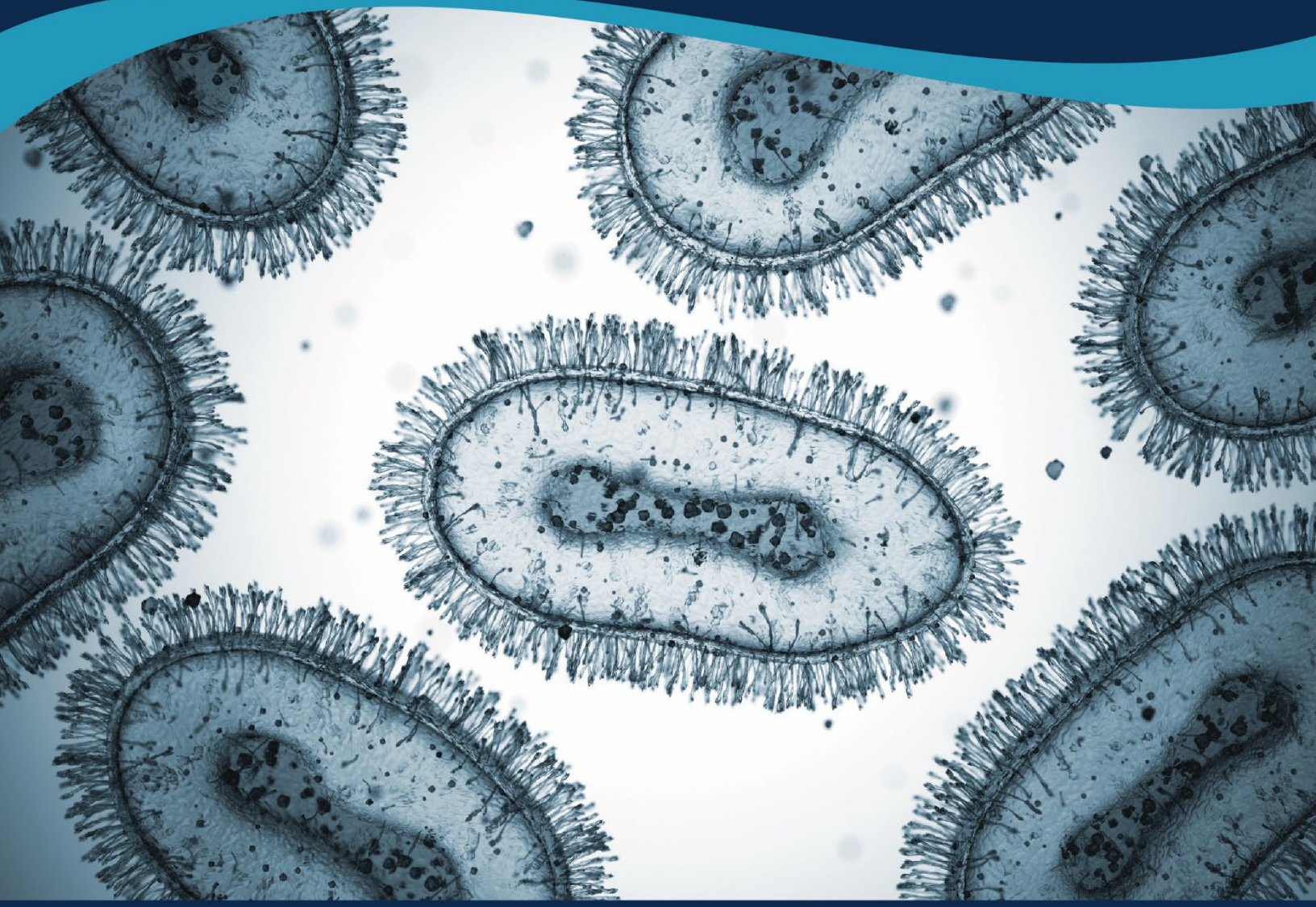
2022 Communicable Disease Report



January 2024

DOH 420-004

Prepared by Disease Control and Health Statistics
Office of Communicable Disease Epidemiology

Washington State Department of HEALTH

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COMMUNICABLE DISEASE REPORT 2022

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This report represents Washington State communicable disease surveillance, the ongoing collection, analysis and dissemination of morbidity and mortality data to prevent and control communicable disease.

Department of Health staff from the following offices and programs contributed to this report:

- Center for Data Science
- Center for Public Health Medical and Veterinary Sciences
- Office of Communicable Disease Epidemiology
- Office of Infectious Disease
- Washington State Public Health Laboratories

We'd also like to acknowledge and extend our thanks and appreciation to Washington's local health jurisdictions and tribal partners who contribute to surveillance, investigation, and prevention of communicable diseases in our state, and to the thousands of clinics, hospitals, clinical laboratories, and clinicians throughout Washington whose disease reports are the basis for this document.

