February 2024

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 or Kaelyn Boyd at 234.458.5135 or kboyd@cantonhealth.org.



Monthly Highlight: Environmental Cleaning and MDROs

MDROs (Multidrug-resistant organisms) are organisms known to be resistant to multiple antibiotics or antifungals. MDROs not only put patients at risk for severe complications or mortality, but are also costly for healthcare facilities to treat and manage, with the CDC estimating that <u>more than \$4.6 billion is spent</u> <u>annually in the United States</u> on treatment. As their prevalence increases, it's important to remember that foundational infection control practices can make an impact on the transmission of these organisms. It is known that the environment plays a key role in harboring and transmitting MDROs in healthcare settings. In a study involving several healthcare facilities, researchers found that nearly <u>40% of</u> <u>commonly touched surfaces in patients rooms' had MDROs</u> <u>present at some point during their stay.</u>

Enhanced cleaning procedures should be considered when caring for patients who are infected or colonized with a MDRO. These procedures include:

Disinfectant Considerations for Multidrug-Resistant Organisms

Multidrug-resistant organisms (MDROs) are resistant to certain antibiotics. However, not all have developed resistance to disinfectants. In contrast, there are other MDROs that require specific disinfectants to effectively kill the organism. The table below offers considerations for infection preventionists to use as they assess what disinfectants are effective against a specific organism.

Be sure to use the disinfectant according to its master label, paying close attention to the product's contact (wet) time and concentration specifications to allow for proper disinfection. If you're combatting multiple MDROs in your health care facility, you will want to check that the disinfectants you use are effective against all of them.

Organism	Disinfectant considerations
Candida auris	Consult the Environmental Protection Agency's (EPA) List P.
Carbapenemase-producing carbapenem-resistant Enterobacterales (CP-CRE)	Consult the disinfectant's master label to be sure it is effective against Enterobacterales.
Carbapenemase-producing carbapenem-resistant Acinetobacter baumannii (CP-CRAB)	Consult the disinfectant's master label to be sure it is effective against Acinetobacter baumannii.
Carbapenemase-producing carbapenem-resistant Pseudomonas aeruginosa (CP-CRPA).	Consult the disinfectant's master label to be sure it is effective against Pseudomonas aeruginosa.
Methicillin-resistant Staphylococcus aureus (MRSA)	Consult the EPA's List H.
Vancomycin-resistant Enterococcus faecalis or faecium (VRE)	Consult the EPA's List H.
Other MDROs	Consult the disinfectant's master label to be sure it is effective against the desired organism(s).
P-03400 (03/2023)	WISCONSIN DEE VTEALTH SERV

Source: https://www.dhs.wisconsin.gov/publications/p03400.pdf

- Cleaning and disinfecting surfaces that are in close proximity to the patient, like bed rails and bedside tables, daily
- Cleaning and disinfecting high-touch surfaces, like light switches and door knobs, daily
- Ensuring that shared non-disposable equipment, like wheel chairs and patient lifts, are cleaned and disinfected after each use
- Using auditing tools in order to ensure that adequate cleaning and disinfection is occurring
- Ensuring that proper PPE is used during cleaning process based on precautions assigned to the patient in the room

As noted above, proper disinfectants and adequate contact (wet) times are important steps in preventing these organisms from transmitting to both patients and healthcare workers.

Table 1: Select Vital Statistics for Stark County							
Feb 2024 YTD 2024 2023							
Live Births	253	563	3915				
Births to Teens	10	21	215				
Deaths	362	801	4570				
* Birth and death data are preliminary.							

Table 2: Stark County Crude Birth and Death Rates

	2019	2020	2021*	2022*	2023*
Birth	11.1	10.6	10.6	10.4	10.6
Death	12.1	14.3	14.6	13.0	12.5

*2021-2023 data are preliminary.

**Source: Data Ohio. Rates are per 1,000 population.

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

	February 2024					March 2023				
	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						Data collected seasonally and currently not available				
Mold Count		cieu seasu	nany anu c	unently not available.	Data conected seasonally and currently not available.					
Air Quality Index	68	12	36	Moderate (5)	65	33	45	Moderate (7)		
**See the following websites for updated Air Quality Index and mold index terminology and color coding: http://www.airnow.gov/index.cfm?action=agibasics.agi										

