - Colonization Screening	.	.	.	8	.	.	.	.	.	.	.	8
Campylobacteriosis	4	.	1	7	5	1	1	9	.	.	.	28
Coccidioidomycosis	1	.	.	.	.	.	.	.	.	.	.	1
Cryptosporidiosis	6	.	.	.	.	.	.	2	.	.	.	8
E.Coli (shiga toxin producing)	2	.	1	4	.	.	.	3	.	.	.	10
Ehrlichiosis/Anaplasmosis	3	.	.	.	.	.	.	.	.	.	.	3
Giardiasis	5	1	.	.	.	.	.	.	.	.	.	6
Haemophilus influenzae (invasive)	3	.	1	.	.	.	.	.	.	.	.	4
Hepatitis A	3	1	.	2	.	.	.	.	.	.	.	6
Hepatitis B (chronic)	17	.	.	12	1	2	1	7	.	.	.	40
Hepatitis C (acute)	.	.	.	.	1	.	.	.	.	.	.	1
Hepatitis C (chronic)	46	1	6	20	10	2	4	11	.	.	.	100
Influenza-associated hospitalization	3	.	.	4	.	.	.	1	.	.	.	8
Legionellosis	6	.	.	1	.	1	1	.	.	.	.	9
Lyme Disease	6	4	.	.	5	.	1	1	1	1	.	17
Malaria	.	.	.	.	.	.	.	1	.	.	.	1
Meningitis (aseptic/viral)	1	1	1	1	4	1	.	1	1	1	.	10
Meningitis (bacterial)	1	.	.	.	.	.	.	.	.	.	.	1
Meningococcal disease	1	.	.	.	.	.	.	.	.	.	.	1
Pertussis	1	.	.	2	.	.	.	1	.	.	.	4
Q fever (acute)	.	.	.	1	.	.	.	.	.	.	.	1
Rubella	1	.	.	.	.	.	.	.	.	.	.	1
Salmonellosis	2	.	.	6	.	1	1	.	.	.	.	10
Shigellosis	2	.	.	.	.	.	.	1	.	.	1	3
Spotted Fever Rickettsiosis (RMSF)	1	1	.	.	.	.	.	.	.	.	.	2
Staphylococcal aureus (VRSA)	.	.	1	.	.	.	.	.	.	.	.	1

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

Reportable Condition	County										Total
	Hamilton	Adams	Brown	Butler	Clermont	Clinton	Highland	Warren			
Streptococcal pneumoniae (invasive)	6	.	1	6	.	.	.	1			14
Streptococcal, Group A (invasive)	6	.	.	1	1	1	.	.			9
Streptococcal, Group B (in newborn)	1	.	.	1	.	.	.	.			2
Tuberculosis	3	.	.	.	.	.	.	.			3
Varicella	5	.	1	4	1	1	1	1			14
Total	164	10	14	90	30	11	10	42			371

Table 3. YTD Cases of Notifiable Diseases in Southwest Ohio as Reported in ODRS by County, October 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	.	.	2	.	.	.	1	.	.	4
C. auris	60	.	.	8	1	.	.	2	.	.	71
C. auris - Colonization Screening	97	.	2	21	6	.	.	3	.	.	129
CPO	86	10	4	38	13	8	11	18	.	.	188
CPO - Colonization Screening	.	.	.	53	1	1	23	11	.	.	89
Campylobacteriosis	76	9	12	40	33	4	16	32	.	.	222
Coccidioidomycosis	14	1	.	3	3	.	.	.	.	.	21
Creutzfeldt-Jakob Disease	.	.	.	.	1	.	.	.	.	.	1
Cryptosporidiosis	37	.	.	6	2	.	1	12	.	.	58
Cyclosporiasis	3	.	.	3	1	.	.	3	.	.	10
Dengue	1	.	.	.	1	.	.	.	.	.	2
E.Coli (shiga toxin producing)	25	3	4	15	7	1	.	8	.	.	63
Ehrlichiosis/Anaplasmosis	5	1	.	.	1	1	.	5	.	.	13
Giardiasis	31	1	1	12	4	.	2	9	.	.	60
Haemophilus influenzae (invasive)	64	.	7	15	7	.	3	3	.	.	99
Hemolytic uremic syndrome (HUS)	.	.	.	1	.	.	.	.	.	.	1
Hepatitis A	27	4	.	21	1	1	7	3	.	.	64
Hepatitis B (acute)	8	.	.	4	1	.	.	1	.	.	14
Hepatitis B (chronic)	199	12	15	110	21	10	10	38	.	.	415
Hepatitis C (acute)	.	.	.	2	2	.	.	.	.	.	4
Hepatitis C (chronic)	565	44	65	239	102	28	36	117	.	.	1196
Hepatitis C - Perinatal Infection	2	.	2	1	1	1	.	1	.	.	8
Hepatitis E	2	.	1	.	.	1	.	.	.	.	4
Influenza-associated hospitalization	65	3	12	37	26	2	13	13	.	.	171
Influenza-associated pediatric mortality	.	.	.	.	.	.	.	1	.	.	1
Legionellosis	22	.	.	12	3	2	4	7	.	.	50
Listeriosis	.	1	.	1	.	.	.	.	.	.	2

