

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: Mumps

With as “many as 40%–50% of mumps infections associated with nonspecific or primarily respiratory symptoms” it may be challenging to diagnose mumps in a low incidence community. A single suspect case of Mumps was reported in a youth in Stark County in November. On average, less than one case is reported annually in Stark County. A single diagnosis leads to a public health recommendation of isolation for 5 days post onset of parotitis as well as vaccination or proof of disease in close contacts born after 1956. Vaccination or proof of prior disease in health care workers in contact with the case is required, despite their year of birth.

The CDC states “the classic symptoms of mumps include parotitis in about 50% either unilateral or bilateral, which develops an average of 16 to 18 days after exposure. Swelling can also be seen in the submandibular and sublingual gland in a small percentage. Nonspecific symptoms including myalgia, anorexia, malaise, headache and low-grade fever may precede parotitis by several days. Persons with mumps are usually considered most infectious from 1-2 days before until 5 days after onset of parotitis.”

The diagnosis of Mumps in 3 or more individuals clustered in time and space defines an outbreak. If the time and space association is related to a childcare or school, considerable isolation requirements may be necessary to prevent spread of the disease. In accordance with Ohio Statute 3313.671 (Exemptions), unvaccinated childcare and school aged children are subject to exclusion from school for the duration of an outbreak of mumps. Outbreaks are usually not declared over until two full incubation periods have lapsed since the last known case. With an incubation period of 16 – 18 days and up to 14-25 days, unvaccinated children may have to be excluded for at least 50 days in an outbreak setting. This leads to a great deal of urgency to diagnose cases as early as possible to prevent the spread of the disease and the hardship that can occur in not just the diseased but also in the exposed. Additional information on Mumps can be found at: <http://www.cdc.gov/mumps/clinical/qa-disease.html> and <http://www.odh.ohio.gov/pdf/IDCM/mumps.pdf>

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

	November 2012				December 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	Reported seasonally, not currently available							
Mold Count								
Air Quality Index	61	15	32	2 Moderate	70	7	18	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> 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

	November 2012	YTD 2012	2011
Live Births	390	4011	4075
Births to Teens	33	365	399
Deaths	370	3891	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	
	Nov	YTD	Nov	YTD	Nov	YTD	Nov	YTD	Nov	YTD
Brucellosis								1	0	1
Campylobacteriosis		4	2	25		2	5	31	7	62
Chlamydia infection	10	120	54	645	14	133	41	520	119	1418
Coccidioidomycosis								1	0	1
Cryptosporidiosis	1	5	3	8		2	4	28	8	43
Dengue								1	0	1
E Coli Not O157:H7								1	0	1
E Coli O157:H7								2	0	2
E Coli Unk Serotype		1							0	1
Giardiasis			2	7			4	32	6	39
Gonococcal infection	1	23	33	347	5	62	15	155	54	587
Haemophilus influenzae	1	1		1			2	6	3	8
Hepatitis A		1		1			2	3	2	5
Hepatitis B - Perinatal Infection				1			1	3	1	4
Hepatitis B - acute			1	3			2	3	3	6
Hepatitis B - chronic		1		9		3	3	21	3	34
Hepatitis C - acute	1	3		4		1		1	1	9
Hepatitis C - chronic		23	8	62	3	30	6	93	17	208
Influenza-associated hospitalization		1	3	8	1	3	12	24	16	36
LaCrosse Virus Disease								1	0	1
Legionnaires' Disease			1	6			1	9	2	15
Lyme Disease		1				1		10	0	12
Meningitis - aseptic/viral	1	3	1	7		4	4	18	6	32
Meningitis - bacterial (Not N. meningitidis)			1	3				1	1	4
Mumps							1	1	1	1
Mycobacterial disease -		2		6		1		13	0	22
Pertussis	1	2		2				10	1	14
Salmonellosis		1	1	6		1	3	30	4	38
Shigella		3				1		2	0	6
Streptococcal - Group A -invasive		1	1	5		2	1	11	2	19
Streptococcal-Group B in Newborn							1	1	1	1
Streptococcal toxic shock syndrome							1	1	1	1
Streptococcus pneumoniae - invasive antibiotic resistance unknown or non-resistant		4	2	13		2	2	34	4	53
Streptococcus pneumoniae - invasive antibiotic resistant/intermediate	1	3	2	5		1		7	3	16
Syphilis, Total		1	2	4	1	6			3	11
Syphilis, Primary and Secondary			2	2					2	2
Typhoid Fever								1	0	1
Varicella		4		7	2	6	1	17	3	34
West Nile Virus				1					0	1
Yersiniosis								2	0	2

Source: Ohio Disease Reporting System, downloaded 12/09/2012.

