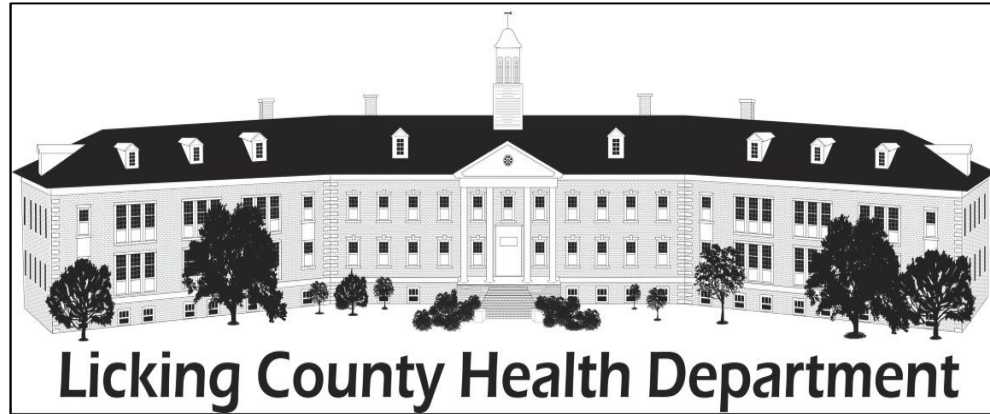




Licking County Health Department



2017 Communicable Disease Annual Report



Healthy people living in healthy communities



2017 Communicable Disease Annual Report



SUMMARY OF 2017 EVENTS

The Licking County Health Department (**LCHD**) is dedicated to conducting disease surveillance and continues to evaluate investigation protocols to better serve county residents. In 2017, LCHD responded to two outbreaks (**scabies and hand, foot, and mouth disease**) in the community and 1,586 reportable diseases through the Ohio Disease Reporting System (**ODRS**).

Flu Surveillance Dashboard

The Licking County Health Department (**LCHD**) is using a new dashboard system that allows data from the Influenza Reporting Information System (**IRIS**) to be published directly to its website in the form of graphs and tables. The old report, was a published pdf that included more information but is no longer being published to the website. The dashboard shows flu activity for the published week, breakdown by type of influenza, a running total for the season, and comparison to past seasons along with a historical average. LCHD has eight years' worth of influenza data collected through the IRIS system.

Social Media Usage for Communicable Disease Prevention

In 2017, LCHD increased its utilization of social media platforms to share information on communicable disease. Published reports were shared on Facebook and Twitter along with guidance to go with any noted increases. Local awareness is also being shared through these platforms about emerging diseases and what can be done at an individual level. By sharing this information on social media, LCHD has been featured on local and Columbus media outlets for public health prevention.

Newark High School Clinic

In September 2017, LCHD conducted an immunization clinic at Newark High School (**NHS**) to fulfill immunization requirements for students who were out of compliance. NHS requested support from the health department and LCHD set up a small-scale POD to complete immunization operations. LCHD has emergency preparedness plans in place to conduct POD operations for the entire county and this opportunity allowed staff to exercise those plans. LCHD may conduct similar operations in the future to exercise a designed scenario around fulfilling the needs of required immunizations for local students.



2017 Communicable Disease Annual Report



CLASS A

Diseases of major public health concern because of the severity of disease or potential for epidemic spread – report immediately via telephone upon recognition that a case, suspected case, or a positive laboratory result exists

- **CLASS A = 0 cases**

CLASS B

Disease of public health concern because of potential for epidemic spread – report by the end of the next business day after the existence of a case, suspected case, or a positive laboratory result is known.

