## COLUMBIA/BOONE COUNTY PUBLIC HEALTH AND HUMAN SERVICES



# 2023 BOONE COUNTY, MISSOURI COMMUNICABLE DISEASE SUMMARY







#### **Boone County Communicable Disease Summary 2023**

The Missouri Department of Health and Senior Services (DHSS) designates which diseases, disabilities, conditions, and findings must be reported to the local health authority or DHSS. In compliance with this rule, data used for this report was collected from multiple sources, including medical providers, laboratories and hospitals. Both timely reporting and rapid investigations are important for identifying possible outbreaks, assuring appropriate preventive treatment and education, and guiding the planning and evaluation of disease prevention and control programs.

In 2023, Columbia/Boone County Public Health and Human Services (PHHS) had 793 confirmed reportable communicable diseases, excluding influenza, COVID-19 and sexually transmitted infections (STIs). Reported case counts are confirmed and probable cases. Boone County case counts for STIs are available on the department's website at <a href="CoMo.gov/health">CoMo.gov/health</a>. Influenza and COVID-19 case numbers are published weekly during the influenza season. The number of reported cases of communicable diseases may not represent the true total number of cases that occur in a county. Diseases with milder symptoms, such as gastrointestinal, may go undiagnosed and unreported either because the ill person may not see a doctor, or the doctor may treat without a lab confirmation. Diseases which cause severe symptoms, such as botulism, are more likely to be diagnosed and reported. Furthermore, some conditions, such as animal bites, do not require lab confirmation and often the person bitten does not seek medical care.

Table 1 lists the 2023 confirmed case counts for Boone County. Table 2 shows the confirmed case counts in Boone County from 2019-2023 along with the five-year mean.

Figures 1-4 show a breakdown of all 2023 reported diseases/conditions, organized into enteric, vector-borne, zoonotic, "other" and hepatitis categories. Definitions can be found below the figures.

A list of all the diseases and conditions reportable in Missouri can be found on the Missouri Department of Health and Senior Services website:

<u>communicabledisease/pdf/reportablediseaselist2.pdf</u>

Reporting rule 19 CSR 20-20 can be found at the following site: 19CSR/19c20-20.pdf

### Reported Cases of Communicable Diseases 2023 Boone County, Missouri

#### Table 1

Disease/Condition	Number of reported cases
Animal bites	288
Botulism (foodborne)	1
Botulism (other)	1
Campylobacteriosis	49
Cryptosporidiosis	8
Cyclosporiasis	11
E. Coli Shiga toxin positive	17
E. Coli Shiga O157:H7	3
Ehrlichia Chaffeensis	10
Giardiasis	10
Haemophilus influenzae, invasive	2
Hepatitis B (pregnancy) prenatal	6
Hepatitis B acute	1
Hepatitis B chronic	16
Hepatitis C acute	1
Hepatitis C chronic	71
Legionellosis	3
Malaria	3
Mumps	1
Mycobacterium other than tuberculosis (MOTT)	41
Pertussis	1
Q fever acute	1
Rabies animal	3
Rabies PEP	34
Rocky mountain spotted fever	5
Salmonellosis	41
Shigellosis	6
Tuberculosis disease	7
Tuberculosis infection	145
Vibriosis	2
Yersiniosis	5
Total	793

#### 2019-2023 Reported Cases Boone County, Missouri with 5-Year Mean

Table 2\*

Disease/Condition	2019	2020	2021	2022	2023	5-Year Mean
Anaplasma phagocytophilum	0	0	1	0	0	0
Animal bites	306	327	203	218	288	268
Botulism (foodborne)	0	0	0	0	1	0
Botulism (other)	0	0	0	0	1	0
Campylobacteriosis	40	31	31	25	49	35
Coccidioidomycosis	1	2	2	0	0	1
Creutzfeldt-Jakob disease (CJD)	0	1	0	0	0	0
Cryptosporidiosis	17	7	12	6	8	10
Cyclosporiasis	12	16	9	1	11	10
E. Coli Shiga toxin positive	12	8	17	10	17	13
E. Coli Shiga O157:H7	4	1	1	3	3	2
Ehrlichia chaffeensis	8	12	5	11	10	9
Ehrlichia ewingii	0	0	2	0	0	0
Ehrlichiosis anaplasmosis	8	2	0	0	0	2
Giardiasis	9	8	15	14	10	11
Haemophilus influenzae, invasive	2	2	2	3	2	2
Hepatitis A acute	0	1	4	8	0	3
Hepatitis B (pregnancy) prenatal	5	3	3	8	6	5
Hepatitis B acute	0	0	1	0	1	0
Hepatitis B chronic	15	13	17	13	16	15
Hepatitis C acute	1	0	0	1	1	1
Hepatitis C chronic	73	104	104	107	71	92
Legionellosis	2	2	2	9	3	4
Listeriosis	0	1	1	0	0	0

