2015 COMMUNICABLE DISEASE SUMMARY

Columbia/Boone County Department of Public Health and Human Services

Boone County, Missouri





Published September 2016

2015 Boone County, Missouri

Communicable Disease Summary

In Missouri, in 2015, there were 91 reportable communicable diseases identified in the Department of Health and Senior Services (MDHSS) reporting rule 19 CSR 20-20.020. The local public health agency receives reports from medical providers, hospitals, patients, and other reporters and investigates these reports according to MDHSS guidelines. Both timely reporting and rapid investigations are important to prevent more cases, assure appropriate treatment and education, identify possible outbreaks, and guide in the planning and evaluation of disease prevention and control programs.

The information in this report was gathered from disease and condition reports on Boone County residents during 2015. There were 944 total cases identified and investigated with 832 of those cases meeting the MDHSS guidelines or "case definition" to be considered a confirmed or probable case. Both confirmed and probable cases are forwarded to the Centers for Disease Control and Prevention (CDC) and included in national and Missouri annual case counts. Although not all of the 944 cases reported are reflected in the annual case count, they reflect staff time spent on investigations to determine the status of the report. It is also important to remember that the number of reported cases may not represent the true total number of cases that occur in a county. Some diseases, particularly those with milder symptoms, may go undiagnosed and unreported either because the ill person may not see a doctor, or the doctor may treat without a lab confirmation.

2015 =

832 communicable diseases reported

- + 782 influenza (2015-2016 flu season) reported
- + 1397 sexually transmitted infections (excluding HIV) reported
- = 3011 cases of communicable diseases reported in Boone County for 2015

In addition to the 832 cases identified in Boone County, there were 782 influenza cases (2015-2016 influenza season) and 1397 sexually transmitted infections reported in 2015, bringing the total number of confirmed and probable communicable disease cases reported in Boone County in 2015 to 3011. Sexually transmitted diseases and influenza are addressed in separate reports which can be found at the Columbia/Boone County Public Health and Human Service

website:

https://www.gocolumbiamo.com/Health/PublicHealthandHumanServicesPublications.php.

While reviewing the count of reportable diseases in Boone County, keep in mind that those diseases which cause severe symptoms are more likely to be diagnosed and reported than those which cause mild or no symptoms, or those which are not confirmed by lab testing. If there is a single case of botulism reported, it is likely a true representation of the disease prevalence for botulism. However, the 297 animal bites reported in 2015 is likely a gross underrepresentation of the actual number of bites which occurred within the year since they do not require lab confirmation, and often the person bitten does not seek medical care. Also, when a disease becomes a newsworthy event nationally and/or locally, the attention may lead to an increase in total cases reported in a year. Once attention is drawn to the symptoms, there is increased awareness by patients to seek medical care, and increased awareness by physicians to test and find cases.

Outbreaks

An outbreak is defined as the occurrence of more cases of a disease than expected in a specific setting or the community. The trigger for an outbreak may depend on the cause. While one disease may have an outbreak trigger of ten cases, another may be considered an outbreak with a single case. As with reportable diseases, the total number of outbreaks reported is not a true representation of the actual number of outbreaks occurring during the year since many who become ill do not seek medical care and do not report illness. The Columbia/Boone County Department of Public Health and Human Services investigated six outbreaks during 2015. A summary of the outbreaks reported and investigated can be found in Figure 4 along with a brief description.

Revised Diseases and Conditions Reportable in Missouri (19CSR-20.020):

The list of communicable and sexually transmitted diseases and conditions that are reportable in Missouri has been revised, to ensure consistency with the National Notifiable Conditions, through the Centers for Disease Control and Prevention and the Council for State and Territorial Epidemiologists. Some conditions have been added, while others already on the list have been modified to include updated terminology for the conditions. The final version of the revised reportable disease list went into effect in May of 2016 and is attached at the end of this report. (Missouri Department of Health and Senior Services, 2016)