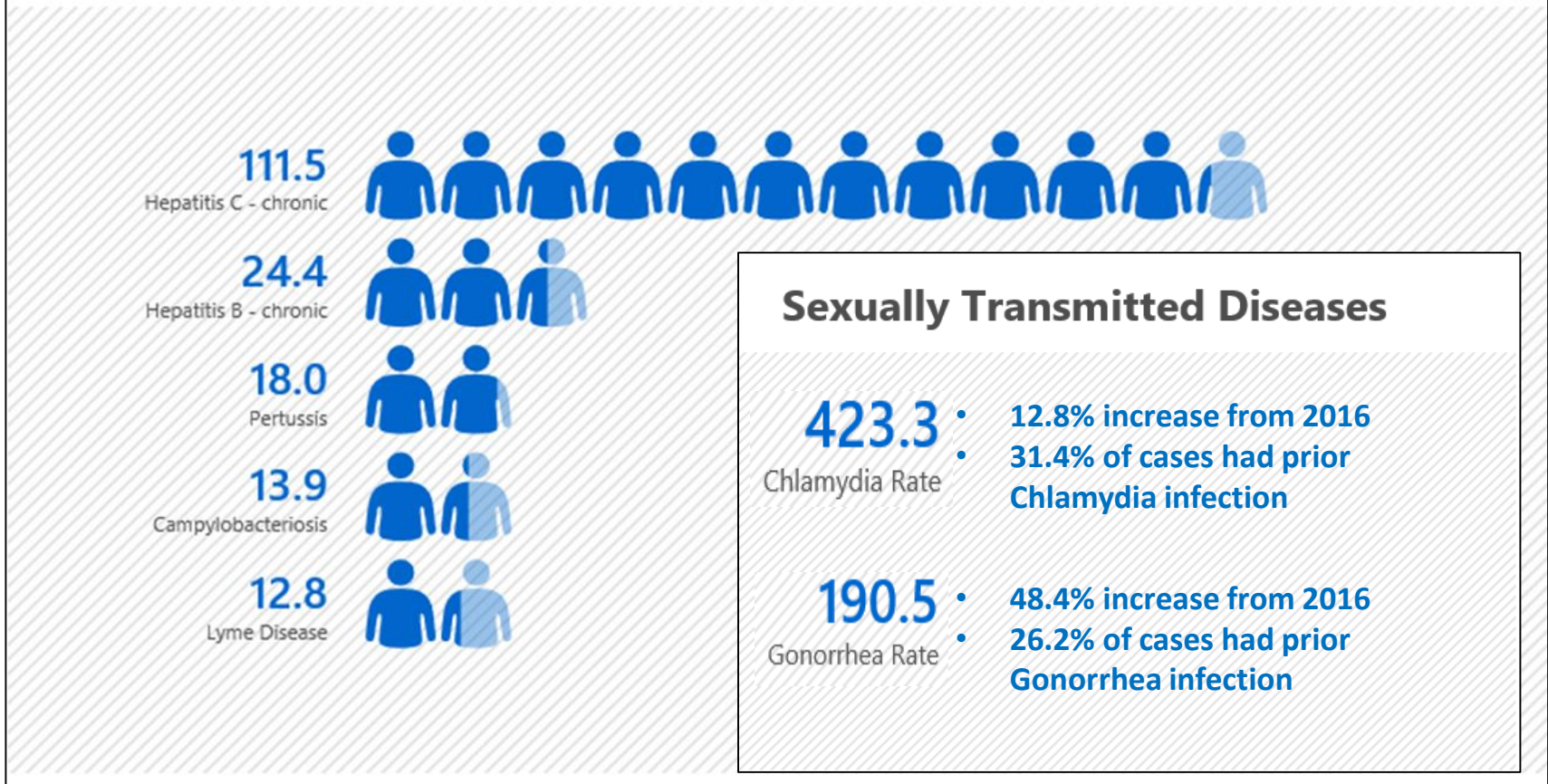
- **CLASS B = 1,586 cases**

CLASS C

Report an outbreak, unusual incident or epidemic of other diseases by the end of the next business day.

