

EPI GRAM September, 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: La Crosse Virus Disease

La Crosse virus (LACV) is an arthropod-borne virus (arbovirus) in the California group of viruses spread by the bite of infected mosquitoes.

Many people infected with La Crosse virus have no apparent symptoms. For those who do, symptoms typically begin five to 15 days after a mosquito bite and initially include nonspecific symptoms such as:

Fever	Vomiting	Nausea
Headache	Lethargy	Vomitting

Most cases of LaCrosse virus disease in Ohio are reported in children aged 5-9. Figure 2 shows the same trend in Stark County. Severe disease most often occurs among children less than 16 years of age and is characterized by:

Seizures	Paralysis	Coma
A variety of neurological complications after recovery		
Death from infection with La Crosse virus is rare and occurs in < 1 percent of cases.		

In Ohio, La Crosse virus infection can occur anytime during mosquito season, which typically runs from May through October. Most of the cases are reported in July and September. Most people are infected in Ohio by the eastern treehole mosquito, *Aedes triseriatus*, an aggressive daytime biting mosquito commonly found in wooded areas. La Crosse virus is endemic in Ohio, and Ohio has reported more human cases than any other state in the United States, averaging about 20 cases per year. Stark County historically experiences very few cases of La Crosse, with a 5 year annual average of 0.2 cases per year. However, 2018 has proven to be an unusually busy year for La Crosse cases in Stark County. Four cases have been reported in 2018, with one case recorded each month from May to August (Figure 1). To date, this is the highest number of cases recorded locally with one month remaining in mosquito season. The majority of cases are in suburban/rural residents and are in one Stark County jurisdiction.

The best way to prevent La Crosse virus disease is to prevent mosquito bites..

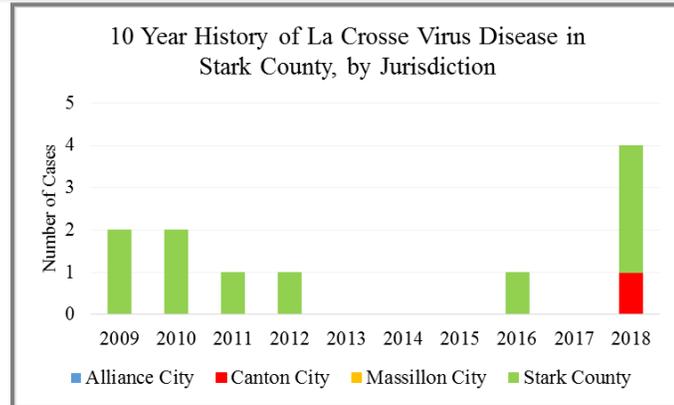


Figure 1

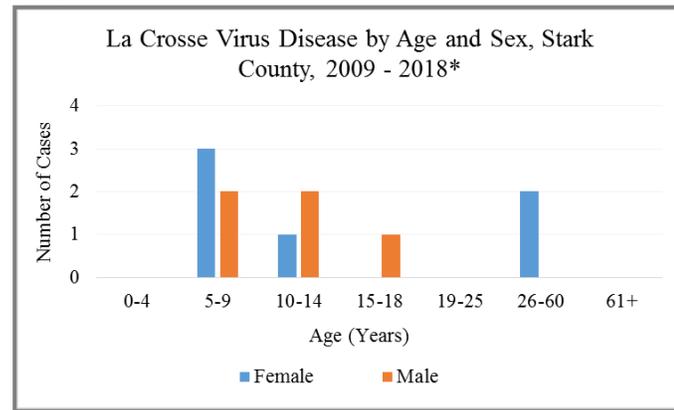


Figure 2

*2018 data represents data only through 9/30/2018

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

	September 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	89	1	7	N/A	2	0	0	N/A
Mold Count	14260	820	4110	1 (High)	8800	0	0	1 (Moderate)
Air Quality Index	56	19	37	2 (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> <http://www.aaaai.org/global/nab-pollen-counts/reading-the-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

