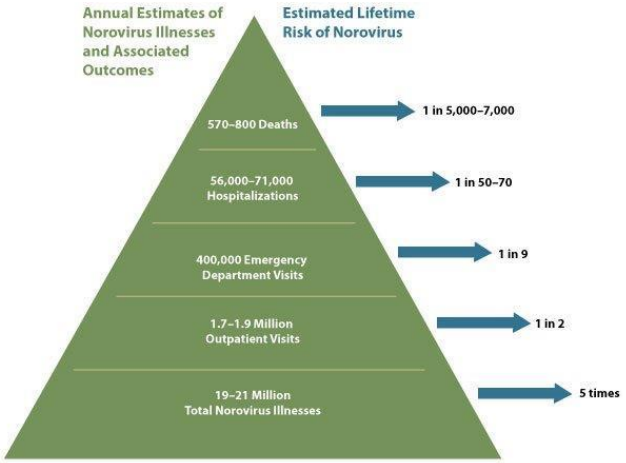
EPI GRAM October, 2018

A Monthly Publication of the Stark Public Health Infrastructure Coalition

EPI Gram *is a monthly publication of the Stark County Public Health Infrastructure Coalition. It contains a summary of provisional communicable disease reports and other key public health indicators, with summary tables for Stark County, Ohio. 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 Avinash Joseph at 330.493.9914 or josepha@starkhealth.org, or Amanda Archer at 330.489.3327 or aarcher@cantonhealth.org.***

Monthly Highlight: Norovirus

Norovirus, also referred to as the stomach flu or food poisoning, is the most common gastrointestinal illness in the United States. Norovirus is not related to the influenza virus and most often presents with symptoms of diarrhea, vomiting, and abdominal cramping within 48 hours of exposure. In contrast with other diarrheal illnesses, the course of the illness is not long, lasting about 1-3 days after symptom onset. Treatment outside of increasing fluid intake is not normally recommended for norovirus infection, as most patients recover on their own.



Annual Estimates of Norovirus Illnesses and Associated Outcomes (via CDC)

Norovirus transmission can occur through a variety of different pathways. Billions of norovirus particles are shed during each bowel movement of an infected individual, with only a few particles necessary to induce illness. Because of this low threshold of infectivity, norovirus can be easily transmitted through contaminated food, water, surfaces, or human touch. The best way to prevent norovirus transmission is through regular and thorough hand washing. Hand hygiene is particularly important for child care workers and food handlers, who may become vectors for a norovirus outbreak. Norovirus infection rates increase during the winter and can be associated with sharing meals, so thorough cleaning and preparation of meat and fresh produce prior to consumption can also help prevent transmission. Those who are experiencing norovirus symptoms should take care to practice thorough hygiene and refrain from working (particularly in sensitive settings) and preparing food until symptoms have ceased. Any surfaces that may have been contaminated with norovirus should be cleaned and disinfected with bleach or an antimicrobial product effective against norovirus. Careful adherence to widely utilized infection control practices can help prevent norovirus incidence around the holiday season.

Table 1 Summary of Air Quality Index, Pollen, and Mold Counts for Stark County, Ohio, including historical data.

	October 2018				October 2017			
	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	9	0	0	N/A	2	0	0	N/A
Mold Count	9,000	0	0	**3 (Moderate)**	8,800	0	0	**1 (Moderate)**
Air Quality Index	58	21	32	**5 (Moderate)**	59	20	38	**2 (Moderate)**

**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/nab/index.cfm?p=reading_charts. Data source for this table is the Air Quality Division of the Canton City Health Department.

Table 2 Select Vital Statistics for Stark County

	OCT 2018	YTD 2018	2017
Live Births	308	3519	4014*
Births to Teens	15	242	271*
Deaths	280	3533	4475*

* Birth and death data is preliminary

Table 3 Stark County Crude Birth Rate and Death Rates

	2013	2014	2015	2016	2017*
Birth	11.3	11.3	11.2	11.3	10.7
Death	11.3	11.4	11.6	11.7	11.9

*Source: Ohio Department of Health Data Warehouse. Rates are per 1,000 population. 2017 data is preliminary.