- **CLASS C = 2 outbreaks**

Top 5 Class B Incidence Rates (Rates per 100,000)



Sexually Transmitted Diseases

- 423.3** Chlamydia Rate
 - 12.8% increase from 2016
 - 31.4% of cases had prior Chlamydia infection
- 190.5** Gonorrhea Rate
 - 48.4% increase from 2016
 - 26.2% of cases had prior Gonorrhea infection



2017 Communicable Disease Annual Report



Top Reportable Diseases in Licking County in Comparison to Central Region Counties
(Rate per 100,000)

CENTRAL REGION COUNTIES	HEPATITIS C - CHRONIC		HEPATITIS B - CHRONIC		PERTUSSIS		CAMPYLOBACTERIOSIS		LYME DISEASE		CHLAMYDIA		GONORRHEA	
	Cases	Rate	Cases	Rate	Cases	Rate	Cases	Rate	Cases	Rate	Cases	Rate	Cases	Rate
Crawford	67	159.2	20	47.5	2	4.8	4	9.5	6	14.3	172	408.7	19	45.1
Delaware	105	53.4	17	8.7	36	18.3	20	10.2	10	5.1	381	193.9	77	39.2
Fairfield	193	126.5	43	28.2	31	20.3	18	11.8	27	17.7	341	223.5	62	40.6
Fayette	61	212.7	27	94.2	3	10.5	12	41.8	3	10.5	80	279.0	17	59.3
Franklin	2,175	172.0	671	53.1	370	29.3	223	17.6	58	4.6	9,271	733.2	4,246	335.8
Hardin	58	184.3	17	54.0	0	0.0	12	38.1	1	3.2	84	266.9	37	117.6
Knox	65	106.9	15	24.7	12	19.7	14	23.0	4	6.6	165	271.3	41	67.4
Licking	192	111.5	42	24.4	31	18.0	24	13.9	22	12.8	729	423.3	328	190.5
Logan	41	90.8	4	8.9	2	4.4	13	28.8	5	11.1	117	259.1	23	50.9
Madison	98	225.7	23	53.0	13	29.9	9	20.7	1	2.3	131	301.7	40	92.1
Marion	173	265.8	37	56.8	13	20.0	12	18.4	2	3.1	343	526.9	87	133.6
Morrow	48	137.0	19	54.2	1	2.9	7	20.0	2	5.7	77	219.8	15	42.8
Pickaway	793	1,377.6	57	99.0	176	305.7	6	10.4	1	1.7	188	326.6	52	90.3
Union	395	712.3	54	97.4	9	16.2	14	25.2	4	7.2	213	384.1	57	102.8
Wyandot	14	63.3	3	13.6	1	4.5	33	149.2	3	13.6	57	257.7	5	22.6
OHIO	21,951	188.3	4,156	35.6	865	7.4	2,088	17.9	299	2.6	58,272	499.8	22,632	194.1

Healthy people living in healthy communities



2017 Communicable Disease Annual Report



Review of Top Reportable Diseases in Licking County

HEPATITIS C – CHRONIC: Increases in Hepatitis C cases continue in Licking County but have declined overall in Ohio. The major contributing factor for Hepatitis C infections are the use of injection drugs.

HEPATITIS B - CHRONIC: Increases in Hepatitis B cases can also be attributed to the use of injection drugs.

PERTUSSIS: The 2017 Licking County Pertussis rate decreased by 21.4 percent compared to 2016 but still ranked third, as one of the leading communicable diseases. LCHD continues to address historical issues with Pertussis cases including reporting lag, misdiagnoses, and cases not seeking medical attention immediately. From 2014-2016, LCHD has confirmed and diagnosed a Pertussis outbreak each year. In 2017, no outbreaks were confirmed but investigations identified three instances where household siblings were sick with Pertussis accounting for about 30% of the reported cases for the year.

CAMPYLOBACTERIOSIS: Licking County had a 98.6 percent increase in Campylobacteriosis for 2017 compared to 2016. Amongst the region, Licking County ranked 11th (**out of 15**) in the central region for Campy. Investigations suggest these are isolated and random cases as no outbreaks were identified. Of the cases investigated, the top animal exposure was “**dogs**” and the top food exposure (**consumption**) was “**poultry**”.

LYME DISEASE: Lyme disease has never been listed as a top reportable disease in Licking County but in 2017 ranked 5th with 24 reported cases (**100 percent increase from 2016**). Lyme disease needs to meet a specific case definition to be considered “**confirmed**” and right now 37.5 percent of cases are listed as confirmed. All other cases are listed as “**suspected**” not fully meeting the confirmed case definition. Regardless, these reports need to be investigated and of those that have been questioned, 62.5 percent have likely occurred in Licking County (**tick exposure/infection occurred in Licking County due to no travel**). Counties to the east and south of Licking County are also seeing significant increases in the number of Lyme Disease cases being reported. LCHD is using social media platforms to share information on tick guidance/prevention and raising awareness about locally acquired Lyme Disease infections.

