

McHenry County Department of Health Reportable Conditions Report 2021

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INTRODUCTION

The McHenry County Department of Health (MCDH) collects monthly report data on all Illinois Reportable Diseases as defined by the Illinois Department of Public Health (IDPH). This report summarizes the incident cases of all IDPH reportable conditions during 2021. The frequency of incident cases are reported for each month. Incident cases include both probable and confirmed cases. Summary statistics for each reportable condition are reported and include: annual total, annual rate, and annual reference. The definition (and calculation) of these summary statistics can be found below. Reportable conditions are separated by disease category: arboviral infections, gastrointestinal illnesses, sexually transmitted infections, tick borne diseases, vaccine preventable diseases, and other diseases.

DEFINITION OF TERMS

Incident Case

Incident cases are all newly diagnosed cases in a given timeframe. The frequency of incident cases for each month for the current year are presented in the tables below.

Annual Total

The annual total (**2021 Total**) represents the frequency of new cases that occurred during 2021. It is calculated for each condition as the sum of the frequency of incident cases for all months. The annual totals for each disease category are also reported.

Annual Rate

The annual rate (**2021 Rate**) is reported for each condition (and disease category) as the annual rate of disease per 100,000 population. It can be interpreted as the number of incident cases per 100,000 residents of McHenry County. It is calculated as the annual total divided by the current population of McHenry County (based on the US Census Bureau, 2015-2019 ACS 5-year Estimates for McHenry County: 307,714 people) multiplied by 100,000; this is represented mathematically as:

Annual Rate =
$$\frac{2021 \text{ Total}}{307,714} * 100,000$$

Annual Reference

Annual reference (**An. Ref**) serves as a historical reference to detect reportable conditions that are higher than average for the year based on historical data. When the annual total is greater than the annual reference (i.e. 2021 Total > An. Ref), this indicates that a condition is tracking higher than average (note: a condition that is tracking higher than average does not necessarily indicate the occurrence of an outbreak; the MCDH CD program uses this data in conjunction with other investigative methods to monitor the spread of illness in the county and identify outbreaks). The past 5-year year-to-date median was used for the calculation of reference values in all cases except where data was unavailable for the past 5 years (median calculated based on available years in these cases).

ARBOVIRAL INFECTIONS

Zero arboviral infections were reported in 2021. The annual rate of all arboviral infections is 0 cases per 100,000 residents of McHenry County. Table 1 summarizes the frequency of incident cases of all arboviral infections for 2021.

Condition	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	2021 Total	2021 Rate	An. Ref
California Encephalitis	0	0	0	0	0	0	0	0	0	0	0	0	0	0.0	0
Chikungunya Fever	0	0	0	0	0	0	0	0	0	0	0	0	0	0.0	0
Dengue Fever	0	0	0	0	0	0	0	0	0	0	0	0	0	0.0	0
St. Louis Encephalitis	0	0	0	0	0	0	0	0	0	0	0	0	0	0.0	0
West Nile: Neuroinvasive	0	0	0	0	0	0	0	0	0	0	0	0	0	0.0	1
West Nile: Non- neuroinvasive	0	0	0	0	0	0	0	0	0	0	0	0	0	0.0	0
Zika: Congenital	0	0	0	0	0	0	0	0	0	0	0	0	0	0.0	0
Zika: Non- congenital	0	0	0	0	0	0	0	0	0	0	0	0	0	0.0	0
Total	0	0	0	0	0	0	0	0	0	0	0	0	0	0.0	-

Table 1. Arboviral Infections

GASTROINTESTINAL ILLNESSES

One hundred sixty-three gastrointestinal illnesses were reported in 2021. The annual rate of all gastrointestinal illnesses is 53.0 cases per 100,000 residents of McHenry County. Table 2 summarizes the frequency of incident cases of all gastrointestinal illnesses for 2021.

Condition	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	2021 Total	2021 Rate	An. Ref
Campylo- bacteriosis	1	2	2	0	2	4	6	5	5	2	3	4	36	11.7	59
Cholera ¹	0	0	0	0	0	0	0	0	0	0	0	0	0	0.0	0
<i>Escherichia coli</i> Infections	0	0	0	0	0	0	2	0	1	0	0	0	3	1.0	10
S. Paratyphi	0	0	0	0	0	0	0	0	0	0	0	0	0	0.0	1
Salmonellosis	3	1	2	2	11	5	4	59	20	7	3	1	118	38.3	49
Shigellosis	1	0	0	0	0	2	0	1	0	0	0	0	4	1.3	6
Vibriosis ²	0	0	0	0	1	0	1	0	0	0	0	0	2	0.6	1
Total	5	3	4	2	14	11	13	65	26	9	6	5	163	53.0	-

Table 2. Gastrointestinal Illnesses

¹Toxigenic Vibrio cholerae O1 or O139

² Other than toxigenic Vibrio cholerae O1 or O139

SEXUALLY TRANSMITTED INFECTIONS (STIs)

Eight hundred forty-nine STIs were reported in 2021. The annual rate of all STIs is 275.9 cases per 100,000 residents of McHenry County. Table 3 summarizes the frequency of incident cases of all STIs for 2021 (AIDS/HIV is also a reportable condition but is excluded from the table to protect patient privacy in line with guidelines from the Office of Heath Protection; monthly syphilis data is updated quarterly, and unreported data may be missing for some months).

