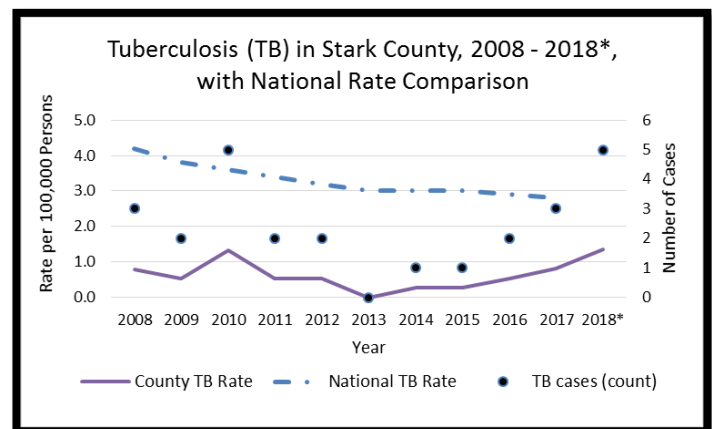


### Monthly Highlight: Tuberculosis

Tuberculosis (TB) is caused by a bacterium called *Mycobacterium tuberculosis*. The bacteria usually attack the lungs (pulmonary TB), but TB bacteria can attack any part of the body such as the kidney, spine, and brain. Not everyone infected with TB bacteria becomes sick. As a result, two TB-related conditions exist: latent TB infection (LTBI) and TB disease. TB bacteria are spread through the air from one person to another as an airborne pathogen. When a person breathes in TB bacteria, the bacteria can settle in the lungs and begin to grow. From there, they can move through the blood to other parts of the body. TB disease in the lungs or throat can be infectious, but TB in other parts of the body is usually not infectious. Tuberculosis is treatable and curable, but if not treated properly, TB disease can be fatal. Symptoms of non-pulmonary TB disease in other parts of the body depend on the area affected. People who have latent TB infection do not feel sick, do not have any symptoms, and cannot spread TB to others. Symptoms of TB disease depend on where in the body the bacteria are growing. Pulmonary TB can present with the following symptoms:

- a bad cough that lasts 3 weeks or longer
- pain in the chest
- coughing up blood or sputum
- weakness or fatigue
- weight loss
- no appetite
- chills
- fever
- sweating at night



Active, drug-susceptible TB disease is treated with a standard 6 to 9 month course of 4 antimicrobial drugs that are provided with information, supervision and support to the patient by a health worker or trained volunteer. Without such support, treatment adherence can be difficult and the disease can spread. The vast majority of TB cases can be cured when medicines are provided and taken properly. Emerging trends in tuberculosis infection include resistance to the commonly used anti-tuberculous drugs. Such resistant bacteria frequently arise as a result of incomplete or intermittent treatment. These cases are complicated by the need for multiple drugs for even more prolonged periods of time. Tuberculosis due to resistant mycobacteria can be incurable and fatal.

In 2017, the national incidence rate was 2.8 cases per 100,000 persons, which was a 2.3% decrease from 2016. Stark County typically experiences a rate far below the national rate. 2010 and 2018 recorded the highest number of TB cases in Stark County in 10 years and the rate per 100,000 persons was 1.3. The 5 year annual average is 2.4 cases per year with a rate of 0.64 per 100,000 persons. The national rate has been steadily decreasing since the early 1950s, and while Stark County's incidence of TB is low, our cases counts have been slowly increasing since 2013.

For more information, visit: <https://odh.ohio.gov/wps/portal/gov/odh/know-our-programs/tuberculosis> or <https://www.cdc.gov/tb/default.htm>

For information on World TB Day: <https://www.cdc.gov/tb/worldtbdays/default.htm> or [https://odh.ohio.gov/wps/portal/gov/odh/know-our-programs/tuberculosis/news-and-events/world\\_tb\\_day](https://odh.ohio.gov/wps/portal/gov/odh/know-our-programs/tuberculosis/news-and-events/world_tb_day)



Alliance City  
Health Department  
[cityofalliance.com/health](http://cityofalliance.com/health)



Canton City  
Public Health  
[cantonhealth.org](http://cantonhealth.org)



Massillon City  
Health Department  
[massillonohio.com/health](http://massillonohio.com/health)



Stark County  
Health Department  
[starkhealth.org](http://starkhealth.org)

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

	January 2019				February 2018			
	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 currently not available				Data collected seasonally and currently not available			
Mold Count	Data collected seasonally and currently not available				Data collected seasonally and currently not available			
Air Quality Index	75	16	37	(5) Moderate	69	13	36.5	(5) 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](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**

