

EPI GRAM June, 2017

A Monthly Publication of the Stark Public Health Infrastructure Coalition



Public Health
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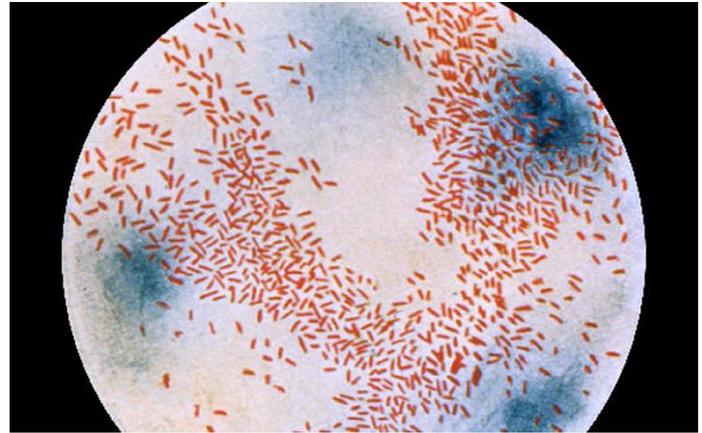
EPI Gram is a monthly publication of the Stark County Public Health Infrastructure Coalition. It contains a summary of provisional communicable disease reports and other key public health indicators, with summary tables for Stark County, Ohio. Some reportable conditions may be under investigation and, 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: Haemophilus influenzae

Haemophilus influenzae is a bacteria that primarily affects infants and young children. While there are several strains of Haemophilus influenzae that exist, the most common is Haemophilus influenzae b, or Hib. Despite its name, this infection does not cause the flu. Instead it can cause one of many invasive diseases, including

- pneumonia
- bacteremia
- meningitis
- epiglottitis
- cellulitis
- infectious arthritis.

Of the invasive diseases Haemophilus influenzae can cause, one of the most common is **pneumonia**. This type of pneumonia normally affects children aged 4 months to 4 years, but can also affect adults with primary lung disease or alcohol dependence. Onset of this pneumonia is usually quicker and more severe than with other types of bacterial pneumonia, and affected children must often be hospitalized immediately. The other invasive disease that Haemophilus influenzae is well known for is **meningitis**. Prior to the development of the Hib vaccine, Haemophilus influenzae was the leading cause of bacterial meningitis in children under the age of 5. The effects of a bout with meningitis can be severe, and include hearing loss, language delay, mental retardation, cerebral palsy, and death.



Gram stain of Haemophilus influenzae, via Centers for Disease Control

Stark County has seen an increase in cases of Haemophilus influenzae this year. Through July there have been 7 cases found in the area, which is greater than the average number of annual cases over the past 5 years. The most effective method of preventing the spread of Haemophilus influenzae is vaccination. Young children who have not received the full course of vaccinations (including the Hib vaccine) are the most susceptible to these diseases, so efforts must be made by healthcare providers to ensure that children are up to date on all immunizations. The other preventive method that can have a significant impact on the spread of Haemophilus influenzae is practicing proper hygiene. The only known carrier of this bacteria is humans, and transmission usually occurs via direct respiratory secretions (coughing or sneezing) or by touching surfaces that have come into contact with these secretions. Practice of proper hand hygiene and disinfection techniques, particularly among children, is the best way to prevent the spread of this germ.

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

	June 2017				July 2016			
	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	60	2	15	N/A	20	2	11	
Mold Count	4,020	500	2,162	22 (Low)	5,310	780	2,859	20 (Low)
Air Quality Index	119	23	53	1 (Unhealthy for Sensitive Groups)	99	35	59	15 (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

	June 2017	YTD 2017	2016
Live Births	359	1,990	4,190
Births to Teens	31	153	263
Deaths	310	2,212	4,374

* Birth and death data may include non-county residents.

