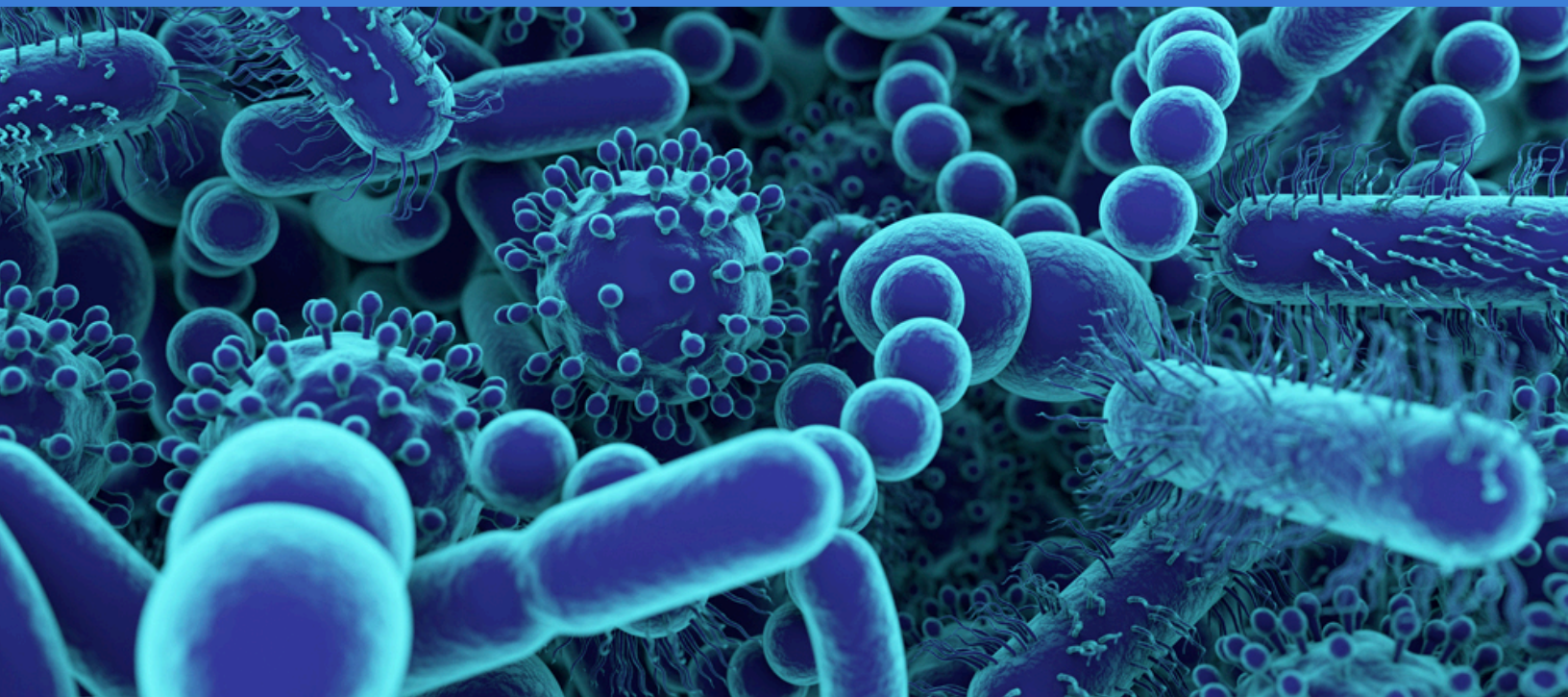


# COLUMBIA/BOONE COUNTY PUBLIC HEALTH AND HUMAN SERVICES



## 2024 BOONE COUNTY, MISSOURI COMMUNICABLE DISEASE SUMMARY

## Boone County Communicable Disease Summary 2024

The Missouri Department of Health and Senior Services (DHSS) determines which diseases, disabilities, conditions, and findings must be reported to the local health departments or DHSS. Following DHSS rules, data for this report were collected from various sources, which included medical providers, hospitals, and laboratories. Timely reporting and rapid investigations are both crucial to identify possible outbreaks, ensure effective preventative treatment and education, and inform the planning and evaluation of disease prevention and control programs.

