

September 2023

The EpiGram is a monthly publication of the Stark County Reportable and Emerging Disease Network (REDNET). It contains a summary of provisional communicable disease reports and other key public health indicators, with summary tables for each of the four local health department jurisdictions. Some reportable conditions may be under investigation, and, at any given time, data may fluctuate from month to month for a specific category. If you have any questions, please contact Julianna Smith at 330.451.1650 or smithj@starkhealth.org, Cassie Johnson at 330.451.1688 or johnsonc@starkhealth.org or Kaelyn Boyd at 234.458.5135 or kboyd@cantonhealth.org.



Public Health
Prevent. Promote. Protect.

Monthly Highlight: Pertussis Outbreak

In July-August 2023, there was a pertussis outbreak in Stark County. The outbreak included six children within the same community who commonly call themselves “cousins”. The outbreak started during a playdate among the cases in late July. Two of the cases reside in the same household. Ages of cases ranged from less than one year of age to twelve years old. The earliest illness onset was on 7/12/2023 and the last illness onset known was on 8/4/2023. There were sixteen other contacts identified as exposed and who accepted PEP. Some adults were identified as contacts, but most declined PEP. All cases and contacts reported being under vaccinated or unvaccinated for pertussis.

This investigation presented some challenges for public health. For instance, multiple children present with similar onset dates during the playdate made identifying the index case difficult. All six cases were laboratory confirmed. None of the cases were noted to attend any school or childcare facility, reducing the risk of transmission in a larger population. All but one household had other children residing in the home. The parents were hesitant to give information and did not disclose much during the case interviews.

This community seems to have some vaccine hesitancy and mentioned that they had preferred to gain natural immunity against diseases like pertussis. Luckily, none of the cases required hospitalization and, to our knowledge, none of the exposed contracted the disease. It is important for children to be fully vaccinated in order to stop outbreaks like this from occurring. It’s imperative that health care providers listen to parents’ concerns, while also stressing the importance of vaccines and their role in preventing disease.

Pertussis, or whooping cough, can cause serious illnesses in all ages, but is especially dangerous for babies. Symptoms usually develop about five to ten days after contact and can include runny or stuffy nose, low grade fever, apnea, and cyanosis (turning blue or purple). One to two weeks after symptom onset, rapid, violent, and uncontrolled coughing fits can occur. This can last for one to six weeks. Coughing fits can cause the “whoop” sound when inhaling, vomiting during or after coughing fits, and difficulty breathing. Recovery from pertussis is slow and coughing fits can occur many months after illness.

Pertussis is spread from person to person through the air. It can be spread from start of symptoms to two weeks after coughing begins. Pertussis infection can present with mild symptoms in older children and adults, which can unknowingly put babies and younger children at risk for infection and severe illness.

Vaccination is the best way to prevent pertussis. The vaccines available include DTaP and Tdap, which also provide protection against tetanus and diphtheria. It is also important to cover coughs and sneezes, adequately wash hands often and to stay home when sick.

For the most vulnerable, babies, a third of children younger than one will be hospitalized. Of those:

- 2 in 3 will have apnea
- 1 in 5 will get pneumonia
- 1 in 50 will have convulsions
- 1 in 150 will have encephalopathy
- 1 in 100 will die

For more information:

[Whooping Cough \(Pertussis\) | CDC](#)

[Pertussis | ODH IDCM](#)

People of all ages need WHOOPIING COUGH VACCINES



DTaP for young children	Tdap for preteens	Tdap for pregnant women	Tdap for adults
✓ 2, 4, and 6 months ✓ 15 through 18 months ✓ 4 through 6 years	✓ 11 through 12 years	✓ During the 27-36th week of each pregnancy	✓ Anytime for those who have never received it

www.cdc.gov/whoopingcough



Table 1: Select Vital Statistics for Stark County

	September 2023	YTD 2023	2022
Live Births	323	2,907	3,851
Births to Teens	17	160	183
Deaths	319	3,338	4,807

* Birth and death data are preliminary.

Table 2: Stark County Crude Birth Rate and Death Rates

	2018	2019	2020	2021*	2022*
Birth	10.9	11.0	10.5	10.5	10.3
Death	11.8	12.0	14.1	14.5	12.8

*Source: Data Ohio. Rates are per 1,000 population. 2021 and 2022 data are preliminary.

Table 3: Summary of Air Quality Index, Pollen, and Mold Counts for Stark County, Ohio, including historical data.

	September 2023				October 2022			
	Monthly High	Monthly Low	Monthly Median	Counts in highest reported health risk category	Monthly High	Monthly Low	Monthly Median	Counts in highest reported health risk category
Pollen Count	55	0	4	N/A	8	1	2	N/A
Mold Count	6,510	800	1,750	N/A	4,300	200	2,100	N/A
Air Quality Index	51	20	37	Good	66	3	37	Moderate (5)

**See the following websites for updated Air Quality Index and mold index terminology and color coding: <http://www.airnow.gov/index.cfm?action=aqibasics.aqi> <https://pollen.aaaai.org/#/pages/reading-the-levels>. Data source for this table is the Air Quality Division of the Canton City Health Department.

