

Monthly Communicable Disease Surveillance Report

December 2022

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NOTIFIABLE COMMUNICABLE DISEASES

Hamilton County Public Health (HCPH) Jurisdiction

Number of Communicable Diseases Reported: 223 Most frequently reported communicable diseases:

- Influenza-associated hospitalization (n=149)
- Chronic hepatitis C (n=19)
- Chronic hepatitis B (n=9)

- Syphilis (n=8)
- Streptococcal pneumoniae (n=6)
- Streptococcal, Group A (invasive) (n=6)

Southwest Ohio (SWOH)

Number of Communicable Diseases Reported: 869 Most frequently reported communicable diseases:

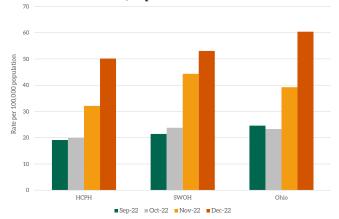
- Influenza-associated hospitalization (n=532)
- Chronic hepatitis C (n=121)
- Streptococcal pneumoniae (n=38)
- Chronic hepatitis B (n=32)
- Streptococcal, Group A (invasive) (n=22)

Summary

The overall rates of reported communicable diseases for HCPH, SWOH, and Ohio in December increased by 56%, 20% and 54% respectively (Figure 1). These rates are pro-rated to 30 days so they can be compared accurately. The Ohio rate (60.4) was the highest of the three rates, and the HCPH rate (50.2) was the lowest. The SWOH rate (53.1) was higher than the HCPH rate and lower than the SWOH rate. (Table 1).

Influenza-associated hospitalization was the most commonly reported communicable disease across SWOH, with Chronic hepatitis C and Streptococcal pneumoniae $2^{\rm nd}$ and $3^{\rm rd}$ respectively (Table 2). Influenza-associated hospitalization cases accounted for 61.2% of the total communicable diseases reported during December. The number of cases of Influenza-associated hospitalization reported for SWOH in December (532) was higher than the number of cases in the previous month (430). The rate of Influenza-associated hospitalization within Hamilton County for December was 30.3 per 100,000 residents. This rate was 1% lower than the SWOH rate of 30.6 per 100,000 residents.

Figure 1. 30-Day Rates of Reported Communicable Diseases in Ohio, Southwest Ohio, and Hamilton County Public Health Jurisdiction, September 2022 - December 2022



Chronic hepatitis C was the second most frequently reported communicable disease across SWOH. Chronic hepatitis (Hepatitis C and Hepatitis B combined) comprised 17.6% of the total communicable diseases reported during December. Southwest Ohio

Table 1. Comparison of the Reported Cases of Notifiable Communicable Diseases by Location, December 2022

Location	Number of Reported Cases	Rate per 100,000	Rate Ratio [†]	Confidence Interval (99%)‡
HCPH	223	46.82	0.83	0.70 - 0.99
SWOH	869	49.52	0.88	0.80 - 0.96
Ohio	6,524	56.36		

is currently on pace to have 13.4% fewer hepatitis cases than the previous year's average number of cases (191). The rate of chronic hepatitis within Hamilton County for December was 7.6 per 100,000 residents. This rate was 14% lower than the SWOH rate of 8.8 per 100,000 residents.

Streptococcal pneumoniae was the third most frequently reported disease in SWOH (Table 2). Streptococcal pneumoniae cases accounted for 4.4% of the total communicable diseases reported during December. The number of cases of Streptococcal

pneumoniae reported for SWOH in December (38) was higher than the number of cases in the previous month (29). The rate of Streptococcal pneumoniae within Hamilton County for December was 1.7 per 100,000 residents. This rate was 20% lower than the SWOH rate of 2.2 per 100,000 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 and gonorrhea 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 December 1-28, 2022. Data was accessed from the Ohio Disease Reporting System on 12/29/2022.

