EPI GRAM August, 2012

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.*

Monthly Highlight: Travel related illness

Each year travel related illnesses are brought home to Stark County. This year is no exception. Travel to areas of the Middle East and Asia have been linked to Dengue Fever, *Salmonella* Typhi and *Cryptosporidium*.

Dengue Fever is one of the leading causes of morbidity in some countries, particularly in tropical and subtropical zones. It is spread through the bite of an infected mosquito. No vaccine is available. Prevention, while traveling, lies in good mosquito avoidance practices, such as restricting outdoor activities when mosquitoes active, utilizing mosquito netting or secure window screening in areas of known transmission and applying a proven mosquito repellant regularly. Dengue is characterized by a sudden onset of high fever (103-106°F), severe headache, backache, intense pain in joints and muscles, retro-orbital pain, nausea and vomiting and a generalized erythematous rash. If a person suspects Dengue fever the Centers for Disease Control and Prevention (CDC) recommends using analgesics (pain relievers) with acetaminophen, rest, drink plenty of fluids, and consulting a physician. If symptoms persist or worsen, immediate medical treatment should be sought.

Salmonella Typhi is the agent of typhoid fever. Typhoid fever is transmitted by ingestion of food or water contaminated by an individual infected with the *Salmonella* Typhi organism. Salmonella Typhi enters the blood stream causing a febrile illness with headache, malaise, anorexia, weakness, stomach pain, headache and non-productive cough. Rose spots on the trunk appear in 25% of cases. Constipation is more common than diarrhea. Approximately 2%-5% of typhoid fever patients become carriers. *Salmonella* Typhi is a vaccine preventable illness.

Cryptosporidium species are parasites which produce hardy 4-6 µm oocysts. These oocysts are highly infective for humans and most animals and are resistant to chlorine and other disinfectants. The most common route of transmission is from consumption of contaminated water. Due to the low infective dose, drinking even very minute amounts of contaminated water can lead to illness. Illness is characterized by profuse watery diarrhea often accompanied by stomach pain, dehydration, nausea, vomiting and weight loss. Prevention includes drinking filtered and treated water, avoid swallowing water when swimming, and washing hands thoroughly particularly after animal contact and prior to eating.

Information above excerpted from the CDC and the Ohio Department of Health, please visit their websites for additional information. http://wwwnc.cdc.gov/travel/ and http://www.odh.ohio.gov/pdf/IDCM/sect3TOC.pdf.

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

	August 2012				September 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	150	5	20	N/A	230	10	35	N/A
Mold Count	11,990	2,210	5,150	**5 Moderate**	27,360	5,120	8,930	**3 High**
Air Quality Index	110	31	50	**2 Unhealthy for Sensitive Groups**	132	16	35.5	**1 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

	August 2012	YTD 2012	2011
Live Births	391	2889	4075
Births to Teens	40	278	399
Deaths	354	2821	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	
	AUG	YTD	Aug	YTD	Aug	YTD	Aug	YTD	Aug	YTD
Brucellosis		0		0		0		1	0	1
Campylobacteriosis	2	4	5	20		2	2	22	9	48
Chlamydia infection	8	85	59	460	20	91	72	377	159	1013
Coccidioidomycosis		0		0		0		1	0	1
Cryptosporidiosis	2	4		3	1	2	6	18	9	27
Dengue		0		0		0		1	0	1
E Coli O157:H7		0		0		0	1	1	1	1
Giardiasis		0	1	5		0	4	20	5	25
Gonococcal infection		15	37	228	8	42	17	115	62	400
Haemophilus influenzae		0		1		0	1	4	1	5
Hepatitis A		1		1		0		1	0	3
Hepatitis B - Perinatal Infection		0		1		0		1	0	2
Hepatitis B - acute		0		1		0		1	0	2
Hepatitis B - chronic		1		8		2	1	13	1	24
Hepatitis C - acute		0	1	3		0		0	1	3
Hepatitis C - chronic	5	25	2	43	4	21	14	70	25	159
Influenza-associated hospitalization		1		4		2		11	0	18
LaCrosse Virus Disease		0		0		0	1	1	1	1
Legionnaires' Disease		0	1	4		0	3	7	4	11
Lyme Disease		1		0		1	2	8	2	10
Meningitis - aseptic/viral		1	2	3	1	1	3	11	6	16
Meningitis - bacterial (Not N. meningitidis)		0		2		0		1	0	3
Mycobacterial disease -		2	2	5		1	3	10	5	18
Pertussis		0		1		0	2	7	2	8
Salmonellosis		0	1	3		1	4	24	5	28
Shigella		0		0		1		1	0	2
Streptococcal - Group A -invasive		1		4		2	1	10	1	17
Streptococcus pneumoniae - invasive antibiotic resistance unknown or non-resistant	1	4		11		1		29	1	45
Streptococcus pneumoniae - invasive antibiotic resistant/intermediate		2		2		0		5	0	9
Syphilis, Total		1		2	1	4			1	7
Syphilis, Primary and Secondary										0
Typhoid Fever		0		0		0	1	1	1	1
Varicella		3		5		2	1	12	1	22
West Nile Virus		0	1	1		0		0	1	1
Yersiniosis		0		0		0		1	0	1