Table 4: Jurisdictional Summary of Reportable Diseases in Stark County, OH (Provisional Data)	Alliance City		Canton City		Massillon City		Stark County		All Departments	
	OCT	YTD	OCT	YTD	OCT	YTD	OCT	YTD	OCT	YTD
Anaplasmosis	0	0	0	1	0	0	0	1	0	2
Babesiosis	0	0	0	0	0	0	0	2	0	2
Campylobacteriosis	0	1	1	17	0	8	10	52	11	78
Chlamydia infection	10	95	77	625	18	136	70	584	175	1440
CP-CRE	0	0	0	9	0	4	2	10	2	23
Cryptosporidiosis	0	3	2	11	0	1	2	16	4	31
Cyclosporiasis	0	0	0	0	0	0	0	9	0	9
E. coli, Shiga Toxin-Producing	0	0	0	6	0	1	1	9	1	16
Giardiasis	0	2	0	5	1	2	1	9	2	18
Gonococcal infection	2	25	51	321	6	40	11	138	70	524
Haemophilus influenzae (invasive disease)	0	0	0	1	0	1	0	2	0	4
Hepatitis A	0	1	0	4	0	2	3	8	3	15
Hepatitis B (including delta) – acute	0	0	0	7	0	0	0	2	0	9
Hepatitis B (including delta) - chronic	0	3	5	40	0	8	3	42	8	93
Hepatitis C - acute	0	0	0	5	0	0	0	0	0	5
Hepatitis C – chronic	3	25	10	128	3	43	12	149	28	345
Influenza-associated hospitalization	0	25	1	156	0	46	1	385	2	612
LaCrosse virus disese	0	0	0	1	0	0	0	3	0	4
Legionellosis - Legionnaires' Disease	0	0	1	11	0	2	4	16	5	29
Lyme Disease	0	0	1	2	0	4	2	31	3	37
Meningitis - aseptic/viral	0	3	0	7	0	2	2	24	2	36
Meningitis - bacterial (Not N. meningitidis)	0	0	0	2	0	2	0	1	0	5
Mumps	0	0	0	1	0	0	0	1	0	2
Pertussis	1	12	1	3	0	6	1	20	3	41
Salmonellosis	0	1	2	5	0	6	8	45	10	57
Shigellosis	0	0	1	10	0	5	1	12	2	27
Spotted Fever Rickettsiosis, including RMSF	0	0	0	2	0	0	0	4	0	6
Streptococcal - Group A -invasive	0	1	0	8	0	1	0	14	0	24
Streptococcus pneumoniae - invasive antibiotic resistance unknown or non-resistant	0	2	0	8	0	1	0	12	0	23
Streptococcus pneumoniae - invasive antibiotic resistant/intermediate	0	0	0	0	0	1	2	6	2	7
Syphilis, Total	1	2	2	12	0	2	3	18	6	34
Syphilis, Primary, Secondary and Early Latent	1	1	0	7	0	2	3	10	4	20
Tuberculosis	0	0	0	0	0	0	0	2	0	2
Varicella	0	1	0	9	0	1	1	19	1	30
Yersiniosis	0	1	1	1	0	0	0	1	1	3
Total	19	212	164	1463	30	337	147	1698	360	3710