Contents

*The category of conditions titled "Other Rare Diseases of Public Health Significance" has been repealed, effective January 1, 2023. The conditions listed above have been integrated within the notifiable conditions chapter WAC 246-101 as specific conditions.

Executive Summary

This report summarizes notifiable communicable diseases reported to the Department of Health (DOH) in 2022. The most common reports continue to be sexually transmitted conditions, chronic hepatitis, diarrheal infections, and tuberculosis. Data completeness and case reporting have been impacted by the COVID-19 pandemic.

Technical Notes

Washington Administrative Code (WAC) Chapters 246-100 and 246-101 outline disease reporting requirements: healthcare providers and facilities, laboratories, food service establishments, childcare facilities, and schools must report certain communicable diseases to the local health jurisdiction or DOH. Cases of communicable conditions designated as notifiable are included in this annual report if they have met the following criteria*:

1. Resident of Washington.
2. Qualifying event dates were in MMWR Year 2022 (January 2, 2022 – December 31, 2022).
3. Reported to DOH and entered prior to October 31, 2023.
4. Given a valid DOH case classification by DOH (see: guidelines for each condition).
5. Cases that are the first reports of very rare conditions (zero to two cases per year) received by DOH after the previous year's deadline.

Typically, a fraction of the actual number of cases are reported to a surveillance system. Infected persons may: not have symptoms, be symptomatic but not have contacted a healthcare provider, not have appropriate testing, or not be reported after diagnostic testing. Case counts reflect reported cases only and may be artificially low for 2020 and 2021 due to the impacts of the COVID-19 on access to medical care, diagnostic practices, availability of routine screening and testing, and investigative resources.

Summary tables with incidence and mortality rates reflect years when data are reliable. Population estimates for rate calculations for years 1999 and prior are from the Washington State Office of Financial Management. Due to US Census Bureau delays in releasing critical data inputs from the 2020 Census, rate calculations for 2000-2022 use population denominators from Washington State Population Interim Estimates (PIE, December 2022), developed by Public Health – Seattle & King County, except where otherwise noted. This is in accordance with a statewide workgroup recommendation to adopt interim population estimates that utilize available 2020 decennial data at this time (DOH Data and Statistical Reports). For more information about PIE, please contact DOH. Rates may differ from previously published rates due to changes in denominators. County rates are not provided for conditions with one to four reported cases.

This report is available online on the DOH website. Additional information on communicable disease surveillance and case investigation in Washington is available on Department of Health website under List of Notifiable Conditions.

**The inclusion criteria for HIV, hepatitis B, hepatitis C, tuberculosis, and sexually transmitted diseases cases in this report can be found in the footnotes underneath each individual data table.*

Reporting a Notifiable Condition

In accordance with Washington State rule, chapter 246-101 WAC, public health and healthcare professionals should report most notifiable conditions to public health authorities, typically the sovereign tribal nation or local health jurisdiction in the county where the patient resides. Disease reporting telephone numbers for each local health jurisdiction are provided on the DOH website. If no one is available at the local health jurisdiction and a condition is immediately notifiable or is notifiable to DOH, please call the 24-hour reporting line: 877-539-4344 or 206-418-5500. For a complete list of notifiable conditions for local health jurisdictions, laboratories, healthcare providers and facilities please refer to the corresponding reporting posters available on the DOH website, How to Report – Posters.

Changes in chapter 246-101 WAC took effect January 1, 2023.

Washington State Department of HEALTH

Notifiable Conditions

LOCAL HEALTH JURISDICTIONS

Notifiable to the Washington State Department of Health

Investigation and Reporting Guidelines are available on the List of Notifiable Conditions

IMMEDIATELY NOTIFIABLE (suspected or confirmed cases)

Notifiable to the Office of Communicable Disease Epidemiology: 1-877-539-4344 or 206-418-5500 (unless noted otherwise)

Amebic meningitis

Anthrax (*Bacillus anthracis* and confirmed *Bacillus cereus* biovar *anthracis* only)

Botulism, foodborne, infant, and wound

Cholera (*Vibrio cholerae* O1 or O139)

Coronavirus infection ([severe], SARS, MERS, COVID-19)

Diphtheria

Domoic acid poisoning

Glanders (*Burkholderia mallei*)

Haemophilus influenzae (invasive disease, children under 5 years of age)

Influenza, novel or unsubtypable strain

Measles (rubeola) - Acute disease only

Melioidosis (*Burkholderia pseudomallei*)

Mpox (Monkeypox)

Outbreaks and suspected outbreaks

Paralytic shellfish poisioning

Pesticide poisoning (hospitalized, fatal, or cluster)
(notify Washington Poison Center – 1-800-222-1222)

Plague

Poliomyelitis

Rabies (suspect or confirmed human and confirmed animal)