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

Reportable Condition	County										Total
	Hamilton	Adams	Brown	Butler	Clermont	Clinton	Highland	Warren			
Lyme Disease	71	30	15	19	43	2	19	16			215
MIS-C associated with COVID-19	1	.	.	1	.	.	.	.			2
Malaria	7	.	.	3	.	.	.	1			11
Measles - indigenous/imported Status Not Determined (call health department immedia	.	.	.	.	.	.	.	1			1
Meningitis (aseptic/viral)	32	1	1	9	14	2	3	3			65
Meningitis (bacterial, not N. meningitidis)	13	1	.	8	5	2	2	4			35
Meningococcal disease	3	.	.	.	.	.	.	1			4
Mpox	2	.	.	.	.	.	.	.			2
Mumps	3	.	.	1	3	.	.	1			8
Pertussis	4	1	1	6	4	.	4	2			22
Q fever (acute)	1	1	.	2	.	.	.	.			4
Rubella (not congenital)	1	.	.	.	.	.	.	.			1
Salmonella Paratyphi Infection	.	.	.	1	.	.	.	1			2
Salmonella Typhi	2	.	.	1	.	.	.	2			5
Salmonellosis	66	4	4	49	27	5	6	22			183
Shigellosis	28	.	.	7	6	1	1	3			46
Spotted Fever Rickettsiosis (including Rocky Mountain spotted fever (RMSF))	5	6	2	1	2	.	4	4			24
Staphylococcal aureus (intermediate resistance to vancomycin (VISA))	.	.	.	.	1	.	.	.			1
Staphylococcal aureus - resistant to vancomycin (VRSA)	.	.	1	.	.	.	.	.			1
Streptococcal pneumoniae (invasive)	101	.	12	32	21	8	3	16			193
Streptococcal toxic shock syndrome (STSS)	2	.	.	.	.	.	.	1			3
Streptococcal, Group A (invasive)	84	1	6	37	25	1	8	24			186
Streptococcal, Group B (in newborn)	7	.	.	1	.	.	.	.			8
Tuberculosis	15	.	.	4	.	.	1	2			22
Tularemia	2	.	.	.	.	.	.	1			3
Varicella	23	.	1	15	3	2	5	6			55
Vibriosis	4	.	.	3	.	.	.	2			9
West Nile virus infection (WNV)	2	.	.	1	.	.	.	.			3
Yersiniosis	16	1	.	4	4	.	.	2			24
Total	1890	135	169	850	397	83	183	403			4083

SYNDROMIC SURVEILLANCE

Emergency Department Visits

Number of EpiCenter alerts received: 7

Types of EpiCenter alerts:

- Infectious Disease Symptoms (n=6)
- Syndromic Symptoms (n=1)

The alerts received for Hamilton County from October 1 - October 31 are summarized in Table 5 below. Two of the anomalies received in EpiCenter were dispositioned as Not a health event, two anomalies were dispositioned as Indeterminate, one as ILI, and two 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, October 2023

Anomaly Classifier	Event Date	Alert Category	Analysis Method	Aggregated By	Actual Value	Predicted Value	Threshold Value	Final Disposition
Ear, Nose, Throat	10/24/2023	Infectious Disease	Recursive Least Squares	Home Location	70	42.2	64.6	Active
Fever	10/22/2023	Infectious Disease	Cusum EMA	Facility Location	73	55.0	68.1	Active
Lymphadenitis	10/17/2023	Infectious Disease	Recursive Least Squares	Home Location	10	2.7	8.9	Not a health event
Lymphadenitis	10/17/2023	Infectious Disease	Exponential Moving Average	Home Location	10	2.6	9.3	Not a health event
Exacerbation	10/7/2023	Infectious Disease	Exponential Moving Average	Facility Location	21	8.9	20.3	Indeterminate
Constitutional	10/3/2023	Syndromic	Recursive Least Squares	Facility Location	165	104.8	150.7	Seasonal Illness - ILI/Respiratory
Rash	10/3/2023	Infectious Disease	Recursive Least Squares	Facility Location	62	31.8	55.3	Indeterminate

