

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.

Monthly Highlight: Staphylococcus aureus

Staphylococcus aureus is a bacteria commonly found on skin or in the nose and generally does not cause illness. On occasion however it can cause an infection. These infections can be treated and don't become an issue unless they enter the bloodstream. When it enters the bloodstream a more serious infection may occur. These more serious infections may include things such as pneumonia, endocarditis which is an infection of a heart valve and can lead to heart failure, and osteomyelitis which is a bone infection. On occasion these more severe infections have been fatal.

In Ohio, *Staphylococcus aureus* is required to be reported to the local health department if there is some resistance to vancomycin, a specific antibiotic. On average, there are eight cases reported in Ohio each year. In April, the first case was reported in Stark County. People who are more susceptible to acquire Vancomycin-intermediate *Staphylococcus aureus* (VISA) or Vancomycin-resistant *Staphylococcus aureus* (VRSA) are those who have underlying health conditions, tubes such as catheters going into their bodies, previous infections, or recent exposure to someone else who had a VISA or VRSA infection. Detecting antibiotic resistance early is important to implementing a different, more effective treatment and prevent the development of more severe infections.



Susceptibility testing at the Centers for Disease Control and Prevention

The Centers for Disease Control and Prevention also state that when presumptive results for resistance come back the primary care physician, patient care personnel and infection control personnel should all be notified in order to initiate effective control measures. Laboratories should not wait until the final results come back in order to make this notification. Transmission can be prevented when contact with the wound or materials contaminated by the wound are avoided. Personal protective equipment, such as gloves, should be worn if contact must be made. Thorough hand washing with soap and water should be done frequently.

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

	April 2016				May 2015			
	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	430	3	30	N/A	1,610	30	140	
Mold Count	1,630	50	310	Good (0)	9,280	400	2,440	Moderate (2)
Air Quality Index	114	37	46	Unhealthy for Sensitive Groups (2)	94	29	43	Moderate (4)

**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 Summaries of Select Vital Statistics for Stark County

	April 2016	YTD 2016	2015
Live Births	315	1,419	4,314
Births to Teens	27	111	308
Deaths	402	1,583	4,362

Birth and death data is reported by the four health districts and may include non county residents.

Table 3 Stark County Crude Birth Rate and Death Rates

	2010	2011	2012	2013	2014
Birth	10.8	10.8	10.9	11.2	12.0
Death	10.9	11.3	11.4	11.3	11.4

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

Table 4: Jurisdictional Summary of Reportable Diseases in Stark County

	Alliance City		Canton City		Massillon City		Stark County		Total	
	April	YTD	April	YTD	April	YTD	April	YTD	April	YTD
Campylobacteriosis	0	0	6	7	0	0	2	14	8	21
Chlamydia infection	11	38	84	325	11	62	37	212	143	637
Cryptosporidiosis	0	0	1	2	0	2	1	3	2	7
E. coli, Shiga Toxin-Producing	0	0	0	0	0	0	2	3	2	3
Giardiasis	0	0	2	4	0	0	3	4	5	8
Gonococcal infection	1	13	29	154	3	15	15	53	48	235
Haemophilus influenzae	0	0	0	1	0	0	0	1	0	2
Hepatitis B – acute	0	0	0	0	0	0	0	1	0	1
Hepatitis B - chronic	0	0	2	5	1	2	1	10	4	17
Hepatitis B - perinatal	0	0	0	0	0	0	1	1	1	1
Hepatitis C - acute	0	0	0	1	1	1	0	1	1	3
Hepatitis C - chronic	2	10	8	35	3	13	15	52	28	110
Hepatitis E	0	0	0	0	0	0	1	1	1	1
Influenza-associated hospitalization	1	6	16	46	11	24	22	74	50	150
Influenza-associated pediatric mortality	0	0	0	0	0	0	0	0	0	0
Legionellosis	0	1	0	0	0	0	0	1	0	2
Listeriosis	0	0	0	0	0	0	1	1	1	1
Lyme Disease	0	1	1	1	0	0	3	5	4	7
Malaria	0	0	0	0	0	1	0	0	0	1
Measles - indigenous to Ohio	0	0	0	0	0	0	0	1	0	1
Meningitis - aseptic/viral	0	0	0	0	0	0	1	7	1	7
Meningitis-bacterials (not N. meningitides)	0	0	0	0	0	0	0	1	0	1
Mumps	0	0	0	0	0	0	0	1	0	1
Mycobacterial Disease- other than tuberculosis	0	0	0	0	0	0	4	12	4	12
Other Arthropod-borne Disease	0	0	0	1	0	0	1	2	1	3
Pertussis	0	0	2	3	0	5	0	3	7	11
Q fever, acute	0	0	0	0	5	0	0	0	0	0
Salmonellosis	0	1	0	3	0	2	2	5	3	11
Shigellosis	0	0	1	1	1	0	0	0	1	1
Staphylococcal aureus	0	0	1	1	0	0	0	0	1	1
Streptococcal-Group A, invasive	0	0	1	3	0	0	0	1	1	4
Streptococcus pneumoniae - invasive antibiotic resistance unknown or non-resistant	0	0	1	10	1	0	0	8	2	21
Streptococcus pneumoniae - invasive antibiotic resistant/intermediate	0	0	1	5	0	3	1	5	2	10
Syphilis, Total	0	2	1	5	0	0	0	0	1	7
> Primary, Secondary and Early Latent	0	0	1	3	0	0	0	0	1	3
Tuberculosis	0	0	0	0	1	1	0	0	1	1
Varicella	0	1	1	6	0	3	2	9	3	19
Vibriosis (not cholera)	0	0	1	1	0	0	1	1	2	2
Yersiniosis	0	1	0	0	0	0	1	1	1	2
Total	15	72	158	615	38	134	117	494	328	1,315

Source: Ohio Disease Reporting System, downloaded 05/11/2016.