Jurisdictional Summary of Select Reportable Conditions in Stark County, OH (Provisional Data)	Alliance City		Canton City		Massillon City		Stark County		All Departments	
	Sep	YTD	Sep	YTD	Sep	YTD	Sep	YTD	Sep	YTD
Campylobacteriosis	0	3	2	18	1	6	11	52	14	79
Chlamydia infection	7	101	67	601	12	106	48	430	134	1,238
COVID-19	53	421	129	1,062	73	458	450	3,545	705	5,486
CPO	0	1	0	5	1	6	2	18	3	30
E. coli, Shiga Toxin-Producing (O157:H7, Not O157, Unknown Serotype)	0	0	0	1	0	2	1	15	1	18
Gonococcal infection	1	26	29	277	2	39	11	122	43	464
Hepatitis B (including delta) - chronic	0	0	1	6	0	2	1	10	2	18
Hepatitis C - acute	0	0	0	1	0	0	1	2	1	3
Hepatitis C - chronic	0	14	7	57	3	21	5	38	15	130
Influenza-associated hospitalization	0	4	1	28	0	9	0	60	1	101
Legionellosis	0	0	1	2	0	1	0	9	1	12
Lyme Disease	0	1	0	2	1	5	2	51	3	59
Meningitis - aseptic/viral	0	0	0	5	0	0	1	6	1	11
Salmonellosis	1	2	0	8	1	4	1	23	3	37
Streptococcal - Group A -invasive	0	5	2	9	0	0	0	23	2	37
Streptococcus pneumoniae - invasive antibiotic resistant/intermediate	0	0	1	3	0	0	1	2	2	5
Syphilis, Total	0	3	7	54	2	10	2	27	11	94
Syphilis, Primary, Secondary and Early Latent	0	2	5	38	2	6	1	19	8	65
Syphilis, Congenital	0	0	0	2	0	0	0	0	0	2
Varicella	0	0	0	3	0	1	3	5	3	9
West Nile virus disease	0	0	0	0	0	0	2	2	2	2
Yersiniosis	0	0	0	2	0	2	2	6	2	10
Total	62	585	247	2,162	96	679	544	4,511	949	7,937

Source: Ohio Disease Reporting System, downloaded 10/17/2023.



Summary Table of Select Reportable Conditions Reported in the Previous 5 Years Within Stark County, OH (Provisional Data)	Sep 2023	Sep 2022	YTD 2023	YTD 2022	All of 2022	5 Year Annual Average	Rate
Campylobacteriosis	14	12	79	58	71	70.0	18.83
Chlamydia infection	134	140	1,238	1,246	1,672	1,692.8	455.46
COVID-19	705	1,948	5,486	28,081	32,266	19,153.0	5,153.29
CPO	3	1	30	17	22	15.2	4.09
CPO - Colonization Screening	0	0	2	0	0	N/A	N/A
Creutzfeldt-Jakob Disease	0	0	1	0	0	0.6	0.16
Cryptosporidiosis	0	1	14	15	18	27.0	7.26
Cyclosporiasis	0	0	3	1	1	4.2	1.13
E. coli, Shiga Toxin-Producing (O157:H7, Not O157, Unknown Serotype)	1	2	18	9	10	11.8	3.17
Ehrlichiosis-Ehrlichia chaffeensis	0	0	1	1	1	0.2	0.05
Giardiasis	0	2	10	5	7	10.8	2.91
Gonococcal infection	43	78	464	597	767	715.0	192.38
Haemophilus influenzae (invasive disease)	0	2	8	9	12	6.8	1.83
Hepatitis B (including delta) - acute	0	1	2	2	2	5.2	1.40
Hepatitis B (including delta) - chronic	2	0	18	22	29	36.0	9.69
Hepatitis C - acute	1	1	3	6	7	7.0	1.88
Hepatitis C - chronic	15	11	130	145	185	235.6	63.39
Hepatitis C - Perinatal Infection	0	0	1	1	1	0.8	0.22
Hepatitis E	0	0	1	0	0	0.0	0.00
Influenza-associated hospitalization	1	1	101	113	327	334.6	90.03
LaCrosse virus disease (other California serogroup virus disease)	0	1	1	1	1	1.2	0.32
Legionellosis	1	0	12	27	28	27.8	7.48
Lyme Disease	3	1	59	21	28	22.4	6.03
Meningitis - aseptic/viral	1	2	11	11	14	20.6	5.54
Meningitis - bacterial (Not N. meningitidis)	0	0	2	1	1	2.0	0.54
Mpox	0	2	0	4	8	1.6	0.43
Mumps	0	0	1	0	0	0.4	0.11
Other arthropod-borne disease	0	0	0	0	0	N/A	N/A
Pertussis	0	0	10	0	0	21.8	5.87
Salmonellosis	3	4	37	40	47	45.6	12.27
Shigellosis	0	0	7	9	13	13.2	3.55
Streptococcal - Group A -invasive	2	0	37	13	20	15.4	4.14
Streptococcal - Group B - in newborn	0	0	1	1	1	0.3	0.38
Streptococcus pneumoniae - invasive antibiotic resistance unknown or non-resistant	0	1	23	14	20	20.0	5.38
Streptococcus pneumoniae - invasive antibiotic resistant/intermediate	2	0	5	13	18	11.4	3.07
Syphilis, Total	11	14	94	88	113	57.6	15.50
Syphilis, Primary, Secondary and Early Latent	8	12	65	68	84	41.4	11.14
Syphilis, Congenital	0	0	2	2	2	0.6	0.16
Tuberculosis	0	0	2	0	0	1.6	0.43
Varicella	3	0	9	2	4	12.6	3.39
Vibriosis (not cholera)	0	0	2	0	1	1.8	0.48
West Nile virus disease (also current infection)	2	0	2	0	0	1.2	0.32
Yersiniosis	2	0	10	5	5	5	1.35

Source: Ohio Disease Reporting System, downloaded 10/17/2023. Rates are per 100K population and based on 5 yr. average incidence 2018-2022.