EPI GRAM Dec. 2010

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

<u>IN THE NEWS:</u> Outbreaks reported in 2010: In 2010, ten (10) outbreaks were reported to area health departments. Of these, six were Sarcoptes scabiei (scabies), one were confirmed as Norovirus GII, Methicillin Resistant Staphylococcus Aurerus (MRSA), and Pertussis, and one was suspected as being a Norovirus outbreak. All of the outbreaks were in a variety of settings where individuals had close person-to-person contact.

Scabies outbreaks were seen in institutional living environments. In this setting, infected individuals can easily transport the very small skin burrowing scabies mite to others. Important factors in controlling and eliminating scabies outbreaks in institutions are the rapid identification and **simultaneous treatment of all** contacts.

The MRSA outbreak was associated with one outpatient setting. However, the actual source of the infection was never determined. All patients affected had compromised health conditions and visited other health settings. MRSA can be spread person-to-person and has been known to be transmitted through contact with common items, such as workbenches where bare skin contact by different individuals is possible. Prevention lies in thorough hand washing and cleaning.

Norovirus GII was confirmed in a communal housing setting with a median age of 19 years. In this setting, individuals who become sick with the associated symptoms can quickly contaminate multiple surfaces through the aerosolization of vomitus material. Poor cleaning habits and a lack of knowledge of containment by young adults may have exacerbated the outbreak.

The Pertussis outbreak was a community-wide outbreak previously described in the August issue of the Epi Gram. Cases continue to be reported in, and related to the 44601 area code; however, they have slowed. The cases were primarily well-vaccinated 3 year olds. Overall ages of the 79 cases ranged from 2 weeks to 63 years, with 6 hospitalizations. Initially, the cases were few and sporadic; however, reports increased rapidly when daycares inadvertently housed infected individuals. Prevention relies on early diagnosis, treatment and isolation. Early diagnosis in adults was often hindered from presumed self-diagnosis of "seasonal allergies".

Tuberculosis: Stark County saw an increase in the number of cases of Suspect Tuberculosis reported to Public Health, as well as an increase in the number of confirmed cases in 2010. With a current rate of 1.32 confirmed cases per 100,000 population, Stark County continues with a designation as a "low incidence" county for tuberculosis activity. As a comparison, the State of Ohio confirmed 180 cases in 2009 for a rate of 1.6, and the United States has a rate of 3.8.

	Suspect TB Reports received by Public Health	Confirmed as TB	Stark County TB Rate per 100,000 population	MOTTS	Not TB Not MOTT	Pending
2010	58	5	1.32	33	13	7
2009	36	2	0.52	21	13	0
2008	51	3	0.79	26	14	2

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

		Dec 2	2010	Jan 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	
Air Quality Index	40	3	17	All Good	107	5	33	1 Unhealthy	

^{**}See the following websites for updated Air Quality Index and mold index terminology and color-coding 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

	Dec-2010	2010	2009 Total
Live Births	263	4521	4839
Births to Teens	29	457	521
Deaths	407	4102	4110

<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 Karen Schanz at 330.493.9928 or Schanzk@starkhealth.org or Christina Henning at 330.489.3327 or Chenning@cantonhealth.org.

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

	4: Jurisdictional summary of Reportable Diseases in					C3 III			IIIty, On	
December 2010, with updates through		ance lity	Canton City		Massillon City		Stark County		All	
01/07/2011.	Dec	YTD	Dec	YTD	Dec	YTD	Dec	YTD	Dec	YTD
Campylobacteriosis	0	1	1	12	1	7	2	30	4	50
Chlamydia infection	4	106	57	731	6	116	37	384	104	1337
Cryptosporidiosis	0	1	1	2	1	3	0	17	2	23
Dengue	0	0	0	0	0	0	0	1	0	1
E. coli - enterohemorrhagic (stp) O157:H7	0	0	0	0	0	0	0	3	0	3
E. coli - enterohemorrhagic (shiga toxin producing) Unknown serotype	0	0	0	0	0	0	0	2	0	2
Giardiasis	0	2	2	11	1	9	3	47	6	69
Gonococcal infection	2	41	21	220	1	32	9	117	33	410
Haemophilus influenzae (invasive disease)	0	0	0	2	0	0	0	6	0	8
Hepatitis B (including delta) - acute	0	1	0	2	0	0	0	1	0	4
Hepatitis B (including delta) - chronic	0	4	0	17	0	2	2	17	2	40
Hepatitis C - acute	0	0	0	2	0	0	0	2	0	4
Hepatitis C - chronic	0	19	5	80	2	32	7	112	14	243
Influenza-associated hospitalization	0	0	1	3	0	0	2	4	3	7
LaCrosse virus disease	0	0	0	0	0	0	0	2	0	2
Legionellosis - Legionnaires' Disease	0	0	1	6	0	3	0	7	1	16
Listeriosis	0	0	0	1	0	0	0	0	0	1
Lyme Disease	0	0	0	0	1	1	0	4	1	5
Malaria	0	0	0	0	0	0	0	2	0	2
Meningitis - aseptic/viral	2	4	2	12	0	1	0	16	4	33
Meningitis - bacterial (Not N. meningitidis)	0	0	0	1	0	0	0	1	0	2
Meningococcal disease - N meningitidis	0	0	1	2	0	0	0	0	1	2
Mumps	0	1	0	0	0	0	0	0	0	1
Mycobacterial disease - not tuberculosis	0	4	0	6	0	3	2	20	2	33
Pertussis	3	63	0	3	0	6	1	34	4	106
Rocky Mountain spotted fever (RMSF)	0	0	0	0	0	0	0	1	0	1
Salmonellosis	0	2	0	3	0	1	0	28	0	34
Shigellosis	0	0	0	0	0	0	0	4	0	4
Streptococcal - Group A -invasive	0	0	0	3	0	0	2	9	2	12
Streptococcal - Group B - in newborn	0	0	0	1	0	1	1	2	1	4
Streptococcus pneumoniae - invasive antibiotic resistance unk or non-resistant	0	0	2	4	0	3	1	18	3	25
Streptococcus pneumoniae - invasive antibiotic resistant/intermediate	0	1	0	6	1	4	0	9	1	20
Syphilis, Total	0	2	0	4	0	0	1	4	1	10
Syphilis, Pr & Secondary	0	1	0	1	0	0	0	2	0	4
Toxic Shock Syndrome (TSS)	0	0	1	1	0	0	0	0	1	1
Varicella	0	3	0	7	0	1	2	47	2	58

