EPI GRAM August, 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: E. coli (Shiga Toxin Producing)

Stark County worked through an outbreak of E. coli - enterohemorrhagic (shiga toxin producing) O157:H7 (STEC) during the month of August. This cluster involved nine family members and five counties including Stark, Summit, Holmes, Wayne and Columbiana.The potential exposures investigated for this particular outbreak were zoonotic including a safari type ranch in Holmes County and a traveling petting zoo that came to a marketplace in Stark County for a family fun day. Due to the potential zoonotic exposures under investigation during this outbreak, education on measures to prevent disease associated with animals in public settings were disseminated.

It should be noted that:

- Animals carrying human enteric pathogens may be asymptomatic
- Some enteric pathogens are more prevalent among younger animals, such as those used in petting zoos
- Shedding pathogens is increased during the summer and fall months
- Transmission may occur without direct contact with animals, but rather through the contaminated environment

A report put out by the National Association of State Public Health Veterinarians Animal Contact Compendium Committee entitled, "Compendium of Measures to Prevent Disease Associated with Animals in Public Settings, 2013," sited a fair in Ohio that left E.Coli in the sawdust on the floor 42 weeks after the fair had ended. Although it is impossible to remove the risk of infection completely, there are several things that can be modified to reduce the risk. These modifiable risks include: inadequate hand washing facilities, inappropriate flow of people, and incomplete separation between animal exhibitis and food areas. Additionally, antibiotics should not be used to treat individuals with STEC. The best form of prevention is good hand hygiene.

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

	August 2014				September 2013			
	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	165	10	50	N/A	190	2	15	N/A
Mold Count	9,600	1,780	5,870	**6 Moderate**	11,800	1,270	2,960	**2 Moderate**
Air Quality Index	68	32	41	**4 Moderate**	74	39	45	**7 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

	August 2014	YTD 2014	2013
Live Births	361	2,674	4,211
Births to Teens	27	232	370
Deaths	309	2,856	4,229

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

Table 3 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

	Alliance City		Canton City		Massillon City		Stark County		Total	
	Aug.	YTD	Aug.	YTD	Aug.	YTD	Aug.	YTD	Aug.	YTD
Campylobacteriosis	0	1	2	12	0	0	6	32	8	45
Chlamydia infection	8	58	65	453	16	105	46	386	135	1,002
Chikungunya	0	0	0	0	0	0	1	1	1	1
Cryptosporidiosis	1	2	0	3	1	3	4	16	6	24
E. coli-Not O157:H7	0	0	0	0	0	0	0	1	0	1
E. coli-O157:H7	0	0	0	0	1	1	4	4	5	5
Giardiasis	0	0	1	2	0	0	0	5	1	7
Gonococcal infection	0	17	22	233	4	25	9	94	35	369
Haemophilus Influenzae	0	0	1	3	0	0	1	2	2	5
Hepatitis A	0	1	0	0	0	1	1	4	1	6
Hepatitis B - acute	0	1	0	1	0	0	2	2	2	4
Hepatitis B - chronic	1	3	0	4	0	5	2	22	3	34
Hepatitis B - perinatal	0	0	0	0	0	0	0	1	0	1
Hepatitis C - acute	1	2	0	1	0	0	4	4	5	7
Hepatitis C - chronic	3	9	9	74	1	18	9	86	22	187
Influenza-associated hospitalization	0	10	0	48	0	15	0	64	0	137
Legionellosis	0	0	0	0	0	0	2	3	2	3
Lyme Disease	0	0	0	2	0	0	2	4	2	6
Malaria	0	0	0	0	0	0	1	1	1	1
Measles-indigenous to Ohio	2	2	0	0	0	0	0	7	2	9
Meningitis - aseptic/viral	0	0	0	4	0	0	1	9	1	13
Meningitis - bacterial (Not N. meningitidis)	0	0	0	1	0	0	0	1	0	2
Meningococcal disease	0	0	0	1	0	0	0	0	0	1
Mumps	0	0	0	0	0	0	0	4	0	4
Mycobacterial disease - other than tuberculosis	0	0	0	6	1	2	0	14	1	22
Pertussis	1	2	0	7	1	9	9	35	11	53
Salmonellosis	1	1	0	4	0	0	1	18	2	23
Shigellosis	1	5	1	33	0	1	0	24	2	63
Streptococcal - Group A -invasive	0	0	0	1	0	0	0	6	0	7
Streptococcal - Group B -newborn	0	0	0	0	0	0	1	1	1	1
Streptococcal toxic shock syndrome (STSS)	0	0	0	1	0	0	0	1	0	2
Streptococcus pneumoniae - invasive antibiotic resistance unknown or non-resistant	0	4	0	7	0	1	1	6	1	18
Streptococcus pneumoniae - invasive antibiotic resistant/intermediate	0	0	0	1	0	0	1	4	1	5
Syphilis, Total	0	2	0	0	0	2	0	0	0	4
Syphilis, Primary and Secondary	0	2	0	0	0	2	0	0	0	4
Tuberculosis	0	0	0	0	0	0	0	1	0	1
Typhoid Fever	0	0	0	0	0	0	1	1	1	1
Varicella	0	0	0	3	0	0	1	13	1	16
Vibriosis-Other (not cholera)	0	0		0	0	0	0	1	0	1
Yersiniosis	0	1	0	0	0	0	1	1	1	2
Total	19	123	101	905	25	190	111	879	256	2,097

Source: Ohio Disease Reporting System, downloaded 9/5/2014.