In 2024, Columbia/Boone County Public Health and Human Services (PHHS) had 913 confirmed reportable communicable diseases, excluding COVID-19, influenza, and sexually transmitted infections (STIs). Reported case counts included both confirmed and probable cases. Boone County COVID-19 and Influenza case counts are published weekly during the influenza season, and STI case counts can be found on the department's website at [CoMo.gov/health](https://comogov.health). The number of communicable disease cases reported may not accurately represent the true total number of cases in the community due to underreporting and underdiagnosis. Diseases with milder symptoms, such as gastrointestinal diseases, may not get diagnosed and reported due to the ill individual not seeing a doctor, or treatment without a laboratory confirmation. Individuals with conditions that do not require a lab confirmation, such as animal bites, often also do not seek medical care. Contrarily, diseases with severe symptoms, like botulism, are more likely to be diagnosed and reported.

It should be noted that measles (rubeola) is monitored closely at a national level by the Centers for Disease Control and Prevention (CDC). While there were cases confirmed in several states, including Missouri, none were reported in Boone County in 2024. Measles is a highly contagious viral disease that is easily preventable by immunization. It was officially eliminated from the United States in 2000, meaning that it is not actively spreading within the country and new cases are due to travelers contracting it elsewhere and returning to the country. The elimination of measles is a historic public health achievement sustained through immunization programs, policies, and education.

Animal bites have increased from previous years. This may be attributed to a rise in pet ownership during the COVID-19 pandemic. Due to a lack of adequate socialization with people and other animals, these pets were more likely to display aggressive behavior. Enforcement measures such as mandatory bite reporting, investigations, and adherence to leash and licensing laws are associated with reductions in dog bite incidents (American Veterinary Medical Association, 2019). Policies that support consistent enforcement and adequate staffing of animal control services may help reduce risk by ensuring capacity to respond to and manage incidents (Weiss, Slater, & Lord, 2013).

Table 1 lists the 2024 confirmed case counts for Boone County. Table 2 shows the confirmed case counts in Boone County from 2020-2024 and the five-year mean.

Figures 1-4 show a breakdown of all 2024 reported diseases and conditions, which are organized into categories such as enteric, vector-borne/zoonotic, “other,” and hepatitis diseases. Definitions can be found under their respective figures.

A list of all reportable diseases and conditions in Missouri can be found on the Missouri Department of Health and Senior Services website:  
[communicabledisease/pdf/reportablediseaselist2.pdf](#)

Reporting rule 19 CSR 20-20 can be found at the following site: [19CSR/19c20-20.pdf](#)

**Reported Cases of Communicable Diseases  
2024 Boone County, Missouri**

**Table 1**

<b>Disease/Condition</b>	<b>Number of reported cases</b>
Animal bites	405
Campylobacteriosis	35
Cryptosporidiosis	6
Cyclosporiasis	7
E. Coli Shiga toxin positive	14
E. Coli O157 H7	2
Ehrlichia Chaffeensis	18
Ehrlichia Ewingii	3
Ehrlichia Anaplasmosis	1
Giardiasis	11
Haemophilus Influenzae, Invasive	5
Hepatitis B (pregnancy) prenatal	4
Hepatitis B acute	4
Hepatitis B chronic infection	54
Hepatitis C acute	1
Hepatitis C chronic infection	66
Legionellosis	10
Malaria	1
Non Neuroinvasive West Nile	1
Pertussis	19
Rabies animal	3
Rabies post exposure prophylaxis	31
Rocky mountain spotted fever	2
Salmonellosis	35

\*Table 1 content continues on the next page

<b>Disease/Condition</b>	<b>Number of reported cases</b>
Shigellosis	3
Staph Aureus Visa	1
Strep Pneumoniae Invasive	15
Tetanus	1
Tuberculosis Infection	146
Varicella (Chickenpox)	1
Vibriosis	1
Yersiniosis	7
Total	913

