

*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.

**IN THE NEWS: Pertussis:**

As the case rate in Ohio reaches the highest in the United States, California has the highest case count and Ohio the highest rate, Stark County appears to have curbed their outbreak. The outbreak directly affected 72 cases with a median age of 4 years. The reduction of the spread was made possible through the combined efforts of public health, the medical profession and a great deal of partners in prevention including the community as a whole.

Medical providers prevented the continued spread of pertussis through the early initiation of treatment and prophylaxis. Additionally, they provided instructions to families regarding requirements for isolation and quarantine. Medical providers significantly decreased reporting time, thus enabling public health to contact potential cases without the standard reporting delays. At least one hospital in our community provided additional supplies and training to local medical practices to increase their testing capability. Facilities and medical practices offered Tdap vaccinations to their staff to prevent transmission to and by employees. New parents were also offered the Tdap vaccine and when unable to pay were quickly referred to their respective health jurisdiction for free or low cost vaccination.

The community became aware of a localized outbreak of pertussis through communications provided by local daycares, schools, print and radio media, employers' and others. The community, aware of the potential significance of exposure to pertussis, responded by increasing their uptake of Tdap vaccine, spreading information through word of mouth, and bringing their symptomatic children and themselves to the medical profession for evaluation.

Although, everyone worked together to reduce the spread of pertussis in the community there were numerous challenges. Providing a clear message and working together to provide prophylactic treatment led our challenges. The message to stay home for five days for all possible cases while on antibiotic treatment was sometimes misunderstood and misquoted by both the medical community and the affected. The isolation also posed a large economic burden on those who needed to work. With a median age of 4 years in the most recent outbreak, there were numerous caregivers that were exposed and unfortunately, a disproportionate number of them were without a medical home. Without a medical home, they faced overwhelming costs and barriers to obtaining prophylaxis, and this was cited as one reason for possible ongoing transmission in the community. Public health will continue to strive for an increased awareness for the need for a medical home by all in our community. Public health would like to thank all of our community partners and the community as a whole for their quick response to curb this outbreak. We are thankful, that unlike California, we have had no deaths attributed to pertussis and hope that the level of awareness of the potential threat remains in the public eye.

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

	Oct 2010				Nov 2009			
	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	25	1	5	N/A	No reporting during Winter Months			
Mold Count	13,370	1,420	4,160	1 High				
Air Quality Index	67	18	31	2 Moderate	83	6	40	9 Moderate

\*\*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](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**

	Oct-2010	YTD 2010	2009 Total
Live Births	400	3672	4839
Births to Teens	36	371	521
Deaths	324	3001	4110

**Table 3 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](mailto:Schanzk@starkhealth.org) or Christina Henning at 330.489.3327 or [Chenning@cantonhealth.org](mailto:Chenning@cantonhealth.org).

