EPI GRAM December, 2014

A Monthly Publication of the Stark Public Health Infrastructure Coalition

EPI Gram is a bimonthly 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: Meningococcal Disease

During 2014, Stark County had two cases of Meningococcal disease. Though it is found to be endemic in many other countries, less than a 1,000 cases occur in the United States each year. Meningococcal disease is a Class A reportable disease that must be reported to the local health department where the patient resides immediately. The local health department must report it to the state immediately.

Meningococcal disease is any infection caused by the bacterium *Neisseria meningitides*. The bacteria is transmitted through respiratory or throat secretions (e.g. kissing or sharing drinking cups). It is not spread through casual contact or through the air. About 10% of people with this bacteria have no signs and symptoms, but can transmit it to others. Of these carriers, less than 1% will progress to an invasive form of the disease.

A common outcome of this bacterial infection is meningitis where the membranes of the brain and spinal cord swell. Another outcome is septicemia or a bloodstream infection. The bacteria enters the bloodstream, multiplies, and damages the blood vessels causing bleeding into the skin and organs. This is the more severe outcome and can result in amputation of fingers, toes, or limbs or can result in severe scarring. Both outcomes may be fatal within as little as a few hours (10-15% of cases).

Though the vaccine is not 100% effective and it does not include all 13 serotypes, it is still recommended in order to provide some protection. Treatment should also be given to close contacts that would be at risk.

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

			December 2014		January 2014				
	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		Reported Seaso	onally; Not Currently	v Available	Reported Seasonally; Not Currently Available				
Mold Count		1	, , , , , , , , , , , , , , , , , , ,						
Air Quality Index	32	17	20	0 Good	48	20	30	0 Good	

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

	December 2014	YTD 2014	2013
Live Births	291	4,512	4,211
Births to Teens	26	380	370
Deaths	387	4,288	4,229

Birth and Death Data is reported by the four health districts and may include non-county residents.

<u>Table 3</u> Stark County Crude Birth Rate and Death Rates

	2008	2009	2010	2011	2012
Birth	11.8	11.4	10.8	10.8	10.9
Death	11.4	10.9	10.9	11.3	11.4

*Source: Ohio Department of Health Data Warehouse. Rates are per 1,000 population.

If you have any questions, including how to receive copies of this report, please contact Julia Wagner at 330.493.9914 or Wagnerj@starkhealth.org.

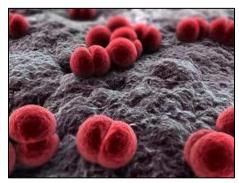


Table 4: Jurisdictional Summary of Reportable Diseases in Stark County, OH

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		ce City YTD		n City YTD		lon City YTD		County VTD		otal YTD
Campylobacteriosis	Dec.	YID 3	Dec.	18 YTD	Dec.		Dec.	YTD 49	Dec.	YTD 74
1.4	1					4				
Chiamydia infection	7	82	61	715	19	164	37	563	124	1,524
Chikungunya Coccidioidomycosis	0	0	0	0	0	0	0	1	0	1
Cryptosporidiosis	0	02	0	0 6	0	03	0	1 18	0	1 29
E. coli-Not O157:H7	0	0	0	0	0	2	0	2	0	29
E. coli-O157:H7	0	0	0	0	0	0	0	4	0	6
		-						-		
Giardiasis	0	1	0	3	0	0	0	11	0	15
Gonococcal infection	6	26	22	341	4	38	7	122	39	527
Haemophilus Influenzae	0	0	0	3	0	0	0	3	0	6
Hemolytic Uremic Syndrome	0	0	0	1	0	0	0	0	0	1
Hepatitis A	0	1	2	2	0	1	0	5	2	9
Hepatitis B - acute	0	1	0	1	0	0	1	5	1	7
Hepatitis B - chronic	0	3	0	5	0	6	2	25	2	39
Hepatitis B - perinatal	0	0	0	0	0	0	0	1	0	1
Hepatitis C - acute	1	2	0	2	0	0	0	0	1	4
Hepatitis C - chronic	2	16	10	103	2	24	7	121	21	264
Influenza-associated hospitalization	8	18	68	119	24	41	160	228	260	406
Legionellosis	0	0	0	0	0	0	1	6	1	6
Lyme Disease	0	0	0	2	0	0	0	7	0	9
Malaria	0	0	0	0	0	0	0	1	0	1
Measles-indigenous to Ohio	1	3	0	0	0	0	0	7	1	10
Meningitis - aseptic/viral	0	4	1	7	1	1	1	12	3	24
Meningitis - bacterial (Not N.										
meningitidis)	0	0	0	1	0	0	0	1	0	2
Meningococcal disease	0	0	0	1	0	0	1	1	1	2
Mumps	0	0	0	0	0	0	1	5	1	5
Mycobacterial disease - other than tuberculosis	0	0	1	7	0	3	1	24	2	34
		_		14						
Pertussis	0	5	0		0	16	2	46	2	81
Salmonellosis	0	2	0	4	0	1	4	31	4	38
Shigellosis	0	5	0	37	0	1	0	26	0	<u>69</u>
Streptococcal - Group A -invasive	0	0	0	1	0	0	1	9	1	10
Streptococcal - Group B -newborn	0	0	0	0	0	0	0	1	0	1
Streptococcal toxic shock syndrome (STSS)	0	0	0	1	0	0	0	1	0	2
Streptococcus pneumoniae -										
invasive antibiotic resistance	0		0	0	-			10	2	27
unknown or non-resistant Streptococcus pneumoniae -	0	4	0	8	1	2	2	13	3	27
invasive antibiotic										
resistant/intermediate	0	0	0	1	0	0	2	8	2	9
Syphilis, Total	0	2	1	2	0	2	0	1	1	7
Syphilis, Primary and Secondary	0	2	1	2	0	2	0	1	1	7
Tuberculosis	0	0	0	0	0	0	0	1	0	1
Typhoid Fever	0	0	0	0	0	0	0	1	0	1
Varicella	0	0	0	5	0	0	3	19	3	24
Vibriosis-Other (not cholera)	0	0	0	0	0	0	0	1	0	1
West Nile				0						
	0	0	0		0	0	0	1	0	1
Yersiniosis	0	170	0	0	0	1	0	1 200	0	3
Total Source: Ohio Disease Reporting System, down	26	179	165	1,408	52	309	240	1,389	483	3,285