Rabies, suspected human exposure

Rubella, acute (including congenital)

Smallpox

Tularemia

Viral hemorrhagic fever (Ebola virus, Crimean-Congo virus, Guanarito virus, Junin virus, Lassa virus, Luio virus, Machupo virus, Marburg virus, Sabia virus)

Yellow fever

NOTIFIABLE *(initially)* WITHIN 3 BUSINESS DAYS of case or laboratory report

see WAC 246-101-510 for investigation report submission requirements

NOTIFIABLE TO: Office of Communicable Disease Epidemiology (1-877-539-4344 or 206-418-5500)

Anaplasmosis

Arboviral disease (acute disease only) including, but not limited to:
- California serogroup viruses
- Chikungunya
- Dengue
- Eastern and western equine encephalitis
- Japanese encephalitis
- La Crosse encephalitis
- Powassan virus infection
- St. Louis encephalitis
- West Nile virus infection
- Zika virus infection
  - See also "Yellow fever"

Babesiosis

Baylisascariasis

Brucellosis

Campylobacteriosis

Candida auris infection or colonization

Carbapenem-resistant Enterobacteriaceae infections limited to:
- *Klebsiella species*
- *E. coli*
- *Enterobacter* species

Chagas disease

Coccidioidomycosis

Cryptococcus gattii or undifferentiated *Cryptococcus* species (i.e., *Cryptococcus* not identified as *C. neoformans*)

Cryptosporidiosis

Cyclosporiasis

Cysticercosis

Echinococcosis

Ehrlichiosis

Giardiasis

Hantavirus including, but not limited to:
- Andes virus
- Bayou virus
- Black Creek Canal virus
- Dobrava-Belgrade virus
- Hantaan virus
- Seoul virus
- Sin nombre virus

Hepatitis A (acute infection)

Hepatitis B (acute and chronic infection, perinatal)

Hepatitis B, surface antigen-positive pregnant persons

Hepatitis D (acute and chronic infection)

Hepatitis E (acute infection)

Histoplasmosis

Human prion disease

Influenza-associated death (laboratory confirmed)

Legionellosis

Leptospirosis

Notifiable Conditions: LOCAL HEALTH JURISDICTIONS

NOTIFIABLE *(initially)* WITHIN 3 BUSINESS DAYS of case or laboratory report
see WAC 246-101-510 for investigation report submission requirements

NOTIFIABLE TO: Office of Communicable Disease Epidemiology (1-877-539-4344 or 206-418-5500)

- Listeriosis
- Lyme disease
- Malaria
- Meningococcal disease, invasive
- Mumps, acute disease only
- Pertussis
- Psittacosis
- Q fever
- Relapsing fever (borreliosis)
- *Rickettsia* infection
- *Salmonella* species (Salmonellosis, typhoid fever)
- Shiga toxin-producing *E. coli* (STEC)/enterohemorrhagic *E. coli*
- Shigellosis
- Taeniasis
- Tetanus
- Tick paralysis
- Trichinosis
- Typhus
- Unexplained critical illness or death
- Vaccinia transmission
- Vancomycin-resistant *Staphylococcus aureus* (not including vancomycin-intermediate)
- Varicella-associated death
- Vibriosis (*Vibrio* species not including *Vibrio cholerae* O1 or O139)
- Yersiniosis

NOTIFIABLE TO: Office of Infectious Disease (360-706-3400)

- Acquired immunodeficiency syndrome (AIDS)
- Chancroid
- *Chlamydia trachomatis* infection
- Gonorrhea
- Granuloma inguinale
- Hepatitis C (acute and chronic infection, perinatal)*
- Herpes simplex, neonatal and genital (initial infection only)
- Human immunodeficiency virus (HIV) infection
- Lymphogranuloma venereum
- Syphilis

NOTIFIABLE TO: Washington Poison Center

- Pesticide poisoning (all other) **1-800-222-1222**

NOTIFIABLE TO: Tuberculosis Program

- Tuberculosis disease (confirmed or highly suspicious, i.e., initiation of empiric treatment) TB Reporting Fax Line: **206-364-1060**

NOTIFIABLE TO: Immunization Program CHILD Profile (Fax: 360-236-3590)

- Serious adverse reactions to immunizations

The conditions listed above are notifiable to Washington State Department of Health in accordance with WAC 246-101. The local health officer will provide the following information for each notification, investigation report, and outbreak report submitted under WAC 246-101-510:

Notifications must include: Patient's first and last name, notifiable condition, date local health jurisdiction was notified, condition symptom onset data (preferred) or diagnosis date (alternatively), patient's date of birth and sex.

