

EPI GRAM April, 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 Julia Wagner at 330.493.9914 or Wagnerj@starkhealth.org, or Amanda Archer at 330.489.3327 or aarcher@cantonhealth.org.



Public Health
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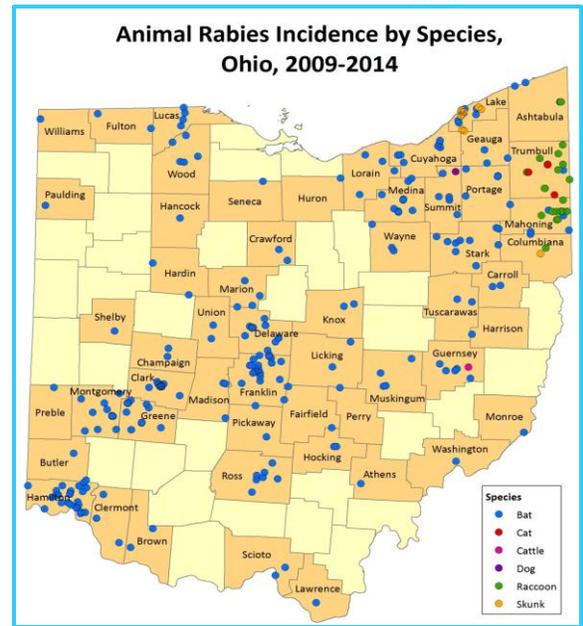
Monthly Highlight: Rabies

Though Stark County has no reported human cases of rabies, during the month of April Stark County had its second raccoon case confirmed positive for the raccoon rabies variant. There are different variant forms of rabies depending on the infected species. However, transmission can occur between species. Stark County has historically only seen rabies in bats (as can be seen by the blue dots on the map below). With these first reported cases in raccoons there is concern that if this strain becomes established it could lead to increased exposures to humans and pets.



Humans infected through the saliva of a rabid animal have a period with no symptoms. On average this period may last from one month to three months, but may be as short as ten days or as long as a year. Once symptoms start the disease almost always progresses to coma or death. In general there are five stages of rabies.

1. **Incubation**-infected, but asymptomatic
2. **Prodrome**- presenting with general malaise, chills, fever, headache, sore throat and fever. Experiencing behavioral changes such as apprehension, anxiety, agitation, irritability, insomnia and depression.
3. **Acute neurologic**- presenting with numbness, muscle spasms, convulsions, neck stiffness, hyperventilation, and hypersalivation
4. **Coma**- often requires ventilation assistance
5. **Death (seldom recovery)**



In addition, this disease can manifest in one of two ways. **Furious rabies** manifests as signs of hyperactivity, hypersalivation, periods of agitation alternating with lucidity, hydrophobia and sometimes aerophobia. Cardio-respiratory rests is the cause of death. This is the most common manifestation. The second is **paralytic rabies** characterized by a slow and gradual paralysis starting the infection site. Death is caused by respiratory failure.

Vaccination is the best form of prevention. If an individual is bitten by an animal they should be evaluated by a healthcare provider to determine whether or not they should receive post-exposure vaccine to prevent rabies after an exposure. Pets should be vaccinated against rabies as well and precautions should be taken to stay away from any wild animal.

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

	April 2017				May 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	1,085	40	320	N/A	900	35	160	N/A
Mold Count	3,670	188	690	13 (Low)	5,950	400	795	15 (Low)
Air Quality Index	71	38	45.5	6 (Moderate)	122	30	45.5	2 (Unhealthy for Sensitive Groups)

**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

	April 2017	YTD 2017	2016
Live Births	327	1,286	4,190
Births to Teens	18	98	263
Deaths	304	1,483	4,356