Table 3 Stark County Crude Birth Rate and Death Rates

	2011	2012	2013	2014	2015
Birth	10.8	10.9	11.2	12.0	12.3
Death	11.3	11.4	11.3	11.4	11.6

*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	
	June	YTD	June	YTD	June	YTD	June	YTD	June	YTD
Amebiasis	0	0	0	0	0	1	0	0	0	1
Babesiosis	0	0	0	0	0	0	0	1	0	1
Campylobacteriosis	0	0	2	12	0	0	2	18	4	30
Chlamydia infection	13	61	67	405	26	120	79	363	185	949
Coccidioidomycosis	0	0	0	0	0	0	0	0	0	0
Creutzfeldt-Jakob Disease	0	0	0	0	0	0	0	0	0	0
Cryptosporidiosis	0	0	0	1	0	1	0	8	0	10
Cyclosporiasis	0	0	0	0	0	0	1	1	1	1
E. coli, Shiga Toxin-Producing	0	0	0	1	0	0	0	2	0	3
Giardiasis	0	0	1	1	0	1	1	7	2	9
Gonococcal infection	0	7	29	179	2	21	7	71	38	278
Haemophilus influenzae	0	0	1	2	0	0	1	5	2	7
Hepatitis A	0	0	0	0	0	1	0	4	0	5
Hepatitis B – acute	0	1	0	2	1	1	1	1	2	5
Hepatitis B - chronic	1	1	2	10	1	3	1	16	5	30
Hepatitis B - perinatal	0	0	0	0	0	0	0	3	0	3
Hepatitis C - acute	0	0	0	1	0	0	0	0	0	1
Hepatitis C - chronic	3	21	7	62	3	18	12	73	25	174
Hepatitis E	0	0	0	0	0	0	0	0	0	0
Influenza-associated hospitalization	0	18	0	81	1	22	0	164	1	285
Influenza-associated pediatric mortality	0	0	0	0	0	0	0	0	0	0
LaCrosse Virus Disease	0	0	0	0	0	0	0	0	0	0
Legionellosis	0	1	1	2	0	0	2	3	3	6
Listeriosis	0	0	0	0	0	0	0	0	0	0
Lyme Disease	0	0	2	2	0	0	4	10	6	12
Malaria	0	0	0	0	0	0	0	0	0	0
Measles - indigenous to Ohio	0	0	0	0	0	0	0	0	0	0
Meningitis - aseptic/viral	0	0	1	6	0	0	2	10	3	16
Meningitis-bacterial (not N. meningitides)	0	0	0	0	0	0	0	0	0	0
Mumps	0	0	0	1	0	0	0	1	0	2
Pertussis	0	0	1	2	0	0	1	6	2	8
Q fever, acute	0	0	0	0	0	0	0	0	0	0
Salmonellosis	2	3	1	3	0	0	3	10	6	16
Shigellosis	0	0	0	1	0	0	0	2	0	3
Spotted Fever Rickettsiosis	0	0	0	0	0	0	0	1	0	1
Staphylococcal aureus	0	0	0	0	0	0	0	0	0	0
Streptococcal-Group A, invasive	0	0	0	3	0	2	0	10	0	15
Streptococcal-Group B- in newborn	0	0	0	0	0	0	0	1	0	1
Streptococcus pneumoniae - invasive antibiotic resistance unknown or non-resistant	0	2	1	6	0	2	2	11	3	21
Streptococcus pneumoniae - invasive antibiotic resistant/intermediate	0	2	1	4	1	4	0	2	2	12
Streptococcal toxic shock syndrome	0	0	0	0	0	0	0	0	0	0
Syphilis, Total	0	2	3	5	0	1	0	7	3	15
➤ Primary, Secondary and Early Latent	0	1	2	2	0	1	0	1	2	5
Tuberculosis	0	0	0	1	0	0	0	2	0	3
Varicella	0	0	0	2	1	1	0	2	1	5
Vibriosis (not cholera)	0	0	0	0	0	0	0	2	0	2
Yersiniosis	0	0	0	1	0	0	0	5	0	6
Zika Virus Disease	0	0	0	0	0	0	0	0	0	0
Total	19	120	122	798	36	200	119	823	296	1,941

Source: Ohio Disease Reporting System, downloaded 7/9/2017.

