EPI GRAM August, 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.



Monthly Highlight: Varicella

Varicella, or chickenpox, is one of two diseases caused by the varicella-zoster virus (VZV), the other of which is herpes zoster (shingles). Varicella normally presents in people who have both never had the disease before and have not received the chickenpox vaccine. The most well-known symptom of varicella is the distinctive rash, which usually begins on the face, chest, or back and spreads to the rest of the body, eventually turning into fluid filled blisters which scab over. Other symptoms of varicella may include the following:

- fever
- tiredness
- loss of appetite
- headache



Child with varicella, via CDC

More severe complications, including pneumonia, Group A streptococcal infection, encephalitis, sepsis, and death can occasionally result from varicella, although this is rare. Transmission occurs via person to person contact or through aerosolized spread of blister fluid. Varicella cases are normally infectious from one to two days before the rash appears until when all lesions have crusted over.

Stark County has seen a decrease in varicella this year. Through August there have been 7 cases found in the county, which is much fewer than the 25 cases at this point last year or the 5 year average of 29.4 cases per year. However, varicella is extremely contagious and with local schools starting for the year it is important to remain vigilant and take preventive measures that can reduce varicella incidence. The most important preventive measure for varicella is the chickenpox vaccine. Two doses of the vaccine (one normally given at 12-15 months old, another given at 4-6 years old) has been shown to be 90% effective at preventing varicella. Varicella cases who have been vaccinated also experience less severe symptoms than those who have not been vaccinated. Sustaining high vaccine coverage is the most important way to prevent varicella cases and outbreaks in our community.

Table 1 Summary of Air Quality Index, Pollen, and Mold Counts for Stark County, Ohio, including historical data.											
	August 2017					August 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	75	5	15	N/A	100	5	15	N/A			
Mold Count	6,100	990	2,385	22 (Low)	8,360	1,600	3,790	16 (Low)			
Air Quality Index	74	35	53	14 (Moderate)	79	30	48	14 (Good)			

**See the following websites for updated Air Quality Index and mold index terminology and color coding: https://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									
	August 2017	YTD 2017	2016						
Live Births	376	2,757	4,190						
Births to Teens	24	194	263						
Deaths	337	2,940	4,388						
* 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				

*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	
	Aug	YTD	Aug	YTD	Aug	YTD	Aug	YTD	Aug	YTD	
Amebiasis	0	0	0	0	0	1	0	0	0	1	
Babesiosis	0	0	0	0	0	0	0	1	0	1	
Campylobacteriosis	1	1	1	17	0	0	6	36	8	54	
Chlamydia infection	4	83	78	548	10	144	65	476	157	1,251	
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	1	2	0	1	2	3	4	13	7	19	
Cyclosporiasis	0	0	0	0	0	0	0	2	0	2	
E. coli, Shiga Toxin-Producing	0	0	0	1	0	1	1	6	1	8	
Giardiasis	1	1	0	1	0	1	0	9	1	12	
Gonococcal infection	2	9	24	230	5	27	11	94	42	360	
Haemophilus influenzae	0	0	0	2	0	0	0	5	0	7	
Hepatitis A	0	1	0	0	0	1	1	5	1	7	
Hepatitis B – acute	0	1	0	2	0	1	0	1	0	5	
Hepatitis B - chronic	1	2	1	13	0	3	3	23	5	41	
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	1	22	12	76	3	24	11	90	27	212	
Hepatitis E	0	0	0	0	0	0	0	0	0	0	
Influenza-associated hospitalization	0	18	0	81	0	22	0	163	0	284	
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	1	1	0	3	0	0	1	8	2	12	
Listeriosis	0	0	0	0	0	0	0	0	0	0	
Lyme Disease	1	1	0	5	1	1	4	15	6	21	
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	2	10	0	1	2	13	4	24	
Meningitis-bacterial (not N. meningitides)	0	0	0	0	0	0	0	0	0	0	
Mumps	0	0	0	1	0	1	0	1	0	3	
Pertussis	2	2	2	4	0	0	1	7	5	13	
Q fever, acute	0	0	0	0	0	0	0	0	0	0	
Salmonellosis	0	4	0	3	0	0	5	20	5	27	
Shigellosis	0	0	0	1	0	0	0	2	0	3	
Spotted Fever Rickettsiosis	0	0	1	1	1	1	1	2	3	4	
Staphylococcal aureus	0	0	0	0	0	0	0	0	0	0	
Streptococcal-Group A, invasive	0	0	0	3	0	2	1	11	1	16	
Streptocooccal-Group B- in newborn	0	0	0	0	0	0	0	1	0	1	
Streptococcus pneumoniae - invasive antibiotic	0	2	1	7	0	3	2	14	3	26	
resistance unknown or non-resistant											
Streptococcus pneumoniae - invasive antibiotic	0	2	0	4	0	4	0	2	0	12	
resistant/intermediate											
Streptococal toxic shock syndrome	0	0	0	0	0	0	0	0	0	0	
Syphilis, Total	0	2	3	9	0	1	1	8	4	20	
Primary, Secondary and Early Latent	0	1	1	4	0	1	1	2	2	8	
Tuberculosis	0	0	0	1	0	0	0	1	0	2	
Varicella	0	0	0	2	0	1	0	4	0	7	
Vibriosis (not cholera)	0	0	0	0	0	0	0	2	0	2	
Yersiniosis	0	0	0	1	0	0	2	7	2	8	
Zika Virus Disease	0	0	0	0	0	0	0	0	0	0	
Total	15	158	125	1,018	22	243	122	1,046	284	2,473	

