

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: Meningococcal Disease

The five-year average for cases of meningococcal disease in Stark County is 1.2 cases per year, with a rate of 0.320 per 100,000, which is on par with the national rate. Meningococcal disease is a Class A reportable disease in Ohio and should be reported immediately by telephone to the local health department. In 2015, there were 3 cases of invasive meningococcal disease reported in our community. These individuals were unrelated, different ages, spread across the county’s jurisdictions and each had different, individual risk factors.

Neisseria meningitidis is the bacteria responsible for meningococcal disease and is the leading cause of bacterial meningitis and sepsis in the United States. There are at least 13 serogroups known to cause invasive disease (e.g. A, B, C, W, X, Y), with serotypes B, C and Y being the most prevalent in Ohio. Quadrivalent vaccinations are available for serogroups A, C, W and Y, and are required in Ohio for students entering both the 7th and 12th grade, beginning in 2016. A vaccination against serotype B is now available in a separate vaccine; however, there is no current requirement for students to receive this immunization, even though serotype B accounts for over 30% of cases in the United States.

Symptoms of invasive meningococcal disease include sudden onset of fever, headache, stiff neck and may be accompanied by other symptoms, such as nausea, vomiting, sensitivity to light and altered mental status. Anyone can get meningococcal disease but rates of disease are highest in children younger than 1, followed by a second peak in adolescence (between 16 and 23 years). Up to 10% of adults can be asymptomatic transient carriers of the bacteria. Humans are the only natural reservoir for the bacteria. The primary mode of transmission is by droplet spread or direct contact. It is recommended that high-risk, close contacts to a patient receive chemoprophylaxis. The incubation period is usually 3 to 4 days, with a range of 2 to 10 days.

Keeping up to date with recommended immunizations is the best defense against meningococcal disease. The CDC recommends incorporating healthy habits into your lifestyle, including getting plenty of rest and not coming into close contact with people who are sick. Recommendations also include being mindful to not share drinkware. <http://www.cdc.gov/meningococcal/index.html>

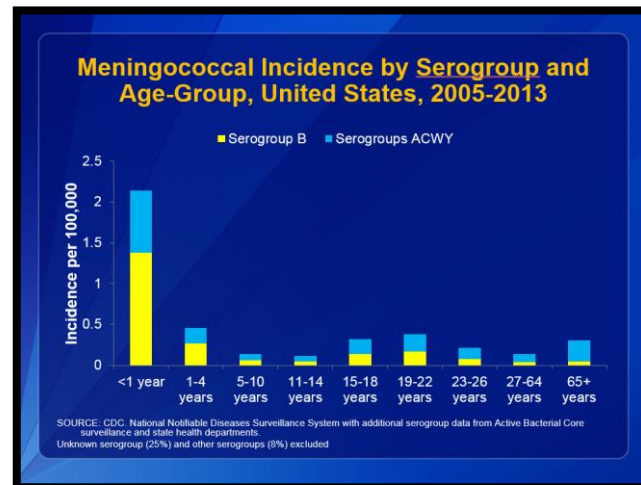


Table 1 Summary of Air Quality Index, Pollen, and Mold Counts for Stark County, Ohio, including historical data.

	January 2016				February 2015			
	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.				Data collected Seasonally, not currently available.			
Mold Count	Data collected Seasonally, not currently available.				Data collected Seasonally, not currently available.			
Air Quality Index	55	6	15.5	1 (Moderate)	28	13	21	0 (All Good)

**See the following websites for updated Air Quality Index and mold index. In 2015, Stark County handled 3 cases within our community. Use 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

	January 2016	YTD 2016	2015
Live Births	357	357	4314
Births to Teens	25	25	308
Deaths	367	367	4362

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

	2010	2011	2012	2013	2014
Birth	10.8	10.8	10.9	11.2	12.0
Death	10.9	11.3	11.4	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 330.493.9904 or Wagnerj@starkhealth.org, or Amanda Archer at 330.489.3327 or aarcher@cantonhealth.org.

Table 4: Jurisdictional Summary of Reportable Diseases in Stark County

	Alliance City		Canton City		Massillon City		Stark County		Total	
	Jan	YTD	Jan	YTD	Jan	YTD	Jan	YTD	Jan	YTD
Campylobacteriosis	0	0	0	0	0	0	4	4	4	4
Chlamydia infection	10	10	82	82	16	16	52	52	160	160
Cryptosporidiosis	0	0	0	0	1	1	1	1	2	2
E. coli, Shiga Toxin-Producing	0	0	0	0	0	0	1	1	1	1
Giardiasis	0	0	1	1	0	0	0	0	1	1
Gonococcal infection	2	2	31	31	5	5	13	13	51	51
Haemophilus influenzae	0	0	0	0	0	0	1	1	1	1
Hepatitis B – acute	0	0	0	0	0	0	1	1	1	1
Hepatitis B - chronic	0	0	3	3	0	0	4	4	7	7
Hepatitis C - acute	0	0	0	0	0	0	1	1	1	1
Hepatitis C - chronic	3	3	8	8	3	3	11	11	25	25
Influenza-associated hospitalization	1	1	0	0	1	1	2	2	4	4
Influenza-associated pediatric mortality	0	0	0	0	0	0	0	0	0	0
Lyme Disease	0	0	0	0	0	0	1	1	1	1
Measles - indigenous to Ohio	0	0	0	0	0	0	1	1	1	1
Meningitis - aseptic/viral	0	0	0	0	0	0	3	3	3	3
Pertussis	0	0	0	0	0	0	1	1	1	1
Salmonellosis	0	0	3	3	1	1	2	2	6	6
Streptococcus pneumoniae - invasive antibiotic resistance unknown or non-resistant	0	0	5	5	1	1	2	2	8	8
Streptococcus pneumoniae - invasive antibiotic resistant/intermediate	0	0	3	3	0	0	2	2	5	5
Syphilis, Total	0	0	1	1	0	0	0	0	1	1
Syphilis, Primary, Secondary and Early Latent	0	0	1	1	0	0	0	0	1	1
Varicella	0	0	1	1	1	1	3	3	5	5
Yersiniosis	1	1	0	0	0	0	0	0	1	1
Total	17	17	139	139	29	29	106	106	289	289

Source: Ohio Disease Reporting System, downloaded 02/01/2016.

