EPI GRAM October-December, 2009

A Monthly Publication of the Stark Public Health Infrastructure Coalition

EPI Gram is a monthly publication of the Stark County Public Health 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.

IN THE NEWS: Notables in 2009

During 2009, Stark County saw declines in reporting of certain Sexually Transmitted Diseases, including, gonorrhea and syphilis, as well as declines in Cryptosporidiosis and Shigellosis. A reduction in outbreaks in 2009 likely led to the reduction in both Shigellosis and Cryptosporidiosis.

2009 also saw increases in infectious diseases, including giardia, legionella, and pertussis, with pertussis at double expected values. Pertussis, a vaccine preventable disease, had reports of individuals who were up-to-date, behind, and not immunized at all, or simply too young to be vaccinated.

2009 also saw the introduction of several newly reportable diseases, with the most noteworthy being Influenza associated hospitalizations. Reports of hospitalization related to influenza are expected between November and March, however in 2009 the reports were received in two distinct waves, the first for seasonal influenza which peaked in CDC week 8 (Feb 22-28, 2009) as well as a second in CDC Week 42 (Oct 18-24, 2009). These two peaks were indicative of two waves of influenza viral strains, the first was dominated by a seasonal H1N1 as well as a type B Influenza, and the second was dominated by a novel strain now commonly referred to as 2009 H1N1. There were significant demographic differences in those affected by each wave, with the first striking all age groups and appearing relatively mild in the very young with only two hospitalizations in children 4 and under. While the 2009 H1N1 wave had striking differences in children and young adults 0-24 year olds. In the first wave there were only 15 total hospitalizations in 0-24 year olds compared with 44 in the second wave. Additional information on influenza can be found in weekly reports at: http://www.cantonhealth.org/ophi/?pg=244

Tuberculosis Quarterly Report: Stark County's number of tuberculosis cases for 2009 is down slightly as compared to 3 cases in 2008. Likewise, Suspect Cases of Reported Mycobacterium TB and Mycobacterium Other Than TB (MOTTS) decreased in comparison to 2008. None of the 2009 cases were INH resistant or multi-drug resistant. See the table below for additional details.

Stark County Tuberculosis Case Registry, 4th Quarter and End of Year Report 2009	4th Quarter 2009	YTD 2009	YTD 2008
Suspect Cases of Reported Mycobacterium TB	14	36	50
Culture Confirmed Mycobacterium Tuberculosis (TB)	1	2	3
Culture Confirmed Mycobacterium Other Than TB (MOTTS)	9	21	26
Not TB, Not MOTTS	1	13	21
Suspects Pending	3	0	2

Source: Stark County TB Registrar, Leanne R Frye, RN

<u>Table 2</u> Summary <u>of Select Vital Statistics for Stark County, Ohio</u>

	Dec-09	YTD 2009	2008 Total
Live Births	382	4839	5169
Births to Teens	53	521	580
Deaths	219	2728	4027

Table 3 Stark County Crude Birth and Death Rates per 100,000 Population Rates are based on the US Census 2000 Stark County population of 377,438.

	2004	2005	2006	2007	2008
Birth	1240	1211	1282	1340	1369
Death	1040	1140	1076	1076	1067

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 Karen Schanz at 330.493.9928 or Schanzk@starkhealth.org or Chenning@cantonhealth.org. Copies of this report can be found at http://www.cantonhealth.org/ophi/?pg=245.