Source: Ohio Disease Reporting System, downloaded 09/17/2012.

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

	12-Aug	YTD 2012	YTD 2011	All of 2011	5 Yr annual average	Rate
Anaplasmosis					0.2	0.05
Brucellosis		1			0	0
Campylobacteriosis	9	48	31	40	50	13.31
Chlamydia	159	1013	958	1457	1269.6	338.03
Coccidioidomycosis		1			0	0
Creutzfeldt-Jakob Disease (CJD)			2	2	1.6	0.43
Cryptosporidiosis	9	27	11	16	21.2	5.64
Cytomegalovirus (CMV), Congenital					0.4	0.11
Dengue		1	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, Unk Serotype					1.4	0.37
Escherichia coli O157:H7	1	1	2	2	2	0.53
Ehrlichiosis-Ehrlichia chaffeensis			1	1	0.2	0.05
Giardiasis	5	25	49	62	52.2	13.9
Gonorrhea	62	400	425	613	540.4	143.88
Haemophilus influenzae , Invasive Disease	1	5	5	8	7	1.86
Hemolytic Uremic Syndrome (HUS)					0.6	0.16
Hepatitis A		3	1	1	2.4	0.64
Hepatitis B - Perinatal Infection		2		2	**	**
Hepatitis B, Acute		2	1	2	3.4	0.91
Hepatitis B, Chronic	1	24	19	24	36.4	9.69
Hepatitis C, Acute	1	3	4	6	4.2	1.12
Hepatitis C, Chronic	25	159	196	278	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		18	140	143	**	**
LaCrosse virus disease	1	1	1	1	0.6	0.16
Legionellosis	4	11	4	9	14.2	3.78
Listeriosis			1	2	2.4	0.64
Lyme Disease	2	10	10	12	4.2	1.12
Malaria			1	1	1.2	0.32
Meningitis, Aseptic	6	16	46	63	40.8	10.86
Meningitis, Bacterial, Not Neisseria meningitidis		3	2	3	2.6	0.69
Meningococcal Disease			1	1	1.2	0.32
Mumps					0.8	0.21
Mycobacterial disease - other than tuberculosis	5	18	15	23	24	6.39
Pertussis	2	8	10	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	5	28	22	32	36.4	9.69
Shigellosis		2		1	50	13.31
Streptococcal Disease, Group A, Invasive	1	17	15	22	10.6	2.82
Streptococcal Disease, Group B, in Newborn			2	3	3.6	0.96
Streptococcal Toxic Shock Syndrome (STSS)			2	2	1	0.27
Streptococcus pneumoniae - invasive antibiotic resistance unknown or non-resistant	1	45	28	37	30.8	8.2
Strep. pneumo. - invasive antibiotic resistant/intermediate		9	13	17	20.2	5.38
Syphilis, Total	1	7	7	13	11.2	2.98
Syphilis, Primary and Secondary			4	10	4.2	1.12
Toxic Shock Syndrome (TSS)					0.6	0.16
Tuberculosis		2	1	2	2.6	0.69
Typhoid Fever	1	1				
Varicella	1	22	16	33	68.6	18.26
Vibriosis - other (not cholera)			1	1	0.2	0.05

Source: Ohio Disease Reporting System, downloaded 09/17/2012. Rates are per 100,000 population.

** Historical information unavailable.