## EPI GRAM October, 2019

## A Monthly Publication of the Stark Public Health Infrastructure Coalition

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. If you have any questions please contact Avinash Joseph at 330.493.9914 or josepha@starkhealth.org, or Amanda Archer at 330.489.3327 or aarcher@cantonhealth.org.



## Monthly Highlight: Drug-Resistant Brucellosis Associated with Raw Milk

Brucellosis is a bacterial infection most commonly associated with exposure to farm animals or contaminated animal products. Animals most commonly linked to Brucella infection include dogs, sheep, cattle, goats, and pigs. The primary modes of transmission are consumption of undercooked meat or unpasteurized dairy products, inhalation of the bacteria, and a exposure via wound or mucus membrane. Symptoms of brucellosis are often nonspecific and include fever, sweats, malaise, headache, pain, and fatigue. Expecting mothers may be at risk for miscarriage or spontaneous abortion.

In February of 2019, CDC an nounced that they were investigating a case of drug-resistant brucellosis associated with consumption of raw (unpasteurized) milk from a farm in Pennsylvania. The strain identified in this outbreak, RB51, is particularly difficult to diagnose and treat due to its resistance to first line antibiotics and similarity to other respiratory illnesses such as influenza. The RB51 strain is a live, weakened strain used in a bovine vaccine to protect against spontaneous abortion; on rare occasions cows vaccinated with this strain shed the bacteria in their milk. Potential exposures from the farm were mapped out to

consumers in 19 states, including Ohio. Rifampin, an antibiotic which is often used both for treatment and prophylactically for exposure to brucellosis, is ineffective against this strain.

The best way to avoid brucellosis is to refrain from consuming unpasteurized dairy products, particularly if you are pregnant. Pasteurization is when high heat is used to kill any remaining bacteria in raw milk; consumers should avoid dairy products that have not been pasteurized. Hunters, herdsmen, and others who handle animal tissue should protect themselves by using personal protective equipment such as rubber gloves, goggles, and aprons.

\* Birth and death data is preliminary

Number of Reported Cases – United States and U.S. Territories, 2010



Brucellosis cases in 2010 by state, via CDC

Table 1 Summary of Air Quality Index, Pollen, and Mold Counts for Stark County, Ohio, including historical data.															
	October 2019							October 2018							
	Monthly High	Monthly Low	Monthly Media	n report		nts in highest ted health risk category	Mo H	onthly Monthly High Low		Month Media	ıly an r	Counts in highest reported health risk category			
Pollen Count	10	0	1		N/A			9 0		0		N/A			
Mold Count	15,300	1,040	2,940		1 (High)		9,	9,000 0		0		3 (Moderate)			
Air Quality Index	68	26	39		6 (	(Moderate)	erate) 5		21	32		5 (Moderate)			
**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 Select Vital Statistics for Stark County Table 3 Stark County Crude Birth Rate and Death Rates											Rates				
		OCT 2019	YTD 2019	2018				2014	2015	2016	2017	2018*			
Live	Births	332	3449	40523	¢		Birth	11.3	11.2	11.3	10.7	10.9			
Birth	s to Teens	16	219	230*			Death	11.4	11.6	11.7	11.9	11.4			
Deat	hs	339	3521	4230,	¢	*Source: Ohio Department of Health Data Warehouse. Rates are per 1,000 population.									

Table 4: Jurisdictional Summary of	Alliance		Canton		Massillon		Stark		All	
Reportable Diseases in Stark County,	City		City		City		County		Departments	
OH (Provisional Data)	OCT	YTD	ОСТ	YTD	ОСТ	YTD	ОСТ	YTD	ОСТ	YTD
Campylobacteriosis	2	2	2	16	1	5	4	58	9	81
Chlamydia infection	12	121	78	696	22	164	62	588	174	1569
CP-CRE	0	0	0	3	0	4	3	11	3	18
Creutzfeldt-Jakob Disease	0	0	0	0	0	0	0	2	0	2
Cryptosporidiosis	1	4	1	4	0	0	1	34	3	42
E. coli, Shiga Toxin-Producing	0	0	0	3	0	3	1	7	1	13
Giardiasis	0	0	0	4	0	2	5	14	5	20
Gonococcal infection	4	27	23	267	0	44	20	135	47	473
Haemophilus influenzae (invasive disease)	0	0	0	1	0	0	1	4	1	5
Hepatitis A	0	2	1	3	0	3	1	9	2	17
Hepatitis B (including delta) - acute	0	2	0	3	0	2	1	1	1	8
Hepatitis B (including delta) - chronic	0	3	1	17	2	7	3	34	6	61
Hepatitis C - acute	0	0	0	1	0	1	0	0	0	2
Hepatitis C - chronic	2	30	6	96	7	41	6	119	21	286
Hepatitis E	0	0	0	0	0	0	0	0	0	0
Influenza-associated hospitalization	0	16	1	117	0	32	1	251	2	416
Legionellosis - Legionnaires' Disease	1	2	0	7	0	3	2	9	3	21
Listeriosis	0	0	0	0	0	0	0	2	0	2
Lyme Disease	0	1	0	2	0	1	3	40	3	44
Meningitis - aseptic/viral	0	2	3	6	0	3	1	5	4	16
Mumps	0	0	0	0	0	0	1	2	1	2
Pertussis	0	2	0	10	1	5	0	21	1	38
Salmonellosis	0	1	0	4	0	6	6	29	6	40
Shigellosis	0	0	0	3	0	0	1	20	1	23
Streptococcal - Group A -invasive	0	0	0	2	0	1	1	10	1	13
Streptococcal - Group B - in newborn	0	0	0	0	0	0	0	1	0	1
Streptococcus pneumoniae - inv antibiotic	0	1	1	5	0	0	0	12	1	18
resistance unknown or non-resistant	Ŭ	<u> </u>	-		Ŭ		Ŭ		-	10
Streptococcus pneumoniae – inv antibiotic	1	3	1	2	0	2	0	3	2	10
Supplies Total	0	2	0	14	1	2	0	11	1	20
Syphilis, Total	0	2	0	14	1	2	0	10	1	29
Syphilis, Primary, Secondary & Early Latent	0	2	0	/		2	0	10	1	21
Varicelle	0	0	1	1		0		1	1	2
Vibriogia (not cholera)	0	0	1	ð	U	2	0	10	1	20
Versiniosis	0	0	0	0	0		0	2	0	3 E
Total	0	0	120	U 1202	22	U 222	120	3 1470	205	3
10(a)	23	222	120	1303	33	333	129	14/0	305	3328