†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, December 2022

				Co	County				- - - -
neportable Condition	Hamilton	Adams	Brown	Butler	Clermont	Clinton	Highland	Warren	IOIAI
Amebiasis	1	•	•				٠		1
C. auris	1			1	1				က
C. auris - Investigation	10	•		2					12
CP-CRE	2	٠		1	1				4
Campylobacteriosis	5			1	1			2	6
Coccidioidomycosis	က	•							က
Cryptosporidiosis				2					2
E.Coli (shiga toxin producing)	က			1					4
Giardiasis	4	•		2			7	2	6
Haemophilus influenzae (invasive)	2	•	1	က	က				6
Hepatitis A	4	1	1	•					9
Hepatitis B (chronic)	17	7	1	5	2	က		က	32
Hepatitis C (acute)				2					2
Hepatitis C (chronic)	44	1	1	37	15	2	က	18	121
Influenza-associated hospitalization	243	4	13	125	56	7	34	50	532
Legionellosis	П		•		•		٠	1	7
Leprosy		٠		1			٠		1
Listeriosis		٠		1		٠	٠		1
Lyme Disease	1	1	1	1	2		7	2	6
Measles		٠		1		1	·		7
Meningitis (aseptic/viral)	က	٠		လ					9
Meningitis (bacterial)	ဇ	•		1	1				2
Monkeypox	2	٠					·		7
Mumps	1	٠							1
Salmonellosis	5	•	•	•	•		1	1	7
Shigellosis	П	•	•	•			٠		Н
Streptococcal pneumoniae (invasive)	14	•	П	6	2	\leftarrow	2	9	38
Streptococcal, Group A (invasive)	6	•	•	10	1			2	22
Syphilis	11		1	1	1		٠		14
Tuberculosis	2		•					1	က
Varicella	2	•	•	Н	•	•	٠	1	4
Yersiniosis	Т			₽					7
Total	395	8	20	212	88	14	42	68	698

Table 3. YTD Cases of Notifiable Diseases in Southwest Ohio as Reported in ODRS by County, January - December 2022

