

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: Tick-borne Diseases

Although not native to Stark County, cases of Ehrlichiosis, Rocky Mountain Spotted Fever (RMSF) and Lyme Disease have been reported this year which included one death. These diseases are transmitted through the bite of an infected tick. Several cases reported travel outside of Ohio and into areas where the diseases are endemic. The illnesses present with different and often vague symptoms. Physicians are urged to obtain travel and exposure information on all patients that present with the symptoms listed in the table below and to seek testing as needed. The public is strongly encouraged to use appropriate measures to prevent a bite from an infected tick including becoming aware of infested areas, avoiding direct contact with ticks, using repellants with DEET or Permethrin and safely removing ticks, and wearing protective clothing such as long pants and sleeved shirts.



Rocky Mountain Spotted Fever (RMSF)	Ehrlichiosis	Lyme Disease
<ul style="list-style-type: none"> Fever Rash (occurs 2-5 days after fever in 90% of cases; appears as small, flat, pink, non-itchy spots (macules) on the wrists, forearms, and ankles, spreads to the trunk and sometimes the palms and soles) Headache Nausea Vomiting Abdominal pain Muscle pain Lack of appetite Conjunctival injection (red eyes) 	<ul style="list-style-type: none"> Fever Headache Chills Malaise Muscle pain Nausea / Vomiting / Diarrhea Confusion Conjunctival injection (red eyes) Rash (in up to 60% of children, <u>less than 30% of adults</u>, rash associated with <i>Ehrlichia chaffeensis</i> infection may range from maculopapular to petechial in nature, and is usually not itchy, 	<p><u>Early localized stage</u> (3-30 days post-tick bite)</p> <ul style="list-style-type: none"> Red, expanding rash called erythema migrans (EM) also known as the “Bull’s eye rash” Fatigue, chills, fever, headache, muscle and joint aches, and swollen lymph nodes <p><u>Disseminated stage</u></p> <ul style="list-style-type: none"> Additional EM lesions in other areas of the body Facial or Bell's palsy Severe headaches and neck stiffness due to meningitis Pain and swelling in the large joints (such as knees) Shooting pains that may interfere with sleep Heart palpitations and dizziness due to changes in heartbeat Approximately 60% of patients with untreated infection may begin to have intermittent bouts of arthritis 
Transmission from American dog tick, Rocky Mountain wood tick, and brown dog tick	<i>Ehrlichia chaffeensis</i> , which is transmitted by the lone star tick	Known transmission from the black-legged tick, western black-legged, deer tick, and lone star tick.

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

	June 2011				July 2010			
	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	670	5	50	N/A	20	5	10	N/A
Mold Count	11,690	1,870	5,120	9 Moderate	10,130	2,030	4,550	6 Moderate
Air Quality Index	119	32	47	2 Unhealthy for sensitive groups	135	30	48	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

	June 2011	YTD 2011	2010 Total
Live Births	382	2124	4521
Births to Teens	37	209	457
Deaths	321	2135	4102

Table 3 Stark County Crude Birth and Death Rates

	2004	2005	2006	2007	2008
Birth	1172*	1163*	1191*	1190*	1166*
Death	971*	1022*	1000*	1035*	1067

*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.

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

	Alliance City		Canton City		Massillon City		Stark County		All Departments	
	June	YTD	June	YTD	June	YTD	June	YTD	June	YTD
Campylobacteriosis	2	2	1	4		2	5	11	8	19
Chlamydia infection	13	57	69	361	5	62	32	213	119	693
Creutzfeldt-Jakob Disease							1	2	1	2
Cryptosporidiosis				2				5	0	7
E Coli (STP) NOT O157:H7							1	1	0	1
E Coli (STP) O157:H7						1		1	0	2
Ehrlichiosis			1	1					1	1
Giardiasis	1	1	1	5		2	1	25	3	33
Gonococcal infection	6	44	39	190		19	5	49	50	302
Haemophilus influenzae		1		1				2	0	4
Hepatitis A								1	0	1
Hepatitis B- acute								1	0	1
Hepatitis B- Chronic		1	1	6				9	1	14
Hepatitis B-Perinatal Infection								1	0	1
Hepatitis C - acute				1	1	2		1	1	4
Hepatitis C - chronic		8	7	43	3	14	10	77	20	142
Influenza-associated hospitalizations		8		41		12		79	0	140
Legionellosis							1	1	1	1
Listeriosis								1	0	1
Lyme Disease							1	3	1	3
Meningitis - aseptic/viral			3	5	2	3	3	3	8	11
Meningitis - bacterial (Not N. meningitidis)			1	1					1	1
Meningococcal disease -								1	0	1
Mycobacterial disease-Not TB		2		2	1	1	1	9	2	14
Pertussis								8	0	8
Q Fever							1	1	1	1
Rocky Mountain Spotted Fever		1						1	0	2
Salmonellosis		1	1	1			3	12	4	14
Strep pneumo resistance unk or non-resistant		2	1	4		4	1	14	2	24
Strep pneumo antibiotic resistant/intermediate		2		2		2	1	7	1	13
Streptococcal - Group A - invasive				4			1	11	1	15
Streptococcal -Group B in Newborn			1	1					1	1
Streptococcus Toxic Shock Syndrome (STSS)				1				1	0	2
Syphilis, Pr & Secondary				4						4
Syphilis, Total	1	1		5				1	1	7
Varicella		3		1	1	1		8	1	13