Alliance City Health Department cityofalliance.com/health



Canton City Public Health cantonhealth.org



Health Department Massillon City Health Department massillonohio.com/health



Stark County Health Department starkhealth.org

Table 5 – Summary Table of Diseases Reported in the	0.075	0.075			All	5 Yr	
Previous 5 years within Stark County (Provisional	<b>OCT-</b>	OCT-	YTD 2010	YTD 2019	of	Annual	Rate
Data)	19	18	2019	2018	2018	Average	
Amebiasis	0	0	0	0	0	0.4	0.107
Anaplasmosis	0	0	0	2	2	0.6	0.161
Babesiosis	0	0	0	2	2	0.8	0.214
Brucellosis	0	0	0	0	0	0.2	0.054
Campylobacteriosis	9	11	81	74	85	77.6	20.761
Chlamydia	174	174	1569	1440	1713	1720.0	460.169
CP-CRE	3	1	18	15	27	24.0	6.421
Coccidioidomycosis	0	0	0	0	0	0.4	0.107
Creutzfeldt-Jakob Disease	0	0	2	0	1	1.2	0.321
Cryptosporidiosis	3	4	42	31	33	33.8	9.043
Cyclosporiasis	0	0	4	8	8	3.0	0.803
E. coli, Shiga Toxin-Producing (O157:H7, Not O157, Unknown	1	1	13	14	17	14.0	3.746
Serotype)							
Giardiasis	5	2	20	18	23	21.8	5.832
Gonorrhea	47	69	473	523	643	580.2	155.227
Haemophilus influenzae, Invasive	1	0	5	3	4	6.4	1.712
Hemolytic Uremic Syndrome (HUS)	0	0	1	0	0	0.2	0.054
Hepatitis A	2	2	17	11	11	7.6	2.033
Hepatitis B, Perinatal	0	1	1	0	1	1.8	0.482
Hepatitis B, Acute	1	0	8	9	11	6.4	1.712
Hepatitis B, Chronic	6	7	61	71	85	57.6	15.410
Hepatitis C, Acute	0	0	2	5	5	6.2	1.659
Hepatitis C, Chronic	21	23	286	260	313	313.0	83.740
Hepatitis C-Perinatal Infection	0	0	2	3	4	4.0	1.070
Hepatitis E	0	0	0	0	0	0.2	0.054
Influenza-associated hospitalization	2	2	416	582	595	379.0	101.398
LaCrosse virus disease	0	0	0	4	4	1.0	0.268
Legionellosis	3	5	21	27	34	18.0	4.810
	0	0	2	1	1 20	1.0	0.268
Lyine Disease Malaria	3	3	44	35	38	24.0	0.421
Manalia Manalas (indiganous to Obio)	0	0	1	0	0	0.4	0.107
Meningitis Asentic	4	2	16	26	46	2.0	0.333
Meningitis, Aseptic	4	2	10	<u> </u>	40	34.0	9.237
Meningococcal Disease	0	0	1			1.0	0.268
Mumps	1	0	2	2	2	3.2	0.200
Pertussis	1	3	38	41	54	50.4	13.484
O fever chronic	0	0	0	0	0	0.2	0.054
Salmonellosis	6	10	40	54	61	47.8	12.788
Shigellosis	1	1	23	24	25	26.2	7.010
Spotted Fever Rickettsiosis	1	0	1	5	5	2.2	0.589
Staphylococcal aureus - intermediate resistance to vancomycin (VISA)	0	0	0	0	0	0.2	0.054
Streptococcal Dis, Group A, Invasive	1	0	13	24	25	15.2	4.067
Streptococcal Dis, Group B, in Newborn	0	1	1	2	2	1.6	0.428
Streptococcal Toxic Shock Syndrome	0	0	0	0	0	0.8	0.214
Streptococcus pneumoniae - inv. antibiotic resistance unknown or non-	1	0	18	21	29	30.6	8.187
resistant							
Streptococcus pneumo – inv. antibiotic resistant/intermediate	2	2	10	7	10	13.4	3.585
Syphilis, Total	1	7	29	35	33	19.4	5.190
Syphilis, Primary, Secondary and Early Latent	1	4	21	21	19	11.8	3.157
Toxic Shock Syndrome (TSS)	0	0	0	0	0	0.2	0.054
Tuberculosis	0	1	2	2	5	2.4	0.642
Varicella	1	1	20	13	16	24.2	6.474
Vibriosis - other (not cholera)	0	1	3	1	1	2.2	0.589
Vibrio parahaemolyticus infection	0	0	0	0	0	0.0	0.000
West Nile Virus	0	0	0	1	8	2.2	0.589
Yersiniosis	2	1	5	3	3	6.4	1.712
Zika virus infection	0	0	U	0	0	1.0	0.268

Source: Ohio Disease Reporting System, downloaded 9/2019. Rates are per 100K population and based on 5 yr average incidence '14 - '18.