## **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 might be under investigation; and, at any given time, data might fluctuate from month to month for a specific category.

## Monthly Highlight: Gonococcal Infections, increasing activity in Stark County and new treatment and screening recommendations.

The CDC recently updated treatment and screening guidelines for gonococcal infections (see the following website for a complete listing: <a href="http://www.cdc.gov/std/treatment/2010/gonococcal-infections.htm">http://www.cdc.gov/std/treatment/2010/gonococcal-infections.htm</a>). Treatment recommendations are based on the recognition that coinfection with *N. gonorrhoeae* 

and *C trachomatis* are common and that only one class of antimicrobials, the cephalosporins, is recommended for treatment of *N gonorrhoeae*. The table to the right provides common treatment recommendations for uncomplicated gonococcal infections. In the table, the upper box provides recommendations for *N gonorrhoeae* and the lower box is for uncomplicated *C trachomatis*; note that both treatments are recommended to be provided simultaneously for treating gonococcal infections. Additionally, the CDC recommends, "To maximize compliance with recommended therapies, medications for gonococcal infections should be dispensed on site."

The screening recommendations state, "health-care providers should consider local gonorrhea epidemiology when making screening decisions". They continue by providing the following general screening recommendations:

"...Women with previous gonorrhea infection, other STDs, new or multiple sex partners, and inconsistent condom use; those who engage in commercial sex work and drug use; women in certain demographic groups; and those living in communities with a high prevalence of disease. USPSTF (U.S. Preventive Services Task Force) does not recommend screening for gonorrhea in men and women who are at low risk for infection"

## Uncomplicated Gonococcal Infections of the Cervix, Urethra, and Rectum Recommended Regimens

Ceftriaxone 250 mg IM in a single dose
OR, IF NOT AN OPTION
Cefixime 400 mg orally in a single dose
OR
Single-dose injectible cephalosporin regimens

## **PLUS**

Azithromycin 1g orally in a single dose
OR
Doxycycline 100 mg orally twice a day for 7 days

In Stark County, gonococcal infections are increasing and tend to have a disproportionate number of diagnoses in the African American population. A 39% reduction in the number of gonococcal infections occurred during the last four years. However, if diagnoses continue at the current rate, we are on track to exceed a five-year high in the number of cases. The cases seen in 2010 and 2011 are found primarily in young adults, with median age of 22 years and a range of 14 to 67 years. Sixty-eight percent of the time diagnosis are in women, and cases are nearly equally distributed in two races, African American (52%) and Caucasian (48%).

To help reverse the increasing trend in gonococcal infections, public health is urging physicians to screen all at risk clients and to treat in accordance with the CDC recommendations.

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

			March	2011	April 2010					
	Monthly High Monthly Monthly		Monthly	Counts in highest reported	Monthly	Monthly Low	Monthly Median	Counts in highest reported health risk		
	Monuny righ	Low	Median	health risk category	High	Monuny Low	Monuny Median	category		
Air Quality Index	34	5	19.5	All Good	114	25	46	1 Unhealthy		

<sup>\*\*</sup>See the following websites for updated Air Quality Index and mold index terminology and color-coding <a href="http://www.airnow.gov/index.cfm?action=aqibasics.aqi">https://pollen.aaaai.org/nab/index.cfm?p=reading\_charts</a>
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

	Mar 2011	YTD 2011	2010 Total
Live Births	374	996	4521
Births to Teens	41	115	457
Deaths	423	1252	4102

<u>Table 3</u> Stark County Crude Birth and Death Rates per 100,000 Population

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

\*Source: Ohio Department of Health Data Warehouse

Due to the current method of reporting, all data is provisional.