2015 Boone County, Missouri Communicable Disease Summary

Reported Cases of Selected Communicable Diseases*

Boone County, Missouri 2015

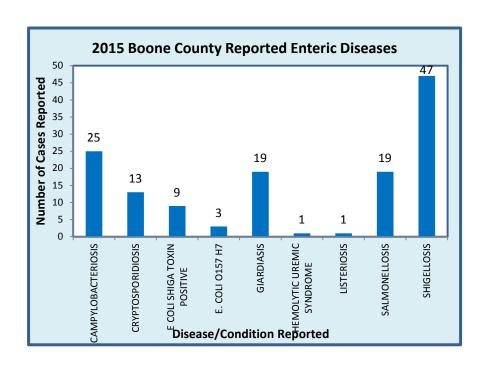
DISEASE/CONDITION	Reported Cases Counts**
ANAPLASMA PHAGOCYTOPHILUM	1
ANIMAL BITES	297
CAMPYLOBACTERIOSIS	25
CHIKUNGUNYA	1
COCCIDIOIDOMYCOSIS	2
CRYPTOSPORIDIOSIS	13
E COLI SHIGA TOXIN POSITIVE	9
E. COLI 0157 H7	3
EHRLICHIA CHAFFEENSIS	3
EHRLICHIOSIS ANAPLASMOSIS UNDETERMINED	1
GIARDIASIS	19
HAEMOPHILUS INFLUENZAE, INVASIVE	4
HEMOLYTIC UREMIC SYNDROME	1
HEPATITIS B (PREGANCY) PRENATAL	10
HEPATITIS B ACUTE	1
HEPATITIS B CHRONIC INFECTION	22
HEPATITIS C CHRONIC INFECTION	107
LEGIONELLOSIS	2
LISTERIOSIS	1
MALARIA	1
MENINGOCOCCAL DISEASE	1
MOTT (MYCOBACTERIUM OTHER THAN TUBERCULOSIS)	25
MUMPS	25
NEUROINVASIVE WEST NILE	1
PERTUSSIS	6
RABIES ANIMAL	6
RABIES POST EXPOSURE PROPHYLAXIS	22
ROCKY MOUNTAIN SPOTTED FEVER	11
SALMONELLOSIS	19
SHIGELLOSIS	47
STREP DISEASE, GROUP A INVASIVE	2
STREP PNEUMONIAE, <5 YEARS, INVASIVE	2
STREP PNEUMONIAE, DRUG-RESISTANT	1
TUBERCULOSIS DISEASE	2
TUBERCULOSIS INFECTION	132
TULAREMIA	1
VARICELLA (CHICKEN POX)	6
TOTAL	832

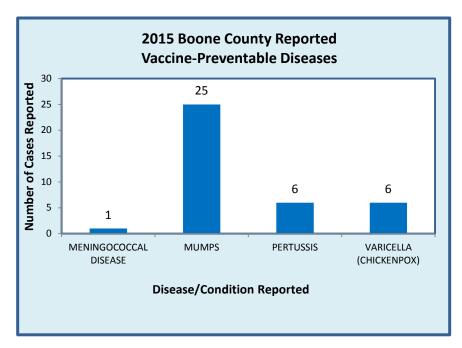
^{*}Excludes reported STDs and influenza cases **Reported case counts are confirmed and probable cases

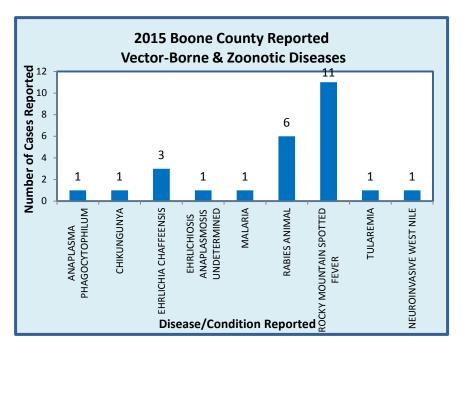
2011-2015 Reported Diseases/Conditions Boone County

