

EPI GRAM December, 2018

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: Measles Outbreak in Clark County, Washington

Measles is a highly contagious, vaccine-preventable illness caused by the measles virus. Symptoms of measles include high fever, runny nose, cough, and conjunctivitis, followed by a characteristic rash that normally begins at the head and spreads to the rest of the body. Measles is extremely contagious from four days before rash onset to four days after, and can be spread through the air or through direct contact with an infected person. Measles was largely eradicated in the U.S. after the year 2000. 2018 saw the second highest number of measles cases reported in the U.S. since this elimination (2014 was the highest).

Clark County, Washington has declared a public health emergency due to a recent outbreak of measles involving 23 confirmed and 2 suspected cases. Of the reported cases, 20 of these cases were not immunized. 18 of these cases were in children <10 years of age, with only 1 adult case (between 19 and 29 years of age). One case has been hospitalized. Multiple public locations have been identified as potential sources of exposure, including the Moda Center, where the Portland Trailblazers played a nearly sold out home game on January 11th that potentially exposed upwards of 19,000 individuals. 90% of unvaccinated individuals who are exposed develop the disease, and Clark County is known to have an above average percentage of unvaccinated individuals. Low immunization uptake in a population also negatively affects those who have been immunized due to the concept of “herd immunity”, which offers greater protection to a population with higher vaccine uptake, particularly those with weakened immune systems or with medical contraindications for the vaccine.

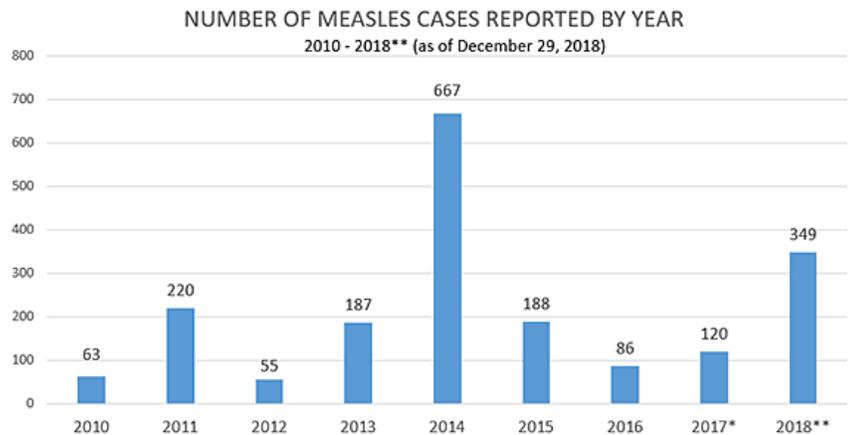


Chart via Centers for Disease Control

While Stark County did not report any measles cases during 2018, pockets of unvaccinated individuals and growing anti-vaccine sentiment could lay the groundwork for future outbreaks in our community. Universal measles immunization is the best way to prevent a public health emergency such as this from occurring in Northeast Ohio.

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

	December 2018				December 2017			
	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 and not currently available.				Data collected seasonally and not currently available.			
Mold Count	Data collected seasonally and not currently available.				Data collected seasonally and not currently available.			
Air Quality Index	89	15	45	9 (Moderate)	72	18	39.5	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 Select Vital Statistics for Stark County

	DEC 2018	YTD 2018	2017
Live Births	340	4265	4014*
Births to Teens	19	292	271*
Deaths	337	4269	4475*

* Birth and death data is preliminary

Table 3 Stark County Crude Birth Rate and Death Rates

	2013	2014	2015	2016	2017*
Birth	11.3	11.3	11.2	11.3	10.7
Death	11.3	11.4	11.6	11.7	11.9

*Source: Ohio Department of Health Data Warehouse. Rates are per 1,000 population. 2017 data is preliminary.

Table 4: Jurisdictional Summary of Reportable Diseases in Stark County, OH (Provisional Data)	Alliance City		Canton City		Massillon City		Stark County		All Departments	
	DEC	YTD	DEC	YTD	DEC	YTD	DEC	YTD	DEC	YTD
Anaplasmosis	0	0	0	1	0	0	0	1	0	2
Babesiosis	0	0	0	0	0	0	0	2	0	2
Campylobacteriosis	0	1	1	18	0	8	1	56	2	83
Chlamydia infection	6	112	67	756	10	163	41	682	124	1713
CP-CRE	2	2	0	5	0	3	5	13	7	23
Cryptosporidiosis	0	3	0	11	0	1	0	18	0	33
Cyclosporiasis	0	0	0	0	0	0	0	8	0	8
E. coli, Shiga Toxin-Producing	0	0	1	6	0	1	0	10	1	17
Giardiasis	0	2	1	6	1	3	2	12	4	23
Gonococcal infection	4	30	36	391	3	47	19	175	62	643
Haemophilus influenzae (invasive disease)	0	0	1	2	0	0	0	2	1	4
Hepatitis A	1	2	0	3	0	0	0	6	1	11
Hepatitis B (including delta) – acute	1	1	0	8	0	0	0	3	1	12
Hepatitis B (including delta) - chronic	1	5	1	25	1	6	7	48	10	84
Hepatitis C - acute	0	0	0	4	0	1	0	0	0	5
Hepatitis C – chronic	0	29	7	110	3	39	7	137	17	315
Influenza-associated hospitalization	0	23	2	153	1	45	7	372	10	593
LaCrosse virus disease	0	0	0	1	0	0	0	3	0	4
Legionellosis - Legionnaires' Disease	0	1	0	11	0	2	2	20	2	34
Lyme Disease	0	0	1	3	1	4	0	31	2	38
Meningitis - aseptic/viral	0	3	0	8	0	3	3	32	3	46
Meningitis - bacterial (Not N. meningitidis)	0	0	0	2	0	1	0	1	0	4
Mumps	0	0	0	1	0	0	0	1	0	2
Pertussis	5	17	2	8	0	6	3	23	10	54
Salmonellosis	0	1	2	8	0	7	1	43	3	59
Shigellosis	0	0	0	9	0	5	0	10	0	24
Spotted Fever Rickettsiosis, including RMSF	0	0	0	2	0	0	0	3	0	5
Streptococcal - Group A -invasive	0	1	0	8	1	2	0	14	1	25
Streptococcus pneumoniae - invasive antibiotic resistance unknown or non-resistant	0	2	1	9	1	1	3	17	5	29
Streptococcus pneumoniae - invasive antibiotic resistant/intermediate	0	0	1	2	0	1	0	7	1	10
Syphilis, Total	0	2	0	11	0	2	1	18	1	33
Syphilis, Primary, Secondary and Early Latent	0	1	0	8	0	2	1	8	1	19
Tuberculosis	0	0	0	0	0	0	2	5	2	5
Varicella	0	0	0	4	0	0	2	12	2	16
Yersiniosis	0	1	0	1	0	0	0	1	0	3
Total	20	241	125	1603	22	357	110	1804	277	4005