Investigation reports must include: Patient's first and last name, date of birth, ethnicity, race, preferred language, pregnancy status for hepatitis B acute or chronic infection investigation reports of patients twelve to fifty years of age, investigation start date, investigation completion date, initial notification source, hospitalization status of patient, whether the patient died during this illness, probable geographic region of exposure, travel out of the country (as applicable), whether the case is associated with an ongoing outbreak investigation, and the data used to verify the case meet clinical criteria or laboratory criteria, or both.

*If available include: pregnancy status for hepatitis C infection investigation reports.

Outbreak reports must include: Organism or suspected organism, source or suspected source, and number of persons infected and potentially exposed.

Note: This poster does not include information about provisional reporting notifications, for more information please visit:
https://doh.wa.gov/public-health-healthcare-providers/notifiable-conditions

Washington State Department of HEALTH

DOH 420-007 October 2023

Washington State Department of HEALTH

Notifiable Conditions

HEALTH CARE PROVIDERS/FACILITIES

Notifiable to the local health jurisdiction (LHJ) of the patient's residence unless otherwise designated

If unable to reach the LHJ of the patient's residence, please call: 1-877-539-4344
(If patient residence is unknown, notify the LHJ of the health care provider that ordered the diagnostic test)

IMMEDIATELY NOTIFIABLE

Requires a phone call to reach a live person at the local health jurisdiction, 24/7. ***Must be reported as soon as clinically suspected.***

- Amebic meningitis
- Anthrax (*Bacillus anthracis* and confirmed *Bacillus cereus* biovar *anthracis* only - Do not report all *Bacillus cereus*)
- Botulism, foodborne, infant, and wound
- Cholera (*Vibrio cholerae* O1 or O139)
- Coronavirus infection (severe communicable)
  - SARS-associated coronavirus
  - MERS-associated coronavirus
  - Novel coronavirus (COVID-19)
- Diphtheria
- Domoic acid poisoning
- *E. coli* (See "*Shiga toxin-producing E. coli*")
- Glanders (*Burkholderia mallei*)
- *Haemophilus influenzae* (invasive disease, children under 5 years of age)
- Influenza, novel or unsubtypable strain
- Measles (rubeola) - Acute disease only
- Melioidosis (*Burkholderia pseudomallei*)
- Meningococcal disease, invasive
- Monkeypox (Mpox)
- Outbreaks and suspected outbreaks
- Paralytic shellfish poisoning
- Pesticide poisoning (hospitalized, fatal, or cluster): **1-800-222-1222**
- Plague
- Poliomyelitis
- Rabies (suspect or laboratory confirmed human cases and laboratory confirmed animal cases)
- Rabies, suspected human exposure (suspected human rabies exposures due to a bite from or other exposure to an animal that is suspected of being infected with rabies)
- Rubella, acute disease only (including congenital rubella syndrome)
- Shiga toxin-producing *E. coli* (STEC) infections/ enterohemorrhagic *E. coli* infections
- Smallpox
- Tularemia
- Vaccinia transmission
- Viral hemorrhagic fever
- Yellow fever

NOTIFIABLE WITHIN 24 HOURS

Requires a phone call if reporting after normal public health business hours.

- Baylisascariasis
- Brucellosis
- *Candida auris* infection or colonization
- Hantaviral infection
- Hepatitis A (acute infection)
- Hepatitis B (acute infection)*
- Hepatitis C (acute infection)
- Hepatitis C (perinatal) - Initial diagnosis, and previously unreported cases
- Hepatitis D (acute and chronic infection)
- Hepatitis E (acute infection)
- Legionellosis
- Leptospirosis
- Listeriosis
- Mumps, acute disease only
- Pertussis
- Psittacosis
- Q fever
- Salmonellosis
- Shigellosis
- Tuberculosis disease (confirmed or highly suspicious, i.e., initiation of empiric treatment)
- Vancomycin-resistant *Staphylococcus aureus* (not to include vancomycin-intermediate)
- Vibriosis (*Vibrio* species not including *Vibrio cholerae* O1 or O139)
- Yersiniosis
- Unexplained critical illness or death

LEGEND

- Laboratory Confirmation Required Before Submitting Case Report
- DOH Notifiable to Department of Health

Notifiable Conditions: HEALTH CARE PROVIDERS/FACILITIES

NOTIFIABLE WITHIN 3 BUSINESS DAYS

Acquired immunodeficiency syndrome (AIDS)
Notifiable to: DOH (for facilities) and LHJ (for providers)

Anaplasmosis

Arboviral disease (acute disease only) including, but not limited to:
- Chikungunya
- Dengue
- Eastern and western equine encephalitis
- Japanese encephalitis
- La Crosse encephalitis
- Powassan virus infection
- St. Louis encephalitis
- West Nile virus infection
- Zika virus infection
- See also "Yellow fever"

Babesiosis

Campylobacteriosis

Carbapenem-resistant Enterobacteriaceae infections limited to:
- *Klebsiella* species
- *E. coli*
- *Enterobacter* species