	Sept 2018	YTD 2018	2017
Live Births	325	3045	4014*
Births to Teens	17	177	271*
Deaths	268	3183	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	
	Sep	YTD	Sep	YTD	Sep	YTD	Sep	YTD	Sep	YTD
Anaplasmosis-Anaplasma phagocytophilum	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	16	1	8	4	41	6	66
Chlamydia infection	6	83	71	551	15	118	51	513	143	1265
CP-CRE	0	0	1	9	0	3	3	7	4	19
Cryptosporidiosis	0	3	2	9	0	1	1	14	3	27
Cyclosporiasis	0	0	0	0	0	0	0	8	0	8
E. coli, Shiga Toxin-Producing	0	0	1	5	0	1	0	7	1	13
Giardiasis	0	2	0	5	0	1	0	8	0	16
Gonococcal infection	1	23	45	270	1	34	18	126	65	453
Haemophilus influenzae (invasive disease)	0	0	0	1	0	0	0	2	0	3
Hepatitis A	1	1	1	3	0	0	1	4	3	8
Hepatitis B (including delta) - acute	0	0	1	7	0	0	1	2	2	9
Hepatitis B (including delta) - chronic	0	3	2	18	0	5	1	37	3	63
Hepatitis C - acute	0	0	0	5	0	0	0	1	0	6
Hepatitis C - chronic	2	22	9	94	5	35	9	106	25	257
Immigrant Investigation	0	1	0	0	0	1	0	0	0	2
Influenza - ODH Lab Results	0	0	0	0	0	1	0	1	0	2
Influenza-associated hospitalization	0	23	0	150	0	44	2	365	2	582
LaCrosse virus disease	0	0	0	1	0	0	1	3	1	4
Legionellosis - Legionnaires' Disease	0	0	1	10	0	2	4	10	5	22
Listeriosis	0	0	0	0	0	0	0	1	0	1
Lyme Disease	0	0	0	1	0	3	1	29	1	33
Meningitis - aseptic/viral	0	3	1	7	0	2	2	22	3	34
Meningitis - bacterial (Not N. meningitidis)	0	0	0	2	0	1	1	1	1	4
Mumps	0	0	0	1	0	0	0	1	0	2
Pertussis	3	11	0	2	1	6	1	19	5	38
Salmonellosis	0	1	2	3	1	6	6	35	9	45
Shigellosis	0	0	0	9	0	5	0	10	0	24
Spotted Fever Rickettsiosis,including Rocky Mountain spotted fever (RMSF)	0	0	2	2	0	0	0	3	2	5
Streptococcal - Group A -invasive	0	1	0	8	0	1	1	14	1	24
Streptococcal - Group B - in newborn	0	0	0	1	0	0	0	1	0	2
Streptococcus pneumoniae - invasive antibiotic resistance unknown or non-resistant	0	2	0	7	0	0	0	12	0	21
Streptococcus pneumoniae - invasive antibiotic resistant/intermediate	0	0	0	0	0	1	0	4	0	5
Syphilis, Total	0	1	2	9	1	2	2	12	5	24
Syphilis, Primary, Secondary and Early Latent	0	0	2	7	1	2	1	4	4	13
Tuberculosis	0	0	0	0	0	0	0	2	0	2
Varicella	0	0	0	4	0	0	1	9	1	13
West Nile virus disease	1	1	2	2	0	0	4	5	7	8
Yersiniosis	0	1	0	0	0	0	1	1	1	2
Zika virus infection	0	0	0	0	0	0	0	1	0	1
Total	14	183	144	1213	25	281	116	1440	299	3117

Source: Ohio Disease Reporting System, downloaded 10/12/2018.



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)	Sep-18	Sep-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	1	0	1	1	0.2	0.054
Campylobacteriosis	6	13	66	66	88	74.0	19.807
Chlamydia	143	147	1265	1398	1803	1666.6	446.078
CP-CRE	4	0	19	0	0	-	-
Coccidioidomycosis	0	0	0	0	0	0.4	0.107
Creutzfeldt-Jakob Disease	0	0	0	1	3	1.2	0.321
Cryptosporidiosis	3	2	27	21	30	32.4	8.672
Cyclosporiasis	0	0	8	2	2	1.6	0.428
E. coli, Shiga Toxin-Producing	1	1	13	9	12	11.0	2.944
Giardiasis	0	0	16	12	18	24.6	6.584
Gonorrhea	65	50	453	410	542	574.0	153.635
Haemophilus influenzae , Invasive	0	0	3	7	9	7.0	1.874
Hemolytic Uremic Syndrome (HUS)	0	0	0	0	0	0.2	0.054
Hepatitis A	3	0	8	7	10	7.0	1.874
Hepatitis B, Perinatal	0	0	0	0	0	1.8	0.482
Hepatitis B, Acute	2	1	9	7	9	5.6	1.499
Hepatitis B, Chronic	3	6	63	47	66	45.0	12.045
Hepatitis C, Acute	0	0	6	1	1	6.6	1.767
Hepatitis C, Chronic	25	19	257	230	306	295.4	87.363
Hepatitis E	0	0	0	0	0	0.2	0.054
Influenza-associated hospitalization	2	0	582	284	413	326.4	87.363
Influenza-associated pediatric mortality	0	0	0	0	0	0.2	0.054
LaCrosse virus disease	1	0	4	0	0	0.2	0.054
Legionellosis	5	1	22	13	15	15.4	4.122
Listeriosis	0	1	1	1	1	1.2	0.321
Lyme Disease	1	1	33	23	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	3	2	34	26	43	30.2	8.083
Meningitis, Other Bacterial	1	1	4	1	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	5	1	38	14	41	42.8	11.456
Q fever, acute	0	0	0	0	0	0.4	0.107
Q fever, chronic	0	1	0	1	1	0.2	0.054
Salmonellosis	9	4	45	31	39	44.8	11.991
Shigellosis	0	0	24	3	23	38.6	10.332
Spotted Fever Rickettsiosis	2	2	5	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	1	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	0	21	26	33	31.2	8.351
Streptococcus pneumo - inv antibiotic resistant/intermediate	0	1	5	13	16	16.8	4.497
Syphilis, Total	5	1	24	16	31	15.4	4.122
Syphilis, Primary, Secondary and Early Latent	4	1	13	6	14	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
Thyphoid Fever	0	0	0	0	0	0.2	0.054
Varicella	1	3	13	10	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	7	1	8	1	1	0.6	0.161
Yersiniosis	1	0	2	8	9	6.0	1.606
Zika virus infection	0	0	1	0	0	1.0	0.268

Source: Ohio Disease Reporting System, downloaded 10/12//2018. Rates are per 100K population and based on 5 yr average incidence '13 – '17.