

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.

Monthly Highlight: Seasonal Illness

Certain reportable conditions have distinctive seasonal patterns. Understanding and recognizing these patterns may be useful in their diagnosis and prevention. Highlighted in the graphs to the right are four illnesses with strong late summer seasonal incidence trends: Legionella, Campylobacter, Salmonella, and Shigella. The first cause's respiratory illness and the later three lead to gastroenteritis. The later three have long been recognized to have seasonal trends due to consumer changes in eating and exposure habits.

Due to the strong association with warm environmental conditions, Legionella cases tend to peak in the late summer and early fall months. *L. pneumonophila* is a gram negative rod shaped bacterium and the leading cause of human cases of Legionella. Disease is usually the result of inhalation of *L. pneumonophila* from an aerosolized contaminated water source. Common water sources for growth of the organisms include:

1. cooling towers, evaporative condensers, and fluid coolers that use evaporation to reject heat. These include many industrial processes that use water to remove excess heat;
2. domestic hot-water systems with water heaters that operate below 140°F and deliver water to taps below 122°F;
3. humidifiers and decorative fountains that create a water spray and use water at temperatures favorable to growth;
4. spas and whirlpools;
5. dental water lines, which are frequently maintained at temperature above 68°F and sometimes as warm as 98.6°F; and
6. other sources including stagnant water in fire sprinkler systems and warm water for eye washes and safety showers.

May of 2012 had unusually early increases in Legionella reporting. Investigation of the reported cases in Stark County and another case with exposure in Stark County did not find any common source of exposure to Legionella. More information on Legionella can be found at http://www.osha.gov/dts/osta/otm/otm_iii/otm_iii_7.html

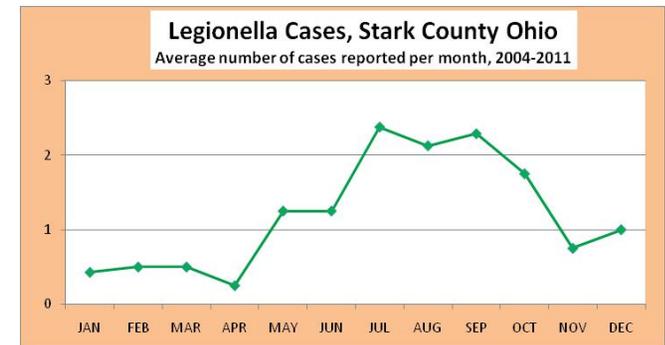
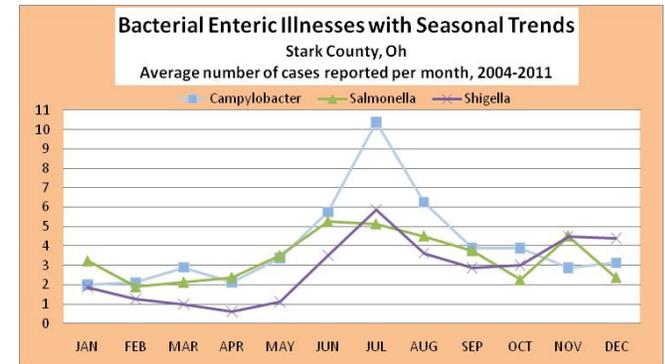


Table 1 Summary of Air Quality Index, Pollen, and Mold Counts for Stark County, Ohio, including historical data.

	May 2012				June 2011			
	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	6,130	50	158	N/A	670	5	45	N/A
Mold Count	5,600	100	2,900	All Low Levels	11,690	1,870	5,375	9 Moderate
Air Quality Index	104	36	47	1 Unhealthy for Sensitive Groups	119	32	47.5	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 Summaries of Select Vital Statistics for Stark County

	May 2012	YTD 2012	2011
Live Births	365	1709	4075
Births to Teens	49	165	399
Deaths	383	1816	4110

Table 3 Stark County Crude Birth and Death Rates

	2006	2007	2008	2009	2010
Birth	1191*	1190*	1166*	1139	1085
Death	1000*	1035*	1055*	1072	1094

*Source: Ohio Department of Health Data Warehouse. Rates are per 100,000 population.

If you have any questions, including how to receive copies of this report, please contact Christina Henning at 330.489.3327 or Chenning@cantonhealth.org or Lauren Drinkard at 330.493.9928 or Drinkardl@starkhealth.org.