**2020-2024 Reported Cases**  
**Boone County, Missouri with 5-Year Mean**

**Table 2**

Disease/Condition	2020	2021	2022	2023	2024	5-Year Mean
Anaplasma phagocytophilum	0	1	0	0	0	0.2
Animal bites	327	203	218	288	405	288.2
Botulism (foodborne)	0	0	0	1	0	0.2
Botulism (other)	0	0	0	1	0	0.2
Campylobacteriosis	31	31	25	49	35	34.2
Coccidioidomycosis	2	2	0	0	0	0.8
Creutzfeldt-Jacob disease (CJD)	1	0	0	0	0	0.2
Cryptosporidiosis	7	12	6	8	6	7.8
Cyclosporiasis	16	9	1	11	7	8.8
E. Coli Shiga toxin positive	8	17	10	17	14	13.2
E. Coli O157:H7	1	1	3	3	2	2
Ehrlichia Chaffeensis	12	5	11	10	18	11.2
Ehrlichia Ewingii	0	2	0	0	3	1
Ehrlichia anaplasmosis	2	0	0	0	1	0.6
Giardiasis	8	15	14	10	11	11.6
Haemophilus Influenzae, Invasive	2	2	3	2	5	2.8
Hepatitis A Acute	1	4	8	0	0	2.6
Hepatitis B (pregnancy) prenatal	3	3	8	6	4	4.8
Hepatitis B acute	0	1	0	1	4	1.2
Hepatitis B chronic infection	13	17	13	16	54	22.6
Hepatitis C acute	0	0	1	1	1	0.6
Hepatitis C chronic infection	104	104	107	71	66	90.4
Legionellosis	2	2	9	3	10	5.2
Listeriosis	1	1	0	0	0	0.4