Table 5 – Summary Table of Diseases Reported in the Previous 5 years within Stark County (Provisional Data)

	April 2016	April 2015	YTD 2016	YTD 2015	All of 2015	5 Yr Annual Average	5 Yr. Annual Rate
Amebiasis	0	0	0	1	1	0.2	0.053
Babesiosis	0	1	0	1	1	0.2	0.053
Brucellosis	0	0	0	0	0	0.2	0.053
Campylobacteriosis	8	2	21	9	59	61.0	16.235
Chlamydia	143	128	637	508	1702	1539.0	409.596
Coccidioidomycosis	0	0	0	0	0	0.4	0.106
Creutzfeldt-Jakob Disease	0	0	0	0	0	0.6	0.160
Cryptosporidiosis	2	3	7	7	30	29.2	7.771
Cyclosporiasis	0	0	0	0	1	0.4	0.106
Dengue	0	0	0	0	0	0.6	0.160
Ehrlichiosis/ Anaplasmosis	0	0	0	0	0	0.4	0.106
Escherichia coli, Shiga Toxin-Producing	2	1	3	2	17	6.8	1.810
Giardiasis	5	0	8	6	29	36.2	9.634
Gonorrhea	48	42	235	136	530	586.8	156.173
Haemophilus influenzae , Invasive	0	0	2	3	8	7.4	1.969
Hemolytic Uremic Syndrome (HUS)	0	0	0	0	0	0.2	0.053
Hepatitis A	0	0	0	1	5	5.8	1.544
Hepatitis B, Perinatal	1	0	1	1	5	3.4	0.905
Hepatitis B, Acute	4	0	1	1	4	5.0	1.331
Hepatitis B, Chronic	1	4	17	18	45	33.6	8.942
Hepatitis C, Acute	0	2	3	7	13	7.8	2.076
Hepatitis C, Chronic	28	34	110	118	374	275.8	73.403
Hepatitis E	1	0	1	0	0	0.2	0.053
Influenza-associated hospitalization	50	42	150	272	284	263.6	70.156
Influenza-associated pediatric mortality	0	0	0	0	0	0.2	0.053
LaCrosse virus disease	0	0	0	0	0	0.4	0.106
Legionellosis	0	1	2	2	19	14.2	3.779
Listeriosis	1	0	1	0	1	1.4	0.373
Lyme Disease	4	1	7	3	18	13.6	3.620
Malaria	0	0	1	0	0	0.6	0.160
Measles (indigenous to Ohio)	0	0	1	0	0	1.8	0.479
Meningitis, Aseptic	0	1	7	7	31	35.2	9.368
Meningitis, Other Bacterial	1	0	1	1	3	3.4	0.905
Meningococcal Disease	0	1	0	3	3	1.2	0.319
Mumps	0	0	1	3	4	2.0	0.532
Mycobacterial disease - Not TB	4	3	12	8	36	31.0	8.250
Other arthropod-borne disease	1	0	3	0	0	0.2	0.052
Pertussis	7	4	11	24	51	34.6	9.209
Q fever, acute	0	0	0	0	0	0.4	0.106
Salmonellosis	3	2	11	6	53	41.6	11.072
Shigellosis	1	0	1	0	6	34.4	9.155
Spotted Fever Rickettsiosis	0	0	0	0	0	0.4	0.106
Staphylococcal aureaus	1	0	1	0	0	0.0	0.000
Streptococcal Dis, Group A, Invasive	1	0	4	5	9	15.2	4.045
Streptococcal Dis, Group B, in Newborn	0	0	0	0	0	1.6	0.426
Streptococcal Toxic Shock Syndrome	0	0	0	1	1	1.2	0.319
Streptococcus pneumo. – inv. antibiotic resistance unknown or non-resistant	2	4	21	8	29	36.8	9.794
Streptococcus pneumo. – inv. antibiotic resistant/intermediate	2	3	10	10	15	17.8	4.737
Syphilis, Total	1	0	7	2	7	10.4	2.768
> Syphilis, Primary, Secondary and Early Latent	1	0	3	1	5	6.6	1.757
Toxic Shock Syndrome (TSS)	0	0	0	0	1	0.8	0.213
Tuberculosis	1	0	1	0	1	1.0	0.266
Typhoid Fever	0	0	0	0	0	0.4	0.106
Typhus Fever	0	0	0	0	0	0.2	0.053
Varicella	3	1	19	5	26	29.2	7.771
Vibriosis - other (not cholera)	2	0	2	0	3	1.2	0.319
Vibriosis parahaemolyticus	0	0	0	0	0	0.2	0.053
West Nile Virus	0	0	0	0	1	0.6	0.160
Yersiniosis	2	0	2	2	8	2.8	0.745

Source: Ohio Disease Reporting System, downloaded 05/11/16. Rates are per 100K population and based on 5 yr average incidence '11-'15.