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

	Alliance City		Canton City		Massillon City		Stark County		All	
	Oct	YTD	Oct	YTD	Oct	YTD	Oct	YTD	Oct	YTD
Campylobacteriosis	0	1	0	10	0	6	4	25	4	42
Chlamydia infection	16	92	64	605	10	99	34	315	124	1111
Cryptosporidiosis	0	1	0	1	0	2	1	16	1	20
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	4	9	3	8	8	40	15	59
Gonococcal infection	2	36	23	179	4	29	9	94	38	338
Haemophilus influenzae (invasive disease)	0	0	1	2	0	0	0	6	1	8
Hepatitis B (including delta) - acute	0	1	0	2	0	0	0	1	0	4
Hepatitis B (including delta) - chronic	0	4	2	15	1	2	1	13	4	34
Hepatitis C - acute	0	0	0	2	0	0	0	2	0	4
Hepatitis C - chronic	0	17	5	69	3	27	9	93	17	206
Influenza-associated hospitalization	0	0	1	1	0	0	0	1	1	2
LaCrosse virus disease	0	0	0	0	0	0	0	2	0	2
Legionellosis - Legionnaires' Disease	0	0	1	5	0	3	0	7	1	15
Listeriosis	0	0	0	1	0	0	0	0	0	1
Lyme Disease	0	0	0	0	0	0	1	3	1	3
Malaria	0	0	0	0	0	0	0	2	0	2
Meningitis - aseptic/viral	1	2	1	9	1	1	4	16	7	28
Meningitis - bacterial (Not N. meningitidis)	0	0	0	1	0	0	0	1	0	2
Meningococcal disease - Neisseria meningitidis	0	0	0	1	0	0	0	0	0	1
Mumps	0	1	0	0	0	0	0	0	0	1
Mycobacterial disease - not tuberculosis	0	4	1	6	0	3	3	18	4	31
Pertussis	5	54	0	3	0	2	4	32	9	91
Rocky Mountain spotted fever (RMSF)	0	0	0	0	0	0	0	1	0	1
Salmonellosis	0	2	0	3	0	1	1	27	1	33
Shigellosis	0	0	0	0	0	0	0	4	0	4
Streptococcal - Group A -invasive	0	0	0	2	0	0	0	5	0	7
Streptococcal - Group B - in newborn	0	0	0	0	0	1	0	1	0	2
Streptococcus pneumoniae - invasive antibiotic resistance unk or non-resistant	0	0	1	2	2	3	2	15	5	20
Streptococcus pneumoniae - invasive antibiotic resistant/intermediate	0	1	1	6	2	3	3	8	6	18
Syphilis, Total	0	2	2	3	0	0	0	3	2	9
Syphilis, Pr & Secondary	0	1	1	1	0	0	0	2	1	4
Varicella	0	3	1	6	0	1	13	37	14	47

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					
	Oct 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	42	48	55	50.8	13.44
Chlamydia	124	1111	991	1190	1216	321.61
Creutzfeldt-Jakob Disease	0	0	2	3	1.4	0.37
Cryptosporidiosis	1	20	13	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	3	4	2.8	0.74
E coli , STP, Unknown	0	2	1	1	2.2	0.58
Giardiasis	15	59	56	57	43.8	11.58
Gonorrhea	38	338	358	435	567	149.96
Haemo. Influz., Bacteria	1	8	8	9	5.8	1.53
Hemolytic 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	4	34	38	39	29.4	7.78
Hep C, Acute	0	4	2	4	2.8	0.74
Hep C, Past or Present	17	206	157	191	216.6	57.29
Herpes, Congenital	0	0	0	1	0.4	0.11
Influenza A - novel virus infection	0	0	2	2	0.4	0.11
Influenza-Hospitalized	1	2	127	194	N/A	N/A
LaCrosse virus disease	0	2	0	0	0	0
Legionellosis	1	15	19	21	14.8	3.91
Listeriosis	0	1	4	4	3.2	0.85
Lyme Disease	1	3	4	4	1.4	0.37
Malaria	0	2	3	3	0.6	0.16
Meningitis, Asep	7	28	19	23	40.2	10.63
Meningitis Bac.	0	2	5	5	2.2	0.58
Meningococcal Dis.	0	1	1	1	1.2	0.32
Mumps	0	1	0	1	1	0.26
Mycobacterial disease - other than tuberculosis	4	31	16	20	16.8	4.44
Pertussis	9	91	46	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	1	33	35	39	39.4	10.42
Shigellosis	0	4	26	28	51.8	13.7
Strep Inv A GAS	0	7	6	7	7.6	2.01
Strep B Newborn	0	2	5	5	3.2	0.85
Strep toxic shock (STSS)	0	0	0	0	0.6	0.16
Streptococcus pneumoniae - invasive antibiotic resistance unknown or non-resistant	5	20	28	31	31	8.2
Streptococcus pneumoniae - invasive antibiotic resistant/intermediate	6	18	14	16	24.2	6.4
Syphilis, Total	2	8	9	9	14	3.7
Syphilis, Pri & Secondary	1	4	4	4	4.6	1.22
Toxic shock syndrome (TSS)	0	0	0	0	0.4	0.11
Typhoid Fever	0	0	0	0	0.2	0.05
Varicella#	14	47	48	61	121	32
West Nile Virus	0	0	0	0	0.8	0.21
Yersiniosis	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