\*Table 2 content continues on the next page

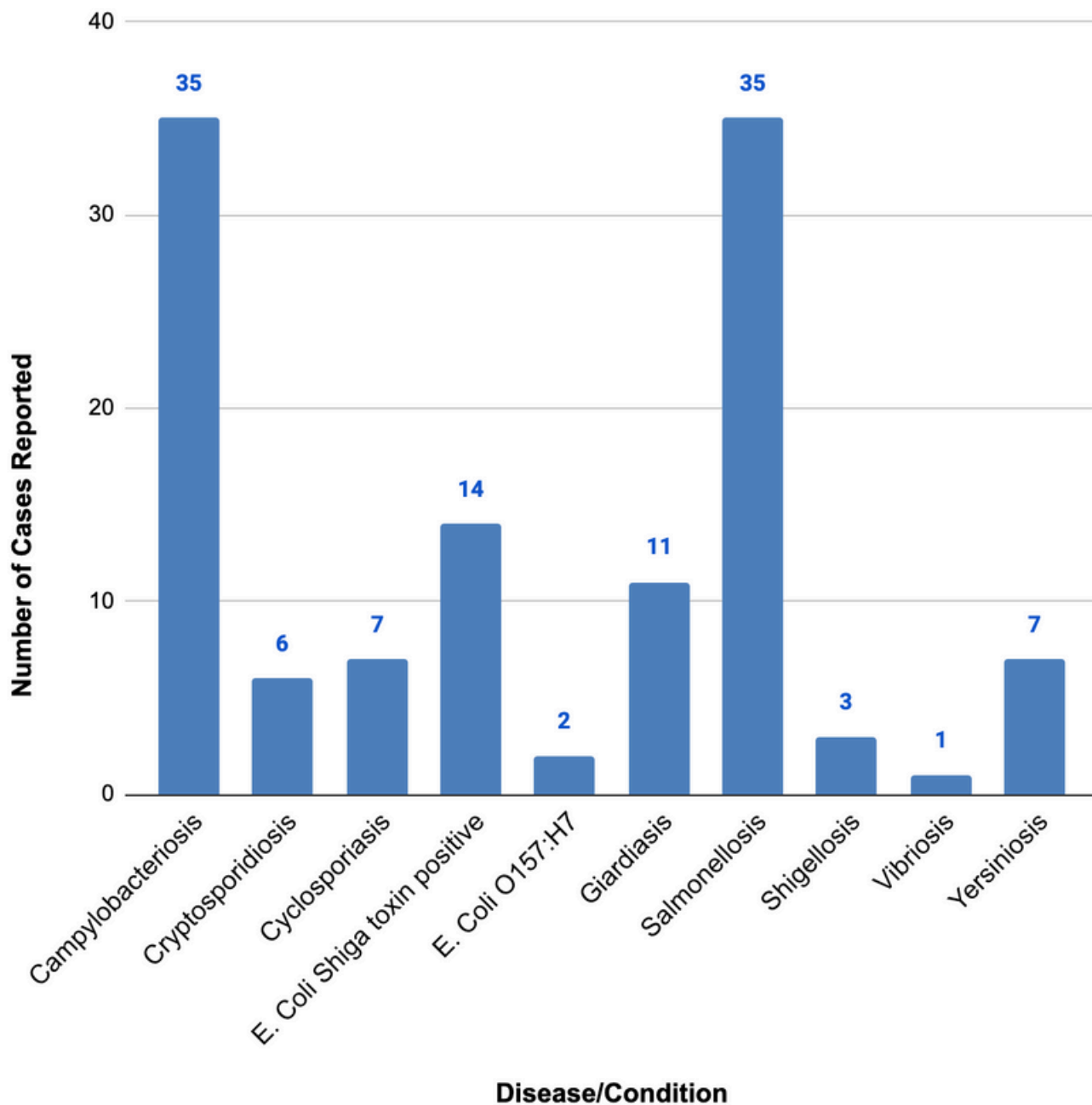
**2020-2024 Reported Cases**  
**Boone County, Missouri with 5-Year Mean**

**Table 2**

Disease/Condition	2020	2021	2022	2023	2024	5-Year Mean
Malaria	1	1	1	3	1	1.4
Meningococcal disease	1	0	0	0	0	0.2
Mumps	0	0	1	1	0	0.4
Mycobacterium other than tuberculosis (MOTT)	25	32	39	41	38	35
Neuroinvasive West Nile	0	1	0	0	0	0.2
Non Neuroinvasive West Nile	0	0	1	0	1	0.4
Pertussis	0	0	2	1	19	4.4
Q fever acute	0	0	0	1	0	0.2
Rabies animal	2	0	2	3	3	2
Rabies post exposure prophylaxis (PEP)	21	2	3	34	31	18.2
Rocky mountain spotted fever	2	1	2	5	2	2.4
Salmonellosis	22	33	26	41	35	31.4
shiga toxin positive (non E. Coli)	3	0	0	0	0	0.6
Shigellosis	2	3	7	6	3	4.2
Strep disease, group A invasive	13	5	9	0	0	5.4
Staph Aureus Visa	0	0	0	0	1	0.2
Strep Pneumoniae Invasive	0	0	0	8	15	4.6
Tetanus	0	0	0	0	1	0.2
Tuberculosis disease	4	7	2	7	0	4
Tuberculosis infection	97	107	155	145	146	130
Varicella (Chickenpox)	3	0	0	0	1	0.8
Vibriosis	0	0	3	2	1	1.2
Yersiniosis	2	9	6	5	7	5.8