Ambientain Hamilton Adams Bnown Butler Clemont Climton Highland Waren Ambiensis 3 0 0 1 0					Co	County				Ē
sistentification and the control of	reportable Condition	Hamilton	Adams	Brown	Butler	Clermont	Clinton	Highland	Warren	Iorai
isis thick that the control of the c	Amebiasis	3	0	0	1	0	0	0	2	9
Officiarity 2 0 0 0 1 0 <th< td=""><td>Babesiosis</td><td>1</td><td>0</td><td>0</td><td>0</td><td>0</td><td>0</td><td>0</td><td>0</td><td>1</td></th<>	Babesiosis	1	0	0	0	0	0	0	0	1
1-westligation 0 0 1 0	Botulism (Infant)	2	0	0	0	1	0	0	0	က
Privestigation 77 0 1 2 3 0 1 0 0 0 0 0 0 0 0	Botulism - wound	0	0	0	1	0	0	0	0	1
Investigation	C. auris	54	0	1	2	က	0	1	0	61
Description	C. auris - Investigation	62	0	0	œ	8	0	0	0	113
-Investigation	CP-CRE	27	2	4	16	6	4	5	9	73
bacteriosis 100 4 1 14 47 29 6 5 5 36 gunya virus 0 0 0 0 0 1 1 0 0 0 0 0 0 0 0 0 0 0 0	CP-CRE - Investigation	0	0	0	0	0	2	0	0	7
gunya virus 0 0 1 0 <th< td=""><td>Campylobacteriosis</td><td>100</td><td>4</td><td>14</td><td>47</td><td>29</td><td>9</td><td>5</td><td>36</td><td>241</td></th<>	Campylobacteriosis	100	4	14	47	29	9	5	36	241
indomycosis 10 0 0 2 2 2 0 0 0 0 2 2 Advalancesis 10 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	Chikungunya virus	0	0	0	1	0	0	0	0	1
ldt-Jakob Disease	Coccidioidomycosis	10	0	2	2	2	0	0	2	18
portidiosis 10 2 0 7 2 1 6 4 portidiosis 0 0 1 2 0 0 0 prisasis 0 0 1 2 0 0 0 uiga toxin producing) 31 1 1 1 7 0 0 0 0 osis/Anaplasmosis 1 1 1 1 7 0 0 0 0 sis 38 0 2 10 5 0 0 2 11 sis 4 2 1 6 0 1 1 1 1 1 1 1 1 1 1 1 1 2 4 4 2 4	Creutzfeldt-Jakob Disease	4	0	0	1	0	0	0	0	2
oriasis 0 0 0 0 1 2 0 0 0 0 0 0 0 0 0 0 0 0 0 0	Cryptosporidiosis	10	2	0	7	2	1	0	4	79
uga toxin producing) 1 0 0 2 0	Cyclosporiasis	0	0	0	1	2	0	0	0	က
uiga toxin producting) 31 1 1 17 7 0 2 11 osis/Anaplasmosis 1 1 1 0 1 0 0 0 2 sisting Anaplasmosis 38 0 2 10 5 0 3 14 shill be influenzae (invasive) 22 0 1 12 8 0 0 0 0 0 0 0 0 1 14 12 8 0	Dengue	1	0	0	2	0	0	0	0	က
osis/Anaplasmosis 1 1 0 1 0 0 0 2 sis object 22 10 5 0 3 14 shillus influenzae (invasive) 22 0 1 12 8 0 0 2 tic uremic syndrome (HUS) 0 0 0 0 0 0 0 1 s A s A 4 4 5 2 4 6 1 s B (acute) 12 1 1 3 8 1 2 15 s B (acute) 202 23 17 146 27 17 28 76 s C (acute) 10 0 0 0 0 0 0 0 0 0 0 0 0 1 1 20 0 0 0 0 0 0 0 0 0 0 0 0 0 0	E.Coli (shiga toxin producing)	31	1	1	17	7	0	2	11	20
is hillus influenzae (invasive) 22 0 1 1 12 8 0 3 14 incurrent syndrome (HUS) 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	Ehrlichiosis/Anaplasmosis	1	1	0	1	0	0	0	2	2
whilus influenzae (invasive) 22 0 1 12 8 0 0 2 st curemic syndrome (HUS) 0 0 0 0 0 0 0 1 s A 26 4 4 5 2 4 6 15 s B (acute) 12 1 1 3 8 1 2 15 s B (acute) 12 1 1 3 8 1 2 15 s B (chronic) 202 23 17 146 27 17 28 76 s C (acute) 10 0	Giardiasis	38	0	2	10	2	0	က	14	72
tic uremic syndrome (HUS) 0 0 0 0 0 0 0 0 1 s A	Haemophilus influenzae (invasive)	22	0	1	12	8	0	0	2	45
s A 26 4 4 5 2 4 6 15 s B (acute) 12 1 1 3 3 8 1 2 s B (acute) 12 1 1 1 1 2 1 2 1 2 s C (acute) 10 0 0 2 0 0 0 1 2 1 2 1 2 1 2 1 2 0	Hemolytic uremic syndrome (HUS)	0	0	0	0	0	0	0	1	1
s B (acute) 12 1 1 3 3 8 1 2 s B (chronic) s B (chronic) 202 23 17 146 27 17 28 76 s C (acute) 10 0 0 2 0 0 0 1 210 1 210 1 210 1 210 0<	Hepatitis A	26	4	4	57	2	4	9	15	99
s B (chronic) 202 23 17 146 27 17 28 76 s C (acute) 10 0 0 2 0 0 1 1 s C (chronic) 738 41 75 393 157 37 51 210 s C - Perinatal Infection 1 2 0 0 3 0 <td>Hepatitis B (acute)</td> <td>12</td> <td>1</td> <td>1</td> <td>က</td> <td>က</td> <td>∞</td> <td>1</td> <td>2</td> <td>31</td>	Hepatitis B (acute)	12	1	1	က	က	∞	1	2	31
sC (acute) 10 0 2 0 0 1 s C (chronic) 738 41 75 393 157 37 51 210 s C - Perinatal Infection 1 2 0 0 3 0 0 0 0 s E 1 0 0 1 0 0 0 0 0 0 0 sa-associated hospitalization 579 8 41 290 158 18 63 135 135 llosis 0 0 0 0 0 0 0 9 9	Hepatitis B (chronic)	202	23	17	146	27	17	28	2/9	236
sC (chronic) 738 41 75 393 157 37 51 210 s C - Perinatal Infection 1 2 0 0 3 0	Hepatitis C (acute)	10	0	0	2	0	0	0	1	13
s C - Perinatal Infection 1 2 0 0 3 0 0 0 s E 1 0 0 1 0 0 0 0 0 a-associated hospitalization 579 8 41 290 158 18 63 135 llosis 19 0 2 16 4 1 0 9 noisis 0 0 0 0 0 0 0 0	Hepatitis C (chronic)	738	41	75	393	157	37	51	210	1702
sE 1 0 0 1 0	Hepatitis C - Perinatal Infection	1	2	0	0	က	0	0	0	9
a-associated hospitalization 579 8 41 290 158 18 63 135 Ilosis 19 0 2 16 4 1 0 9 0 0 0 0 0 0 0 0 0	Hepatitis E	Н	0	0	1	0	0	0	0	7
Hosis 19 0 2 16 4 1 0 0 0 0 0 1 0 </td <td>Influenza-associated hospitalization</td> <td>579</td> <td>8</td> <td>41</td> <td>290</td> <td>158</td> <td>18</td> <td>63</td> <td>135</td> <td>1292</td>	Influenza-associated hospitalization	579	8	41	290	158	18	63	135	1292
$egin{array}{cccccccccccccccccccccccccccccccccccc$	Legionellosis	19	0	7	16	4	1	0	6	51
	Leprosy	0	0	0	Т	0	0	0	0	1

