EPI GRAM November, 2017

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.***

Public Health
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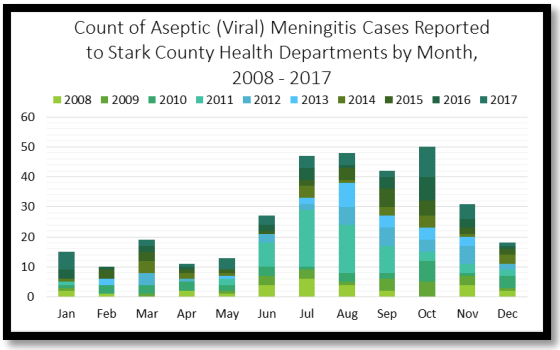
Monthly Highlight: Aseptic Meningitis:



The term aseptic meningitis applies to any meningitis (infectious or non-infectious) for which a cause is not apparent after initial evaluation, including routine stains and cultures of cerebrospinal fluid. Aseptic meningitis is a syndrome of multiple etiologies, but many cases are caused by a viral agent. Viral etiologies include (but are not limited to):

- Enteroviruses: Coxsackievirus Group A and B, Echovirus
- Herpes simplex virus (HSV)
- Mumps, arboviruses, measles, varicella, lymphocytic choriomeningitis virus and adenovirus

Predominatley a syndrome of infants and children, symptoms include headache, fever malaise and anorexia, followed by evidence of meningeal irritation (stiff neck, irritability). Abdominal pain, nausea and vomiting are common. Sore throat, chest pain and generalized muscular aches occur occasionally. Symptoms usually subside rapidly and spontaneously, with recovery in 7-10 days.

Transmission occurs if there is close contact with a person who has viral meningitis. However, meningitis is not always likely to develop because only a small number of people who get infected with the viruses will actually develop viral meningitis.

Peak activity in late summer and early fall are typically related to enteroviruses and arboviruses, with late winter activity typically ity related to mumps. Stark County has seen 41 through November 2017 and is already above our 5 year average. This is the 2nd highest case count in 10 years, only to be trumped by 63 cases in 2011. With a yearly average of 28 cases, approximately 2-3 cases are expected per month; however, in 2017, Stark County saw 3 or more cases per month during 7 of the 11 months reported.

Since there are no vaccines to protect against non-polio enteroviruses, which are the most common cause of viral meningitis, the following steps are recommended to help lower the risk infection or the spread to other people:

- Wash your hands often with soap and water, especially after changing diapers, using the toilet, or coughing or blowing your nose.
- Avoid touching your face with unwashed hands.
- Avoid close contact such as kissing, hugging, or sharing cups or eating utensils with people who are sick.
- Cover your coughs and sneezes with a tissue or your upper shirt sleeve, not your hands.
- Clean and disinfect frequently touched surfaces, such as toys and doorknobs, especially if someone is sick.
- Stay home when you are sick.
- Some vaccinations can protect against diseases such as measles, mumps, chickenpox, and influenza, that can lead to viral meningitis. Make sure you and your child are vaccinated on schedule.
- Avoid bites from mosquitoes and other insects that carry diseases that can infect humans.

More information can be found: https://emedicine.medscape.com/article/1169489-overview

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

	Nov 2017				Dec 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	Data collected seasonally and currently not available				Data collected seasonally and currently not available			
Mold Count								
Air Quality Index	65	13	37	(5) Moderate	58	15	25	(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

	Nov 2017	YTD 2017	2016
Live Births	358	3860	4190
Births to Teens	21	276	263
Deaths	303	3974	4356

