

EPI GRAM April, 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.**



Public Health
Prevent. Promote. Protect.

Monthly Highlight: Nationwide Increase in Measles Incidence in 2019

Since the beginning of 2019, the United States as a whole has seen more measles cases and outbreaks than any other year in recent memory. As of 5/24/19 940 cases of measles have been confirmed in the U.S. this year; the average number of annual cases in the previous 9 years was ~217. Outbreaks have been reported across the country, including in Los Angeles, Michigan, New York City, Georgia, Pennsylvania, and Washington. While many of these outbreaks begin in a case with a history of travel to an endemic country, they often blossom in pockets of the population with depressed vaccination rates.

Measles is a vaccine preventable disease (VPD), and was considered eradicated in the United States in 2000. However, the increased spread of misinformation and junk science about vaccine effectiveness, side effects, and association with unrelated medical conditions has led to a resurgence in measles transmission. Recent outbreaks have largely affected ethnic enclaves and culturally distinctive or isolated areas where vaccine skepticism is prevalent. The insular nature of communities where vaccine misinformation is spread makes it difficult for public health officials and other healthcare professionals to encourage preventive activities.

Number of Measles Cases Reported by Year

2010-2019**(as of May 24, 2019)

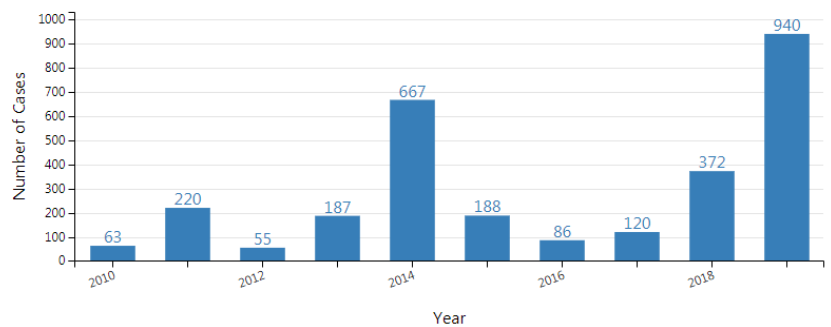


Chart via Centers for Disease Control and Prevention

As rates of measles and other VPDs continue to increase across the country, the best way to counter this rising tide is by providing accurate information about immunizations. The concept of “herd immunity” relies on an extremely high percentage of the population being vaccinated to prevent outbreaks from occurring and to protect those who cannot receive vaccinations, but herd immunity becomes less effective when more individuals refuse vaccination. It is crucial that public health officials use their platform to counter misinformation and discuss the benefits of immunization.

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

	June 2018				June 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	510	5	112.5	N/A	1350	30	185	N/A
Mold Count	2,800	160	640	18 (Low)	4,960	290	2,385	22 (Low)
Air Quality Index	71	32	47	6 (Moderate)	58	34	41	16 (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

	APR 2019	YTD 2019	2018
Live Births	313	1344	4052*
Births to Teens	16	95	230*
Deaths	343	1471	4230*

* Birth and death data is preliminary

Table 3 Stark County Crude Birth Rate and Death Rates

	2014	2015	2016	2017	2018*
Birth	11.3	11.2	11.3	10.7	10.9
Death	11.4	11.6	11.7	11.9	11.4

*Source: Ohio Department of Health Data Warehouse. Rates are per 1,000 population. 2018 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	
	Apr	YTD	Apr	YTD	Apr	YTD	Apr	YTD	Apr	YTD
Campylobacteriosis	0	0	0	5	0	2	1	18	1	25
Chlamydia infection	19	53	82	288	9	53	52	224	162	618
CP-CRE	0	0	1	2	0	2	4	4	5	8
Creutzfeldt-Jakob Disease	0	0	0	0	0	0	0	2	0	2
Cryptosporidiosis	0	1	0	1	0	0	1	7	1	9
E. coli, Shiga Toxin-Producing	0	0	0	0	0	2	0	3	0	5
Giardiasis	0	0	1	2	0	1	2	5	3	8
Gonococcal infection	1	9	31	124	6	24	10	49	48	206
Haemophilus influenzae (invasive disease)	0	0	1	1	0	0	0	1	1	2
Hepatitis A	0	0	0	1	1	2	1	2	2	5
Hepatitis B (including delta) - acute	0	0	0	1	0	0	0	0	0	1
Hepatitis B (including delta) - chronic	0	0	3	10	0	2	5	15	8	27
Hepatitis C - acute	0	0	0	1	0	0	0	0	0	1
Hepatitis C - chronic	2	8	10	48	6	12	13	55	31	123
Hepatitis E	0	0	0	0	0	0	0	0	0	0
Influenza-associated hospitalization	3	15	15	113	3	32	27	247	48	407
Legionellosis - Legionnaires' Disease	0	0	0	1	1	2	0	2	1	5
Listeriosis	0	0	0	0	0	0	0	1	0	1
Lyme Disease	0	0	0	0	0	0	0	3	0	3
Meningitis - aseptic/viral	0	0	0	0	1	2	0	0	1	2
Mumps	0	0	0	0	0	0	0	1	0	1
Pertussis	0	2	0	7	0	2	0	10	0	21
Salmonellosis	0	0	0	1	0	0	3	6	3	7
Shigellosis	0	0	1	2	0	0	0	3	1	5
Streptococcal - Group A -invasive	0	0	0	1	0	1	1	6	1	8
Streptococcal - Group B - in newborn	0	0	0	0	0	0	0	1	0	1
Streptococcus pneumoniae - inv antibiotic resistance unknown or non-resistant	1	1	0	2	0	0	2	7	3	10
Streptococcus pneumoniae – inv antibiotic resistant/intermediate	0	1	0	1	0	1	0	2	0	5
Syphilis, Total	0	1	3	3	0	0	3	5	6	9
➤ Syphilis, Primary, Secondary & Early Latent	0	1	3	3	0	0	3	5	6	9
Tuberculosis	0	0	0	1	0	0	0	0	0	1
Varicella	0	0	6	6	1	1	1	8	8	15
Vibriosis (not cholera)	0	0	0	0	0	1	0	0	0	1
Yersiniosis	0	0	0	0	0	0	0	1	0	1
Total	26	92	155	623	28	142	130	691	339	1548