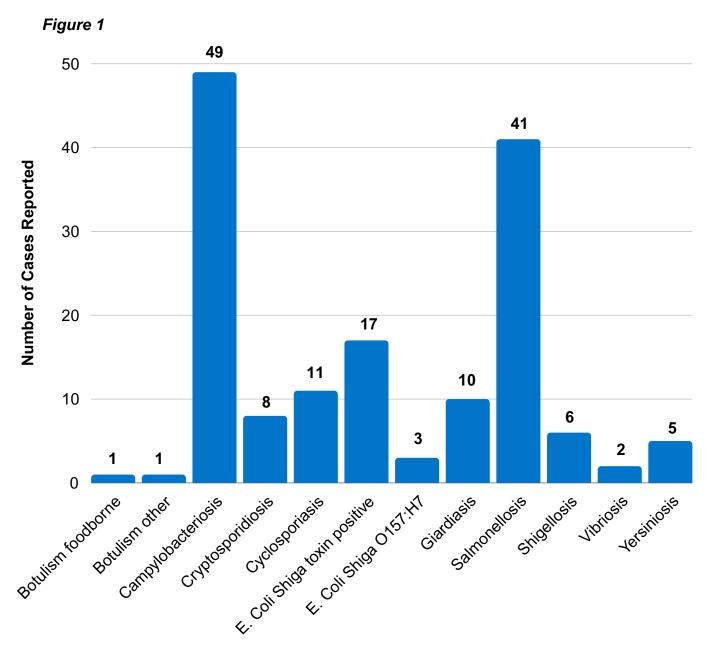
<sup>\*</sup>Table 2 content continues on the next page

#### 2019-2023 Reported Cases Boone County, Missouri with 5-Year Mean

Table 2

Disease/Condition	2019	2020	2021	2022	2023	5-Year Mean
Malaria	1	1	1	1	3	1
Meningococcal disease	2	1	0	0	0	1
Mumps	12	0	0	1	1	3
Mycobacterium other than tuberculosis (MOTT)	45	25	32	39	41	36
Neuroinvasive West Nile	0	0	1	0	0	0
Non-Neuroinvasive West Nile	1	0	0	1	0	0
Pertussis	2	0	0	2	1	1
Q fever acute	0	0	0	0	1	0
Rabies animal	0	2	0	2	3	1
Rabies PEP	14	21	2	3	34	15
Ricin	0	0	0	0	0	0
Rocky Mountain spotted fever	6	2	1	2	5	3
Salmonellosis	25	22	33	26	41	29
Shiga toxin positive (non E. Coli)	3	3	0	0	0	1
Shigellosis	2	2	3	7	6	4
Strep disease, group A invasive	20	13	5	9	0	9
Tuberculosis disease	6	4	7	2	7	5
Tuberculosis infection	141	97	107	155	145	129
Toxic shock (strep) syndrome	1	0	0	0	0	0
Varicella (chickenpox)	4	3	0	0	0	1
Vibriosis	2	0	0	3	2	1
Yersiniosis	2	2	9	6	5	5

#### 2023 Boone County Reported Enteric Diseases\*

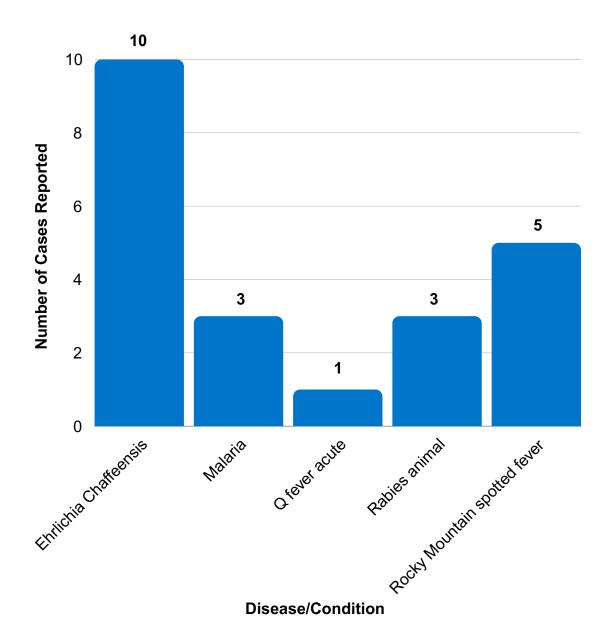


#### Disease/Condition

\*Enteric bacteria typically enter the body through the mouth. They are acquired through contaminated food and water, by contact with animals or their environments, by contact with the feces of an infected person and through other means.