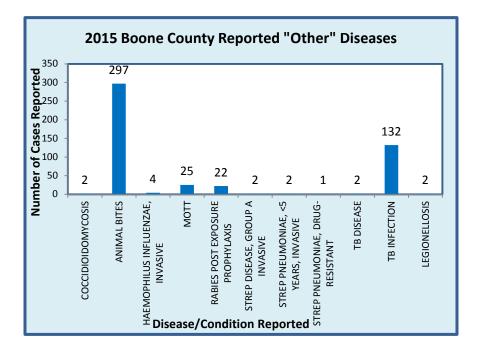
With 5 Year Mean

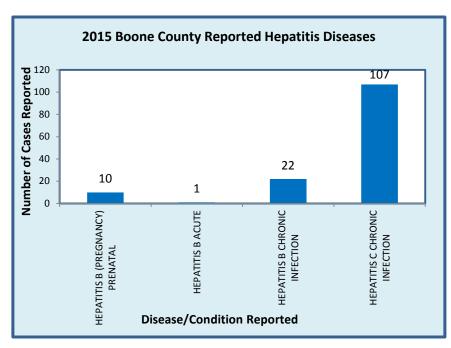
DISEASE/CONDITION	2011	2012	2013	2014	2015	5 YR Mean
ANAPLASMA PHAGOCYTOPHILUM	1	3	0	1	1	1
ANIMAL BITES	269	305	292	267	297	286
BRUCELLOSIS	0	0	1	0	0	0
CAMPYLOBACTERIOSIS	21	26	30	23	25	25
CHIKUNGUNYA	0	0	0	1	1	0
COCCIDIOIDOMYCOSIS	0	1	1	0	2	1
CREUTZFELDT-JAKOB DISEASE (CJD)	0	0	1	0	0	0
CRYPTOSPORIDIOSIS	16	9	3	8	13	10
DENGUE FEVER	0	0	1	0	0	0
E COLI SHIGA TOXIN POSITIVE	0	7	2	3	9	4
E. COLI 0157 H7	7	13	6	1	3	6
EHRLICHIA CHAFFEENSIS	3	1	13	10	3	6
EHRLICHIA EWINGII	0	0	1	0	0	0
EHRLICHIOSIS ANAPLASMOSIS UNDETERMINED	0	0	3	2	1	1
GIARDIASIS	26	13	6	11	19	15
HAEMOPHILUS INFLUENZAE, INVASIVE	1	3	3	3	4	3
HEMOLYTIC UREMIC SYNDROME	0	3	0	0	1	1
HEPATITIS A ACUTE	4	0	0	0	0	1
HEPATITIS B (PREGNANCY) PRENATAL	6	7	7	6	10	7
HEPATITIS B ACUTE	2	1	3	0	1	1
HEPATITIS B CHRONIC INFECTION	5	20	12	12	22	14
HEPATITIS C ACUTE	0	0	0	1	0	0
HEPATITIS C CHRONIC INFECTION	160	162	130	148	107	141
LEGIONELLOSIS	2	2	4	2	2	2
LEPTOSPIROSIS	0	0	1	0	0	0
LISTERIOSIS	0	0	0	0	1	0
LYME	0	0	0	3	0	1
MALARIA	1	0	0	0	1	0
MENINGOCOCCAL DISEASE	2	0	1	0	1	1
MOTT	20	32	31	40	25	30
MUMPS	0	0	0	0	25	5
NON NEUROINVASIVE ST LOUIS	1	0	0	0	0	0
NEUROINVASIVE WEST NILE	0	0	0	0	1	0
PERTUSSIS	2	16	5	7	6	7
Q FEVER ACUTE	0	1	1	0	0	0
RABIES ANIMAL	0	2	2	0	6	2
RABIES POST EXPOSURE PROPHYLAXIS	10	15	15	31	22	19
ROCKY MOUNTAIN SPOTTED FEVER	1	4	7	3	11	5
SALMONELLOSIS	16	40	18	11	19	21
SHIGELLOSIS	3	1	2	6	47	12
STREP DISEASE, GROUP A INVASIVE	4	2	3	1	2	2
STREP PNEUMONIAE, <5 YEARS, INVASIVE	3	0	0	0	2	1
STREP PNEUMONIAE, DRUG-RESISTANT	0	1	3	2	1	1
TB DISEASE	2	4	8	0	2	3
TB INFECTION	174	145	431	202	132	217
TOXIC SHOCK (STREP) SYNDROME	0	0	0	0	0	0
TULAREMIA	0	2	0	0	1	1
TYPHOID FEVER	0	0	0	1	0	0
VARICELLA (CHICKENPOX)	14	5	21	19	6	13
VARICELLA (CHICKENPOX) VIBRIOSIS	0	0	0	19	0	0
YERSINIOSIS	0	1	0	0	0	0