Table 4-Jurisdictional summary of reportable diseases in Stark County, Ohio in

Cech Nov. and Dec 2009. Oct. Nov. Dec Oct. Nov. Nov.	Out No and Day 2000																
Campylobacteriosis	Oct, Nov, and Dec 2009.	Alliance City		Canton City			Massillon City			Stark County			County				
Chlamydia infection		Oct	Nov	Dec	Oct	Nov	Dec	Oct	Nov	Dec	Oct	Nov	Dec	Oct	Nov	Dec	
Creutzfeldt-Jakob Disease		0	1	0	1	1	0	1	0	0	1	3	2	3	5	2	
Cryptosporidiosis	<u> </u>	7	9	8	45	47	47	8	11	7	27	27	41	87	94	103	
Cytomegalovirus -congenital (CMV)	Creutzfeldt-Jakob Disease	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1	
E. coli - enterohemorrhagic (STP) - Not O157:H7	Cryptosporidiosis	1	1	0	0	1	0	0	0	0	0	3	1	1	5	1	
E. coli - enterohemorrhagic (STP) O157:H7 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	Cytomegalovirus -congenital (CMV)	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
E. coli - enterohemorrhagic (STP) Unk serotype 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Giardiasis	E. coli - enterohemorrhagic (STP) O157:H7	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Gonococcal infection	E. coli - enterohemorrhagic (STP) Unk serotype	0	0	0	0	0	0	0	0	0	0	1	0	0	1	0	
Haemophilus influenzae (invasive disease)	Giardiasis	0	0	1	0	0	0	0	0	0	2	0	0	2	0	1	
Hepatitis A	Gonococcal infection	5	4	2	15	26	23	4	3	4	8	4	9	32	37	38	
Hepatitis B (including delta) - acute	Haemophilus influenzae (invasive disease)	0	0	0	2	0	0	0	0	0	0	1	0	2	1	0	
Hepatitis B (including delta) - chronic	Hepatitis A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Hepatitis C - acute	Hepatitis B (including delta) - acute	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Hepatitis C - chronic	Hepatitis B (including delta) - chronic	0	0	0	4	0	0	0	1	0	1	0	0	5	1	0	
Herpes - congenital	Hepatitis C - acute	1	2	0	0	0	0	0	0	0	0	0	0	1	2	0	
Influenza A - novel virus infection	Hepatitis C - chronic	1	1	1	7	8	3	1	5	1	11	11	3	20	25	8	
Influenza-associated hospitalization	Herpes - congenital	0	0	0	0	0	0	0	1	0	0	0	0	0	1	0	
Legionellosis - Legionnaires' Disease	Influenza A - novel virus infection	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Listeriosis 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	Influenza-associated hospitalization	2	5	0	29	24	2	8	4	2	27	27	4	66	60	8	
Lyme Disease 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	Legionellosis - Legionnaires' Disease	0	0	0	1	0	1	1	0	0	1	0	1	3	0	2	
Malaria 0 </td <td>Listeriosis</td> <td>0</td>	Listeriosis	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Meningitis - aseptic/viral 0 </td <td>Lyme Disease</td> <td>0</td>	Lyme Disease	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Meningitis - bacterial (Not N. meningitidis) 0 <td>Malaria</td> <td>0</td>	Malaria	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Meningococcal disease - Neisseria meningitidis 0<	Meningitis - aseptic/viral	0	0	0	0	1	0	1	1	0	4	1	1	5	3	1	
Mumps 0 <td>Meningitis - bacterial (Not N. meningitidis)</td> <td>0</td> <td>0</td> <td>0</td> <td>0</td> <td>0</td> <td>0</td> <td>0</td> <td>0</td> <td>0</td> <td>1</td> <td>0</td> <td>0</td> <td>1</td> <td>0</td> <td>0</td>	Meningitis - bacterial (Not N. meningitidis)	0	0	0	0	0	0	0	0	0	1	0	0	1	0	0	
Mycobacterial disease - other than tuberculosis 1 0 0 0 0 0 1 0 0 1 1 1 2 1 Pertussis 0	Meningococcal disease - Neisseria meningitidis	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Pertussis 0	Mumps	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1	
Pertussis 0	Mycobacterial disease - other than tuberculosis	1		0		0	0	0	1	0	0	1	1	1	2	1	
Salmonellosis 0 0 0 0 0 0 0 0 0 0 0 1 2 2 1 2 2 Shigellosis 0 0 0 1 2 0	Pertussis															1	
Shigellosis 0 0 0 1 2 0 0 0 0 0 1 2 0 Streptococcal - Group A -invasive 0 0 1 0 <td>Salmonellosis</td> <td></td> <td>2</td> <td></td> <td></td> <td></td> <td>2</td>	Salmonellosis											2				2	
Streptococcal - Group A -invasive 0 1 0	Shigellosis																
Streptococcal - Group B - in newborn 0	Streptococcal - Group A -invasive																
Strep pneumo invasive antibiotic resistance unk or non-resistant 0 0 0 1 1 1 0 0 2 2 0 3 3 1 Strep pneumo invasive antibiotic resistant/intermediate 0 0 1 2 0 0 1 0	Streptococcal - Group B - in newborn																
Strep pneumo invasive antibiotic resistant/intermediate 0 1 2 0 0 1 0 0 0 3 0 1 Syphilis, Total 0 0 0 1 0 <t< td=""><td>1 1</td><td>0</td><td>0</td><td>0</td><td>1</td><td>1</td><td>1</td><td>0</td><td>0</td><td>0</td><td>2</td><td>2</td><td>0</td><td>3</td><td>3</td><td>1</td></t<>	1 1	0	0	0	1	1	1	0	0	0	2	2	0	3	3	1	
Syphilis, Total 0																	
Syphilis, Pri & Secondary 0 <td>Syphilis, Total</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td>0</td> <td>0</td> <td></td> <td></td> <td></td> <td></td>	Syphilis, Total										0	0					
Typhoid Fever 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0																	
	V 2																
	Varicella					_											

Case Definitions for Infectious Conditions Under Public Health Surveillance can be found in "MMWR 1997; 46 (No. RR-10). This report contains confirmed, probable and suspect cases, as reported by the local health jurisdictions in Stark County, Ohio.

