

*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.

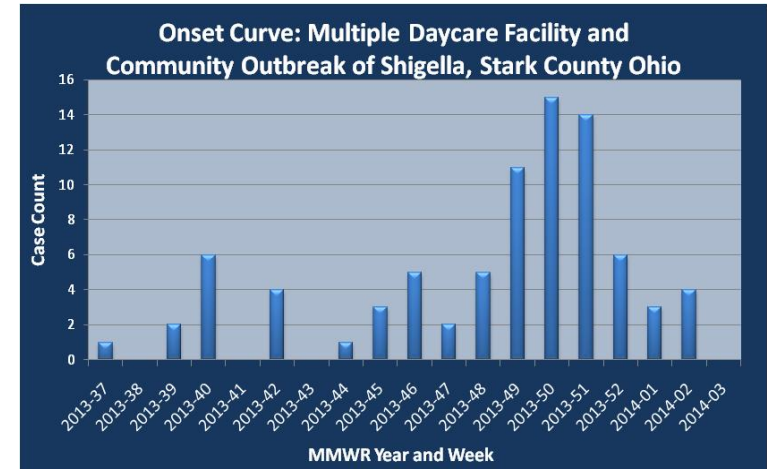
## Monthly Highlight: Shigella

An outbreak of *Shigella sonnei*, that quickly spread throughout Stark County, was brought under control in January. *Shigella*, a diarrheal illness, spreads easily from person-to-person, particularly in a toddler/child population with naïve hand hygiene practices and a propensity to place objects in the mouth. The increase was first identified in early October 2013, in employees and attendees of a single daycare. Spread among extended family members led to exposures at an ever increasing number of daycares and other settings including lower elementary schools, homeless shelters and fast food restaurants.

In total, 82 cases were identified from MMWR week 2013-37 to 2014-02, of which 13% were hospitalized. Cases ranged in age from 1-66 years with median of 5 and a mode of 2. Hospitalized cases tended to be adult, with a median and mode of 28 years. Among hospitalized and home bound patients multiple antibiotic resistance panels were identified, including resistance to Bactrim (sulfamethoxazole and trimethoprim), with differing panels noted within the same household.

Control of the outbreak was obtained through the use of: strict exclusion policies; stool testing for identification of new cases, test for cure and test for treat; and an aggressive and rapid response to daycares. Despite identifying 13 different daycares with confirmed cases, only 2 had more than 1 child confirmed with *Shigella*. Controlling the disease within daycares likely prevented further spread to community members and highlights the need for early detection and reporting by healthcare providers. During a community wide outbreak of *Shigella*, a high index of suspicion of *Shigella* should be maintained in patients presenting with a diarrheal illness and primary or secondary exposure to a daycare setting.

Additional information about *Shigella* can be found at: <http://www.cdc.gov/nczved/divisions/dfbmd/diseases/shigellosis/>.



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

	January 2014				February 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	Data collected Seasonally, not currently available.							
Mold Count	Data collected Seasonally, not currently available.							
Air Quality Index	30	19	23	0	48	20	30	0

\*\*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**

	Jan 2014	YTD 2014	2013
Live Births	363	363	4211
Births to Teens	29	29	370
Deaths	Data Pending		4229

Birth and Death Data is reported by the 4 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 Christina Henning at 330.489.3327 or [Chenning@cantonhealth.org](mailto:Chenning@cantonhealth.org).

**Table 4: JANUARY Jurisdictional Summary of Reportable Diseases in Stark County**

(Provisional Data, as of 2/17/2014)	Alliance City		Canton City		Massillon City		Stark County		All Departments	
	Jan	YTD	Jan	YTD	Jan	YTD	Jan	YTD	Jan	YTD
Campylobacteriosis	0	0	1	1	0	0	3	3	4	4
Chlamydia infection	13	13	63	63	23	23	46	46	145	145
Cryptosporidiosis	1	1	0	0	0	0	0	0	1	1
Gonococcal infection	5	5	33	33	5	5	16	16	59	59
Hepatitis B (including delta) - chronic	0	0	0	0	2	2	1	1	3	3
Hepatitis C - chronic	2	2	17	17	2	2	10	10	31	31
Influenza-associated hospitalization	5	5	35	35	10	10	40	40	90	90
Lyme Disease	0	0	1	1	0	0	0	0	1	1
Meningitis - aseptic/viral	0	0	0	0	0	0	1	1	1	1
Mycobacterial disease - other than tuberculosis	1	1	1	1	0	0	1	1	3	3
Pertussis	0	0	1	1	0	0	2	2	3	3
Salmonellosis	0	0	0	0	0	0	2	2	2	2
Shigellosis	0	0	9	9	0	0	6	6	15	15
Streptococcus pneumoniae - invasive antibiotic resistance unknown or non-resistant	0	0	1	1	0	0	1	1	2	2
Streptococcus pneumoniae - invasive antibiotic resistant/intermediate	0	0	0	0	0	0	1	1	1	1
Syphilis, Total	0	0	0	0	0	0	0	0	0	0
Syphilis, Primary and Secondary	0	0	0	0	0	0	0	0	0	0
Varicella	0	0	1	1	0	0	0	0	1	1

Source: Ohio Disease Reporting System, downloaded 2/17/2014.