Source: Ohio Disease Reporting System, downloaded 1/8/2015.

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

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	Dec.	Dec.	YTD	YTD	All of	5 Yr. Annual	5 Yr. Annual		
(Provisional Data)	2014	2013	2014	2013	2013	Average	Rate		
Campylobacteriosis	3	3	74	67	67	55.4	14.75		
Chikungunya	0	0	1	0	0	0	0		
Chlamydia	124	145	1,524	1,445	1,445	1391	370.46		
Coccidioidomycosis	0	0	1	0	0	0.2	0.053		
Creutzfeldt-Jakob Disease	0	0	0	1	1	1.2	0.32		
Cryptosporidiosis	0	0	29	26	26	25.8	6.87		
Cyclosporiasis	0	0	0	1	1	0.2	0.053		
Escherichia coli, STP, Not O157:H7	0	0	2	2	2	1.8	0.479		
Escherichia coli O157:H7	0	0	6	0	0	2.4	0.639		
Escherichia coli, STP, Unk Serotype	0	0	0	0	0	0.6	0.16		
Ehrlichiosis/Anaplasmosis	0	0	0	1	1	0.4	0.107		
Giardiasis	0	2	15	37	37	52.6	14.01		
Gonorrhea	39	54	527	612	612	543.2	144.63		
Haemophilus influenzae, Invasive	0	0	6	7	7	8	2.13		
Hemolytic Uremic Syndrome	0	0	1	0	0	0	0		
Hepatitis A	2	2	9	8	8	3.4	0.91		
Hepatitis B-Acute	1	0	7	8	8	4.4	1.172		
Hepatitis B, Chronic	2	0	39	22	22	32.4	8.627		
Hepatitis B, Perinatal	0	1	1	6	6	2.4	0.639		
Hepatitis C, Acute	1	0	4	7	7	5.6	1.491		
Hepatitis C, Chronic	21	29	264	202	202	231	61.5		
Influenza-associated hospitalization	260	40	406	332	332	165.2	43.99		
Influenza-associated pediatric mortality	0	0	0	1	1	0.2	0.053		
Legionellosis	1	1	6	21	21	16.6	4.42		
Listeriosis	1	0	1	2	2	2	0.533		
Lyme Disease	0	0	9	15	15	9.8	2.609		
Malaria	0	0	1	1	1	1.4	0.373		
Measles (Indigenous to Ohio)	1	0	10	0	0	0	0		
Meningitis, Aseptic	3	0	24	24	24	35.4	9.425		
Meningitis, Other Bacterial	0	0	2	5	5	3.8	1.012		
Meningococcal Disease	1	0	2	0	0	0.8	0.213		
Mumps	1	0	5	0	0	0.6	0.16		
Mycobacterial disease - Not TB	2	4	34	35	35	27.6	7.349		
Pertussis	2	2	81	16	16	39	10.384		
Q fever, acute	0	0	0	2	2	0.4	0.107		
Salmonellosis	4	5	38	46	46	38	10.12		
Shigellosis	0	47	69	87	87	25.6	6.816		
Streptococcal Dis, Group A, Invasive	1	1	10	14	14	15.2	4.047		
Streptococcal Dis, Group B, in Newborn	0	0	1	2	2	3.2	0.852		
Streptococcal Toxic Shock Syndrome	0	0	2	0	0	0.6	0.16		
Streptococcus pneumoniae - invasive	2	-	27	22	22	26.6	0.745		
antibiotic resistance unknown or non-resistant	3	5	27	32	32	36.6	9.745		
Streptococcus pneumo - invasive antibiotic resistant/intermediate	2	2	9	27	27	20.2	5 279		
	2	3	9 7	27			5.378		
Syphilis, Total	1	2	7	13 8	13	<u>11.6</u> 3.4*	3.089		
Syphilis, Primary and Secondary					8		0.91*		
Toxic Shock Syndrome (TSS)	0	0	0	<u>3</u>	3	0.8*	0.213*		
Tuberculosis	0	0	1		0	2.4	0.639		
Typhoid Fever	0	0	1	0	0	0.2	0.053		
Typhus Fever	0	0	0	1	1	0.2	0.053		
Varicella	3	2	24	23	23	42.4	11.29		
Vibriosis - other (not cholera)	0	0	1	1	1	0.4	0.107		
Vibriosis parahaemolyticus	0	0	0	1	1	0.2	0.053		
West Nile virus	0	0	1	0	0	0	0		
Yersiniosis	0	0	3	1	1	0.6	0.16		

Source: OH Disease Reporting System, downloaded 1/8/2015. Rates are per 100K population and based on 5 yr. average incidence 09-13.*08-12 from ODH Stats pg.