Table 3. YTD Cases of Notifiable Diseases in Southwest Ohio as Reported in ODRS by County, January - December 2022, Continued

				Co	County				Ē
Reportable Condition	Hamilton	Adams	Brown	Butler	Clermont	Clinton	Highland	Warren	lotai
Listeriosis	2	0	0	1	1	0	0	0	4
Lyme Disease	28	16	11	9	40	1	19	18	169
MIS-C associated with COVID-19	8	1	0	7	0	0	0	2	18
Malaria	2	0	0	က	0	0	0	0	2
Measles	1	0	0	1	0	1	0	0	က
Meningitis (aseptic/viral)	28	0	2	12	10	1	က	10	99
Meningitis (bacterial)	14	0	1	12	4	2	0	9	39
Meningococcal disease	1	0	0	0	0	0	0	0	1
Monkeypox	27	1	0	4	0	0	0	2	34
Mumps	4	1	0	0	0	0	0	2	7
Pertussis	6	0	1	80	2	1	1	1	23
Psittacosis	1	0	0	0	0	0	0	0	1
Q fever (acute)	0	0	0	0	0	0	0	1	1
Q fever (chronic)	1	0	0	0	0	0	0	0	1
Rubella (not congenital)	0	0	0	0	1	0	0	0	1
Salmonella Typhi	0	0	0	0	П	0	0	0	1
Salmonellosis	98	5	5	36	27	က	9	25	193
Shigellosis	26	0	0	9	1	0	0	8	36
Spotted Fever Rickettsiosis	6	4	က	1	2	2	4	2	30
St. Louis encephalitis virus disease	0	0	0	1	0	0	0	0	-
Streptococcal pneumoniae (invasive)	92	0	4	41	20	9	∞	18	189
Streptococcal, Group A (invasive)	29	0	က	38	19	1	က	17	148
Streptococcal, Group B (in newborn)	5	0	0	1	0	П	0	0	7
Syphilis	214	0	9	46	6	4	Н	9	786
Tuberculosis	24	0	1	∞	က	2	1	5	44
Tularemia	0	Н	0	0	0	0	0	0	1
Typhus fever	0	0	0	П	0	0	0	0	П
Varicella	78	0	0	6	9	0	ო	6	22
Vibriosis	П	0	0	7	0	0	0	2	2
West Nile virus infection (WNV)	0	0	0	П	0	0	0	0	1
Yersiniosis	7	0	0	ო	2	0	0	2	14
Total	2704	118	202	1234	581	123	214	629	5835