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

Allianter   City   Carter   City   City   Stark   Country   Departments   Mar   YTD   YT	County, Orr					Massillon				All	
Campylobacteriosis					· ·		T T		· ·		
Chlamydia infection         8         25         45         174         15         30         45         103         113         332           Cryptosporidiosis         1         2         3         1         2         6         15         9         20           Gonococcal infection         10         18         21         77         7         9         11         25         49         129           Haemophilus influenzae (invasive disease)         1         -         -         9         12         0         3           Hepatitis B- acute         1         -         -         2         2         5         2         7           Hepatitis B- chronic         -         -         2         -         2         5         2         7           Hepatitis B- Perinatal infection         -         -         1		Mar	YID	Mar	YID	Mar	YID	Mar	YID	Mar	YID
Cryptosporidiosis Giardiasis Giardiasis Comococcal infection Comococcal	Campylobacteriosis				1	2	2	1	3	3	6
Compage   Comp	Chlamydia infection	8	25	45	174	15	30	45	103	113	332
Gonococcal infection	Cryptosporidiosis			1	2				4	1	6
Haemophilus influenzae (invasive disease)	Giardiasis			2	3	1	2	6	15	9	20
Cinvasive disease    1	Gonococcal infection	10	18	21	77	7	9	11	25	49	129
Hepatitis B - chronic			1						2	0	3
Hepatitis B- Perinatal infection	Hepatitis B- acute		1					1	1	1	2
Hepatitis C - acute	Hepatitis B - chronic				2			2	5	2	7
Repatitis C - chronic   2   7   10   25   3   8   10   41   25   81	Hepatitis B- Perinatal infection							1	1	1	1
Influenza-associated hospitalization	Hepatitis C - acute				1			1	1	1	2
hospitalization	Hepatitis C - chronic	2	7	10	25	3	8	10	41	25	81
Meningitis - aseptic/viral  Meningococcal disease - Neisseria meningitidis  Mycobacterial disease - other than tuberculosis  Pertussis  Rocky Mountain Spotted Fever (RMSF)  Salmonellosis  1  Streptococcal - Group A - invasive  Streptococcus Toxic Shock Syndrom (STSS)  Streptococcus pneumoniae - invasive antibiotic resistant/intermediate  1  1  1  1  1  1  1  1  1  1  1  1  1		4	8	11	41	4	11	21	77	40	137
Meningococcal disease - Neisseria meningitidis         1         0         1           Mycobacterial disease - other than tuberculosis         1         1         2         1         3         2         6           Pertussis         1         1         2         1         8         1         8           Rocky Mountain Spotted Fever (RMSF)         1         2         1         1         1         1         1         1         1         1         1         2         9         5         15         1         1         1         1         2         4         4         4         4         4         4         4         4         8         8         3         1         1         1         1	Listeriosis								1	0	1
Neisseria meningitidis  Mycobacterial disease - other than tuberculosis  Pertussis  Rocky Mountain Spotted Fever (RMSF)  Salmonellosis  1 1 2 1 3 2 6  Rocky Mountain Spotted Fever (RMSF)  Salmonellosis  1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	Meningitis - aseptic/viral				1					0	1
than tuberculosis         1         1         2         1         3         2         6           Pertussis         1         1         8         1         8           Rocky Mountain Spotted Fever (RMSF)         1         2         1         1         1         1         2         1         2         9         5         15         15         1         2         4         4         4         4         4         4         4         4         4         8         3         1									1	0	1
Rocky Mountain Spotted Fever (RMSF)  Salmonellosis  1  Salmonellosis  1  Streptococcal - Group A - invasive  Streptococcus Toxic Shock Syndrom (STSS)  Streptococcus pneumoniae - invasive antibiotic resistance unknown or non-resistant  Streptococcus pneumoniae - invasive antibiotic resistant/intermediate  1  Syphilis, Total  Solution  1  1  1  1  1  1  1  1  1  1  1  1  1			1	1	2			1	3	2	6
(RMSF)1111Salmonellosis11314Streptococcal - Group A - invasive427211Streptococcus Toxic Shock Syndrom (STSS)1111112Streptococcus pneumoniae - invasive antibiotic resistance unknown or non-resistant11131229515Streptococcus pneumoniae - invasive antibiotic resistant/intermediate11131229515Syphilis, Total244448Syphilis, Pr & Secondary12412	Pertussis							1	8	1	8
Streptococcul - Group A - invasive  Streptococcus Toxic Shock Syndrom (STSS)  Streptococcus pneumoniae - invasive antibiotic resistance unknown or non-resistant  Streptococcus pneumoniae - invasive antibiotic resistant/intermediate  1 1 1 3 1 2 2 9 5 15  Streptococcus pneumoniae - invasive antibiotic resistant/intermediate  1 2 1 4 4 8  Syphilis, Total  Syphilis, Pr & Secondary  1 2 1 2								1	1	1	1
invasive	Salmonellosis		1					1	3	1	4
Syndrom (STSS)  Streptococcus pneumoniae - invasive antibiotic resistance unknown or non-resistant  Streptococcus pneumoniae - invasive antibiotic resistant/intermediate  Syphilis, Total  1 1 1 1 1 2 2 9 5 15  1 2 2 9 5 15  1 2 2 9 5 15  1 3 1 2 2 9 5 15  1 4 4 4 8  1 5 2 4 1 2 2 4  1 5 2 4 1 2 2 4					4			2	7	2	11
invasive antibiotic resistance unknown or non-resistant  1 1 1 3 1 2 2 9 5 15  Streptococcus pneumoniae - invasive antibiotic resistant/intermediate  1 2 1 4 4 8 Syphilis, Total  Syphilis, Pr & Secondary  1 2 1 2 1 2					1			1	1	1	2
invasive antibiotic resistant/intermediate  1 2 1 4 4 8 Syphilis, Total  Syphilis, Pr & Secondary  1 2 1 2 1 2 2 4	invasive antibiotic resistance unknown or non-resistant	1	1	1	3	1	2	2	9	5	15
Syphilis, Pr & Secondary  1 2 1 2	invasive antibiotic		1		2		1	4	4	4	8
Syphins, 11 et 200 siloniy	Syphilis, Total			2	4					2	4
Varicella         1         1         1         4         2         6	Syphilis, Pr & Secondary			1	2					1	2
	Varicella	1	1		1			1	4	2	6