Figure 6. Constitutional-related ED Visits, Hamilton County, Ohio, October 2023

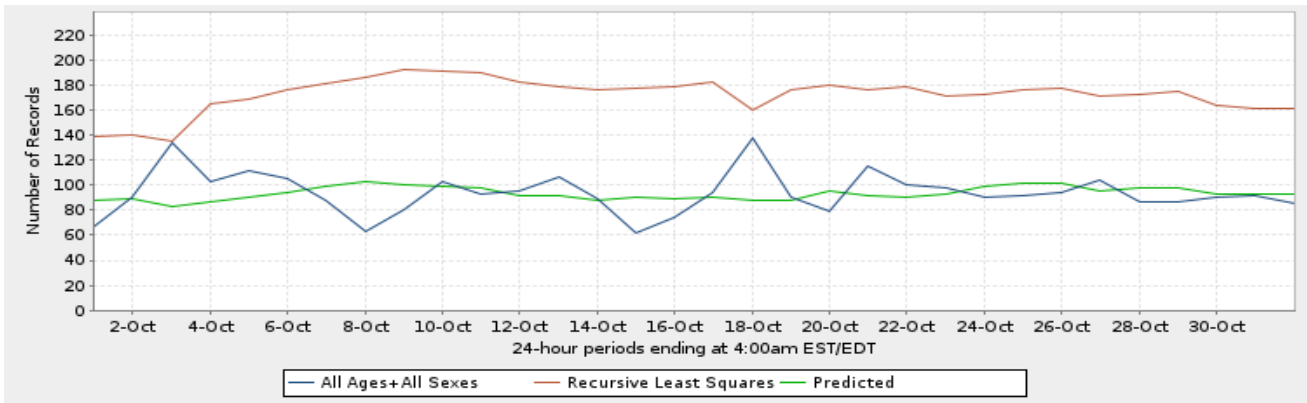


Figure 7. Respiratory-related ED Visits, Hamilton County, Ohio, October 2023

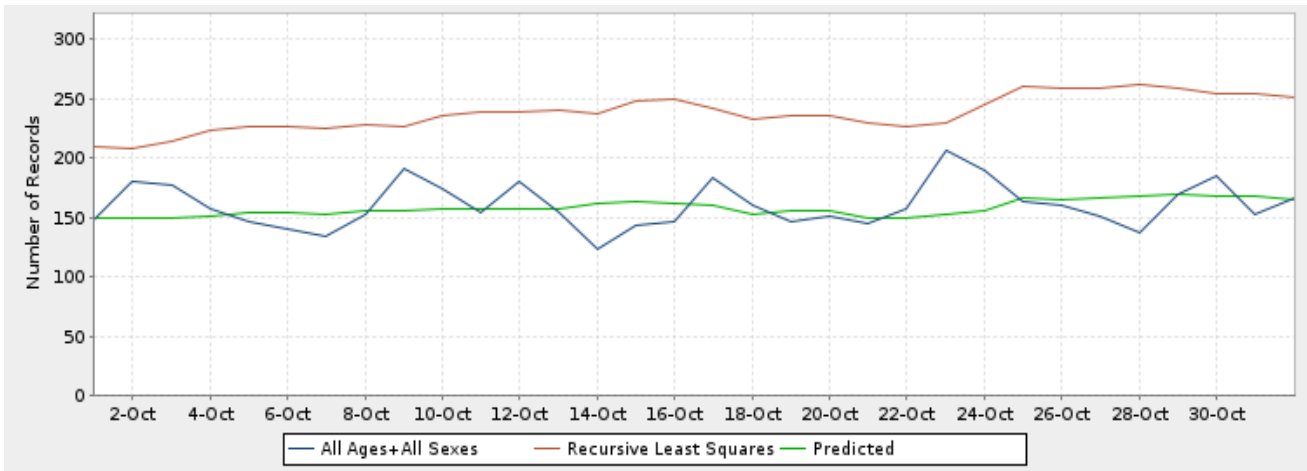


Figure 8. Gastrointestinal-related ED Visits, Hamilton County, Ohio, October 2023