* 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, OH (Provisional Data)	Alliance City		Canton City		Massillon City		Stark County		All Departments	
	Nov	YTD	Nov	YTD	Nov	YTD	Nov	YTD	Nov	YTD
Amebiasis	0	0	0	0	0	1	0	0	0	1
Babesiosis	0	0	0	0	0	0	0	1	0	1
Brucellosis	0	0	0	1	0	0	0	0	0	1
Campylobacteriosis	1	5	5	26	0	2	6	52	12	85
Chlamydia infection	9	113	51	743	8	180	66	650	134	1686
Creutzfeldt-Jakob Disease	0	1	0	0	0	0	1	1	1	2
Cryptosporidiosis	0	3	0	2	0	3	1	19	1	27
Cyclosporiasis	0	0	0	0	0	0	0	2	0	2
E. coli, Shiga Toxin-Producing	0	0	0	1	0	1	1	9	1	11
Giardiasis	0	2	2	3	0	1	1	12	3	18
Gonococcal infection	3	20	30	305	2	38	16	140	51	503
Haemophilus influenzae (invasive disease)	0	0	0	2	0	0	0	6	0	8
Hepatitis A	0	1	0	0	0	1	0	7	0	9
Hepatitis B - Perinatal Infection	0	0	0	0	0	0	0	3	0	3
Hepatitis B (including delta) - acute	0	2	0	2	0	2	0	1	0	7
Hepatitis B (including delta) - chronic	0	2	1	19	0	4	2	33	3	58
Hepatitis C - acute	0	0	1	2	0	0	0	0	1	2
Hepatitis C - chronic	1	28	14	102	6	34	16	122	37	286
Influenza-associated hospitalization	3	21	2	83	3	26	16	180	24	310
Legionellosis - Legionnaires' Disease	0	1	1	6	0	0	0	8	1	15
Listeriosis	0	0	0	0	0	0	0	1	0	1
Lyme Disease	0	2	0	5	0	1	2	19	2	27
Meningitis - aseptic/viral	2	2	1	14	0	2	2	23	5	41
Meningitis - bacterial (Not N. meningitidis)	0	0	0	1	0	1	0	0	0	2
Mumps	0	0	0	1	0	1	0	1	0	3
Pertussis	0	2	1	6	0	0	0	9	1	17
Q fever, chronic	0	0	0	0	0	0	0	1	0	1
Salmonellosis	0	4	1	4	0	0	4	31	5	39
Shigellosis	0	0	6	10	0	0	1	3	7	13
Spotted Fever Rickettsiosis,including Rocky Mountain spotted fever (RMSF)	0	0	0	1	0	1	0	4	0	6
Streptococcal - Group A -invasive	0	0	2	5	0	2	2	13	4	20
Streptococcal - Group B - in newborn	0	0	0	0	0	0	0	1	0	1
Streptococcus pneumoniae - invasive antibiotic resistance unknown or non-resistant	1	3	0	7	0	4	0	18	1	32
Streptococcus pneumoniae - invasive antibiotic resistant/intermediate	0	2	0	5	0	4	1	3	1	14
Syphilis, Total	1	3	0	12	0	2	0	8	1	25
➢ Syphilis, Primary, Secondary and Early Latent	0	1	0	7	0	2	0	2	0	12
Tuberculosis	0	0	0	1	0	0	1	2	1	3
Varicella	0	1	0	3	0	3	0	7	0	14
Vibriosis (not cholera)	0	0	0	0	0	0	0	2	0	2
West Nile virus disease	0	0	0	0	0	0	0	1	0	1
Yersiniosis	0	0	1	2	0	0	0	7	1	9
Total	21	218	119	1374	19	313	139	1402	298	3307

Source: Ohio Disease Reporting System, downloaded 12/04/2017.