Table 4. YTD Cases of Notifiable Diseases in Hamilton County, January - Deecember 2022

Amerikasis 1 1 3 Listerbois 0 6 0 0 1 1 3 Listerbois 0 0 0 0 1 Lymb Desense 0 0 0 1 1 5 Mediatria 3 6 1 1 5 Butuelbosis 0 1 1 0 0 0 Mediatria 0<	Reportable Disease	December 2021	YTD 2021	December 2022	YTD 2022	Reportable Disease	December 2021	YTD 2021	December 2022	YTD 2022
1	Amebiasis	0	1	1	8	Listeriosis	0	9	0	2
1	Babesiosis	0	0	0	1	Lyme Disease	က	61	1	28
1	Botulism (Infant)	0	0	0	2	MIS-C associated with COVID-19	က	31	0	8
on 9 26 1 54 Measles 0 0 0 on 6 51 10 97 Meningtis (sseptic/viral) 5 36 3 fraction 1 2 10 97 Meningtis (sseptic/viral) 5 36 3 fiscase 1 2 10 Meningtis (sseptic/viral) 5 36 3 fiscase 2 10 Meningtis (specifical) 1 2 3 3 doucing) 3 3 4 4 4 6 2 1 oducing) 3 3 4 4 4 4 6 2 1 oducing) 3 3 3 3 4 4 4 6 6 9 oducing) 3 4 4 3 4 4 6 7 1 rand 4 5 4 3 3 <t< td=""><td>Brucellosis</td><td>0</td><td>1</td><td>0</td><td>0</td><td>Malaria</td><td>0</td><td>∞</td><td>0</td><td>2</td></t<>	Brucellosis	0	1	0	0	Malaria	0	∞	0	2
on 6 51 10 97 Meningtits (aseptic/viral) 5 36 3 1 21 2 18 Moningtits (aseptic/viral) 1 22 3 1 2 73 5 100 Moningtits (bacterial) 1 22 3 1 9 1 9 Moningtits (bacterial) 0	C. auris	6	79	1	54	Measles	0	0	0	1
1 21 21 18 Meningitis (bacterial) 1 22 3	C. auris - Investigation	9	51	10	62	Meningitis (aseptic/viral)	2	36	က	28
1	CP-CRE	1	21	2	18	Meningitis (bacterial)	1	22	က	14
stease 1 9 3 10 Monkeypox 0 2 stease 2 5 0 4 Mumps 0 2 1 determined 0 9 0 10 Pertussis 1 4 0 2 1 oducing) 3 31 3 31 34 4 8 9 1 0 1 0 1 0 4 4 0 0 1 0	Campylobacteriosis	2	73	2	100	Meningococcal disease	0	7	0	T
1	Coccidioidomycosis	1	6	က	10	Monkeypox	0	0	2	27
oducing) 3 3 31 3 31 Q fever (acute) 0 0 2 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	Creutzfeldt-Jakob Disease	2	2	0	4	Mumps	0	7	1	4
oducing) 3 3 0 0 0 Psittacosis 0 0 2 0 0 0 Stattacosis oducing) 3 31 3 3 0 0 0 1 0 Q ever (acute) 0 0 1 0 0 1 0 O Cever (acute) 0 0 1 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	Cryptosporidiosis	0	6	0	10	Pertussis	1	4	0	6
oducing) 3 31 32 32 Qfever (acute) 0 0 1 0 0 1 0 0 0 0 0 0 0 0 0 0 0 0 0	Cyclosporiasis	0	က	0	0	Psittacosis	0	7	0	1
smosis 0 2 0 1 Q fever (chronic) 0 0 0 0 0 0 0 0 0 0 0 0 4 57 4 38 Salmonellosis 4 65 6 7	E.Coli (shiga toxin producing)	က	31	က	31	Q fever (acute)	0	1	0	0
nzae (invasive) 3 Salmonellosis 4 65 5 nzae (invasive) 3 20 2 22 Shigellosis 1 18 1 18 1 18 1	Ehrlichiosis/Anaplasmosis	0	2	0	1	Q fever (chronic)	0	0	0	1
nazae (invasive) 3 20 2 22 Shigellosis 1 18 1 18 1 ndrome (HUS) 0 1 0 0 Spotted Fever Rickettsiosis 0 12 0 ndrome (HUS) 0 1 0 0 14 4 48 14 0 ndrome (HUS) 0 1 0 0 12 Streptococcal aureus (VISA) 0 1 0 <td>Giardiasis</td> <td>4</td> <td>22</td> <td>4</td> <td>38</td> <td>Salmonellosis</td> <td>4</td> <td>92</td> <td>5</td> <td>98</td>	Giardiasis	4	22	4	38	Salmonellosis	4	92	5	98