CHLAMYDIA: The Licking County Chlamydia rate increased by 12.8 percent in 2017 compared to 2016. Licking County ranked 3rd in the Central Region (**15 Counties**) for highest Chlamydia rate. Chlamydia is still a major issue needing addressed especially with almost a third of cases having had a prior positive test (**reinfection**).

GONORRHEA: Another significant increase (**48.4 percent**) was seen in the Gonorrhea rate for 2017. Amongst the Central Region, Licking County ranked 2nd behind Franklin County for highest Gonorrhea rate. Also of note, 26.2 percent of all Gonorrhea cases had a prior Gonorrhea infection.

Healthy people living in healthy communities

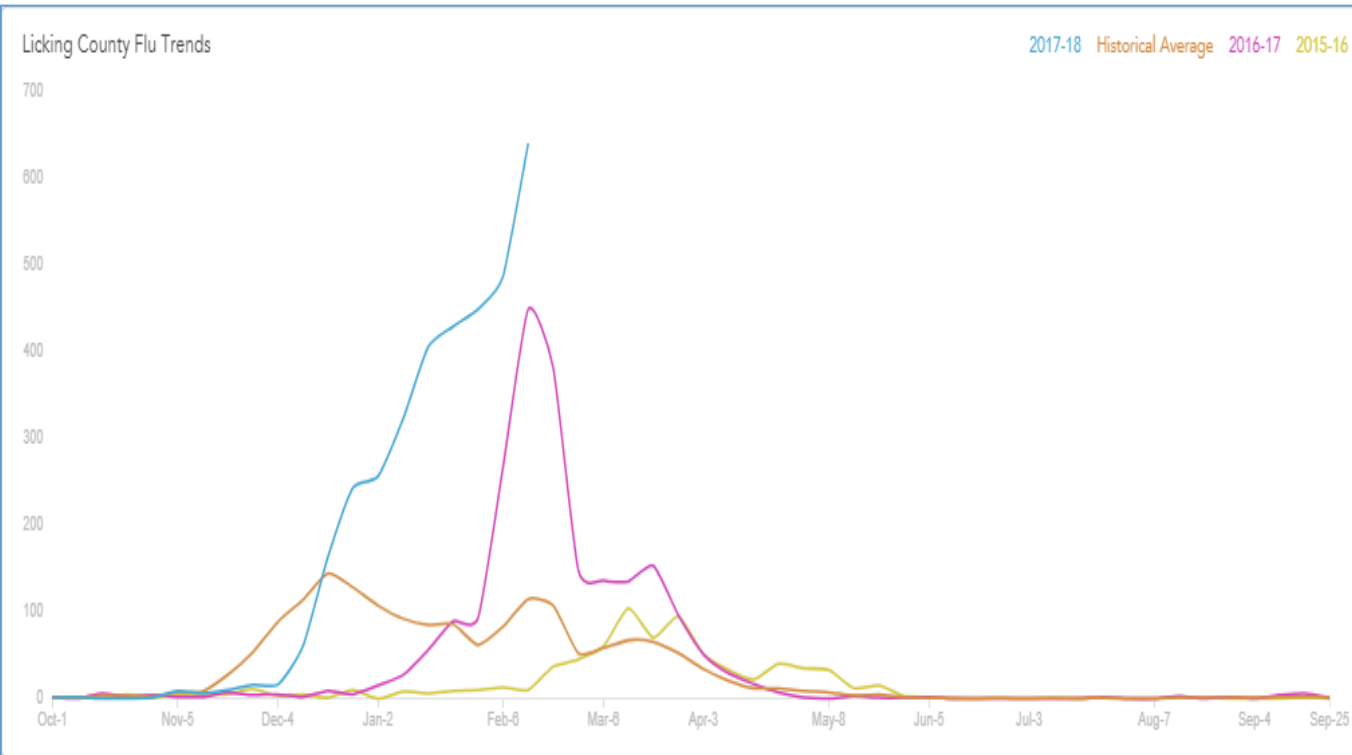


2017 Communicable Disease Annual Report



INFLUENZA

The Licking County Health Department uses several different techniques to track local influenza activity. Influenza is not a reportable disease unless under certain conditions including a case being hospitalized, a pediatric death, or detection of a novel strain. In 2010, LCHD developed the Influenza Reporting Information System (IRIS) which collects weekly influenza statistics from local providers. Predicting influenza activity is a difficult task, but based on our historical data, flu seasons can start as early as Week 39 and last through Week 26. For this report, data will be included for the 2016 – 2017 season and 2017 – 2018 season. ***New dashboard feature on LCHD website tracks weekly flu data! Graph below taken from dashboard!***



Licking County Influenza Surveillance Flu Totals					
Flu Totals	Cases				
	IRIS	Hospitalizations	Pediatric Mortality	Novel	Total
2016 – 2017 Season	2,133	76	0	0	2,209
2017 – 2018 Season	3,407	124	0	0	3,531
Total Cases in 2017	2,613	101	0	0	2,714