Chagas disease

Chancroid

Chlamydia trachomatis infection

Coccidioidomycosis

Cryptococcus gattii or undifferentiated *Cryptococcus* species (i.e., *Cryptococcus* not identified as *C. neoformans*)

Cryptosporidiosis

Cyclosporiasis

Cysticercosis

Echinococcosis

Ehrlichiosis

Giardiasis

Gonorrhea

Granuloma inguinale

Hepatitis B, report pregnancy in hepatitis B virus infected patients (including carriers)*

Hepatitis B (chronic infection) - Initial diagnosis, and previously unreported prevalent cases*

Hepatitis B (perinatal) - Initial diagnosis, and previously unreported cases*

Hepatitis C (chronic infection)

Herpes simplex, neonatal and genital (initial infection only) **(Providers)**

Histoplasmosis

Human immunodeficiency virus (HIV) infection

Human prion disease

Influenza-associated death (laboratory confirmed)

Lyme disease

Lymphogranuloma venereum

Malaria

DOH Pesticide poisoning (all other)

Relapsing fever (borreliosis)

Rickettsia infection

Serious adverse reactions to immunizations

Syphilis

Taeniasis

Tetanus

Tick paralysis

Trichinosis

Typhus

Varicella-associated death

NOTIFIABLE WITHIN 30 DAYS

DOH Birth defects (Alcohol related, Autism spectrum disorders and Cerebral palsy)

Cancer (See chapter 246-102 WAC) wscr@doh.wa.gov

Facilities only

DOH Birth defects - Abdominal wall defects (inclusive of gastroschisis and omphalocele)

DOH Birth defects (Down syndrome, Hypospadias and Limb reductions)

DOH Birth defects - Neural tube defects (inclusive of anencephaly and spina bifida)

DOH Birth defects - Oral clefts (inclusive of cleft lip with/without cleft palate)

DOH Gunshot wounds (nonfatal)

For birth defects listed above, call 360-236-3533

Notifiable to L&I – 360-902-5669

Asthma, occupational

Hypersensitivity pneumonitis, occupational

Silicosis

L&I: Washington state Department of Labor and Industries

RAPID SCREENING TESTS

Providers and facilities performing blood lead level RST shall report as a laboratory and comply with the requirements of WAC 246-101-201 through 246-101-230.

Blood lead level**
RST results (See WAC 246-101-200)

Coronavirus infection (severe communicable)
Novel coronavirus (COVID-19)
RST results (See WAC 246-101-200)

Hepatitis C (acute infection)
RST results (See WAC 246-101-200)

Hepatitis C (chronic infection)
RST results (See WAC 246-101-200)

Human immunodeficiency virus (HIV) infection
RST results (See WAC 246-101-200)

The conditions listed above are notifiable to public health authorities in Washington in accordance with WAC 246-101. The following information is required when reporting a condition that occurs in or is treated by health care providers and facilities:

Patient's: first and last name, physical address including zip code, date of birth, sex, ethnicity, race, preferred language, best contact telephone number, requesting healthcare provider's name, requesting health care provider's phone number; address where patient received care, name of submitting laboratory, telephone number of submitting laboratory, specimen type, specimen collection date, date laboratory received specimen, test method used, and test result.

*For hepatitis B virus, pregnancy status (pregnant, not pregnant, or unknown) of patient twelve to fifty years of age

**For blood lead level, Medicaid status of patient less than seventy-two months of age

Note: This poster does not include information about provisional reporting notifications, for more information please visit:
https://doh.wa.gov/public-health-healthcare-providers/notifiable-conditions

Washington State Department of HEALTH

DOH 210-001 May 2023

Washington State Department of HEALTH

Notifiable Conditions
LABORATORIES

Notifiable to the local health jurisdiction (LHJ) of the patient's residence

If unable to reach the LHJ of the patient's residence, please call: 1-877-539-4344
(If patient residence is unknown, notify the LHJ of the health care provider that ordered the diagnostic test)