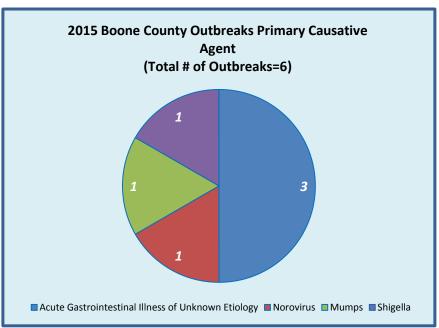


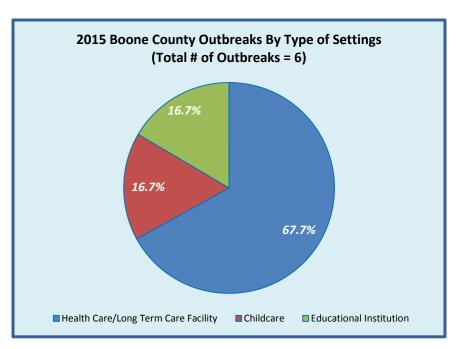


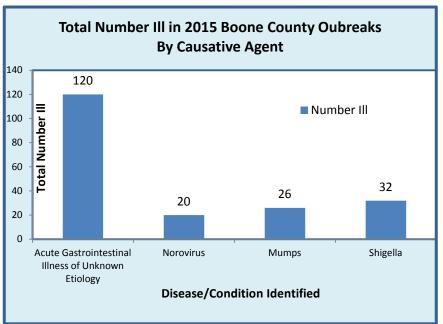












Diseases and Conditions Reportable In Missouri (19 CSR 20-20.020) Numbers in parenthesis represent ICD-10 Codes

Report Diseases and Conditions to your local health agency or to:

Missouri Department of Health and Senior Services during business hours 573-751-6113, after hours and on weekends 800-392-0272 or by fax 573-526-0235

- 1. Immediately reportable diseases or findings shall be reported to the local health authority or to the Department of Health and Senior Services immediately upon knowledge or suspicion by telephone, facsimile or other rapid communication. Immediately reportable diseases or findings are—
- (A) Selected high priority diseases, findings or agents that occur naturally, from accidental exposure, or as the result of a bioterrorism event (Y38, Z65.4):
- Anthrax (A22, Z03.810, Z20.810)
- Botulism (A05.1, A48.51, A48.52)
- Paralytic Poliomyelitis (A80.0, A80.1, A80.2, A80.30, A80.39, A80.9)
- Plague (A20)
- Rabies (Human) (A82, Z20.3)
- Ricin Toxin (Y38.6X)
- Severe Acute Respiratory Syndrome-associated Coronavirus (SARS-CoV) Disease (J12.81, B97.21)
- Smallpox (B03)
- Tularemia (suspected intentional release) (A21)
- Viral hemorrhagic fevers, suspected intentional (e.g., Ebola, Marburg, Lassa, Lujo, new world Arenaviruses (Guanarito, Machupo, Junin, and Sabia viruses), or Crimean-Congo virus) (A96, A98, A99)
- (B) Instances, clusters, or outbreaks of unusual diseases or manifestations of illness and clusters or instances of unexplained deaths which appear to be a result of a terrorist act or the intentional or deliberate release of biological, chemical, radiological, or physical agents, including exposures through food, water, or air. (Y38, Z65.4)
- (C) Instances, clusters, or outbreaks of unusual, novel, and/or emerging diseases or findings not otherwise named in this rule, appearing to be naturally occurring, but posing a substantial risk to public health and/or social and economic stability due to their ease of dissemination or transmittal, associated mortality rates, or the need for special public health actions to control. (A08.11, A08.31)
- 2. Reportable within one (1) day diseases or findings shall be reported to the local health authority or to the Department of Health and Senior Services within one (1) calendar day of first knowledge or suspicion by telephone, facsimile or other rapid communication. Reportable within one (1) day diseases or findings are—
- (A) Diseases, findings or agents that occur naturally, or from accidental exposure, or as a result of an undetected bioterrorism event:
- Animal (mammal) bite, wound, humans
- Brucellosis (A23)
- Cholera (A00)
- Dengue virus infection (A90, A91)
- Diphtheria (A36, Z22.2)
- Glanders (Burkholderia mallei) (A24.0)
- *Haemophilus influenzae*, invasive disease (A41.3, A49.2, B96.3, J14, G00.0)
- Hantavirus pulmonary syndrome (B33.4)
- Hemolytic uremic syndrome (HUS), post-diarrheal (D59.3)
- Hepatitis A (B15)
- Influenza-associated mortality (J09, J10, J11)
- Influenza-associated public and/or private school closures (J09, J10, J11)
- Lead (blood) level greater than or equal to forty-five micrograms per deciliter (\ge 45 μg /dl) in any person (R78.71, T56.0X, Z77.011)
- Measles (rubeola) (B05)
- Melioidosis (Burkholderia pseudomallei) (A24.1-A24.9)
- Meningococcal disease, invasive (A39, Z20.811)
- Novel Influenza A virus infections, human (J09)

