

EPI Gram is a bimonthly 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.

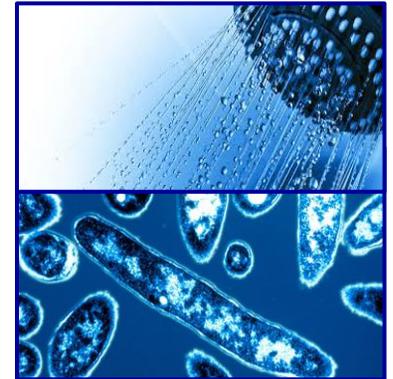
Monthly Highlight: Legionnaires' Disease

According to the Center for Disease Control and Prevention, an estimated 8,000 to 18,000 are hospitalized with Legionnaires' disease each year in the United States. In Stark County there have been eight cases so far this year. This is considerable since all of last year there was only six reported cases. On the other hand, the five year annual average has been recorded as 13.6 cases.

Legionnaire's disease is caused by bacteria called Legionella. In humans, Legionella can be challenging to detect. The symptoms include shortness of breath, cough, fever, headaches, muscle aches, and pneumonia. Though treatment with antibiotics is generally successful, complications with this disease can result in lung failure and death. Those that have a weakened immune system from cancer, diabetes, HIV, kidney disease, or having a pre existing lung condition are more susceptible to the Legionella bacteria.

The bacteria are found in natural environments and grow best in stagnant warm water. Transmission does not occur from person to person, but rather from breathing in droplets of water that have become aerosolized and contain the bacteria. Testing water for Legionella involves water sites associated with the patient that might remain stagnant and lukewarm for a period before becoming aerosolized. Sample sites one may consider for testing include:

- ✓ Humidifiers
- ✓ Respiratory equipment
- ✓ Hot tubs
- ✓ Decorative fountains
- ✓ Faucet tops and showers
- ✓ Cooling towers
- ✓ Evaporative condensers
- ✓ Irrigation equipment



Frequent cleaning and disinfecting of the aforementioned sites can prevent the growth and spread of the Legionella bacteria. Biofilms facilitate the growth of Legionella, forming on the surfaces of poorly managed buildings or cooling towers. Water supply in cooling systems, decorative fountains, humidifiers, plumbing systems, and hot tubs should be kept cycling and free of impurities. The temperature should be kept below 20 degrees Celsius or heated above 60 degrees Celsius.

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

	June 2015				July 2014			
	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	125	3	20	NA	35	10	5	NA
Mold Count	6,580	1,400	3,550	2	9,340	2,080	5,270	8
Air Quality Index	94	33	44	2	49	32	39	0

**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 Summaries of Select Vital Statistics for Stark County

	June 2015	YTD 2015	2014
Live Births	333	2,147	4,512
Births to Teens	21	149	380
Deaths	321	2,317	4,288

Birth and Death Data is reported by the four health districts and may include non-county residents.

Table 3 Stark County Crude Birth Rate and Death Rates

	2009	2010	2011	2012	2013
Birth	11.4	10.8	10.8	10.9	11.2
Death	10.9	10.9	11.3	11.4	11.3

*Source: Ohio Department of Health Data Warehouse. Rates are per 1,000 population.

If you have any questions, including how to receive copies of this report, please contact Julia Wagner at 330.493.9914 or Wagnerj@starkhealth.org.

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	0	0	1	0	1
Babesiosis	0	0	0	0	0	0	0	1	0	1
Campylobacteriosis	2	3	6	10	0	0	2	13	10	26
Chlamydia infection	8	33	46	338	20	92	64	286	138	749
Coccidioidomycosis	0	0	0	0	0	0	0	0	0	0
Cryptosporidiosis	0	1	0	1	0	0	0	5	0	7
Cyclosporiasis	0	0	0	0	0	0	1	1	1	1
E. coli-Not O157:H7	0	0	0	0	0	0	0	3	0	3
E. coli-O157:H7	0	0	0	0	0	0	0	0	0	0
Giardiasis	0	0	1	3	0	1	1	6	2	10
Gonococcal infection	1	11	29	136	2	22	9	37	41	206
Haemophilus Influenzae	1	2	1	3	0	0	0	2	2	7
Hemolytic Uremic Syndrome	0	0	0	0	0	0	0	0	0	0
Hepatitis A	0	0	0	2	0	0	0	0	0	2
Hepatitis B - acute	0	0	0	1	0	0	0	0	0	1
Hepatitis B - chronic	0	3	2	5	0	0	0	14	2	22
Hepatitis B - perinatal	0	0	1	1	0	0	0	4	1	5
Hepatitis C - acute	0	2	0	1	0	2	0	2	0	7
Hepatitis C - chronic	4	26	14	53	6	22	19	73	43	174
Influenza-associated hospitalization	0	7	0	75	0	24	0	173	0	279
Legionellosis	1	1	2	2	1	1	2	4	6	8
Lyme Disease	0	1	1	1	1	1	1	3	3	6
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	1	1	3	0	5	1	9
Meningitis - bacterial (Not N. meningitidis)	0	0	0	0	0	0	1	2	1	2
Meningococcal disease	0	0	0	1	0	1	0	1	0	3
Mumps	0	0	0	1	0	0	0	2	0	3
Mycobacterial disease - other than tuberculosis	0	0	0	2	1	2	0	6	1	10
Pertussis	0	6	0	8	0	3	6	13	6	30
Salmonellosis	1	1	1	4	1	2	6	16	9	23
Shigellosis	0	0	1	2	0	0	0	0	1	2
Streptococcal - Group A -invasive	0	0	0	1	0	1	0	3	0	5
Streptococcal - Group B -newborn	0	0	0	0	0	0	0	0	0	0
Streptococcal toxic shock syndrome (STSS)	0	0	0	1	0	0	0	0	0	1
Streptococcus pneumoniae - invasive antibiotic resistance unknown/non-resistant	1	1	0	4	0	1	0	6	1	12
Streptococcus pneumoniae - invasive antibiotic resistant/intermediate	0	2	0	3	0	0	0	7	0	12
Syphilis, Total	0	0	0	0	0	2	1	3	1	5
Syphilis, Primary and Secondary	0	0	0	0	0	0	1	2	1	2
Tuberculosis	0	0	0	0	0	0	0	0	0	0
Typhoid Fever	0	0	0	0	0	0	0	0	0	0
Varicella	0	0	0	1	0	0	2	12	2	13
Vibriosis-Other (not cholera)	0	0	0	0	0	0	1	2	1	2
West Nile	0	0	0	0	0	0	0	0	0	0
Yersiniosis	0	0	0	0	0	0	0	3	0	3
Total	19	100	106	661	33	180	117	711	274	1,652