Table 4: 2011 Jurisdictional Summary of Reportable Diseases in Stark County, OH

	Alliance City		Canton City		Massillon City		Stark County		All Departments	
	May	YTD	May	YTD	May	YTD	May	YTD	May	YTD
Brucellosis		0		0		0		1	0	1
Campylobacteriosis		1	3	3		1	3	8	6	13
Chlamydia infection	15	65	54	306	7	52	43	201	119	624
Coccidioidomycosis		0		0		0		1	0	1
Cryptosporidiosis		2	1	1		1	1	6	2	10
Dengue		0		0		0		1	0	1
Giardiasis		0	1	2		0	2	12	3	14
Gonococcal infection		14	26	135	1	25	9	61	36	235
Haemophilus influenzae		0		1		0	1	2	1	3
Hepatitis A		1		1		0	1	1	1	3
Hepatitis B - Perinatal Infection		0		1		0		0	0	1
Hepatitis B - acute		0		1		0	1	1	1	2
Hepatitis B (including delta) - chronic		0	3	7	1	1	4	9	8	17
Hepatitis C - acute		0	1	1		0		0	1	1
Hepatitis C - chronic	3	14	5	34	2	14	5	41	15	103
Influenza-associated hospitalization		0		4	1	2		9	1	15
Legionellosis - Legionnaires' Disease		0	1	2		0	1	2	2	4
Lyme Disease	1	1		0		1		4	1	6
Meningitis - aseptic/viral		1		0		0		4	0	5
Meningitis - bacterial (Not N. meningitidis)		0		2		0		1	0	3
Mycobacterial disease - other than tuberculosis		0		2	1	1	3	7	4	10
Pertussis		0		0		0		2	0	2
Salmonellosis		0		0		0	1	10	1	10
Streptococcal - Group A -invasive		0		3	1	2	2	8	3	13
Streptococcus pneumoniae - invasive antibiotic resistance unknown or non-resistant	1	3		6	1	1	3	25	5	35
Streptococcus pneumoniae - invasive antibiotic resistant/intermediate	1	1		2		0		5	1	8
Syphilis, Total		1	1	2	0	3			1	6
Syphilis, Primary and Secondary			0						0	0
Varicella		3	1	5		1	1	11	2	20
Yersiniosis								1	0	1

Source: Ohio Disease Reporting System, downloaded 06/25/2012.

**Table 5 – 2011 Summary Table of Diseases Reported in the Previous 5 years within Stark County, OH.
(Provisional Data)**

	May-12	YTD 2012	YTD 2011	All of 2011	5 Yr annual average	Rate
Anaplasmosis					0.2	0.05
Brucellosis		1			0	0
Campylobacteriosis	6	13	11	40	50	13.31
Chlamydia	119	624	573	1457	1269.6	338.03
Coccidioidomycosis		1			0	0
Creutzfeldt-Jakob Disease (CJD)			1	2	1.6	0.43
Cryptosporidiosis	2	10	7	16	21.2	5.64
Cytomegalovirus (CMV), Congenital					0.4	0.11
Dengue		1		2	0.6	0.16
Encephalitis, Post Other Infection					0.2	0.05
Encephalitis, Primary Viral					0.8	0.21
Escherichia coli , Shiga Toxin-Producing, Not O157:H7			1	2	1	0.27
Escherichia coli , Shiga Toxin-Producing, Unknown Serotype					1.4	0.37
Escherichia coli O157:H7			2	2	2	0.53
Ehrlichiosis-Ehrlichia chaffeensis				1	0.2	0.05
Giardiasis	3	14	30	62	52.2	13.9
Gonorrhea	36	235	253	613	540.4	143.88
Haemophilus influenzae , Invasive Disease	1	3	4	8	7	1.86
Hemolytic Uremic Syndrome (HUS)					0.6	0.16
Hepatitis A	1	3	1	1	2.4	0.64
Hepatitis B - Perinatal Infection		1		2	**	**
Hepatitis B, Acute	1	2	1	2	3.4	0.91
Hepatitis B, Chronic	8	17	15	23	36.4	9.69
Hepatitis C, Acute	1	1	3	6	4.2	1.12
Hepatitis C, Chronic	15	103	119	279	239.8	63.85
Hepatitis E				1	0.2	0.05
Herpes, Congenital					0.4	0.11
Influenza A - novel virus infection					0.4	0.11
Influenza-associated hospitalization	1	15	140	143	**	**
LaCrosse virus disease (other California serogroup virus disease)				1	0.6	0.16
Legionellosis	2	4		9	14.2	3.78
Listeriosis			1	2	2.4	0.64
Lyme Disease	1	6	2	12	4.2	1.12
Malaria				1	1.2	0.32
Meningitis, Aseptic		5	3	63	40.8	10.86
Meningitis, Bacterial, Not Neisseria meningitidis		3		3	2.6	0.69
Meningococcal Disease			1	1	1.2	0.32
Mumps					0.8	0.21
Mycobacterial disease - other than tuberculosis	4	10	12	23	24	6.39
Pertussis		2	8	11	34	9.05
Q Fever					0	0
Rheumatic Fever					0.2	0.05
Rocky Mountain Spotted Fever (RMSF)			2	2	0.6	0.16
Salmonellosis	1	10	10	32	36.4	9.69
Shigellosis				1	50	13.31
Streptococcal Disease, Group A, Invasive	3	13	14	22	10.6	2.82
Streptococcal Disease, Group B, in Newborn				3	3.6	0.96
Streptococcal Toxic Shock Syndrome (STSS)			2	2	1	0.27
Streptococcus pneumoniae - invasive antibiotic resistance unknown or non-resistant	5	35	22	37	30.8	8.2
Strep. pneumoniae - invasive antibiotic resistant/intermediate	1	8	12	17	20.2	5.38
Syphilis, Total	1	6	6	13	11.2	2.98
Syphilis, Primary and Secondary			4	10	4.2	1.12
Toxic Shock Syndrome (TSS)					0.6	0.16
Tuberculosis		1	1	2	2.6	0.69
Varicella	2	20	13	33	68.6	18.26
Vibriosis - other (not cholera)				1	0.2	0.05
Yersiniosis		1			1.2	0.32

Source: Ohio Disease Reporting System, downloaded 06/25/2012. Rates are per 100,000 population.