mdrome (HUS) 0 1 0 Spotted Fever Rickettsiosis 0 12 0 mdrome (HUS) 0 1 0 0 Straphylococcal aureus (VISA) 0 1 0 mdrome (HUS) 3 52 4 26 Straphylococcal aureus (VISA) 0 1 0 1 6 0 12 Streptococcal, Group A (invasive) 4 48 144 22 292 17 202 Streptococcal, Group B (in newborn) 0 4 0 8 0 4 0 1 Typhulis 7 271 11 1 0 4 0 1 Typhus fever 0 1 0 1 1 0 1 Varicella 2 22 22 2 2 1 2 1 1 4 1 4 1 1 2 1 1 4 1 4 1 <	Haemophilus influenzae (invasive)	က	20	2	22	Shigellosis	1	18	1	79
Indrome (HUS) 0 Staphylococcal aureus (VISA) 0 1 0 Straptococcal aureus (VISA) 0 1 0 1 0 Straptococcal aureus (VISA) 0 1 0 4 48 14 14 14 14 26 Streptococcal Group A (invasive) 4 48 14 14 15 Streptococcal, Group B (in newborn) 0 4 0 4 45 9 A 61 904 44 738 Tuberculosis 6 37 27 11 Al Infection 0 1 0 1 1 1 1 0 1 0 1 0 1 0 1 0 1 0 1 0 1 0 1 0 2 3 3 3 3	Hantavirus	0	1	0	0	Spotted Fever Rickettsiosis	0	12	0	6
3 52 4 26 Streptococcal pneumoniae (invasive) 4 48 14 1 6 0 12 Streptococcal, Group A (invasive) 4 45 9 22 292 17 202 Streptococcal, Group B (in newborn) 0 4 0 61 904 44 738 Tuberculosis 6 37 2 al Infection 0 4 0 1 Typhus fever 0 1 0 I hospitalization 26 42 243 579 Vibriosis 0 5 0 I hospitalization 26 1 19 Yersiniosis 1 4 1	Hemolytic uremic syndrome (HUS)	0	1	0	0	Staphylococcal aureus (VISA)	0	1	0	0
1 6 0 12 Streptococcal, Group A (invasive) 4 45 9 22 292 17 202 Streptococcal, Group B (in newborn) 0 4 0 61 904 44 738 Tuberculosis 6 37 2 al Infection 0 4 0 1 Typhus fever 0 1 0 I hospitalization 26 42 243 579 Vibriosis 0 5 0 I hospitalization 0 2 1 19 Yersiniosis 1 4 1	Hepatitis A	က	52	4	26	Streptococcal pneumoniae (invasive)	4	48	14	92
22 292 17 202	Hepatitis B (acute)	1	9	0	12	Streptococcal, Group A (invasive)	4	45	6	29
10 6 6 0 10 10 10 10 1	Hepatitis B (chronic)	22	292	17	202	Streptococcal, Group B (in newborn)	0	4	0	2
al Infection 61 904 44 738 Tuberculosis 6 37 2 al Infection 0 4 0 1 Typhus fever 0 1 0 0 1 0 1 Varicella 2 22 2 1 hospitalization 26 42 243 579 Vibriosis 0 5 0 1 1 19 Yersiniosis 1 4 1 1 1 1 4 1 1	Hepatitis C (acute)	0	9	0	10	Syphilis	7	271	11	214
Perinatal Infection 0 4 0 1 Typhus fever 0 1 0 1 0 1 0 1 0 2 <th< td=""><td>Hepatitis C (chronic)</td><td>61</td><td>904</td><td>44</td><td>738</td><td>Tuberculosis</td><td>9</td><td>37</td><td>2</td><td>24</td></th<>	Hepatitis C (chronic)	61	904	44	738	Tuberculosis	9	37	2	24
sociated hospitalization 26 42 243 579 Vibriosis 0 5 0 5 0 Sociated hospitalization 0 26 1 19 Yersiniosis 1 4 1	Hepatitis C - Perinatal Infection	0	4	0	1	Typhus fever	0	1	0	0
sociated hospitalization 26 42 243 579 Vibriosis 0 5 0 26 1 19 Yersiniosis 1 4 1	Hepatitis E	0	T	0	1	Varicella	7	22	2	78
0 26 1 19 Yersiniosis 1 4 1 1 1 4 1	Influenza-associated hospitalization	26	42	243	579	Vibriosis	0	2	0	1
	Legionellosis	0	79	1	19	Yersiniosis	1	4	1	7