BACTERIA

- *Anaplasma species* (Anaplasmosis)
- ! *Bacillus anthracis* (Anthrax)
- ! *Bacillus cereus*, biovar anthracis only
- *Bordetella pertussis* (Pertussis)
- 2 *Borrelia burgdorferi* or *Borrelia mayonii* (Lyme disease)
- 2 *Borrelia hermsii, B. parkeri, B. turicatae, B. miyamotoi,* or *B. recurrentis* (Relapsing fever, tick- or louse-borne)
- 2 *Brucella* species (Brucellosis)
- ! *Burkholderia mallei* (Glanders)
- ! *Burkholderia pseudomallei* (Melioidosis)
- 2 Carbapenem-resistant Enterobacteriaceae (CRE)
- 2 *Campylobacter* species (Campylobacteriosis)
- *Chlamydia psittaci* (Psittacosis)
- 2 *Chlamydia trachomatis* **(4)**
- ! *Clostridium botulinum* (Botulism)
- ! *Corynebacterium diphtheriae* (Diphtheria)
- *Coxiella burnetii* (Q fever)
- ! *E. coli* - Refer to "Shiga toxin-producing *E. coli*"
- 2 *Ehrlichia* species
- ! *Francisella tularensis* (Tularemia)
- ! *Haemophilus influenzae* (children < 5 years of age)
- *Legionella* species (Legionellosis)
- *Leptospira* species (Leptospirosis)
- *Listeria monocytogenes*
- 2 *Neisseria gonorrhoeae* (Gonorrhea) **(4)**
- ! *Neisseria meningitidis* (Meningococcal disease)
- 2 *Rickettsia* species including, but not limited to:
  Rickettsia rickettsii
  Rickettsia africae
  Rickettsia conorii
  Rickettsia typhi
  Rickettsia parkeri
  Rickettsia philipii
- *Salmonella* species (Salmonellosis, typhoid fever)
- ! Shiga toxin-producing *E. coli*/enterohemorrhagic *E. coli* (STEC)
- *Shigella* species (Shigellosis)
- 2 *Treponema pallidum* (Syphilis) **(4)**
- Vancomycin-resistant *Staphylococcus aureus*
- ! *Vibrio cholerae* O1 or O139 (Cholera)
- *Vibrio* species (Vibriosis) not including Vibrio cholerae O1 or O139 (Cholera)
- *Yersinia enterocolitica, Y. pseudotuberculosis, Y. intermedia, Y. fredericksenii,* or *Y. kristensenii* (Yersiniosis)
- ! *Yersinia pestis* (Plague)

VIRUSES

- 2 Arboviruses, acute, (California serogroup viruses, Chikungunya virus, Dengue virus, Eastern and western equine encephalitis virus, Japanese encephalitis virus, La Crosse encephalitis virus, Powassan virus, St. Louis encephalitis virus, West Nile virus, Zika virus)
- ! Coronavirus (SARS-associated Coronavirus, MERS-associated Coronavirus, Novel Coronavirus [SARS-Cov-2]) **(3)**
- Hantavirus including, but not limited to: Andes virus, Bayou virus, Black Creek Canal virus, Dobrava-Belgrade virus, Hantaan virus, Seoul virus, Sin nombre virus
- Hepatitis A virus
- Hepatitis B virus **(1)**
- 2 Hepatitis C virus **(1) (3) (5)**
- Hepatitis D virus
- Hepatitis E virus
- ! Influenza virus, novel or unsubtypable strain
- ! Measles virus - See "Rubeola (Measles virus)"
- Mumps virus
- ! Poliovirus (Poliomyelitis)
- ! Rabies virus
- ! Rubella
- ! Rubeola (Measles virus)
- ! Vaccinia [Submit specimen collected from a suspect case immediately]
- ! Variola virus (Smallpox) [Submit specimen collected from a suspect case immediately]
- ! Viral hemorrhagic fever (Crimean-Congo virus, Ebola virus, Guanarito virus, Junin virus, Lassa virus, Lujo virus, Machupo virus, Marburg virus, Sabia virus)
- ! Yellow Fever Virus

LEGEND

- ! Notify Immediately
  Requires a phone call to reach a live person at the LHJ, 24/7
- Notify within 24 hours
  Requires phone call if reporting after normal business hours
- 2 Notify within 2 business days
- 30 Notify within 30 days
- Report deidentified negative screening result at least annually
- Specimen/culture submission to the Public Health Laboratories required
  (upon request for all others)
- Call Public Health Lab
  to ensure Federal Select Agent regulations are met (206-418-5562)

Washington State Department of HEALTH

Notifiable Conditions
LABORATORIES

Notifiable to the local health jurisdiction (LHJ) of the patient's residence

If unable to reach the LHJ of the patient's residence, please call: 1-877-539-4344
(If patient residence is unknown, notify the LHJ of the health care provider that ordered the diagnostic test)

PARASITES

- ! Amebic meningitis
- 2 Babesia species (Babesiosis)
- Baylisascaris (Baylisascariasis)
- 2 Cryptosporidium (Cryptosporidiosis)
- 2 Cyclospora cayetanensis (Cyclosporiasis)
- 2 *Echinococcus granulosus* or *E. multilocularis* (Echinococcosis)
- 2 Giardia duodenalis, G. lamblia, G. intestinalis (Giardiasis)
- 2 Plasmodium species (Malaria)
- 2 *Taenia solium* (Taeniasis or Cysticercosis)
- 2 *Trichinella* species (Trichinellosis)
- 2 *Trypanosoma cruzi* (Chagas disease)