## 2024 Boone County Reported Enteric Diseases

**Figure 1**

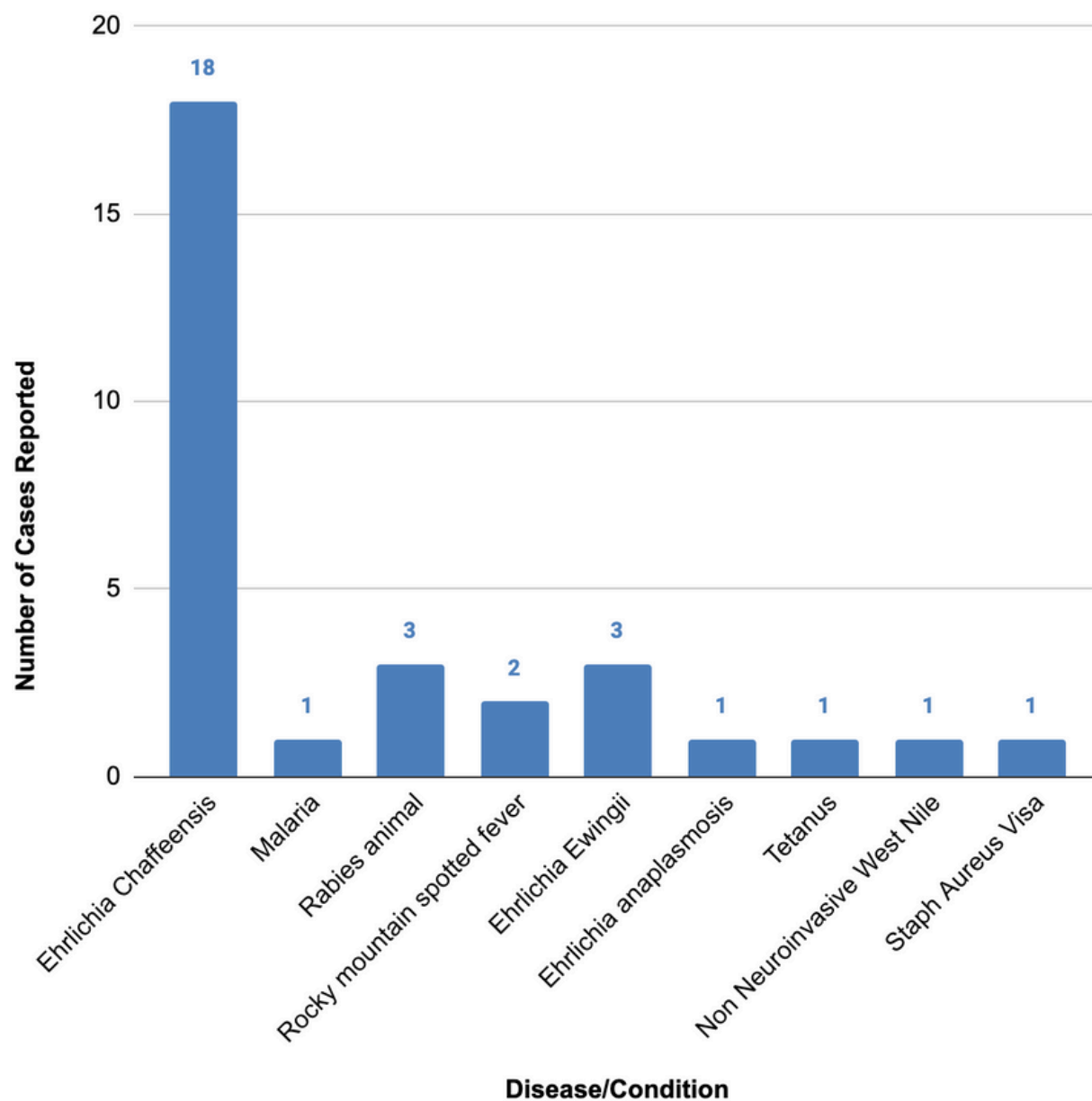


\*Enteric bacteria typically enter the body through the mouth. They are acquired through contaminated food and water, by contact with animals or their environments, by contact with the feces of an infected person, and through other means.