Source: Ohio Disease Reporting System, downloaded 7/8/2015.

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

	June 2015	June 2014	YTD 2015	YTD 2014	All of 2014	5 Yr. Annual Average	5 Yr. Annual Rate
Amebiasis	0	0	1	0	0	0.2	0.053
Anaplasmosis	0	0	0	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	10	9	26	29	74	59.2	15.762
Chlamydia	138	119	749	748	1,531	1,465.2	390.110
Coccidioidomycosis	0	0	0	0	1	0.4	0.107
Creutzfeldt-Jakob Disease	0	0	0	0	0	0.6	0.160
Cryptosporidiosis	0	2	7	15	29	27.8	7.402
Cyclosporiasis	1	0	1	0	0	0.2	0.053
Dengue	0	0	0	0	0	0.8	0.213
Escherichia coli , STP, Not O157:H7	0	0	1	1	2	1.2	0.320
Escherichia coli O157:H7	0	0	0	0	6	2.8	0.746
Escherichia coli , STP, Unk Serotype	0	0	0	0	0	0.4	0.107
Ehrlichiosis	0	0	0	0	0	0.2	0.053
Giardiasis	2	1	10	3	15	44.2	11.768
Gonorrhea	41	41	206	297	527	562.8	149.846
Haemophilus influenzae , Invasive	2	1	7	3	6	7.4	1.970
Hemolytic Uremic Syndrome (HUS)	0	0	0	0	1	0.2	0.053
Hepatitis A	0	1	2	3	9	4.8	1.278
Hepatitis B, Acute	0	0	1	2	6	5.2	1.385
Hepatitis B, Chronic	2	3	22	27	41	32.4	8.627
Hepatitis B, Perinatal	1	0	5	0	1	2.6	0.692
Hepatitis C, Acute	0	0	7	1	4	6	1.597
Hepatitis C, Chronic	43	19	174	135	263	247.8	65.977
Hepatitis E	0	0	0	0	0	0.2	0.053
Influenza-associated hospitalization	0	0	279	139	409	208.2	55.433
Influenza-associated pediatric mortality	0	0	0	0	0	0.2	0.053
LaCrosse virus disease	0	0	0	0	0	0.8	0.213
Legionellosis	6	1	8	1	6	13.6	3.621
Listeriosis	0	0	0	0	1	1.4	0.373
Lyme Disease	3	1	6	3	9	10.8	2.876
Malaria	0	0	0	0	1	1	0.266
Measles (indigenous to Ohio)	0	6	0	7	9	1.8	0.479
Meningitis, Aseptic/Viral	1	0	9	8	24	35.6	9.479
Meningitis, Other Bacterial	1	1	2	2	2	3.2	0.852
Meningococcal Disease	0	0	3	1	2	1	0.266
Mumps	0	2	3	3	5	1.4	0.373
Mycobacterial disease - Not TB	1	5	10	18	34	30.4	8.094
Other arthropod-borne disease	0	0	0	0	1	0.2	0.053
Pertussis	6	8	30	29	81	45.6	12.141
Q fever, acute	0	0	0	0	0	0.4	0.106
Salmonellosis	9	5	23	16	38	37.8	10.064
Shigellosis	1	3	0	42	69	34	9.053
Spotted Fever Rickettsiosis	0	0	2	0	0	0.6	0.160
Streptococcal Dis, Group A, Invasive	0	1	5	7	10	15.8	4.207
Streptococcal Dis, Group B, in Newborn	0	0	0	0	1	2.4	0.639
Streptococcal Toxic Shock Syndrome	0	0	1	2	2	1	0.266
Strep. pneumo. - invasive antibiotic resistance unknown / non-resistant	1	0	12	17	27	36	9.585
Strep. pneumo. - invasive antibiotic resistant /intermediate	0	1	12	2	9	18.8	5.006
Syphilis, Total	1	2	5	8	7	6.4*	1.704*
Syphilis, Primary and Secondary	1	0	2	3	7	0.8*	0.213*
Toxic Shock Syndrome (TSS)	0	0	0	0	0	0.8	0.213
Tuberculosis	0	1	0	1	1	1.8	0.479
Typhoid Fever	0	0	0	0	1	0.4	0.107
Typhus Fever	0	0	0	0	0	0.2	0.053
Varicella	2	2	13	12	24	35.4	9.425
Vibriosis parahaemolyticus	0	0	2	0	0	0.2	0.053
Vibriosis - other (not cholera)	1	0	0	1	1	0.6	0.160
West Nile Virus	0	0	0	0	1	0.4	0.107
Yersiniosis	0	0	3	0	3	1.2	0.320

Source: OH Disease Reporting System, downloaded 7/8/2015. Rates are per 100K population and based on 5 yr. average incidence 09-13.*08-12 from ODH Stats pg.