FUNGI

- Candida auris
- 2 Coccidioides (Coccidioidomycosis)
- 2 Cryptococcus gattii or undifferentiated Cryptococcus species (i.e., Cryptococcus not identified as C. neoformans)
- 2 *Histoplasma capsulatum* (histoplasmosis)

OTHER

- 2 Human prion disease

NOTIFIABLE TO DEPARTMENT OF HEALTH (DOH)

	Condition:	Notifiable to:
2	Blood lead level (elevated: ≥5µg/dL) **(2) (3)**	DOH Lead Program: **360-236-4280**
30	Blood lead level (non-elevated: <5µg/dL) **(2) (3)**	DOH Lead Program: **360-236-4280**
30	CD4 + count 1, or CD4 + percent 2, or both (patients aged thirteen or older)*	DOH Office of Infectious Disease: **360-236-3464**
2	Human immunodeficiency virus (HIV)* (for example, positive antibody and antigen tests, and all NAAT tests) **(3) (5)**	DOH Office of Infectious Disease: **360-236-3464**
2	Mycobacterium tuberculosis complex (Tuberculosis)	DOH Tuberculosis Program – **Fax: 206-364-1060**

* Notify DOH (except King County where this is notifiable to LHJ)

The conditions listed above are notifiable to public health authorities in Washington in accordance with 246-101.The following information is required when reporting a condition that occurs in or is treated by health care providers/facilities:

Patient's: first and last name, physical address including zip code, date of birth, sex, ethnicity, race, preferred language, best contact telephone number; requesting healthcare provider's name, requesting health care provider's phone number, address where patient received care, name of submitting laboratory, telephone number of submitting laboratory, specimen type, specimen collection date, date laboratory received specimen, test method used, and test result.

(1) For positive hepatitis B or hepatitis C result, if available: Pregnancy status, Hepatocellular enzyme levels (e.g., ALT, total bilirubin), and/or Negative result for IgM anti-HBc. (For positive HCV: Negative result for IgM anti-HAV, as well).

(2) For blood lead level, Medicaid status of patient less than seventy-two months of age.

(3) Includes rapid screening test (RST) results for HIV, hepatitis c virus, blood lead level and COVID.

(4) For Chlamydia trachomatis, HIV, Neisseria gonorrhoeae (gonorrhea), and Treponema pallidum (syphilis) as follows: Both positive and indeterminate results by any method.

(5) Includes non-positive/undetectable NAT/NAAT and genotype tests for HIV and hepatitis C virus.

Per WAC 246-101-225(2), The local health officer or the state health officer may request additional information of epidemiological or public health value when conducting a case investigation or otherwise for prevention and control of a specific notifiable condition.

Note: This poster does not include information about provisional reporting notifications, for more information please visit: https://doh.wa.gov/public-health-healthcare-providers/notifiable-conditions

Washington State Department of HEALTH

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Communicable Disease Summary

The narratives below are provided in both short and long format. For additional information on cause, illness, treatment, sources and prevention – please refer to the Department of Health website under List of Notifiable Conditions.

Acute flaccid myelitis (AFM)

Cause: There is no single known cause of acute flaccid myelitis (AFM); it is a rare neurologic condition that can be caused by a viral infection. AFM has been primarily associated with non-polio enteroviruses.

Illness and treatment: AFM is characterized by rapid onset of acute flaccid limb weakness with lesions in gray matter of the spinal cord, particularly in the anterior horn region. Recent or current respiratory, gastrointestinal, or febrile illnesses are reported in most AFM patients. Cranial nerve changes may be present, such as facial or eyelid droop, difficulty speaking or swallowing, or headache. More than one limb can be affected, and AFM can progress rapidly, leading to respiratory failure and requiring mechanical ventilation. Permanent paralysis can occur, but some patients recover. AFM is treated through supportive care, which is recommended by teams of expert healthcare providers on a case-by-case basis.

Sources: AFM as a condition is not communicable. The known preceding viral causes of AFM include enteroviruses (EV-D68, EV-A71), flaviviruses (West Nile virus, Japanese encephalitis virus), herpesviruses, and adenoviruses. These preceding viral illnesses may be transmissible person-to-person, but the outcome of AFM is rare. Reservoirs and transmission methods depend on the infectious agent.

Additional risks: AFM appears to affect children more than adults. About 74 percent of acute flaccid myelitis cases are among children between the ages of one and seven years.

Prevention: There are no specific prevention recommendations for AFM, but preventing viral infections reduces the risk of developing AFM. Respiratory and hand hygiene reduces transmission of viral infections.