**Flu seasons typically over-lap two calendar years. Total Cases in 2017 count from Jan. 1 - Dec. 31, 2017.*

Licking County Influenza Surveillance Flu Types				
Flu Totals	IRIS Flu Types			
	Rapid A's	Rapid B's	Symptomatic	Total
2016 – 2017 Season	1,144	372	617	2,133
2017 – 2018 Season	1,357	793	1,257	3,407
Total Cases in 2017	1,496	398	719	2,613

**Flu seasons typically over-lap two calendar years. Total Cases in 2017 count from Jan. 1 - Dec. 31, 2017.*



2017 Communicable Disease Annual Report



2017														
REPORTABLE DISEASE	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	YTD	+/-
Amebiasis	0	0	0	0	0	0	0	1	0	0	0	0	1	+
Anaplasmosis - Anaplasma phagocytophilum	0	0	0	0	0	1	0	0	0	0	0	0	1	+
Anthrax	0	0	0	0	0	0	0	0	0	0	0	0	0	=
Babesiosis	0	0	0	0	1	0	0	0	0	0	0	0	1	+
Botulism - foodborne	0	0	0	0	0	0	0	0	0	0	0	0	0	=
Botulism - infant	0	0	0	0	0	0	0	0	0	0	0	0	0	-
Botulism - wound	0	0	0	0	0	0	0	0	0	0	0	0	0	=
Brucellosis	0	0	0	0	0	0	0	0	0	0	0	0	0	=
Campylobacteriosis	2	1	1	0	3	1	2	3	2	1	6	2	24	+
Chancroid	0	0	0	0	0	0	0	0	0	0	0	0	0	=
Chlamydia	52	72	60	63	65	59	55	57	68	58	71	49	729	+
Cholera	0	0	0	0	0	0	0	0	0	0	0	0	0	=
Coccidioidomycosis	0	0	1	0	0	0	0	0	0	0	0	0	1	=
Creutzfeldt - Jakob Disease	0	0	0	0	0	0	0	0	0	0	0	0	0	=
Creutzfeldt - Jakob Disease - variant (vCJD)	0	0	0	0	0	0	0	0	0	0	0	0	0	=
Cryptosporidiosis	0	0	0	1	0	1	1	0	0	2	1	0	6	-
Cyclosporiasis	0	0	0	0	0	0	0	0	0	0	0	0	0	=
Cytomegalovirus - congenital (CMV)	0	0	0	0	0	0	0	0	0	0	0	0	0	=
Dengue	0	0	0	0	0	0	0	0	0	0	0	0	0	=
Dengue Hemorrhagic Fever	0	0	0	0	0	0	0	0	0	0	0	0	0	=
Diphtheria	0	0	0	0	0	0	0	0	0	0	0	0	0	=
E.coli - Not O157:H7	0	0	0	0	0	0	0	0	0	0	0	0	0	=
E.coli - O157:H7	0	0	0	0	0	0	0	0	0	0	0	0	0	=

+/- indicate an increase or decrease compared to 2016 Communicable Disease Totals. = represents no change.