Alliance City
Health Department
cityofalliance.com/health



Canton City
Public Health
cantonhealth.org



Stark County
Health Department
starkhealth.org

Table 5 – Summary Table of Diseases Reported in the Previous 5 years within Stark County (Provisional Data)	Apr-19	Apr-18	YTD 2019	YTD 2018	All of 2018	5 Yr Annual Average	Rate
Amebiasis	0	0	0	0	0	0.4	0.107
Anaplasmosis	0	0	0	0	2	0.6	0.161
Babesiosis	0	0	0	1	2	0.8	0.214
Brucellosis	0	0	0	0	0	0.2	0.054
Campylobacteriosis	1	9	25	17	85	77.6	20.761
Chlamydia	162	134	618	571	1713	1720.0	460.169
CP-CRE	5	2	8	3	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	1	2	9	8	33	33.8	9.043
Cyclosporiasis	0	0	0	0	8	3.0	0.803
E. coli, Shiga Toxin-Producing (O157:H7, Not O157, Unknown Serotype)	1	1	5	3	17	14.0	3.746
Giardiasis	3	0	8	6	23	21.8	5.832
Gonorrhea	48	47	206	188	643	580.2	155.227
Haemophilus influenzae , Invasive	1	1	2	2	4	6.4	1.712
Hemolytic Uremic Syndrome (HUS)	0	0	0	0	0	0.2	0.054
Hepatitis A	2	1	5	2	11	7.6	2.033
Hepatitis B, Perinatal	1	0	0	0	1	1.8	0.482
Hepatitis B, Acute	0	1	1	3	11	6.4	1.712
Hepatitis B, Chronic	8	7	27	25	85	57.6	15.410
Hepatitis C, Acute	0	1	0	3	5	6.2	1.659
Hepatitis C, Chronic	31	20	123	103	313	313.0	83.740
Hepatitis C-Perinatal Infection	0	0	0	0	4	4.0	1.070
Hepatitis E	0	0	0	0	0	0.2	0.054
Influenza-associated hospitalization	48	50	407	569	595	379.0	101.398
LaCrosse virus disease	0	0	0	0	4	1.0	0.268
Legionellosis	1	2	5	3	34	18.0	4.816
Listeriosis	0	0	1	0	1	1.0	0.268
Lyme Disease	0	4	3	6	38	24.0	6.421
Malaria	0	0	0	0	0	0.4	0.107
Measles (indigenous to Ohio)	0	0	0	0	0	2.0	0.535
Meningitis, Aseptic	1	2	2	13	46	34.6	9.257
Meningitis, Other Bacterial	0	0	0	1	4	3.4	0.910
Meningococcal Disease	0	0	0	0	0	1.0	0.268
Mumps	0	0	1	1	2	3.2	0.856
Pertussis	0	1	21	19	54	50.4	13.484
Q fever, chronic	0	0	0	0	0	0.2	0.054
Salmonellosis	3	1	7	15	61	47.8	12.788
Shigellosis	1	2	5	19	25	26.2	7.010
Spotted Fever Rickettsiosis	0	1	0	1	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	6	8	14	25	15.2	4.067
Streptococcal Dis, Group B, in Newborn	0	0	1	0	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-resistant	3	1	10	14	29	30.6	8.187
Streptococcus pneumo – inv. antibiotic resistant/intermediate	0	0	5	3	10	13.4	3.585
Syphilis, Total	6	1	9	10	33	19.4	5.190
Syphilis, Primary, Secondary and Early Latent	6	1	9	7	19	11.8	3.157
Toxic Shock Syndrome (TSS)	0	0	0	0	0	0.2	0.054
Tuberculosis	0	0	1	0	5	2.4	0.642
Varicella	8	2	15	6	16	24.2	6.474
Vibriosis - other (not cholera)	0	0	1	0	1	2.2	0.589
Vibrio parahaemolyticus infection	0	0	0	0	0	0.0	0.000
West Nile Virus	0	0	0	0	8	2.2	0.589
Yersiniosis	0	0	1	1	3	6.4	1.712
Zika virus infection	0	0	0	0	0	1.0	0.268

Source: Ohio Disease Reporting System, downloaded 3/2019. Rates are per 100K population and based on 5 yr average incidence '14 – '18.