Table 5 - 2011 Summary Table of Diseases Reported in the previous 5 years within Stark County, OH.

Table 5 – 2011 Summary Table of Diseases Rep	o <u>orted in t</u>	he previo	us 5 year	s within s	Υ	nty, OH.
(Provisional Data)					5 Yr	
	M 11	YTD	YTD	All of	annual	D. (
A 1 '(El 1: 1: ')	Mar-11	2011	2010	2010	average	Rate
Anaplasmosis (Ehrlichiosis)	0	0	0	0	1 52	0.26
Campylobacteriosis	3	6	6	49	52	13.70
Chlamydia	113	332	358	1291	1188	313.12
Coccidioidomycosis	0	0	0	0	1	0.26
Creutzfeldt-Jakob Disease	0	0	0	0	3	0.70
Cryptosporidiosis	1	6	3	23	22	5.80
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	0	0	0	2	0.53
E. coli - enterohemorrhagic (STP) O157:H7	0	0	1	3	3	0.90
E coli , STP, Unknown	0	0	0	2	1	0.37
Encephalitis - post other infection	0	0	0	0	1	0.26
Encephalitis - primary viral	0	0	0	0	2	0.53
Giardiasis	9	20	7	67	49	12.86
Gonorrhea	49	129	91	403	527	138.83
Haemo. Influz., Bacteria	0	3	2	8	6	1.63
Hemolitc Uremic Syndrome	0	0	0	0	2	0.53
Hepatitis A	0	0	0	0	5	1.19
Hepatitis B - Perinatal Infection	1	1	0	4	4	1.05
Hep B, Acute	1	2	3	4	5	1.21
Hep B, Chronic	2	7	10	38	39	10.38
Hep C, Acute	1	2	1	4	4	1.05
Hep C, Past or Present	25	81	67	230	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	40	137	1	7	N/A	N/A
LaCrosse virus disease	0	0	0	2	2	0.53
Legionellosis	0	0	1	16	15	3.90
Listeriosis	0	1	0	1	3	0.79
Lyme Disease	0	0	1	4	3	0.79
Malaria	0	0	1	2	3	0.66
Meningitis, Asep	0	1	7	33	38	9.91
Meningitis Bac.	0	0	0	2	3	0.74
Meningococcal Dis.	0	1	1	2	1	0.32
Mumps	0	0	1	1	2	0.40
Mycobacterial disease - other than tuberculosis	2	6	4	32	22	5.69
Pertussis	1	8	3	106	35	9.22
Rheumatic fever	0	0	0	0	1	0.26
Rocky Mountain Spotted	1	1	0	1	1	0.26
Salmonellosis	1	4	4	34	41	10.80
Shigellosis Steep Lay A. GAS	0 2	0	0	12	51	13.33
Strep Inv A GAS		11			10	2.53
Strep B Newborn  Strep toxic check (STSS)	0	0	2	4	4	0.95
Strep toxic shock (STSS)	1 5	2	0	0	200	0.40
Strep pneumo - invasive antibiotic resistance unk or non-resistant	5	15	8	25	28	7.48
Streptococcus pneumo - invasive antibiotic resistant/intermediate	4	8	6	20	24	6.27
Syphilis, Total	2	4	2	10	14	3.74
Syphilis, Pri & Secondary	1	2	0	4	4	1.16
Toxic shock syndrome (TSS)	0	0	0	1	2	0.40
Typhoid Fever	0	0	0	0	1	0.26
Varicella#	2	6	9	56	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).

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