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

(Provisional Data)	Aug. 2014	Aug. 2013	YTD 2014	YTD 2013	All of 2013	5 Yr Annual Average	5 Yr Annual Rate
Brucellosis	0	0	0	0	0	0.2	0.053
Campylobacteriosis	8	7	45	43	67	55.4	14.75
Chikungunya	1	0	1	0	0	0	0
Chlamydia	135	119	1,002	978	1445	1391	370.46
Coccidioidomycosis	0	0	0	0	0	0.2	0.053
Creutzfeldt-Jakob Disease	0	0	0	1	1	1.2	0.32
Cryptosporidiosis	6	5	24	19	26	25.8	6.87
Cyclosporiasis	0	1	0	1	1	0.2	0.053
Dengue	0	0	0	0	0	0.8	0.213
Escherichia coli , STP, Not O157:H7	0	0	1	0	2	1.8	0.479
Escherichia coli O157:H7	5	0	5	0	0	2.4	0.639
Escherichia coli , STP, Unk Serotype	0	0	0	2	0	0.6	0.16
Ehrlichiosis/Anaplasmosis	0	0	0	0	1	0.4	0.107
Giardiasis	1	3	7	31	37	52.6	14.01
Gonorrhea	35	43	369	391	612	543.2	144.63
Haemophilus influenzae , Invasive	2	0	5	5	7	8	2.13
Hepatitis A	1	0	6	2	8	3.4	0.91
Hepatitis B-Acute	2	0	4	7	8	4.4	1.172
Hepatitis B, Chronic	3	3	34	14	22	32.4	8.627
Hepatitis B, Perinatal	0	0	1	0	6	2.4	0.639
Hepatitis C, Acute	5	1	7	7	7	5.6	1.491
Hepatitis C, Chronic	22	13	187	123	202	231	61.5
Hepatitis E	0	0	0	0	0	0.2	0.053
Influenza-associated hospitalization	0	0	137	290	332	165.2	43.99
Influenza-associated pediatric mortality	0	0	0	1	1	0.2	0.053
LaCrosse virus disease	0	0	0	0	0	0.8	0.213
Legionellosis	2	2	3	17	21	16.6	4.42
Listeriosis	0	0	0	1	2	2	0.533
Lyme Disease	2	6	6	12	15	9.8	2.609
Malaria	1	0	1	0	1	1.4	0.373
Measles (Indigenous to Ohio)	2	0	9	0	0	0	0
Meningitis, Aseptic	1	8	3	13	24	35.4	9.425
Meningitis, Other Bacterial	0	1	2	4	5	3.8	1.012
Meningococcal Disease	0	0	1	0	0	0.8	0.213
Mumps	0	0	4	0	0	0.6	0.16
Mycobacterial disease - Not TB	1	2	22	22	34	27.6	7.349
Pertussis	11	2	53	10	16	39	10.384
Q fever, acute	0	0	0	2	2	0.4	0.107
Salmonellosis	2	3	23	32	46	38	10.12
Shigellosis	2	2	63	17	87	25.6	6.816
Spotted Fever Rickettsiosis	0	0	0	0	0	0.6	0.16
Streptococcal Dis, Group A, Invasive	0	0	7	10	14	15.2	4.047
Streptococcal Dis, Group B, in Newborn	1	0	1	2	2	3.2	0.852
Streptococcal Toxic Shock Syndrome	0	0	2	0	0	0.6	0.16
Streptococcus pneumoniae - invasive antibiotic resistance unknown or non-resistant	1	0	18	22	33	36.6	9.745
Streptococcus pneumo - inv antibiotic resistant/intermediate	1	1	5	20	27	20.2	5.378
Syphilis, Total	0	1	4	11	14	11.6	3.089
Syphilis, Primary and Secondary	0	0	4		8	3.4*	0.91*
Toxic Shock Syndrome (TSS)	0	0	0	3	3	0.8*	0.213*
Tuberculosis	0	0	1	0	0	2.4	0.639
Typhoid Fever	1	0	1	0	0	0.2	0.053
Typhus Fever	0	0	0	0	1	0.2	0.053
Varicella	1	1	16	13	23	42.4	11.29
Vibriosis - other (not cholera)	0	0	1	1	1	0.4	0.107
Vibriosis parahaemolyticus	0	0	0	0	1	0.2	0.053
West Nile Virus	0	0	0	0	0	0.2	0.053
Yersiniosis	1	0	2	1	1	0.6	0.16

Source: Ohio Disease Reporting System, downloaded 9/5/2014. Rates are per 100K population and based on 5 yr average incidence 09-13.*08-12 from ODH Stats pg.