#### 2023 Boone County Reported Vector-Borne and Zoonotic Diseases\*

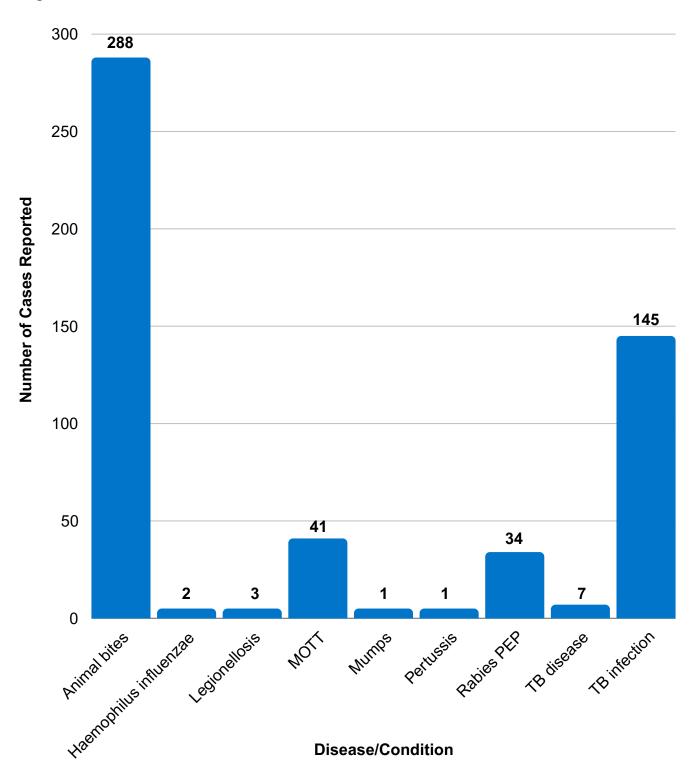
Figure 2



<sup>\*</sup>Vector-borne diseases are human illnesses caused by parasites, viruses, and bacteria transmitted by vectors like mosquitoes, ticks and fleas. Zoonotic diseases are infectious diseases transmitted between species from animals to humans (or from humans to animals).

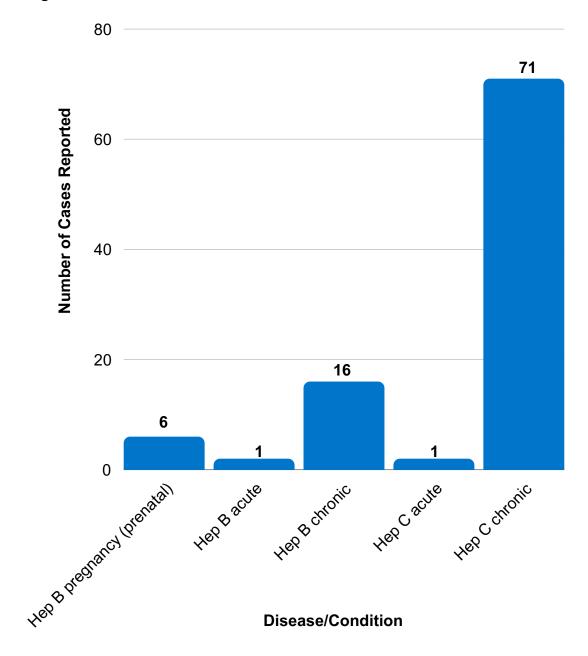
#### 2023 Boone County Reported "Other" Diseases





#### **2023 Boone County Reported Hepatitis Diseases\***





<sup>\*</sup>Hepatitis is an inflammation of the liver caused by various infectious viruses and noninfectious agents leading to a range of health problems, some of which can be fatal. There are five main strains of the hepatitis virus, referred to as types A, B, C, D and E.

#### References

Centers for Disease Control and Prevention. (2024, April 26). National Center for Emerging and Zoonotic Infectious Diseases (NCEZID). <a href="https://www.cdc.gov/ncezid/index.html">https://www.cdc.gov/ncezid/index.html</a>

Centers for Disease Control and Prevention. (2024, June 14). Viral Hepatitis. https://www.cdc.gov/hepatitis/index.html

Department of Health and Senior Services - Missouri. (n.d.). <a href="https://s1.sos.mo.gov/cmsimages/adrules/csr/current/19csr/19c20-20.pdf">https://s1.sos.mo.gov/cmsimages/adrules/csr/current/19csr/19c20-20.pdf</a>

Diseases and Conditions Reportable In Missouri (19 CSR 20-20.020) Numbers in parenthesis represent ICD-10 Codes. (2016, May).

World Health Organization. (n.d.). Vector-borne diseases. World Health Organization. <a href="https://www.who.int/news-room/fact-sheets/detail/vector-borne-diseases">https://www.who.int/news-room/fact-sheets/detail/vector-borne-diseases</a>

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