Healthy people living in healthy communities



2017 Communicable Disease Annual Report



2017														
REPORTABLE DISEASE	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	YTD	+/-
E.coli - Unknown serotype	0	0	0	2	1	0	0	0	1	1	0	0	5	+
Eastern equine encephalitis virus disease	0	0	0	0	0	0	0	0	0	0	0	0	0	=
Ehrlichiosis/Anaplasmosis - Undetermined	0	0	0	0	0	0	0	0	0	0	0	0	0	=
Ehrlichiosis-Ehrlichia chaffeensis	0	0	0	0	0	0	0	0	0	0	0	0	0	=
Ehrlichiosis-Ehrlichia ewingii	0	0	0	0	0	0	0	0	0	0	0	0	0	=
Encephalitis - post chickenpox	0	0	0	0	0	0	0	0	0	0	0	0	0	=
Encephalitis - post mumps	0	0	0	0	0	0	0	0	0	0	0	0	0	=
Encephalitis - post other infection	0	0	0	0	0	0	0	0	0	0	0	0	0	=
Encephalitis - primary viral	0	0	0	0	0	0	0	0	0	0	0	0	0	=
Giardiasis	0	1	0	0	0	2	1	4	0	2	0	1	11	+
Gonorrhea	28	22	28	26	38	32	25	24	27	35	22	21	328	+
Granuloma inguinale	0	0	0	0	0	0	0	0	0	0	0	0	0	=
Haemophilus influenzae (invasive disease)	0	0	0	0	0	0	1	0	0	0	1	1	3	+
Hantavirus - infection	0	0	0	0	0	0	0	0	0	0	0	0	0	=
Hantavirus - pulmonary syndrome	0	0	0	0	0	0	0	0	0	0	0	0	0	=
Hemolytic uremic syndrome (HUS)	0	0	0	0	0	0	0	0	0	0	0	0	0	=
Hepatitis - acute viral undetermined etiology	0	0	0	0	0	0	0	0	0	0	0	0	0	=
Hepatitis A	0	1	0	0	0	0	0	0	0	0	1	0	2	+
Hepatitis B - investigation	0	0	0	0	0	0	0	0	0	0	0	0	0	=
Hepatitis B - Perinatal Infection	0	0	2	0	0	0	0	0	0	0	0	0	2	+
Hepatitis B (including delta) - acute	0	0	0	1	1	2	0	0	0	0	0	0	4	+
Hepatitis B (including delta) - acute/chronic	0	0	0	0	0	0	0	0	0	0	0	0	0	=
Hepatitis B (including delta) - chronic	3	4	3	1	4	4	4	4	3	8	0	4	42	+

+/- indicate an increase or decrease compared to 2016 Communicable Disease Totals. = represents no change.