- Outbreaks (including nosocomial) or epidemics of any illness, disease or condition that may be of public health concern, including illness in a food handler that is potentially transmissible through food. (A05)
- Pertussis (A37)
- Poliovirus infection, nonparalytic (A80.4, A80.9, B91)
- Q fever (acute and chronic) (A78)
- Rabies (animal)
- Rubella, including congenital syndrome (B06, P35.0, Z20.4)
- Shiga toxin-producing Escherichia coli (STEC) (A04.3, B96.21-B96.23)
- Shiga toxin positive, unknown organism
- Shigellosis (A03)
- Staphylococcal enterotoxin B (A05.0)
- Syphilis, including congenital syphilis (A50-A53, A65, O98.11, O98.12, O98.13)
- T-2 mycotoxins (T64.81-T64.84, Y38.6X)
- Tetanus (A33-A35)
- Tuberculosis disease (A15, A17-A19, B90, J65, O98.0, P37.0)
- Tularemia (all cases other than suspected intentional release) (A21)
- Typhoid fever (Salmonella Typhi) (A01, Z22.0)
- Vancomycin-intermediate Staphylococcus aureus (VISA), and Vancomycin-resistant Staphylococcus aureus (VRSA)
- Venezuelan equine encephalitis virus neuroinvasive disease (A92.8, A92.9)
- Venezuelan equine encephalitis virus non-neuroinvasive disease (A92.2, A92.8, A92.9)
- Viral hemorrhagic fevers other than suspected intentional (e.g., Ebola, Marburg, Lassa, Lujo, new world Arenaviruses (Guanarito, Machupo, Junin, and Sabia viruses), or Crimean-Congo virus) (A96, A98, A99)
- Yellow fever (A95)
- (B) Diseases, findings or adverse reactions that occur as a result of inoculation to prevent smallpox, including but not limited to the following, (T50.B15):
- Accidental administration
- Contact transmission (i.e., vaccinia virus infection in a contact of a smallpox vaccinee)
- Eczema vaccinatum
- Erythema multiforme (roseola vaccinia, toxic urticaria)
- Fetal vaccinia (congential vaccinia)
- Generalized vaccinia
- Inadvertent autoinoculation (accidental implantation)
- Myocarditis, pericarditis, or myopericarditis
- Ocular vaccinia (can include keratitis, conjunctivitis, or blepharitis)
- Post-vaccinial encephalitis or encephalomyelitis
- Progressive vaccinia (vaccinia necrosum, vaccinia gangrenosa, disseminated vaccinia)
- Pyogenic infection of the vaccination site
- Stevens-Johnson Syndrome (L51.1, L51.3)
- 3. Reportable within three (3) days diseases or findings shall be reported to the local health authority or the Department of Health and Senior Services within three (3) calendar days of first knowledge or suspicion. These diseases or findings are—
- Acquired immunodeficiency syndrome (AIDS) / Human immunodeficiency virus (HIV) infection (B20)
- Babesiosis (B60.0)
- California serogroup virus neuroinvasive disease (A83.5)
- California serogroup virus non-neuroinvasive disease (A92.8)
- Campylobacteriosis (A04.5)

(Continued on page 2)