## 2024 Boone County Reported Vector-Borne and Zoonotic Diseases

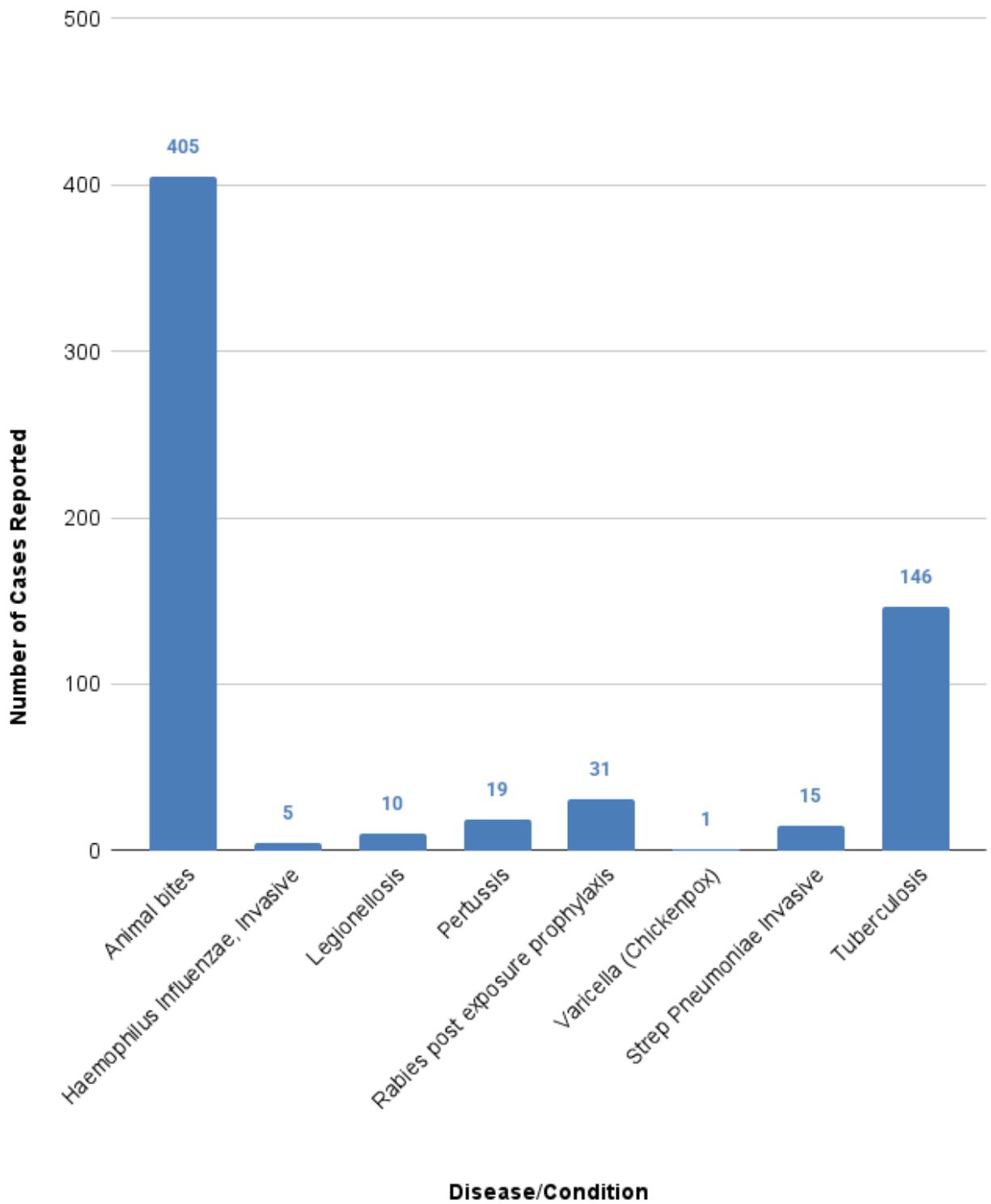
**Figure 2**



\*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 humans to animals).