* 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	
	April	YTD	April	YTD	April	YTD	April	YTD	April	YTD
Amebiasis	0	0	0	0	0	1	0	0	0	1
Campylobacteriosis	0	0	2	8	0	0	7	15	9	23
Chlamydia infection	8	35	57	276	21	77	56	225	142	613
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	1	1	3	7	4	9
Cyclosporiasis	0	0	0	0	0	0	0	0	0	0
E. coli, Shiga Toxin-Producing	0	0	0	1	0	0	1	2	1	3
Giardiasis	0	0	0	0	0	1	2	6	2	7
Gonococcal infection	3	6	30	116	4	15	8	50	45	187
Haemophilus influenzae	0	0	1	1	0	0	0	3	1	4
Hepatitis A	0	0	0	0	0	1	0	4	0	5
Hepatitis B – acute	0	1	0	0	1	1	0	0	1	2
Hepatitis B - chronic	0	0	0	7	0	1	2	12	2	20
Hepatitis B - perinatal	0	0	0	0	0	0	0	2	0	2
Hepatitis C - acute	1	2	0	1	1	0	0	0	2	3
Hepatitis C - chronic	2	16	8	47	2	13	11	49	23	125
Hepatitis E	0	0	0	0	0	0	0	0	0	0
Influenza-associated hospitalization	1	18	9	80	0	21	5	163	15	282
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	0	1	0	0	0	0	0	2
Listeriosis	0	0	0	0	0	0	0	0	0	0
Lyme Disease	0	0	0	0	0	0	0	5	0	5
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	0	3	0	0	1	6	1	9
Meningitis-bacterial (not N. meningitides)	0	0	0	0	0	0	0	0	0	0
Mumps	0	0	0	1	0	0	1	1	1	2
Pertussis	0	0	0	1	0	0	0	3	0	4
Q fever, acute	0	0	0	0	0	0	0	0	0	0
Salmonellosis	1	1	0	2	0	0	2	5	3	8
Shigellosis	0	1	0	1	0	0	0	1	0	3
Spotted Fever Rickettsiosis	0	0	0	0	0	0	1	1	1	1
Staphylococcal aureus	0	0	0	0	0	0	0	0	0	0
Streptococcal-Group A, invasive	0	0	1	3	0	0	0	8	1	11
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	0	5	1	2	2	8	3	17
Streptococcus pneumoniae - invasive antibiotic resistant/intermediate	0	2	1	3	1	2	0	2	2	9
Streptococcal toxic shock syndrome	0	0	0	0	0	0	0	0	0	0
Syphilis, Total	1	2	2	2	1	1	2	5	6	10
➤ Primary, Secondary and Early Latent	0	1	0	0	1	1	0	1	1	3
Tuberculosis	0	0	0	0	0	0	0	0	0	0
Varicella	0	0	0	2	0	0	0	1	0	3
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	1	1	1	1
Total	17	88	111	563	34	138	105	594	267	1,370

Source: Ohio Disease Reporting System, downloaded 5/1/2017.

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

	April 2017	April 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	0	0	0	0.2	0.053
Brucellosis	0	0	0	0	0	0.2	0.053
Campylobacteriosis	9	8	23	21	83	69.4	18.499
Chlamydia	142	146	613	639	1,899	1,611.4	429.518
Coccidioidomycosis	0	0	0	0	1	0.6	0.160
Creutzfeldt-Jakob Disease	0	0	0	0	2	0.6	0.160
Cryptosporidiosis	4	2	9	7	47	35.4	9.436
Cyclosporiasis	0	0	0	0	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	1	2	3	3	16	9.6	2.559
Giardiasis	2	5	7	8	25	28.6	7.623
Gonorrhea	45	50	187	237	678	594.8	158.544
Haemophilus influenzae , Invasive	1	0	4	2	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	0	2	0	4	1.6	0.426
Hepatitis B, Acute	1	0	2	1	4	4.8	1.279
Hepatitis B, Chronic	2	4	20	17	55	39.2	10.449
Hepatitis C, Acute	1	1	3	3	8	7.0	1.866
Hepatitis C, Chronic	22	22	125	96	328	279.0	74.367
Hepatitis E	0	1	0	1	1	0.2	0.053
Influenza-associated hospitalization	17	51	282	151	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	0	0	2	2	16	15.6	4.158
Listeriosis	0	1	0	1	1	1.2	0.320
Lyme Disease	0	4	5	7	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	1	1	9	7	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	1	0	2	1	2	2.4	0.640
Pertussis	0	7	4	11	31	37.4	9.969
Q fever, acute	0	0	0	0	0	0.4	0.107
Salmonellosis	3	3	8	11	51	44.8	11.941
Shigellosis	0	1	2	1	8	35.6	9.489
Spotted Fever Rickettsiosis	1	0	1	0	0	0.00	0.00
Staphylococcal aureaus	0	1	0	1	1	0.2	0.053
Streptococcal Dis, Group A, Invasive	1	1	11	4	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	3	2	17	21	37	36.0	9.596
Streptococcus pneumo. – inv. antibiotic resistant/intermediate	2	2	9	10	16	17.8	4.745
Syphilis, Total	6	1	10	4	21	12.0	3.195
> Syphilis, Primary, Secondary and Early Latent	1	0	3	2	15	7.6	2.024
Toxic Shock Syndrome (TSS)	0	0	0	0	0	0.8	0.213
Tuberculosis	0	0	0	0	2	1.2	0.320
Thyphoid Fever	0	0	0	0	0	0.4	0.107
Varicella	0	3	3	19	35	29.4	7.837
Vibriosis - other (not cholera)	0	2	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	1	6	2	9	4.6	1.226
Zika Virus Disease	1	1	1	3	5	1.0	0.267

Source: Ohio Disease Reporting System, downloaded 5/1/17. Rates are per 100K population and based on 5 yr average incidence '12-'16.



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