

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: HPV Update from the Stark County Red Network, authored by Stark County Communicable Disease Staff.

There are over a hundred known types of human papillomavirus (HPV), making HPV the most sexually transmitted infection in the U.S., affecting both men and women. Approximately 40 types of HPV infect the genital areas of men and women, and are subcategorized as either “high-risk” or “low-risk.” High-risk has been highly associated with the following types of cancer: cervical, vulvar, vaginal, penile, anal, and a few oropharyngeal cancers (Figure 1). Low-risk, also referred to as nononcogenic, is responsible for most outbreaks of genital warts, particularly type 6 and 11. At any given time approximately 1% of sexually active adults show signs of genital warts. Roughly, 14,000 new cancer cases per year are attributed to high-risk HPV infection. High-risk types 16 and 18 are associated with approximately 70% of all cervical cancers, while nearly all other cervical cancers are related to some other type of high-risk HPV.

Percentage of Cases Attributable to HPV Type of Cancer	
Cervical	*Nearly all
Vulvar	*50%
Vaginal	*65%
Penile	*35%
Anal	*95%
Oropharyngeal	*60%

In an effort to spearhead the growing rate of HPV infections 2 vaccines now exist: (1) **Gardasil** [which protects from types 6, 11, 16, 18; also called **HPV4**], and (2) **Cervarix** [which protects from types 16, 18; also called **HPV2**]. Both vaccines reach efficacy levels of up to 99% in preventing their targeted HPV types. Either of the HPV vaccinations can be administered to females between the ages of 9 and 26; only the Gardasil vaccine can be administered to males who are between the ages of 9 and 26. **HPV2** and **HPV4** are not live vaccines, and can be administered to those who are immune-suppressed. Whenever feasible, the same HPV vaccine should be used for the entire vaccination series. Although no studies address interchangeability of HPV vaccines, either HPV vaccine can be used to complete the series to provide protection against HPV 16 and 18. Women who already have some type of HPV should still be vaccinated for protection against the remaining viruses, however they should be informed there is no

Table 1: *All percentages are approximate

therapeutic advantage from the vaccine for a HPV virus already contracted. HPV vaccines are not recommended for use in pregnant women. If a woman is found to be pregnant after initiating the vaccination series, the remaining doses should be delayed until no longer pregnant. If the HPV vaccine schedule is interrupted, the vaccine series does not need to be restarted. For additional information on HPV and as reference to information contained within this article please see: <http://www.cdc.gov/vaccines/pubs/acip-list.htm#hpv> and <http://jco.ascopubs.org/content/29/32/4294>

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

	October 2011				November 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	Seasonally Unavailable				Seasonally Unavailable			
Mold Count	Seasonally Unavailable				Seasonally Unavailable			
Air Quality Index	59	13	31	2 Moderate	67	18	31	2 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
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 2011	YTD 2011	2010 Total
Live Births	282	3440	4521
Births to Teens	20	323	457
Deaths	335	3501	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	
	Oct	YTD	Oct	YTD	Oct	YTD	Oct	YTD	Oct	YTD
Campylobacteriosis		4		5		4	3	22	3	35
Chlamydia infection	14	115	54	590	13	118	40	385	121	1208
Creutzfeldt-Jakob Disease								2	0	2
Cryptosporidiosis				3			1	11	1	14
Dengue								2	0	2
E Coli (STP) NOT O157:H7								2	0	2
E Coli (STP) O157:H7						1		1	0	2
Ehrlichiosis				1				0	0	1
Giardiasis		2		12		2	2	41	2	57
Gonococcal infection	3	64	31	307	4	35	10	108	48	514
Haemophilus influenzae		1	1	2			1	4	2	7
Hepatitis A								1	0	1
Hepatitis B- Perinatal Infection			1	1				2	1	3
Hepatitis B- Acute								1	0	1
Hepatitis B-Chronic		1		6		2	1	10	1	19
Hepatitis C - acute			1	2		2		1	1	5
Hepatitis C - chronic	2	17	4	71	7	32	6	121	19	241
Influenza-associated hospitalized		8		41		12		79	0	140
LaCrosse Virus								1	0	1
Legionellosis					1	2	1	4	2	6
Listeriosis								1	0	1
Lyme Disease		1		2			1	8	1	11
Malaria								1	0	1
Meningitis - aseptic/viral		9		14	2	14	1	21	3	58
Meningitis - bacterial (Not N. meningitidis)				1		1			0	2
Meningococcal disease -								1	0	1
Mycobacterial disease-Not TB		2		2		1		15	0	20
Pertussis								10	0	10
Rocky Mountain Spotted Fever		1						1	0	2
Salmonellosis	1	2	2	4				21	3	27
Shigellosis							1	1	1	1
Streptococcal - Group A -Invas			1	5				14	1	19
Streptococcal -Group B in Newborn				1				1	0	2
Streptococcus Toxic Shock STSS				1				1	0	2
Strep pneumo resistance unk or non-resistant		2	1	6		4	2	20	3	32
Strep pneumo antibiotic resistant/intermediate		4		2		2		7	0	15
Syphilis, Pr & Secondary				4					0	4
Syphilis, Total		1		5				2	0	8
Varicella	1	5	1	3	1	2	5	15	8	25
Vibriosis - other (not cholera)				1					0	1