Table 5 – Summary Table of Diseases Reported in the Previous 5 years within Stark County (Provisional Data)

	Jan-16	Jan-15	YTD 2016	YTD 2015	All of 2015	5 Yr annual average	Rate
Amebiasis	0	1	0	1	1	0.2	0.053
Anaplasmosis	0	0	0	0	0	0.2	0.053
Babesiosis	0	0	0	0	1	0.2	0.053
Brucellosis	0	0	0	0	0	0.2	0.053
Campylobacteriosis	4	1	4	1	59	61.0	16.241
Chlamydia	160	126	160	126	1702	1539.0	409.760
Coccidioidomycosis	0	0	0	0	0	0.4	0.107
Creutzfeldt-Jakob Disease	0	0	0	0	0	0.6	0.160
Cryptosporidiosis	2	2	2	2	30	29.2	7.775
Cyclosporiasis	0	0	0	0	1	0.4	0.107
Dengue	0	0	0	0	0	0.6	0.160
Escherichia coli , STP, Not O157:H7	1	0	1	0	17	4.4	1.172
Escherichia coli O157:H7	0	0	0	0	0	2.2	0.586
Escherichia coli , STP, Unk Serotype	0	0	0	0	0	0.2	0.053
Ehrlichiosis/Anaplasmosis	0	0	0	0	0	0.2	0.053
Giardiasis	1	5	1	5	29	36.2	9.638
Gonorrhea	51	30	51	30	530	586.8	156.236
Haemophilus influenzae , Invasive	1	1	1	1	8	7.4	1.970
Hemolytic Uremic Syndrome (HUS)	0	0	0	0	0	0.2	0.053
Hepatitis A	0	1	0	1	5	5.8	1.544
Hepatitis B, Perinatal	0	1	0	1	5	3.4	0.905
Hepatitis B, Acute	1	0	1	0	4	5.0	1.331
Hepatitis B, Chronic	7	6	7	6	45	33.6	8.946
Hepatitis C, Acute	1	2	1	2	13	7.8	2.077
Hepatitis C, Chronic	25	25	25	25	374	275.8	73.432
Hepatitis E	0	0	0	0	0	0.2	0.053
Influenza-associated hospitalization	4	163	4	163	284	263.6	70.184
Influenza-associated pediatric mortality	0	0	0	0	0	0.2	0.053
LaCrosse virus disease	0	0	0	0	0	0.4	0.107
Legionellosis	0	0	0	0	19	14.2	3.781
Listeriosis	0	0	0	0	1	1.4	0.373
Lyme Disease	1	0	1	0	18	13.6	3.621
Malaria	0	0	0	0	0	0.6	0.160
Measles (indigenous to Ohio)	1	0	1	0	0	1.8	0.479
Meningitis, Aseptic	3	0	3	0	31	35.2	9.372
Meningitis, Other Bacterial	0	0	0	0	3	3.4	0.905
Meningococcal Disease	0	1	0	1	3	1.2	0.320
Mumps	0	1	0	1	4	2.0	0.533
Mycobacterial disease - Not TB	0	0	0	0	36	31.0	8.254
Other arthropod-borne disease	0	0	0	0	0	0.2	0.053
Pertussis	1	9	1	9	51	34.6	9.212
Q fever, acute	0	0	0	0	0	0.4	0.106
Salmonellosis	6	1	6	1	53	41.6	11.076
Shigellosis	0	0	0	0	6	34.4	9.159
Spotted Fever Rickettsiosis	0	0	0	0	0	0.6	0.160
Streptococcal Dis, Group A, Invasive	0	3	0	3	9	15.2	4.047
Streptococcal Dis, Group B, in Newborn	0	0	0	0	0	1.6	0.426
Streptococcal Toxic Shock Syndrome	0	1	0	1	1	1.2	0.320
Streptococcus pneumoniae - invasive antibiotic resistance unknown or non-resistant	8	3	8	3	29	36.8	9.800
Streptococcus pneumo - inv antibiotic resistant/intermediate	5	1	5	1	15	17.8	4.739
Syphilis, Total	1	0	1	0	7	10.4	2.769
Syphilis, Primary, Secondary and Early Latent	1	0	1	0	5	6.6	1.757
Toxic Shock Syndrome (TSS)	0	0	0	0	1	0.8*	0.213*
Tuberculosis	0	0	0	0	1	1.0	0.266
Thyphoid Fever	0	0	0	0	0	0.4	0.107
Typhus Fever	0	0	0	0	0	0.2	0.053
Varicella	5	1	5	1	26	29.2	7.775
Vibriosis - other (not cholera)	0	0	0	0	3	1.2	0.320
Vibriosis parahaemolyticus	0	0	0	0	0	0.2	0.053
West Nile Virus	0	0	0	0	1	0.6	0.160
Yersiniosis	1	1	1	1	8	2.8	0.746
Totals	291	386	291	386	3439		

Source: Ohio Disease Reporting System, downloaded 02/01/16. Rates are per 100K population and based on 5 yr average incidence '10-'14.*08-12 from ODH Stats pg.