See the following websites for updated Air Quality Index and mold index terminology and color coding: http://www.airnow.gov/index.ctm?action=aqibasics.ac 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		Canton		Massillon		ark	All	
		City		City		City		inty	Departments	
		YTD	Feb	YTD	Feb	YTD	Feb	YTD	Feb	YTD
Campylobacteriosis	0	1	0	2	0	0	2	5	2	8
Chlamydia infection	9	19	67	144	10	26	37	97	123	286
COVID-19	55	161	116	348	45	163	452	1,153	668	1,825
СРО	0	0	0	0	0	0	1	4	1	4
CPO - Colonization Screening	0	0	0	0	0	0	0	1	0	1
E. coli, Shiga Toxin-Producing (O157:H7, Not O157, Unknown Serotype)	0	0	1	1	0	0	0	2	1	3
Giardiasis	0	0	1	2	0	0	2	3	3	5
Gonococcal infection	1	5	20	54	1	2	10	26	32	87
Haemophilus influenzae (invasive disease)	0	0	0	1	0	0	0	4	0	5
Hepatitis B (including delta) - chronic	1	1	1	1	0	1	1	1	3	4
Hepatitis C - chronic	1	1	5	9	2	3	2	5	10	18
Influenza-associated hospitalization	9	13	20	59	2	18	43	106	74	196
Legionellosis	0	0	0	0	0	0	2	4	2	4
Lyme Disease	0	0	1	1	1	1	3	4	5	6
Meningitis - aseptic/viral	0	0	0	0	0	0	0	1	0	1
Meningitis - bacterial (Not N. meningitidis)	0	1	0	0	0	1	0	0	0	2
Mumps	0	0	0	0	0	0	1	1	1	1
Pertussis	0	0	0	0	1	1	0	1	1	2
Salmonellosis	0	0	0	2	0	0	3	6	3	8
Shigellosis	0	0	0	0	0	1	0	1	0	2
Streptococcal - Group A -invasive	1	1	2	5	0	0	4	6	7	12
Streptococcal - Group B - in newborn	0	0	0	0	0	0	1	1	1	1
Streptococcus pneumoniae - invasive										
antibiotic resistance unknown or non-	1	1	0	1	0	1	3	4	4	7
resistant										
Streptococcus pneumoniae - invasive	1	1	0	2	0	0	1	1	2	4
antibiotic resistant/intermediate										
Syphilis, Total	0	0	8	17	1	2	2	9	11	28
Syphilis, Primary, Secondary and Early Latent	0	0	6	13	1	2	1	7	8	22
Syphilis, Congenital	0	0	0	0	0	0	0	0	0	0
	0	0	0	0	0	0	0	1	0	1
Typhoid fever	0	0	0	0	0	0	0	0	0	0
Varicella	0	0	0	0	0	0	1	2	1	2
Yersiniosis	0	0	0	0	0	0	1	4	1	4
Total	79	205	242	649	63	220	572	1,453	956	2,527

Source: Ohio Disease Reporting System, downloaded 3/12/2024.









Summary Table of Select Reportable Conditions Reported in the Previous 5 years within Stark	Feb 2024	Feb 2023	YTD 2024	YTD 2023	All of 2023	5 Year Annual	Rate
County, On (Frovisional Data)	_	-	-	_		Average	
Campylobacteriosis	2	4	8	8	108	74.6	20.10
Chlamydia infection	123	131	286	282	1,650	1,680.6	452.86
COVID-19	668	845	1,825	1,999	9,183	20,989.6	5,655.87
СРО	1	5	4	6	38	22.6	6.09
CPO - Colonization Screening	0	0	1	0	8	N/A	N/A
Cryptosporidiosis	0	2	0	4	16	23.8	6.41
Cyclosporiasis	0	0	0	0	3	3.2	0.86
E. coli, Shiga Toxin-Producing (O157:H7, Not	1	1	3	1	21	12.8	3.45
O157, Unknown Serotype)	-	•	-		4.5	10.4	2.00
Giardiasis	3	0	5	1	16	10.4	2.80
Gonococcal infection	32	48	8/	105	618	/08.8	190.99
Haemophilus influenzae (invasive disease)	0	0	5	4	11	8.0	2.16
Hepatitis B (including delta) - acute	0	0	0	0	4	4.0	1.08
Hepatitis B (including delta) - chronic	3	2	4	4	34	36.0	9.69
Hepatitis C - acute	0	0	0	1	4	4.0	1.08
Hepatitis C - chronic	10	1/	18	30	1/8	213.6	57.56
Hepatitis C - Perinatal Infection	0	0	0	0	1	0.8	0.22
Hepatitis E	0	0	0	0	1	0.2	0.05
Influenza-associated hospitalization	74	5	196	88	185	262.6	70.76
Legionellosis	2	0	4	0	17	24.8	6.68
Listeriosis	0	0	0	0	1	1.2	0.32
Lyme Disease	5	1	6	2	90	37.6	10.13
Meningitis - aseptic/viral	0	0	1	1	16	15.2	4.10
Meningitis - bacterial (Not N. meningitidis)	0	0	2	0	3	2.0	0.54
Mumps	1	1	1	1	1	0.4	0.11
Pertussis	1	0	2	3	13	12.2	3.29
Salmonellosis	3	3	8	8	55	44.4	11.96
Shigellosis	0	2	2	2	11	10.8	2.91
Streptococcal - Group A -invasive	7	3	12	10	47	19.8	5.34
Streptococcal - Group B - in newborn	1	0	1	0	1	1.2	0.32
Streptococcus pneumoniae - invasive antibiotic resistance unknown or non-resistant	4	3	7	6	34	21.6	5.82
Streptococcus pneumoniae - invasive antibiotic resistant/intermediate	2	1	4	1	8	10.8	2.91
Syphilis, Total	11	8	28	21	128	57.6	15.50
Syphilis, Primary, Secondary and Early Latent	8	5	22	14	78	41.4	11.14
Syphilis, Congenital	0	0	0	1	2	0.6	0.16
Toxic shock syndrome (TSS)	0	1	0	1	1	0.2	0.05
Tuberculosis	0	0	1	2	2	1.0	0.27
Varicella	1	0	2	1	10	11.6	3.13
Vibriosis (not cholera)	0	0	0	0	2	2.0	0.54
West Nile virus disease (also current infection)	0	0	0	0	2	0.4	0.11
Yersiniosis	1	1	4	2	10	6.4	1.72

Source: Ohio Disease Reporting System, downloaded 3/12/2024. Rates are per 100K population and based on 5 yr. average incidence 2019-2023.