Source: Ohio Disease Reporting System, downloaded 11/28/2011.

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

	Oct-11	YTD 2011	YTD 2010	All of 2010	5 Yr annual average	Rate
Campylobacteriosis	3	35	42	50	52	13.7
Chlamydia	121	1208	1110	1333	1188	313.12
Coccidioidomycosis	0	0	0	0	1	0.26
Creutzfeldt-Jakob Disease	0	2	0	0	3	0.7
Cryptosporidiosis	1	14	20	23	22	5.8
Cytomegalovirus, Congenital	0	0	0	0	1	0.26
Dengue	0	2	1	1	1	0.26
E. coli - enterohemorrhagic (STP) NOT O157:H7	0	2	1	1	2	0.53
E. coli - enterohemorrhagic (STP) O157:H7	0	2	3	3	3	0.9
E coli , STP, Unknown	0	0	1	1	1	0.37
Ehrlichiosis (Anaplasmosis)	0	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	2	57	59	69	49	12.86
Gonorrhea	48	514	337	409	527	138.83
Haemo. Influz., Bacteria	2	7	8	8	6	1.63
Hemolytic Uremic Syndrome	0	0	0	0	2	0.53
Hepatitis A	0	1	0	0	5	1.19
Hepatitis B - Perinatal Infection	1	3	0	2	4	1.05
Hep B, Acute	0	1	4	5	5	1.21
Hep B, Chronic	1	19	37	38	39	10.38
Hep C, Acute	1	5	4	4	4	1.05
Hep C, Past or Present	19	241	199	228	232	61.09
Herpes, Congenital	0	0	0	0	1	0.26
Influenza-Hospitalized	0	140	2	7	N/A	N/A
LaCrosse virus disease	0	1	2	2	2	0.53
Legionellosis	2	6	15	16	15	3.9
Listeriosis	0	1	1	1	3	0.79
Lyme Disease	1	11	3	4	3	0.79
Malaria	0	1	2	2	3	0.66
Meningitis, Asep	3	58	28	33	38	9.91
Meningitis Bac.	0	2	2	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	0	20	30	32	22	5.69
Pertussis	0	10	91	106	35	9.22
Rheumatic fever	0	0	0	0	1	0.26
Q Fever, Chronic	0	0	0	0	0	0
Rocky Mountain Spotted	0	2	1	1	1	0.26
Salmonellosis	3	27	33	34	41	10.8
Shigellosis	1	1	4	4	51	13.33
Strep Inv A GAS	1	19	7	12	10	2.53
Strep B Newborn	0	2	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	3	32	20	25	28	7.48
Streptococcus pneumo - invasive antibiotic resistant/intermediate	0	15	18	20	24	6.27
Syphilis, Total	0	8	0	10	14	3.74
Syphilis, Pri & Secondary	0	4	0	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#	8	25	46	57	119	31.41
Vibriosis	0	1	0	0	0	0
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