	Jan 2019	YTD 2019	2018
Live Births	356	356	4052*
Births to Teens	27	27	230*
Deaths	409	409	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	
	Jan	YTD	Jan	YTD	Jan	YTD	Jan	YTD	Jan	YTD
Campylobacteriosis	0	0	2	2	0	0	3	3	5	5
Chlamydia infection	13	13	73	73	15	15	59	59	160	160
Creutzfeldt-Jakob Disease	0	0	0	0	0	0	2	2	2	2
Cryptosporidiosis	1	1	1	1	0	0	2	2	4	4
E. coli, Shiga Toxin-Producing	0	0	0	0	0	0	1	1	1	1
Giardiasis	0	0	0	0	1	1	3	3	4	4
Gonococcal infection	4	4	24	24	1	1	12	12	41	41
Haemophilus influenzae (invasive disease)	0	0	0	0	0	0	1	1	1	1
Hepatitis B (including delta) - chronic	0	0	1	1	0	0	2	2	3	3
Hepatitis C - chronic	1	1	16	16	3	3	16	16	36	36
Influenza-associated hospitalization	1	1	7	7	9	9	26	26	43	43
Lyme Disease	0	0	0	0	0	0	2	2	2	2
Pertussis	1	1	7	7	2	2	8	8	18	18
Salmonellosis	0	0	1	1	0	0	2	2	3	3
Shigellosis	0	0	0	0	0	0	3	3	3	3
Streptococcal - Group A -invasive	0	0	1	1	0	0	1	1	2	2
Streptococcus pneumoniae - invasive antibiotic resistance unk/non-resistant	0	0	0	0	0	0	1	1	1	1
Streptococcus pneumoniae - invasive antibiotic resistant/intermediate	0	0	0	0	1	1	1	1	2	2
Tuberculosis	0	0	1	1	0	0	0	0	1	1
Varicella	0	0	0	0	0	0	3	3	3	3
Vibriosis (not cholera)	0	0	0	0	1	1	0	0	1	1
Yersiniosis	0	0	0	0	0	0	1	1	1	1
<b>Total</b>	<b>21</b>	<b>21</b>	<b>134</b>	<b>134</b>	<b>33</b>	<b>33</b>	<b>149</b>	<b>149</b>	<b>337</b>	<b>337</b>

Source: Ohio Disease Reporting System, downloaded 2/11/2019

<b>Table 5 – Summary Table of Diseases Reported in the Previous 5 years within Stark County (Provisional Data)</b>	Jan-19	Jan-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	0	2	0.8	0.214
Brucellosis	0	0	0	0	0	0.2	0.054
Campylobacteriosis	5	3	5	3	85	77.6	20.761
Chlamydia	160	155	160	155	1713	1720.0	460.169
CP-CRE	0	0	0	0	27	24.0	6.421
Coccidioidomycosis	0	0	0	0	0	0.4	0.107
Creutzfeldt-Jakob Disease	2	0	2	0	1	1.2	0.321
Cryptosporidiosis	4	4	4	4	33	33.8	9.043
Cyclosporiasis	0	0	0	0	8	3.0	0.803
E. coli, Shiga Toxin-Producing	1	1	1	1	17	14.0	3.746
Giardiasis	4	1	4	1	23	21.8	5.832
Gonorrhea	41	47	41	47	643	580.2	155.227
Haemophilus influenzae , Invasive	1	1	1	1	4	6.4	1.712
Hemolytic Uremic Syndrome (HUS)	0	0	0	0	0	0.2	0.054
Hepatitis A	0	0	0	0	11	7.6	2.033
Hepatitis B, Perinatal	0	0	0	0	1	1.8	0.482
Hepatitis B, Acute	0	0	0	0	11	6.4	1.712
Hepatitis B, Chronic	3	8	3	8	85	57.6	15.410
Hepatitis C, Acute	0	1	0	1	5	6.2	1.659
Hepatitis C, Chronic	36	26	36	26	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	43	312	43	312	595	379.0	101.398
LaCrosse virus disease	0	0	0	0	4	1.0	0.268
Legionellosis	0	1	0	1	34	18.0	4.816
Listeriosis	0	0	0	0	1	1.0	0.268
Lyme Disease	2	1	2	1	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	0	5	0	5	46	34.6	9.257
Meningitis, Other Bacterial	0	1	0	1	4	3.4	0.910
Meningococcal Disease	0	0	0	0	0	1.0	0.268
Mumps	0	0	0	0	2	3.2	0.856
Pertussis	18	8	18	8	54	50.4	13.484
Q fever, chronic	0	0	0	0	0	0.2	0.054
Salmonellosis	3	4	3	4	61	47.8	12.788
Shigellosis	3	9	3	9	25	26.2	7.010
Spotted Fever Rickettsiosis	0	0	0	0	5	2.2	0.589
Staphylococcal aureus - (VISA)	0	0	0	0	0	0.2	0.054
Streptococcal Dis, Group A, Invasive	2	3	2	3	25	15.2	4.067
Streptococcal Dis, Group B, in Newborn	0	0	0	0	2	1.6	0.428
Streptococcal Toxic Shock Syndrome	0	0	0	0	0	0.8	0.214
Streptococcus pneumoniae - inv antibiotic resistance unk/non-resistant	1	5	1	5	29	30.6	8.187
Streptococcus pneumo - inv antibiotic resistant/intermediate	2	0	2	0	10	13.4	3.585
Syphilis, Total	0	0	0	0	33	19.4	5.190
Syphilis, Primary, Secondary and Early Latent	0	0	0	0	19	11.8	3.157
Toxic Shock Syndrome (TSS)	0	0	0	0	0	0.2	0.054
Tuberculosis	1	0	1	0	5	2.4	0.642
Varicella	3	0	3	0	16	24.2	6.474
Vibriosis - other (not cholera)	1	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	1	0	1	0	3	6.4	1.712
Zika virus infection	0	0	0	0	0	1.0	0.268

Source: Ohio Disease Reporting System, downloaded 2/11/2019. Rates are per 100K population and based on 5 yr average incidence '14 – '18