Table 5 – Summary Table of Diseases Reported in the Previous 5 years within Stark County (Provisional Data)	DEC-18	DEC-17	YTD 2018	YTD 2017	All of 2017	5 Yr Annual Average	Rate
Amebiasis	0	0	0	1	1	0.4	0.107
Anaplasmosis	0	0	2	0	0	0.4	0.107
Babesiosis	0	0	2	1	1	0.4	0.107
Bruceellosis	0	0	0	1	1	0.2	0.054
Campylobacteriosis	2	3	83	88	88	74.0	19.807
Chlamydia	124	118	1713	1804	1804	1666.6	446.078
Coccidioidomycosis	0	0	0	0	0	0.4	0.107
Creutzfeldt-Jakob Disease	0	1	1	3	3	1.2	0.321
Cryptosporidiosis	0	3	33	30	30	32.4	8.672
Cyclosporiasis	0	0	8	2	2	1.6	0.428
E. coli, Shiga Toxin-Producing (O157:H7, Not O157, Unknown Serotype)	1	1	17	12	12	11.0	2.944
Giardiasis	4	0	23	18	18	24.6	6.584
Gonorrhea	62	39	643	542	542	574.0	153.635
Haemophilus influenzae , Invasive	1	1	4	9	9	7.0	1.874
Hemolytic Uremic Syndrome (HUS)	0	0	0	0	0	0.2	0.054
Hepatitis A	1	1	11	10	10	7.0	1.874
Hepatitis B, Perinatal	0	0	1	1	1	1.8	0.482
Hepatitis B, Acute	2	1	12	8	8	5.6	1.499
Hepatitis B, Chronic	10	8	84	66	66	45.0	12.045
Hepatitis C, Acute	0	0	5	2	2	6.6	1.767
Hepatitis C, Chronic	17	23	315	300	300	295.4	87.363
Hepatitis E	0	0	0	0	0	0.2	0.054
Influenza-associated hospitalization	10	101	593	413	413	326.4	87.363
Influenza-associated pediatric mortality	0	0	0	0	0	0.2	0.054
LaCrosse virus disease	0	0	4	0	0	0.2	0.054
Legionellosis	2	1	34	15	15	15.4	4.122
Listeriosis	0	0	1	1	1	1.2	0.321
Lyme Disease	2	3	38	29	29	19.4	5.193
Malaria	0	0	0	0	0	0.6	0.161
Measles (indigenous to Ohio)	0	0	0	0	0	2.0	0.535
Meningitis, Aseptic	3	2	46	43	43	30.2	8.083
Meningitis, Other Bacterial	0	1	4	3	3	3.6	0.964
Meningococcal Disease	0	0	0	0	0	1.0	0.268
Mumps	0	0	2	3	3	2.8	0.749
Pertussis	10	24	54	41	41	42.8	11.456
Q fever, acute	0	0	0	0	0	0.4	0.107
Q fever, chronic	0	0	0	1	1	0.2	0.054
Salmonellosis	3	0	59	39	39	44.8	11.991
Shigellosis	0	10	24	23	23	38.6	10.332
Spotted Fever Rickettsiosis	0	0	5	6	6	1.2	0.321
Staphylococcal aureus - intermediate resistance to vancomycin (VISA)	0	0	0	0	0	0.2	0.054
Streptococcal Dis, Group A, Invasive	1	2	25	22	22	13.0	3.480
Streptococcal Dis, Group B, in Newborn	0	0	2	1	1	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-resistant	5	1	29	33	33	31.2	8.351
Streptococcus pneumo – inv. antibiotic resistant/intermediate	1	2	10	16	16	16.8	4.497
Syphilis, Total	1	4	33	29	29	15.4	4.122
Syphilis, Primary, Secondary and Early Latent	1	4	19	13	13	9.6	2.570
Toxic Shock Syndrome (TSS)	0	0	0	0	0	0.8	0.214
Tuberculosis	2	0	5	3	3	1.4	0.375
Typhus Fever	0	0	0	0	0	0.2	0.054
Varicella	2	6	16	20	20	25.6	6.852
Vibriosis - other (not cholera)	0	0	0	2	2	2.2	0.589
Vibrio parahaemolyticus infection	0	0	0	0	0	0.2	0.054
West Nile Virus	0	0	8	1	1	0.6	0.161
Yersiniosis	0	0	3	9	9	6.0	1.606
Zika virus infection	0	0	0	0	0	1.0	0.268

Source: Ohio Disease Reporting System, downloaded 11/19/2018. Rates are per 100K population and based on 5 yr average incidence '13 – '17.