Source: Ohio Disease Reporting System, downloaded 9/20/2017.

Table 5 – Summary Table of Diseases Reported							5 Yr.
in the Previous 5 years within Stark County	August	August	YTD	YTD	All of	5 Yr Annual	Annual
(Provisional Data)	2017	2016	2017	2016	2016	Average	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	8	11	54	56	83	69.4	18.499
Chlamydia	157	163	1,251	1,247	1,899	1,611.4	429.518
Coccidioidomycosis	0	0	0	0	1	0.6	0.160
Creutzfeldt-Jakob Disease	0	0	0	1	2	0.6	0.160
Cryptosporidiosis	7	11	19	27	47	35.4	9.436
Cyclosporiasis	0	0	0	0	0	1.2 0.2	0.320 0.053
Dengue Ehrlichiosis/ Anaplasmosis	0	0	0	0	1	0.4	0.053
Escherichia coli, Shiga Toxin-Producing	1	2	8	10	16	9.6	2.559
Giardiasis	1	6	12	21	25	28.6	7.623
Gonorrhea	42	77	360	450	678	594.8	158.544
Haemophilus influenzae , Invasive	0	1	7	4	5	6.8	1.813
Hemolytic Uremic Syndrome (HUS)	0	0	0	0	0	0.2	0.053
Hepatitis A	1	0	7	1	3	6.2	1.653
Hepatitis B, Perinatal	0	0	3	0	2	1.6	0.426
Hepatitis B, Acute	1	0	5	3	4	4.8	1.279
Hepatitis B, Chronic	5	4	41	37	67	39.2	10.449
Hepatitis C, Acute	0	1	1	6	7	7.0	1.866
Hepatitis C, Chronic	27	34	212	210	328	279.0	74.367
Hepatitis E	0	0	0	1	1	0.2	0.053
Influenza-associated hospitalization	0	0	284	158	196	273.8	72.981
Influenza-associated pediatric mortality	0	0	0	0	0	0.2	0.053
LaCrosse virus disease	0	1	0	1	1	0.4	0.107
Legionellosis	2	3	12	9	16	15.6	4.158
Listeriosis	0	0	0	1	1	1.2	0.320
Lyme Disease	6	3	21	15	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	4	1	24	14	30	28.4	7.570
Meningitis, Other Bacterial	0	2	0	4	5	3.8	1.013
Meningococcal Disease	0	0	0	0	0	1.0	0.267
Mumps Pertussis	5	5	13	21	31	2.4 37.4	9.969
Q fever, acute	0	0	0	0	0	0.4	0.107
Salmonellosis	5	9	27	33	51	44.8	11.941
Shigellosis	0	0	3	33	8	35.6	9.489
Spotted Fever Rickettsiosis	3	0	4	0	0	0.00	0.00
Staphylococcal aureaus	0	0	0	1	1	0.2	0.053
Streptococcal Dis, Group A, Invasive	1	1	16	7	10	12.8	3.412
Streptococcal Dis, Group B, in Newborn	0	0	1	1	4	1.8	0.480
Streptococcal Toxic Shock Syndrome	0	1	0	1	1	1.0	0.267
Streptococcus pneumo. – inv. antibiotic resistance unknown or non-resistant	3	0	26	29	37	36.0	9.596
Streptococcus pneumo. – inv. antibiotic resistant/intermediate	0	0	12	14	16	17.8	4.745
Syphilis, Total	4	0	20	11	21	12.0	3.195
 Syphilis, Primary, Secondary and Early Latent 	2	0	8	7	15	7.6	2.024
Toxic Shock Syndrome (TSS)	0	0	0	0	0	0.8	0.213
Tuberculosis	0	1	2	2	2	1.2	0.320
Thyphoid Fever	0	0	0	0	0	0.4	0.107
Varicella	0	3	7	25	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	2	2	8	5	9	4.6	1.226
Zika Virus Disease	0	0	0	3	5	1.0	0.267

Source: Ohio Disease Reporting System, downloaded 9/20/17. Rates are per 100K population and based on 5 yr average incidence '12-'16.



Alliance City Health
Department
cityofalliance.com/health



Canton City Health Department cantonhealth.org



Department massillonohio.com/health



Stark County Health Department starkhealth.org