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

<b>(Provisional Data)</b>	Jan-14	Jan-13	YTD 2014	YTD 2013	2013	5 Yr Annual Average	5 Yr Annual Rate
Brucellosis	0	0	0	0	0	0.2	0.053
Campylobacteriosis	4	5	4	5	67	55.4	14.75
Chlamydia	145	128	145	128	1450	1391	370.46
Coccidioidomycosis	0	0	0	0	0	0.2	0.053
Creutzfeldt-Jakob Disease	0	0	0	0	1	1.2	0.32
Cryptosporidiosis	1	2	1	2	26	25.8	6.87
Cyclosporiasis	0	0	0	0	1	0.2	0.053
Dengue	0	0	0	0	0	0.8	0.213
Ehrlichiosis/Anaplasmosis	0	0	0	0	1	0.4	0.107
Escherichia coli , STP, Not O157:H7	0	0	0	0	2	1.8	0.479
Escherichia coli O157:H7	0	0	0	0	0	2.4	0.639
Escherichia coli , STP, Unk Serotype	0	0	0	0	0	0.6	0.16
Giardiasis	0	7	0	7	37	52.6	14.01
Gonorrhea	59	53	59	53	612	543.2	144.63
Haemophilus influenzae , Invasive	0	1	0	1	7	8	2.13
Hepatitis A	0	0	0	0	8	3.4	0.91
Hepatitis B-Perinatal	0	0	0	0	7	2.4	0.639
Hepatitis B, Acute	0	1	0	1	9	4.4	1.172
Hepatitis B, Chronic	3	2	3	2	21	32.4	8.627
Hepatitis C, Acute	0	0	0	0	6	5.6	1.491
Hepatitis C, Chronic	31	17	31	17	225	231	61.5
Hepatitis E	0	0	0	0	0	0.2	0.053
Influenza-associated hospitalization	90	188	90	188	332	165.2	43.99
Influenza-associated pediatric mortality	0	0	0	0	1	0.2	0.053
LaCrosse virus disease	0	0	0	0	0	0.8	0.213
Legionellosis	0	1	0	1	21	16.6	4.42
Listeriosis	0	0	0	0	2	2	0.533
Lyme Disease	1	0	1	0	15	9.8	2.609
Malaria	0	0	0	0	1	1.4	0.373
Meningitis, Aseptic	1	0	1	0	24	35.4	9.425
Meningitis, Other Bacterial	0	1	0	1	5	3.8	1.012
Meningococcal Disease	0	0	0	0	0	0.8	0.213
Mumps	0	0	0	0	0	0.6	0.16
Mycobacterial disease - Not TB	3	1	3	1	37	27.6	7.349
Pertussis	3	2	3	2	16	39	10.384
Q fever, acute	0	0	0	0	2	0.4	0.107
Salmonellosis	2	1	2	1	46	38	10.12
Shigellosis	15	2	15	2	87	25.6	6.816
Spotted Fever Rickettsiosis	0	0	0	0	0	0.6	0.16
Streptococcal Dis, Group A, Invasive	0	1	0	1	14	15.2	4.047
Streptococcal Dis, Group B, in Newborn	0	0	0	0	2	3.2	0.852
Streptococcal Toxic Shock Syndrome	0	0	0	0	0	0.6	0.16
Streptococcus pneumoniae - invasive antibiotic resistance unknown or non-resistant	2	7	2	7	33	36.6	9.745
Streptococcus pneumo - inv antibiotic resistant/intermediate	1	9	1	9	27	20.2	5.378
Syphilis, Total	0	0	0	0	14	11.6	3.089
Syphilis, Primary and Secondary	0	0	0	0	8	3.4*	0.91*
Toxic Shock Syndrome (TSS)	0	0	0	0	3	0.8*	0.213*
Tuberculosis	0	0	0	0	0	2.4	0.639
Typhoid Fever	0	0	0	0	0	0.2	0.053
Varicella	1	1	1	1	23	42.4	11.29
Vibriosis - other (not cholera)	0	0	0	0	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	0	1	0	1	1	0.6	0.16

Source: Ohio Disease Reporting System, downloaded 2/17/2014. Rates are per 100K population and based on 5 yr average incidence 09-13.\*08-12 from ODH Stats pg.