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

	Nov 2012	YTD 2012	YTD 2011	All of 2011	5 Yr annual average	Rate
Anaplasmosis					0.2	0.05
Brucellosis		1			0	0
Campylobacteriosis	7	62	37	40	50	13.31
Chlamydia	119	1418	1334	1457	1269.6	338.03
Coccidioidomycosis		1			0	0
Creutzfeldt-Jakob Disease (CJD)			2	2	1.6	0.43
Cryptosporidiosis	8	43	16	16	21.2	5.64
Cytomegalovirus (CMV), Congenital					0.4	0.11
Dengue		1	2	2	0.6	0.16
Encephalitis, Post Other Infection					0.2	0.05
Encephalitis, Primary Viral					0.8	0.21
Escherichia coli , STP, Not O157:H7		1	2	2	1	0.27
Escherichia coli , STP, Unk Serotype		2	2	2	1.4	0.37
Escherichia coli O157:H7		1			2	0.53
Ehrlichiosis-Ehrlichia chaffeensis			1	1	0.2	0.05
Giardiasis	6	39	59	62	52.2	13.9
Gonorrhea	54	587	567	613	540.4	143.88
Haemophilus influenzae , Invasive Disease	3	8	7	8	7	1.86
Hemolytic Uremic Syndrome (HUS)					0.6	0.16
Hepatitis A	2	5	1	1	2.4	0.64
Hepatitis B - Perinatal Infection	1	4	2	2	**	**
Hepatitis B, Acute	3	6	2	2	3.4	0.91
Hepatitis B, Chronic	3	34	22	23	36.4	9.69
Hepatitis C, Acute	1	9	6	6	4.2	1.12
Hepatitis C, Chronic	17	208	229	251	239.8	63.85
Hepatitis E			1	1	0.2	0.05
Herpes, Congenital					0.4	0.11
Influenza A - novel virus infection					0.4	0.11
Influenza-associated hospitalization	16	36	142	143	**	**
LaCrosse virus disease		1	1	1	0.6	0.16
Legionellosis	2	15	7	9	14.2	3.78
Listeriosis			2	2	2.4	0.64
Lyme Disease		12	11	12	4.2	1.12
Malaria			1	1	1.2	0.32
Meningitis, Aseptic	6	32	61	63	40.8	10.86
Meningitis, Bacterial, Not Neisseria meningitidis	1	4	2	3	2.6	0.69
Meningococcal Disease			1	1	1.2	0.32
Mumps	1	1			0.8	0.21
Mycobacterial disease - other than tuberculosis		22	21	23	24	6.39
Pertussis	1	14	11	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	4	38	29	32	36.4	9.69
Shigellosis		6	1	1	50	13.31
Streptococcal Disease, Group A, Invasive	2	19	22	22	10.6	2.82
Streptococcal Disease, Group B, in Newborn	1	1	2	3	3.6	0.96
Streptococcal Toxic Shock Syndrome (STSS)	1	1	2	2	1	0.27
Streptococcus pneumoniae - invasive antibiotic resistance unknown or non-resistant	4	53	34	37	30.8	8.2
Strep. pneumo. - invasive antibiotic resistant/intermediate	3	16	17	17	20.2	5.38
Syphilis, Total	3	11	10	13	11.2	2.98
Syphilis, Primary and Secondary	2	2	6	10	4.2	1.12
Toxic Shock Syndrome (TSS)					0.6	0.16
Tuberculosis	1	3	2	2	2.6	0.69
Typhoid Fever		1				
Varicella	3	34	30	33	68.6	18.26
Vibriosis - other (not cholera)			1	1	0.2	0.05
West Nile Virus		1			0	0
Yersiniosis		2			1.2	0.32

Source: Ohio Disease Reporting System, downloaded 12/09/2012. Rates are per 100,000 population and based on 5 year average. ** Historical information unavailable.