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

	June 2017	June 2016	YTD 2017	YTD 2016	All of 2016	5 Yr Annual Average	5 Yr. Annual Rate
Amebiasis	0	0	1	0	0	0.2	0.053
Babesiosis	0	0	1	0	0	0.2	0.053
Brucellosis	0	0	0	0	0	0.2	0.053
Campylobacteriosis	2	13	30	37	83	69.4	18.499
Chlamydia	79	147	949	933	1,899	1,611.4	429.518
Coccidioidomycosis	0	0	0	0	1	0.6	0.160
Creutzfeldt-Jakob Disease	0	1	0	1	2	0.6	0.160
Cryptosporidiosis	0	2	10	11	47	35.4	9.436
Cyclosporiasis	1	1	1	1	4	1.2	0.320
Dengue	0	0	0	0	0	0.2	0.053
Ehrlichiosis/ Anaplasmosis	0	0	0	0	1	0.4	0.107
Escherichia coli, Shiga Toxin-Producing	0	1	3	7	16	9.6	2.559
Giardiasis	1	3	9	12	25	28.6	7.623
Gonorrhea	7	42	278	321	678	594.8	158.544
Haemophilus influenzae , Invasive	1	0	7	3	5	6.8	1.813
Hemolytic Uremic Syndrome (HUS)	0	0	0	0	0	0.2	0.053
Hepatitis A	0	0	5	0	3	6.2	1.653
Hepatitis B, Perinatal	0	1	3	1	2	1.6	0.426
Hepatitis B, Acute	1	1	5	3	4	4.8	1.279
Hepatitis B, Chronic	1	4	30	35	67	39.2	10.449
Hepatitis C, Acute	0	2	1	5	7	7.0	1.866
Hepatitis C, Chronic	12	29	174	146	328	279.0	74.367
Hepatitis E	0	0	0	1	1	0.2	0.053
Influenza-associated hospitalization	0	0	285	158	196	273.8	72.981
Influenza-associated pediatric mortality	0	0	0	0	0	0.2	0.053
LaCrosse virus disease	0	0	0	0	1	0.4	0.107
Legionellosis	2	2	6	4	16	15.6	4.158
Listeriosis	0	0	0	1	1	1.2	0.320
Lyme Disease	4	2	12	10	26	16.4	4.371
Malaria	0	0	0	1	1	0.6	0.160
Measles (indigenous to Ohio)	0	2	0	1	1	2.0	0.533
Meningitis, Aseptic	2	0	16	9	30	28.4	7.570
Meningitis, Other Bacterial	0	0	0	1	5	3.8	1.013
Meningococcal Disease	0	0	0	0	0	1.0	0.267
Mumps	0	0	2	2	2	2.4	0.640
Pertussis	1	2	8	13	31	37.4	9.969
Q fever, acute	0	0	0	0	0	0.4	0.107
Salmonellosis	3	6	16	19	51	44.8	11.941
Shigellosis	0	2	3	3	8	35.6	9.489
Spotted Fever Rickettsiosis	0	0	1	0	0	0.00	0.00
Staphylococcal aureaus	0	0	0	1	1	0.2	0.053
Streptococcal Dis, Group A, Invasive	0	0	15	5	10	12.8	3.412
Streptococcal Dis, Group B, in Newborn	0	0	1	0	4	1.8	0.480
Streptococcal Toxic Shock Syndrome	0	0	0	0	1	1.0	0.267
Streptococcus pneumo. – inv. antibiotic resistance unknown or non-resistant	2	0	21	29	37	36.0	9.596
Streptococcus pneumo. – inv. antibiotic resistant/intermediate	0	1	12	13	16	17.8	4.745
Syphilis, Total	3	2	15	10	21	12.0	3.195
> Syphilis, Primary, Secondary and Early Latent	2	2	5	6	15	7.6	2.024
Toxic Shock Syndrome (TSS)	0	1	0	0	0	0.8	0.213
Tuberculosis	0	0	3	1	2	1.2	0.320
Thyphoid Fever	0	0	0	0	0	0.4	0.107
Varicella	0	0	5	21	35	29.4	7.837
Vibriosis - other (not cholera)	0	0	2	2	4	1.8	0.480
Vibriosis parahaemolyticus	0	0	0	0	0	0.2	0.053
West Nile Virus	0	0	0	0	0	0.6	0.160
Yersiniosis	0	0	6	3	9	4.6	1.226
Zika Virus Disease	0	0	0	3	5	1.0	0.267

Source: Ohio Disease Reporting System, downloaded 7/9/17. Rates are per 100K population and based on 5 yr average incidence '12-'16.



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