Healthy people living in healthy communities



2017 Communicable Disease Annual Report



2017														
REPORTABLE DISEASE	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	YTD	+/-
Hepatitis C - acute	0	0	0	0	1	1	0	0	0	0	0	0	2	+
Hepatitis C - acute/chronic	0	0	0	0	0	0	0	0	0	0	0	0	0	=
Hepatitis C - chronic	18	17	18	14	24	18	18	13	14	13	10	15	192	+
Hepatitis E	0	0	1	0	0	0	0	0	0	0	0	0	1	+
Herpes - congenital	0	0	0	0	0	0	0	0	0	0	0	0	0	=
Immigrant Investigation	0	0	0	0	1	0	0	0	1	1	1	0	4	+
Influenza – ODH Lab Results	0	0	0	0	0	0	0	0	0	0	0	0	0	=
Influenza – associated hospitalization	8	38	18	4	0	0	0	0	1	0	3	29	101	+
Influenza – associated pediatric mortality	0	0	0	0	0	0	0	0	0	0	0	0	0	=
Influenza Seasonal (IRIS)	182	1152	641	95	11	3	1	3	13	3	25	484	2613	+
Kawasaki disease	0	0	0	0	0	0	0	0	0	0	0	0	0	=
LaCrosse virus disease	0	0	0	0	0	0	0	0	0	0	0	0	0	=
Legionellosis – Legionnaires’ Disease	1	0	1	1	0	0	1	0	1	1	0	0	6	+
Leprosy (Hansen Disease)	0	0	0	0	0	0	0	0	0	0	0	0	0	=
Leptospirosis	0	0	0	0	0	0	0	0	0	0	0	0	0	=
Listeriosis	0	0	0	0	0	0	0	0	0	0	0	0	0	=
Lyme Disease	0	1	0	0	1	7	7	1	2	1	1	1	22	+
Lymphogranuloma venereum (LGV)	0	0	0	0	0	0	0	0	0	0	0	0	0	=
Malaria	0	0	0	0	0	0	0	0	0	0	0	0	0	=
Measles – imported from outside Ohio	0	0	0	0	0	0	0	0	0	0	0	0	0	=
Measles – indigenous to Ohio	0	0	0	0	0	0	0	0	0	0	0	0	0	=
Measles – status not determined	0	0	0	0	0	0	0	0	0	0	0	0	0	=
Meningitis – aseptic/viral	0	0	2	0	0	0	1	0	1	0	0	0	4	-

+/- indicate an increase or decrease compared to 2016 Communicable Disease Totals. = represents no change.

Healthy people living in healthy communities



2017 Communicable Disease Annual Report



2017														
REPORTABLE DISEASE	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	YTD	+/-
Meningitis – bacterial (Not N. meningitidis)	0	0	0	0	0	0	0	0	0	0	0	0	0	-
Meningococcal disease - Neisseria meningitidis	0	0	0	0	0	0	0	0	0	0	0	0	0	=
Mumps	0	0	0	0	0	0	0	0	0	0	0	0	0	=
Mycobacterial disease – other than tuberculosis	0	0	0	0	0	0	0	0	0	0	0	0	0	-
Other arthropod-borne disease	0	0	0	0	0	0	0	0	0	0	0	0	0	=
Pertussis	5	5	4	9	0	4	2	0	0	1	1	0	31	-
Plague	0	0	0	0	0	0	0	0	0	0	0	0	0	=
Poliomyelitis – non-paralytic	0	0	0	0	0	0	0	0	0	0	0	0	0	=
Poliomyelitis – paralytic	0	0	0	0	0	0	0	0	0	0	0	0	0	=
Poliomyelitis – paralytic/non-paralytic	0	0	0	0	0	0	0	0	0	0	0	0	0	=
Powassan virus disease	0	0	0	0	0	0	0	0	0	0	0	0	0	=
Psittacosis	0	0	0	0	0	0	0	0	0	0	0	0	0	=
Q fever, acute	0	0	0	0	0	0	0	0	0	0	0	0	0	=
Q fever, chronic	0	0	0	0	0	0	0	0	0	0	0	0	0	=
Rabies – animal	0	0	0	0	0	0	0	0	0	1	0	0	1	-
Reye syndrome	0	0	0	0	0	0	0	0	0	0	0	0	0	=
Rheumatic fever	0	0	0	0	0	0	0	0	0	0	0	0	0	=
Rocky Mountain spotted fever (RMSF)	0	0	0	0	1	0	1	1	0	0	0	1	4	+
Rubella – congenital	0	0	0	0	0	0	0	0	0	0	0	0	0	=
Rubella – not congenital	0	0	0	0	0	0	0	0	0	0	0	0	0	=
Salmonellosis	0	1	2	3	1	1	1	2	1	2	2	1	17	-
Severe Acute Respiratory Syndrome (SARS)	0	0	0	0	0	0	0	0	0	0	0	0	0	=
Shigellosis	1	0	0	0	0	0	0	0	0	3	0	0	4	-

+/- indicate an increase or decrease compared to 2016 Communicable Disease Totals. = represents no change.