- Carbon monoxide exposure (T58)
- CD4 + T cell count and percent
- Chancroid (A56)
- Chemical poisoning, acute, as defined in the most current ATSDR CERCLA Priority List of Hazardous Substances; if terrorism is suspected, refer to subsection (1)(B)
- Chlamydia trachomatis infections (A55, A56, A74, P23.1)
- Coccidioidomycosis (B38)
- Creutzfeldt-Jakob disease (A81.0, A81.81-A81.83)
- Cryptosporidiosis (A07.2)
- Cyclosporiasis (A07.4)
- Eastern equine encephalitis virus neuroinvasive disease (A83.2)
- Eastern equine encephalitis virus non-neuroinvasive disease (A92.8)
- Ehrlichiosis / Anaplasmosis, human (Ehrlichia chaffeenis, Ehrlichia ewingii, and Anaplasma phagocytophilum infection) and undetermined (A77.4)
- Giardiasis (A07.1)
- Gonorrhea (A54, O98.2)
- Hansen's disease (Leprosy) (A30)
- Heavy metal poisoning including, but not limited to, arsenic, cadmium and mercury (N14.3, R78.79, T57.0X, Z77.010, T56.3X, T56.1X)
- Hepatitis B, acute (B16, B19.1)
- Hepatitis B, chronic (B18.0, B18.1, Z22.51)
- Hepatitis B surface antigen (prenatal HBsAg) in pregnant women (B16, B18.0, B18.1, O98.419)
- Hepatitis B Virus Infection, perinatal (HbsAg positivity in any infant aged equal to or less than twenty-four (≤ 24) months who was born to an HbsAg-positive mother) (B16, B18.0, B18.1)
- Hepatitis C, acute (B17.1, B19.2)
- Hepatitis C, chronic (B18.2, Z22.52)
- Human immunodeficiency virus (HIV) infection, exposed newborn infant (i.e., newborn infant whose mother is infected with HIV) (Z20.6)
- Human immunodeficiency virus (HIV) infection, including any test or series of tests used for the diagnosis or periodic monitoring of HIV infection. For series of tests which indicate HIV infection, all test results in the series (both positive and negative) must be reported (B20)
- Human immunodeficiency virus (HIV) infection, including any negative, undetectable, or indeterminate test or series of tests used for the diagnosis or periodic monitoring of HIV infection conducted within 180 days prior to the test result used for diagnosis of HIV infection (B20, R75, Z11.4)
- Human immunodeficiency virus (HIV) infection, pregnancy in newly identified or pre-existing HIV positive women (B20)
- Human immunodeficiency virus (HIV) infection, test results (including both positive and negative results) for children less than two years of age whose mothers are infected with HIV (R75, Z11.4, Z20.6)
- Human immunodeficiency virus (HIV) infection, viral load measurement (including nondetectable results) (B20)
- Hyperthermia (T67.0-T67.7, X30)
- Hypothermia (T68, X31)
- Lead (blood) level less than forty-five micrograms per deciliter (< 45 μg/dl) in any person (R78.71, T56.0X, Z77.011)
- Legionellosis (A48.1, A48.2)
- Leptospirosis (A27)
- Listeriosis (A32, P37.2)
- Lyme disease (A69.2)
- Malaria (B50-B54, P37.3, P37.4)
- Methemoglobinemia, environmentally-induced (D74.8, D74.9)
- Mumps (B26)
- Non-tuberculosis mycobacteria (NTM) (A31)
- Occupational lung diseases including silicosis, asbestosis, byssinosis, farmer's lung and toxic organic dust syndrome (C45.0, J61, J62.8, J66, J92.0, Z57.2, Z57.39)
- Pesticide poisoning (T60.8X, Z57.4)
- Powassan virus neuroinvasive disease (A83.8)
- Powassan virus non-neuroinvasive disease (A92.8)
- Psittacosis (A70)
- Rabies Post-Exposure Prophylaxis (Initiated) (Z20.3)
- Respiratory diseases triggered by environmental contaminants including environmentally or occupationally induced asthma and bronchitis (J68.0)

- Rickettsiosis, Spotted fever (A77.0-A77.3, A77.8, A77.9)
- Saint Louis encephalitis virus neuroinvasive disease (A83.3)
- Saint Louis encephalitis virus non-neuroinvasive disease (A92.8)
- Salmonellosis (A02)
- Streptococcus pneumoniae, Invasive disease (IPD-Invasive Pneumococcal Disease) (A40.3, B95.3, J13)
- Streptococcal toxic shock syndrome (STSS)
- Toxic shock syndrome, non-streptococcal (TSS) (A48.3)
- Trichinellosis (B75)
- Tuberculosis infection (R76.1)
- Varicella (chickenpox) (B01)
- Varicella deaths (B01)
- Vibriosis (non-cholera Vibrio species infections) (A05.3, A05.5, B96.82)
- West Nile virus neuroinvasive disease (A92.31, A92.32)
- West Nile virus non-neuroinvasive disease (A92.30, A92.39, A92.8, A92.9)
- Western equine encephalitis virus neuroinvasive disease (A83.1, A83.8, A83.9)
- Western equine encephalitis virus non-neuroinvasive disease (A92.8, A92.9)
- Yersiniosis (A04.6, A28.2)
- 4. Reportable weekly diseases or findings shall be reported directly to the Department of Health and Senior Services weekly. These diseases or findings are—
- Influenza, laboratory-confirmed (J09, J10)
- 5. Reportable quarterly diseases or findings shall be reported directly to the Department of Health and Senior Services quarterly. These disease or findings are—
- Methicillin-resistant Staphylococcus aureus (MRSA), nosocomial (Y95 plus one or more of the following: A41.02, A49.02, B59.62, J15.212, Z22.322)
- Vancomycin-resistant enterococci (VRE), nosocomial

NOTE: Cancer is also a reportable disease. Please refer to <u>CSR 70-21.010</u> for complete information.