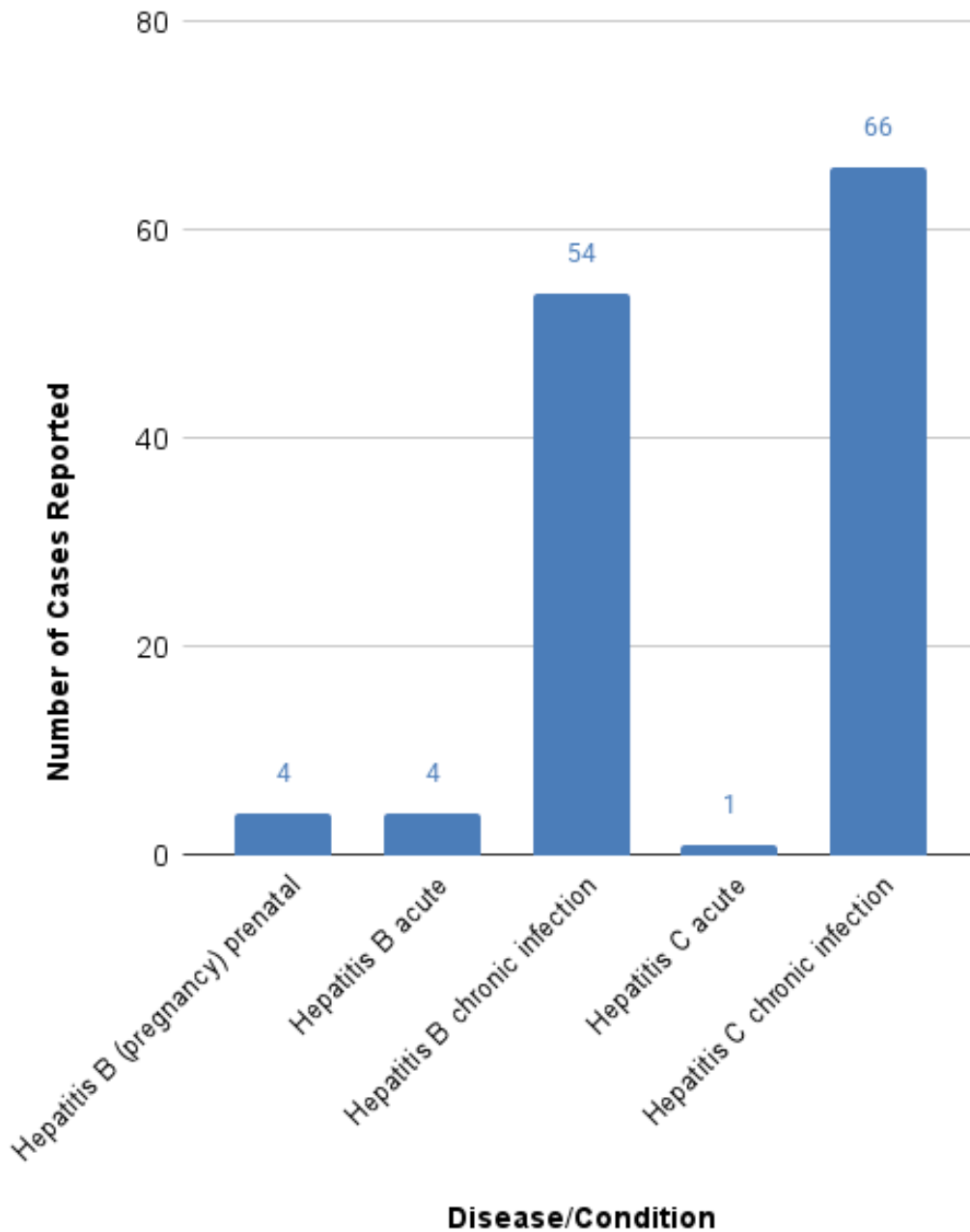
## 2024 Boone County Reported “Other” Diseases

Figure 3



## 2024 Boone County Reported Hepatitis Diseases

**Figure 4**



\*Hepatitis diseases are liver inflammations 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, which are types A, B, C, D and E.

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