Alliance City Health Department
cityofalliance.com/health

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Table 5 – Summary Table of Diseases Reported in the Previous 5 years within Stark County (Provisional Data)	Nov-17	Nov-16	YTD 2017	YTD 2016	All of 2016	5 Yr Annual Average	Rate
Amebiasis	0	0	1	0	0	0.2	0.053
Anaplasmosis	0	0	0	1	1	0.4	0.107
Babesiosis	0	0	1	0	0	0.2	0.053
Brucellosis	0	0	1	0	0	0.2	0.053
Campylobacteriosis	12	4	85	79	83	69.4	18.499
Chlamydia	134	157	1686	1714	1899	1611.4	429.518
Coccidioidomycosis	0	0	0	1	1	0.6	0.160
Creutzfeldt-Jakob Disease	1	0	2	1	2	0.6	0.160
Cryptosporidiosis	1	3	27	45	47	35.4	9.425
Cyclosporiasis	0	0	2	4	4	1.2	0.320
Dengue	0	0	0	0	0	0.2	0.053
Escherichia coli , STP, Not O157:H7	1	1	11	15	16	4.0	1.065
Giardiasis	3	2	18	24	25	28.6	7.623
Gonorrhea	51	65	503	630	678	594.8	158.544
Haemophilus influenzae , Invasive	0	0	8	4	5	6.8	1.813
Hemolytic Uremic Syndrome (HUS)	0	0	0	0	0	0.2	0.053
Hepatitis A	0	0	9	3	3	6.2	1.653
Hepatitis B, Perinatal	0	0	3	1	1	1.6	0.426
Hepatitis B, Acute	0	1	7	4	4	4.8	1.279
Hepatitis B, Chronic	3	4	58	48	55	39.2	10.449
Hepatitis C, Acute	1	0	2	7	7	7.0	1.866
Hepatitis C, Chronic	37	36	286	300	331	279.0	74.367
Hepatitis E	0	0	0	1	1	0.2	0.053
Influenza-associated hospitalization	24	0	310	159	196	273.8	72.981
Influenza-associated pediatric mortality	0	0	0	0	0	0.2	0.053
LaCrosse virus disease	0	0	0	1	1	0.4	0.107
Legionellosis	1	2	15	16	16	15.6	4.158
Listeriosis	0	0	1	1	1	1.2	0.320
Lyme Disease	2	4	27	26	26	16.4	4.371
Malaria	0	0	0	1	1	0.6	0.160
Measles (indigenous to Ohio)	0	0	0	1	1	2.0	0.533
Meningitis, Aseptic	5	3	41	29	30	28.4	7.570
Meningitis, Other Bacterial	0	1	2	5	5	3.8	1.013
Meningococcal Disease	0	0	0	0	0	1.0	0.267
Mumps	0	0	3	2	2	2.4	0.640
Pertussis	1	2	17	31	31	37.4	9.969
Q fever, acute	0	0	0	0	0	0.4	0.107
Q fever, chronic	0	0	1	0	0	0.0	0.000
Salmonellosis	5	3	39	50	51	44.8	11.941
Shigellosis	7	0	13	4	8	35.6	9.489
Spotted Fever Rickettsiosis	0	0	6	0	0	0.0	0.000
Staphylococcal aureus - intermediate resistance to vancomycin (VISA)	0	0	0	1	1	0.2	0.053
Streptococcal Dis, Group A, Invasive	4	0	20	8	10	12.8	3.412
Streptococcal Dis, Group B, in Newborn	0	1	1	4	4	1.8	0.480
Streptococcal Toxic Shock Syndrome	0	0	0	1	1	1.0	0.267
Streptococcus pneumoniae - invasive antibiotic resistance unknown or non-resistant	1	1	32	31	37	36.0	9.596
Streptococcus pneumo - inv antibiotic resistant/intermediate	1	1	14	16	16	117.8	4.745
Syphilis, Total	1	3	25	19	21	12.0	3.195
➢ Syphilis, Primary, Secondary and Early Latent	0	0	11	9	15	7.6	2.024
Toxic Shock Syndrome (TSS)	0	0	0	0	0	0.8	0.213
Tuberculosis	1	0	3	2	2	1.2	0.320
Thyphoid Fever	0	0	0	0	0	0.4	0.107
Varicella	0	3	14	33	35	29.4	7.837
Vibriosis - other (not cholera)	0	1	2	4	4	1.8	0.480
Vibrio parahaemolyticus infection	0	0	0	0	0	0.2	0.053
West Nile Virus	0	0	1	0	0	0.6	0.160
Yersiniosis	1	0	9	9	9	4.6	1.226
Zika virus infection	0	1	0	5	5	1.0	0.267

Source: Ohio Disease Reporting System, downloaded 12/04/2017. Rates are per 100K population and based on 5 yr average incidence '12-'16.