Isolates or specimens positive for the following reportable diseases or conditions must be submitted to the State Public Health Laboratory for epidemiological or confirmation purposes:

- Anthrax (Bacillus anthracis)
- Cholera (Vibrio cholerae)
- Diphtheria (Corynebacterium diphtheriae)
- Escherichia coli O157:H7
- Glanders (Burkholderia mallei)
- Haemophilus influenzae, invasive disease
- Influenza Virus-associated mortality
- Listeriosis
- Malaria (Plasmodium species)
- Measles (rubeola)
- Melioidosis (Burkholderia pseudomallei)
- Mycobacterium tuberculosis
- Neisseria meningitidis, invasive disease
- Orthopoxvirus (smallpox / cowpox-vaccinia / monkeypox)
- Other Shiga Toxin positive organisms
- Pertussis (Bordetella pertussis)
- Plague (Yersinia pestis)
- Salmonella species
- Severe Acute Respiratory Syndrome-associated Coronavirus (SARS-CoV) disease
- Shigella species
- Tularemia (Francisella tularensis)
- Potential Vancomycin Resistant Staphylococcus aureus (VRSA), with MIC greater than or equal to eight (≥ 8).



The reporting rule can be accessed by clicking 19 CSR 20-20.020
AN EQUAL OPPORTUNITY/AFFIRMATIVE ACTION EMPLOYER
Services provided on a nondiscriminatory basis.

The final version of the updated communicable disease list went into effect on May 1, 2015. A summary of the changes and updates are:

Updates for Category 1:

Condition Name	Previous	Update
Paralytic poliomyelitis	Category 2	Category 1
Tularemia (Category 1)	Pneumonic	Suspected intentional release
Viral hemorrhagic fevers	All were Category 1	Suspected intentional release only are Category 1

Updates for Category 2:

Condition Name	Previous	Update
Influenza-associated mortality	Pediatric cases (< 18 years of age)	Age limit deleted
Lead (blood) level ≥ forty-five micrograms per deciliter	Reportable in persons ≤72 months of age	Age limit deleted
Tularemia (Category 2)	Non-pneumonic	Other than suspected intentional release are Category 2
Viral hemorrhagic fevers	All were Category 1	Other than suspected intentional release are Category 2
Acute Respiratory Distress Syndrome (ARDS) in persons <50 years of age	Category 2	Removed from Reportable Condition list

Updates for Category 3:

Condition Name	Previous	Update
AIDS and HIV conditions	Outdated terminology	Category 3 - Multiple wording updates
Arsenic poisoning	Arsenic poisoning	Heavy metal poisoning, including but not limited to, arsenic, cadmium, and mercury
Babesiosis	Nationally Reportable	Added to Missouri's Reportable Disease List
Lead (blood) level ≤ forty-five micrograms per deciliter	Specific age groups	Age limit deleted
Mycobacterial disease other than tuberculous (MOTT)	МОТТ	Non-tuberculosis mycobacteria (NTM)
Rocky Mountain Spotted Fever (RMSF)	RMSF	Rickettsiosis, Spotted Fever
Streptococcus pneumoniae, Invasive disease (IPD-Invasive Pneumococcal Disease)	Invasive S. pneumoniae < 5 years_of age AND all Drugresistant S. pneumoniae	ALL invasive S. pneumoniae cases are reportable
Streptococcal disease, invasive, Group A	Category 3	Removed from Reportable Condition list
Toxic Shock Syndrome (TSS)	Toxic shock syndrome, staphylococcal or streptococcal	Two separate conditions, streptococcal and non- streptococcal

(Pratt, 2016)

Missouri Department of Health and Senior Services. (2016, March 31). Retrieved 2016, from Laws,
Regulations and Manuals:
http://health.mo.gov/living/healthcondiseases/communicable/communicabledisease/manuals.
php

Pratt, D. (2016). Case Definitions and Reportable Conditions 2016 Update. Missouri.