Table 5 – Summary Table of Diseases Reported in the Previous 5 years within Stark County (Provisional Data)	OCT-18	OCT-17	YTD 2018	YTD 2017	All of 2017	5 Yr Annual Average	Rate
Amebiasis	0	0	0	1	1	0.4	0.107
Anaplasmosis	0	0	2	0	0	0.4	0.107
Babesiosis	0	0	2	1	1	0.4	0.107
Brucellosis	0	0	0	1	1	0.2	0.054
Campylobacteriosis	11	7	78	73	88	74.0	19.807
Chlamydia	175	154	1440	1551	1804	1666.6	446.078
Coccidioidomycosis	0	0	0	0	0	0.4	0.107
Creutzfeldt-Jakob Disease	0	0	0	1	3	1.2	0.321
Cryptosporidiosis	4	5	31	26	30	32.4	8.672
Cyclosporiasis	0	0	9	2	2	1.6	0.428
E. coli, Shiga Toxin-Producing (O157:H7, Not O157, Unknown Serotype)	1	1	16	9	12	11.0	2.944
Giardiasis	2	3	18	15	18	24.6	6.584
Gonorrhea	70	42	524	452	542	574.0	153.635
Haemophilus influenzae , Invasive	0	1	4	8	9	7.0	1.874
Hemolytic Uremic Syndrome (HUS)	0	0	0	0	0	0.2	0.054
Hepatitis A	3	2	15	9	10	7.0	1.874
Hepatitis B, Perinatal	1	0	1	0	1	1.8	0.482
Hepatitis B, Acute	0	1	9	8	8	5.6	1.499
Hepatitis B, Chronic	8	8	93	55	66	45.0	12.045
Hepatitis C, Acute	0	0	5	1	2	6.6	1.767
Hepatitis C, Chronic	28	22	345	247	300	295.4	87.363
Hepatitis E	0	0	0	0	0	0.2	0.054
Influenza-associated hospitalization	2	2	612	283	413	326.4	87.363
Influenza-associated pediatric mortality	0	0	0	0	0	0.2	0.054
LaCrosse virus disease	0	0	4	0	0	0.2	0.054
Legionellosis	5	1	29	14	15	15.4	4.122
Listeriosis	0	0	1	1	1	1.2	0.321
Lyme Disease	3	2	37	25	29	19.4	5.193
Malaria	0	0	0	0	0	0.6	0.161
Measles (indigenous to Ohio)	0	0	0	0	0	2.0	0.535
Meningitis, Aseptic	2	10	36	36	43	30.2	8.083
Meningitis, Other Bacterial	0	1	5	2	3	3.6	0.964
Meningococcal Disease	0	0	0	0	0	1.0	0.268
Mumps	0	0	2	3	3	2.8	0.749
Pertussis	3	2	41	16	41	42.8	11.456
Q fever, acute	0	0	0	0	0	0.4	0.107
Q fever, chronic	0	0	0	1	1	0.2	0.054
Salmonellosis	10	3	57	34	39	44.8	11.991
Shigellosis	2	2	27	5	23	38.6	10.332
Spotted Fever Rickettsiosis	0	3	6	6	6	1.2	0.321
Staphylococcal aureus - intermediate resistance to vancomycin (VISA)	0	0	0	0	0	0.2	0.054
Streptococcal Dis, Group A, Invasive	0	0	24	16	22	13.0	3.480
Streptococcal Dis, Group B, in Newborn	0	0	2	1	1	1.6	0.428
Streptococcal Toxic Shock Syndrome	0	0	0	0	0	0.8	0.214
Streptococcus pneumoniae – inv. antibiotic resistance unknown or non-resistant	0	5	23	30	33	31.2	8.351
Streptococcus pneumo – inv. antibiotic resistant/intermediate	2	0	7	13	16	16.8	4.497
Syphilis, Total	6	1	34	28	29	15.4	4.122
Syphilis, Primary, Secondary and Early Latent	4	1	20	22	13	9.6	2.570
Toxic Shock Syndrome (TSS)	0	0	0	0	0	0.8	0.214
Tuberculosis	0	0	2	2	3	1.4	0.375
Typhus Fever	0	0	0	1	0	0.2	0.054
Varicella	1	1	30	14	20	25.6	6.852
Vibriosis - other (not cholera)	0	0	0	2	2	2.2	0.589
Vibrio parahaemolyticus infection	0	0	0	0	0	0.2	0.054
West Nile Virus	1	0	11	1	1	0.6	0.161
Yersiniosis	1	0	3	7	9	6.0	1.606
Zika virus infection	0	0	0	0	0	1.0	0.268

Source: Ohio Disease Reporting System, downloaded 11/19/2018. Rates are per 100K population and based on 5 yr average incidence ’13 – ‘17.