Condition	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	2021 Total	2021 Rate	An. Ref
Chancroid	0	0	0	0	0	0	0	0	0	0	0	0	0	0.0	0
Chlamydia	71	57	40	54	55	58	59	69	61	51	59	62	696	226.2	710
Gonorrhea	13	14	9	4	8	12	13	9	7	8	11	7	115	37.4	89
Syphilis	1	2	2	3	4	9	3	2	4	3	3	2	38	12.3	17
Total	85	73	51	61	67	79	75	79	71	63	71	71	849	275.9	-

Table 3. Sexually Transmitted Infections (STIs)

TICK BORNE DISEASES

Sixty tick borne diseases were reported in 2021. The annual rate of all tick borne diseases is 19.5 cases per 100,000 residents of McHenry County. Table 4 summarizes the frequency of incident cases of all tick borne diseases for 2021.

Condition	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	2021 Total	2021 Rate	An. Ref
Anaplasmosis	0	0	0	0	0	0	0	0	1	0	0	0	1	0.3	1
Babesiosis	0	0	0	0	0	0	0	0	0	0	0	0	0	0.0	0
Ehrlichiosis	0	0	0	0	0	0	1	0	0	0	0	0	1	0.3	1
Lyme Disease	2	2	3	4	10	15	13	3	3	2	0	0	57	18.5	29
Spotted Fever Rickettsioses	0	0	0	0	0	0	0	0	1	0	0	0	1	0.3	1
Typhus Murine	0	0	0	0	0	0	0	0	0	0	0	0	0	0.0	0
Total	2	2	3	4	10	15	14	3	5	2	0	0	60	19.5	-

VACCINE PREVENTABLE DISEASES

Twenty-eight vaccine preventable diseases were reported in 2021. The annual rate of all vaccine preventable diseases is 9.1 cases per 100,000 residents of McHenry County. Table 5 summarizes the frequency of incident cases of all vaccine preventable diseases for 2021.

Condition	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	2021 Total	2021 Rate	An. Ref
Chickenpox	0	1	0	1	0	0	1	5	1	2	1	0	12	3.9	21
Diphtheria	0	0	0	0	0	0	0	0	0	0	0	0	0	0.0	0
Haemophilus influenzae ¹	0	0	0	0	0	0	0	0	0	0	1	0	1	0.3	6
Hepatitis A	0	0	0	0	0	0	0	0	0	0	1	0	1	0.3	2
Hepatitis B	0	0	3	1	0	1	0	3	0	0	1	3	12	3.9	13
Influenza A, variant virus	0	0	0	0	0	0	0	0	0	0	0	0	0	0.0	0
Influenza with ICU admission	0	0	0	0	0	0	0	0	0	0	0	1	1	0.3	27
Influenza, death in ≤ 18 year olds	0	0	0	0	0	0	0	0	0	0	0	0	0	0.0	0
Measles	0	0	0	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	0.0	6
Neisseria meningitidis ²	0	0	0	0	0	0	0	0	0	0	0	0	0	0.0	0
Pertussis	0	0	0	0	0	0	0	0	0	0	0	1	1	0.3	20
Rubella	0	0	0	0	0	0	0	0	0	0	0	0	0	0.0	0
Smallpox	0	0	0	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	0.0	0
Total	0	1	3	2	0	1	1	8	1	2	4	5	28	9.1	-

Table 5.	Vaccine	Preventable	Diseases
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¹*Haemophilus influenzae*, meningitis, & other invasive disease

²Neisseria meningitidis, meningitis and invasive disease

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OTHER DISEASES

29,481 other diseases were reported in 2021. The annual rate of all other diseases is 9,581.0 cases per 100,000 residents of McHenry County. Table 6 summarizes the frequency of incident cases of all other diseases for 2021 (only other diseases that had a case reported from January 2016 – December 2021 are included in Table 6).

Condition	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	2021 Total	2021 Rate	An. Ref
Acute Flaccid Myelitis	0	0	0	0	0	0	0	0	0	0	0	0	0	0.0	0
SARS-CoV-2 Infection (COVID-19) ¹	3,542	1,580	1,155	2,261	983	168	623	1,963	1,986	1,770	3,953	9,357	29,341	9,535.2	19,535
Cryptosporidiosis	0	0	0	0	1	2	1	1	2	0	1	0	8	2.6	7
Cyclosporiasis	0	0	0	0	0	2	1	1	0	0	0	0	4	1.3	4
Hemolytic Uremic Syndrome, Post-diarrheal	0	0	0	0	0	0	0	0	0	0	0	0	0	0.0	0
Hepatitis C	8	7	6	8	5	5	5	4	2	3	5	6	64	20.8	71
Histoplasmosis	2	0	0	1	0	0	0	0	1	0	1	0	5	1.6	2
Legionellosis	2	1	0	0	0	0	1	2	2	2	0	2	12	3.9	6
Listeriosis	0	0	0	0	0	0	1	0	0	0	0	0	1	0.3	0
Malaria	0	0	0	0	0	0	0	0	0	0	0	0	0	0.0	1
Q Fever	0	0	0	0	0	0	0	0	0	0	0	0	0	0.0	0
Rabies, Human (Potential Exposure)	2	1	1	2	1	6	7	9	4	0	2	2	37	12.0	40
Streptococcal Infections, Group A, Invasive Disease	1	0	1	0	0	0	0	0	0	0	0	1	3	1.0	9
Streptococcus Pneumoniae, Invasive Disease ²	0	0	0	0	0	0	0	0	0	0	1	0	1	0.3	1
Toxic Shock Syndrome (due to staph aureus)	0	0	0	0	0	0	0	0	0	0	0	0	0	0.0	0
Tuberculosis	0	2	2	0	0	0	1	0	0	0	0	0	5	1.6	1
Total	3,557	1,591	1,165	2,272	990	183	640	1,980	1,997	1,775	3,963	9,368	29,481	9,580.6	-

Table 6. Other Diseases

¹Onset date not known for all cases

² In children less than 5 years