Source: Ohio Disease Reporting System

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

	June-11	YTD 2011	YTD 2010	All of 2010	5 Yr annual average	Rate
Campylobacteriosis	8	19	20	50	52	13.7
Chlamydia	119	693	680	1334	1188	313.12
Coccidioidomycosis	0	0	0	0	1	0.26
Creutzfeldt-Jakob Disease	1	2	0	0	3	0.7
Cryptosporidiosis	0	7	10	23	22	5.8
Cytomegalovirus, Congenital	0	0	0	0	1	0.26
Dengue	0	0	0	1	1	0.26
E. coli - enterohemorrhagic (STP) NOT O157:H7	0	1	0	1	2	0.53
E. coli - enterohemorrhagic (STP) O157:H7	0	2	2	3	3	0.9
E coli , STP, Unknown	0	0	0	1	1	0.37
Ehrlichiosis (Anaplasmosis)	1	1	0	0	1	0.26
Encephalitis - post other infection	0	0	0	0	1	0.26
Encephalitis - primary viral	0	0	0	0	2	0.53
Giardiasis	3	33	18	69	49	12.86
Gonorrhea	50	302	187	409	527	138.83
Haemo. Influz., Bacteria	0	4	3	8	6	1.63
Hemolitic Uremic Syndrome	0	0	0	0	2	0.53
Hepatitis A	0	1	0	0	5	1.19
Hepatitis B - Perinatal Infection	0	1	0	2	4	1.05
Hep B, Acute	0	1	3	5	5	1.21
Hep B, Chronic	1	14	22	38	39	10.38
Hep C, Acute	1	4	1	4	4	1.05
Hep C, Past or Present	20	142	125	239	232	61.09
Herpes, Congenital	0	0	0	0	1	0.26
Influenza A - novel virus infection	0	0	0	0	2	0.53
Influenza-Hospitalized	0	140	1	7	N/A	N/A
LaCrosse virus disease	0	0	0	2	2	0.53
Legionellosis	1	1	6	16	15	3.9
Listeriosis	0	1	0	1	3	0.79
Lyme Disease	1	3	2	4	3	0.79
Malaria	0	0	1	2	3	0.66
Meningitis, Asep	8	11	15	33	38	9.91
Meningitis Bac.	1	1	1	2	3	0.74
Meningococcal Dis.	0	1	1	2	1	0.32
Mumps	0	0	1	1	2	0.4
Mycobacterial disease - other than tuberculosis	2	14	19	33	22	5.69
Pertussis	0	8	9	106	35	9.22
Rheumatic fever	0	0	0	0	1	0.26
Q Fever, Chronic	1	1	0	0	0	0
Rocky Mountain Spotted	0	2	0	1	1	0.26
Salmonellosis	4	14	21	34	41	10.8
Shigellosis	0	0	4	4	51	13.33
Strep Inv A GAS	1	15	3	12	10	2.53
Strep B Newborn	1	1	2	4	4	0.95
Strep toxic shock (STSS)	0	2	0	0	2	0.4
Strep pneumo - invasive antibiotic resistance unk or non-resistant	2	24	13	25	28	7.48
Streptococcus pneumo - invasive antibiotic resistant/intermediate	1	13	10	20	24	6.27
Syphilis, Total	1	7	7	10	14	3.74
Syphilis, Pri & Secondary	0	4	4	4	4	1.16
Toxic shock syndrome (TSS)	0	0	0	1	2	0.4
Typhoid Fever	0	0	0	0	1	0.26
Varicella#	1	13	25	57	119	31.41
West Nile Virus	0	0	0	0	2	0.53
Yersiniosis	0	0	0	0	3	0.88

This report includes confirmed, probable and suspect cases, as reported in the Ohio Disease Reporting System (ODRS).

*Annual Rate per 100,000 population is derived from a five year average of disease incidence and on a total population of 379,466