SARS-CoV-2 (COVID-19) Outbreak

Chinese Health Officials identified the novel coronavirus, now known as SARS-CoV-2 or COVID-19, in December, 2019. Due to rapid global spread of disease, the World Health Organization declared COVID-19 a pandemic March 11, 2020. The United States identified its first case of COVID-19 January 21, 2020 and declared COVID-19 a national emergency March 13, 2020. Outbreak confirmed and probable cases increased rapidly between March and April, 2020. After remaining steady through May and June, 2020, Ohio experienced a spike in confirmed and probable cases in July, 2020. After a decrease in cases through August and September, 2020, Ohio experienced a significant spike in November and December, 2020. Cases began to decrease in January, 2021 and continued to decline through June, 2021, with the exception of a slight increase in cases in April, 2021. From July through September 2021 Ohio experienced an increase in confirmed and probable cases. After a decline in October 2021, Ohio experienced a rapid increase from November, 2021 through January, 2022. In 2022 Ohio experienced increasing cases from April to July and from October to December. The Southwest Ohio (SWOH) counties recognize the same pattern of confirmed and probable cases as Ohio. As of December 28, 2022, cases in Ohio and SWOH are increasing. The SWOH counties account for 524,007 confirmed and probable cases.

Overall, the SWOH rate is higher than the Ohio rate (Figure 3). The SWOH region accounts for 15.9 percent of Ohio cases. Brown County has the highest rate of the 8 SWOH counties, followed by Adams County and Clermont County. Currently the Hamilton County rate is lower than the Ohio rate, while all other counties in the SWOH region have rates that are higher than the Ohio rate.

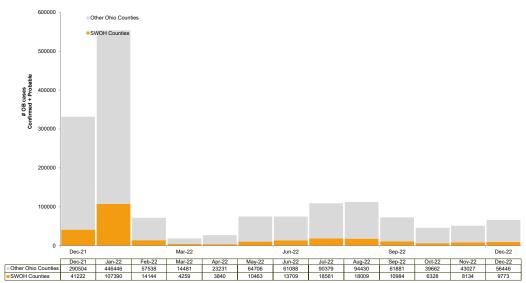
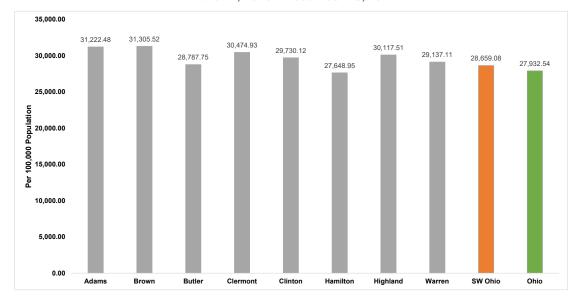