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)	Stark County Totals								
December 2010, with updates	Dag	VTD	VTD	All of	5 Va annual				
through Jan 14 th 2011.	Dec 2010	YTD 2010	YTD 2009	All of 2009	5 Yr annual average	Rate			
Amebiasis	0	0	0	0	0.2	0.05			
Anaplasmosis	0	0	0	0	0.2	0.05			
Campylobacteriosis	4	50	55	55	50.8	13.44			
Chlamydia	104	1337	1190	1190	1216	321.61			
Creutzfeldt-Jakob Disease	0	0	3	3	1.4	0.37			
Cryptosporidiosis	2	23	19	19	18.6	4.92			
Cytomegalovirus, Congenital	0	0	1	1	1.2	0.32			
Dengue	0	1	0	0	0.2	0.05			
Enceph., Post Other	0	0	0	0	0.2	0.05			
Enceph, Primary viral	0	0	0	0	1.6	0.42			
E. coli - enterohemorrhagic (STP) NOT O157:H7	0	0	3	3	0.4	0.11			
E. coli - enterohemorrhagic (STP) O157:H7	0	3	4	4	2.8	0.74			
E coli , STP, Unknown	0	2	1	1	2.2	0.58			
Giardiasis	6	69	57	57	43.8	11.58			
Gonorrhea	33	410	435	435	567	149.96			
Haemo. Influz., Bacteria	0	8	9	9	5.8	1.53			
Hemolite Uremic Syndrome	0	0	0	0	0.8	0.21			
Hepatitis A	0	0	2	2	3	0.79			
Hep B, Acute	0	4	2	2	3	0.79			
Hep B, Chronic	2	40	39	39	29.4	7.78			
Hep C, Acute	0	40	4	4	2.8	0.74			
Hep C, Past or Present	14	243	190	190	216.6	57.29			
Herpes, Congenital	0	0	190		0.4	0.11			
Influenza A - novel virus infection	0	0	2	2	0.4	0.11			
Influenza-Hospitalized	3	7	194	194	N/A	N/A			
LaCrosse virus disease	0	2	0	0	0	0			
Legionellosis	1	16	21	21	14.8	3.91			
Listeriosis	0	1	4	4	3.2	0.85			
Lyme Disease	1	5	4	4	1.4	0.37			
Malaria Malaria	0	2	3	3	0.6	0.37			
Meningitis, Asep	4	33	23	23	40.2	10.63			
Meningitis Bac.	0	2	5	5	2.2	0.58			
Meningococcal Dis.	1	2	1	1	1.2	0.32			
Mumps	0	1	1	1	1.2	0.32			
Mycobacterial disease - other than tuberculosis	2	33	20	20	16.8	4.44			
Pertussis	4	106	48	48	22	5.82			
Rheumatic fever	0	0	0	0	0.2	0.05			
Rocky Mountain Spotted	0	1	0	0	0.2	0.05			
Salmonellosis	0	34	39	39	39.4	10.42			
	0								
Shigellosis Strep Inv A GAS	2	4 12	28 7	28 7	51.8	13.7			
Strep B Newborn	1	4	5	5	7.6 3.2	2.01 0.85			
Strep toxic shock (STSS)	0	0	0	0	0.6	0.16			
Streptococcus pneumoniae - invasive antibiotic resistance	U	U	U	U	0.0	0.10			
unknown or non-resistant	3	25	31	31	31	8.2			
Streptococcus pneumoniae - invasive antibiotic									
resistant/intermediate	1	20	16	16	24.2	6.4			
Syphilis, Total	10	10	9	9	14	3.7			
Syphilis, Pri & Secondary	4	4	4	4	4.6	1.22			
Toxic shock syndrome (TSS)	1	1	0	0	0.4	0.11			
Typhoid Fever	0	0	0	0	0.2	0.05			
Varicella#	2	58	61	61	121	32			
West Nile Virus	0	0	0	0	0.8	0.21			
Yersiniosis This report includes confirmed probable and suspect cases as report	0	0	0	0	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 on a total population of 378,098