Healthy people living in healthy communities



2017 Communicable Disease Annual Report



2017														
REPORTABLE DISEASE	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	YTD	+/-
Smallpox	0	0	0	0	0	0	0	0	0	0	0	0	0	=
St. Louis encephalitis virus disease	0	0	0	0	0	0	0	0	0	0	0	0	0	=
Staphylococcal aureus - intermediate (VISA)	0	0	0	0	0	0	0	0	0	0	0	0	0	=
Staphylococcal aureus - vancomycin resistant (VRSA)	0	0	0	0	0	0	0	0	0	0	0	0	0	=
Streptococcal – Group A – invasive	0	0	0	0	0	1	0	0	0	0	1	0	2	+
Streptococcal – Group B – in newborn	0	0	0	0	0	0	0	0	0	0	0	0	0	=
Streptococcal toxic shock syndrome (STSS)	0	0	0	0	0	0	0	0	0	0	0	0	0	=
Streptococcus pneumoniae - unknown resistance	2	1	2	1	0	0	0	0	1	0	3	1	11	+
Streptococcus pneumoniae – intermediate resistance	1	0	1	1	0	0	0	0	0	1	0	1	5	+
Syphilis – congenital	0	0	0	0	0	0	0	0	0	0	0	0	0	=
Syphilis – early latent (<1 year)	0	0	0	0	0	0	0	0	0	0	0	0	0	=
Syphilis – late latent (>1 year) asymptomatic	0	0	1	0	0	1	0	0	0	0	0	0	2	-
Syphilis – late with no neurosyphilis	0	0	0	0	0	0	0	0	0	0	0	0	0	=
Syphilis – neurosyphilis	0	0	0	0	0	0	0	0	0	0	0	0	0	=
Syphilis – primary	0	0	0	0	1	1	0	0	0	1	0	0	3	+
Syphilis – secondary	0	0	1	0	0	0	0	0	0	1	1	0	3	-
Syphilis – stage Unknown	0	0	0	0	0	0	0	0	0	0	0	1	1	=
Syphilis – unknown latent	0	0	0	0	0	0	0	0	0	0	0	0	0	=
Tetanus	0	0	0	0	0	0	0	0	0	0	0	0	0	=
Toxic shock syndrome (TSS)	0	0	0	0	0	1	0	0	0	0	0	0	1	+
Toxoplasmosis – congenital	0	0	0	0	0	0	0	0	0	0	0	0	0	=
Trichinosis	0	0	0	0	0	0	0	0	0	0	0	0	0	=

+/- indicate an increase or decrease compared to 2016 Communicable Disease Totals. = represents no change

Healthy people living in healthy communities



2017 Communicable Disease Annual Report



2017														
REPORTABLE DISEASE	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	YTD	+/-
Tuberculosis	0	0	0	0	0	0	0	0	0	0	0	0	0	-
Tuberculosis – multi-drug resistant (MDR-TB)	0	0	0	0	0	0	0	0	0	0	0	0	0	=
Tularemia	0	0	0	0	0	0	0	0	0	0	0	0	0	=
Typhoid fever	0	0	0	0	0	0	0	0	0	0	0	0	0	=
Typhus fever	0	0	0	0	0	0	0	0	0	0	0	0	0	=
Varicella	0	3	1	1	0	0	0	2	0	0	0	0	7	+
Vibrio parahaemolyticus infection	0	0	0	0	0	0	0	0	0	0	0	0	0	=
Vibrio vulnificus infection	0	0	0	0	0	0	0	0	0	0	0	0	0	=
Vibriosis – other (not cholera)	0	0	0	0	0	0	0	0	0	0	0	0	0	=
Viral Hemorrhagic Fever (VHF)	0	0	0	0	0	0	0	0	0	0	0	0	0	=
West Nile virus disease	0	0	0	0	0	0	0	0	0	0	0	0	0	-
Western equine encephalitis virus disease	0	0	0	0	0	0	0	0	0	0	0	0	0	=
Yellow fever	0	0	0	0	0	0	0	0	0	0	0	0	0	=
Yersiniosis	0	0	0	0	0	0	0	0	0	0	1	1	2	+
Zika virus disease	0	0	0	0	0	0	0	0	0	0	0	0	0	-

+/- indicate an increase or decrease compared to 2016 Communicable Disease Totals. = represents no change.

Healthy people living in healthy communities