Figure 2. Number of Confirmed and Probable Cases of COVID-19 in Ohio and Southwest Ohio Counties,
December 2021 - December 2022

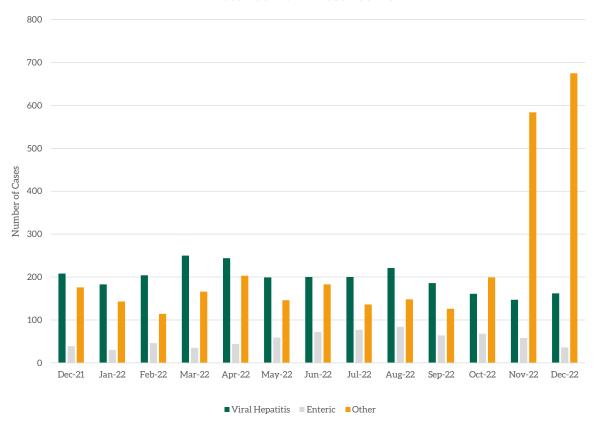
Figure 3. Rate of Confirmed and Probable Cases of COVID-19 in Ohio and Southwest Ohio Counties, March 9, 2020 - December 28, 2022



NOTES: This data is provisional and subject to change when additional information is gained. Outbreak confirmed positive cases between March 9, 2020 and December 28, 2022 were used for analysis. Cases were selected based on address at diagnosis. Confirmed and probable cases determined by date reported to local health department.

Source: Ohio Department of Health, Ohio Disease Reporting System. Data reported as of December 30, 2022. Outbreak confirmed and probable cases have to meet the criteria set by ODH. Detailed information regarding the statewide COVID-19 outbreak is available at: https://coronavirus.ohio.gov/wps/portal/gov/covid-19/home

Figure 4. Notifiable Communicable Diseases in Southwest Ohio by Disease Category as Reported in ODRS,
December 2021 - December 2022*



SYNDROMIC SURVEILLANCE

Emergency Department Visits

Number of EpiCenter alerts received: 6

Types of EpiCenter alerts:

- Infectious Disease Symptoms (n=6)
- Syndromic Symptoms (n=0)

One anomaly received in EpiCenter was dispositioned as not a health event. The alerts received for Hamilton County for December 1 - December 28 are summarized in Table 5 (page 8). Constitutional and respiratory related syndromic hospital visits are presented for the entire month for Hamilton County in Figures 6 and 7 respectively (page 8).

^{*}Suspected, Probable and Confirmed cases included in the counts. Cases counted by month reported to the local health department. STIs (i.e., Chlamydia, Gonorrhea, and Syphilis) are excluded from the analysis. Diseases are assigned to mutually exclusive categories, this means that disease cases are NOT included in more than one category shown in Figure 4. All cases are assigned to one of the categories.

Table 5. Emergency Department Visit Anomalies for Hamilton County, December 2022

Anomaly Classifier	Event Date	Alert Category	Analysis Method	Aggregat- ed By	Actual Value	Predicted Value	Threshold Value	Final Dispsition
Diarrhea - Not Watery/Bloody	12/26/2022	Infectious Disease	Recursive Least Squares	Facility Location	33	12.7	32.2	Active
Diarrhea - Not Watery/Bloody	12/26/2022	Infectious Disease	Exponential Moving Average	Facility Location	34	11.3	33.9	Active
Diarrhea - Not Watery/Bloody	12/26/2022	Infectious Disease	Cusum EMA	Facility Location	34	11.5	33.4	Active
Vomiting	12/20/2022	Infectious Disease	Recursive Least Squares	Facility Location	85	55.8	84.0	Active
Vomiting	12/20/2022	Infectious Disease	Recursive Least Squares	Home Location	75	48.2	72.2	Active
Paralysis	12/5/2022	Infectious Disease	Recursive Least Squares	Home Location	17	8.2	16.0	Not a health event

Figure 6. Constitutional-related ED Visits, Hamilton County, Ohio, December 2022



Figure 7. Respiratory-related ED Visits, Hamilton County, Ohio, December 2022