Table 5 – Summary Table of Diseases Reported in the previous 5 years within Stark County,

Ohio.(provisional data only)

Onio.(provisional data only)	Stark County Totals						
	5 Yr annual						
	Oct	Nov	Dec	2009	2008	average	Rate
Amebiasis	0	0	0	0	0	0.2	0.05
Anaplasmosis	0	0	0	0		0.2	0.05
Campylobacteriosis	3	5	2	55	56	50.8	13.44
Chlamydia	90	95	103	1189	1122	1216	321.61
Creutzfeldt-Jakob Disease (CJD)	0	0	1	3	3	1.4	0.37
Cryptosporidiosis	1	5	1	19	24	18.6	4.92
Cytomegalovirus (CMV), Congenital	0	0	0	1	1	1.2	0.32
Dengue	0	0	0	0	0	0.2	0.05
Escherichia coli , STP, Not O157:H7	0	0	0	2	0	0.4	0.11
Escherichia coli , STP, Unk Serotype	0	0	0	4	1	2.2	0.58
Escherichia coli O157:H7	0	1	0	2	1	2.8	0.74
Encephalitis, Post Other Infection	0	0	0	0	1	0.2	0.05
Encephalitis, Primary Viral	0	0	0	0	2	1.6	0.42
Giardiasis	2	0	1	57	38	43.8	11.58
Gonorrhea	32	38	38	434	592	567	149.96
Haemophilus influenzae , Invasive Disease	2	1	0	9	8	5.8	1.53
Hemolytic Uremic Syndrome (HUS)	0	0	0	0	2	0.8	0.21
Hepatitis A	0	0	0	2	4	3	0.79
Hepatitis B, Acute	0	0	0	3	4	3	0.79
Hepatitis B, Chronic	5	1	0	41	37	29.4	7.78
Hepatitis C, Acute	1	2	0	5	5	2.8	0.74
Hepatitis C, Past or Present	20	27	8	197	215	216.6	57.29
Herpes, Congenital	0	1	0	1	1	0.4	0.11
Influenza A - novel virus infection	0	0	0	2	0	0.4	0.11
Influenza-associated hospitalization	65	59	8	194	N/A	N/A	N/A
Legionellosis	3	0	2	21	16	14.8	3.91
Listeriosis	0	0	0	4	3	3.2	0.85
Lyme Disease	0	0	0	4	1	1.4	0.37
Malaria	0	0	0	3	0	0.6	0.16
Meningitis, Aseptic	5	3	1	23	28	40.2	10.63
Meningitis, Other Bacterial	1	0	0	5	3	2.2	0.58
Meningococcal Disease	0	0	0	1	1	1.2	0.32
Mumps	0	0	1	1	3	1	0.26
Mycobacterial disease - other than tuberculosis	6	2	1	19	24	5.8	1.53
Pertussis	3	1	1	48	3	22	5.82
Rheumatic Fever	0	0	0	0	1	0.2	0.05
Rocky Mountain Spotted Fever (RMSF)	0	0	0	0	0	0.2	0.05
Salmonellosis	1	2	2	39	45	39.4	10.42
Shigellosis	1	2	0	28	213	51.8	13.70
Streptococcal Disease, Group A, Invasive	0	0	1	7	10	7.6	2.01
Streptococcal Disease, Group B, in Newborn	0	0	0	5	2	3.2	0.85
Streptococcal Toxic Shock Syndrome (STSS)	0	0	0	0	1	0.6	0.16
Streptococcus pneumo invasive antibiotic resistance unk or non-resistant	2	2	1	31	29	31	8.20
Streptococcus pneumoniae - invasive antibiotic resistant/intermediate	4	1	1	16	26	24.2	6.40
Syphilis, Total	1	0	0	9	19	10.4	2.75
Syphilis, Primary and Secondary	0	0	0	4	4	4.6	1.22
Toxic Shock Syndrome (TSS)	0	0	0	0	2	0.4	0.11
Typhoid Fever	0	0	0	0	0	0.2	0.05
Varicella	2	9	4	61	54	121	32.00
West Nile Virus	0	0	0	0	0	0.8	0.21
Yersiniosis	0	0	0	0	3	1.6	0.42

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 for a total population of 378,098