Recent Washington trends: Surveillance for AFM in Washington State was implemented in 2015. Increases of reported AFM cases occurred in 2016 and 2018, with 10 and 11 cases reported in Washington, respectively. Spikes in national AFM cases in 2014, 2016, and 2018 are thought to have been caused by enterovirus D68 (EV-D68); high circulation levels of EV-D68 were observed in these years, and EV-D68 was the most commonly detected pathogen in specimens from patients with AFM. Sporadic cases of AFM have been reported in non-peak years. No cases have been reported in Washington since 2019.

2022: No cases were reported.

Arboviral Disease

Recent Washington trends: Prior to 2013, fewer than 20 cases of travel-associated arboviral disease were reported annually. An outbreak of chikungunya began in late 2013 in the Caribbean and quickly spread throughout Central and South America; in 2015, a peak of 40 travel-associated chikungunya cases were reported in Washington. In early 2015, an outbreak of Zika virus disease was detected in Brazil and soon spread to South and Central America, the Caribbean, and the South

Pacific. In 2016, 68 cases of Zika virus disease, five cases of Zika virus infection, and three cases of unspecified flavivirus disease were reported following travel. Rare reports of other travel-associated arboviral diseases include Colorado tick fever in 2008 and 2021, Japanese encephalitis in 2004 and 2008, and St. Louis encephalitis and Toscana virus in 2009. Other than West Nile virus, the last reported human arboviral infection acquired in the state was western equine encephalitis in 1988. St. Louis encephalitis infections occurred in the past, primarily east of the Cascade Mountains.

2022: 18 cases of dengue fever and one case of chikungunya were reported, all with international travel-related exposure.

West Nile virus (WNV) Disease

Recent Washington trends: The first evidence of West Nile virus transmission in Washington occurred in 2002, when infected birds and horses were detected. In 2009, Washington had the highest number of cases to-date with 38 cases and two presumptive viremic donors. Of these cases, 36 were endemically acquired within Washington. On average, seven cases are reported each year, with a median of four cases per year.

2022: Four cases were reported, three with out-of-state exposure and one with unknown exposure location.

Yellow Fever

Recent Washington trends: No cases, with the exception of a vaccine-associated infection in 2002, have been reported in over 50 years of surveillance.

2022: No cases were reported.

Botulism

Cause: Bacterial toxin from *Clostridium botulinum*, mainly types A, B, and less commonly E.

Illness and treatment: Forms are foodborne botulism (ingested toxin), wound botulism (toxin production in an infected wound), infant botulism (toxin produced in the intestine of a child under a year of age), adult colonization botulism (toxin produced in the intestine of an adult), and inhalational botulism (inhaling toxin, which does not happen naturally). Infant botulism cases usually occur in babies under three months old (almost always under six months), both breast fed and formula fed. Paralysis starts with facial muscles and often progresses to involve the breathing muscles. Infants may have a weak cry, difficulty feeding leading to weight loss, and weakness. Treatment is supportive care plus either human-derived botulism hyperimmune globulin (BIG-IV) for infants or botulism antitoxin for older children and adults. In addition, antibiotics are given for wound botulism.

Sources: *C. botulinum* spores are common in soil. No consistent exposure is known for infants. Most foodborne cases are due to inadequately processed home-canned foods. Wound botulism is usually associated with injecting black-tar heroin injection into the skin (“skin popping”) or muscle, or sometimes with deep contaminated injuries.

Prevention: Follow safe home canning procedures. Boil risky home-canned foods (i.e., low acidic, non-pickled foods) before consumption. Clean any deep puncture wounds promptly.

Recent Washington trends: Each year, there are zero to four reports of foodborne botulism, zero to nine reports of infant botulism, and zero to seven reports of wound botulism. Almost all cases with Washington exposures are type A.

2022: Two cases of food botulism, nine cases of infant botulism, and no cases of wound botulism were reported. The food botulism cases were both due to home canned items and one was fatal.

Brucellosis

Recent Washington trends: Although brucellosis has been eradicated from cattle in the state since 1988, there are zero to four reports of human brucellosis infections each year, primarily due to consumption of raw dairy products in foreign countries. Each year, laboratory exposure events related to culturing *Brucella* without proper biosafety precautions lead to post-exposure prophylaxis recommendations and serologic monitoring follow-up for laboratorians. Additionally, each year up to 12 dogs with *B. canis* infections are reported to DOH, resulting in exposure assessment and follow-up to prevent human cases.

2022: Four cases were reported; all four cases reported consumption of raw (unpasteurized) dairy products in while in Mexico.

Campylobacteriosis

Cause: Bacteria in the genus *Campylobacter*, most commonly *C. jejuni*.

Illness and treatment: Symptoms include diarrhea, sometimes containing blood, abdominal pain, fatigue, fever, and vomiting. Most persons will recover without treatment; however, serious complications can occur.

Sources: Transmission is mainly through ingestion of contaminated food that was inadequately cooked or mishandled or through direct contact with animals. Reservoirs are animals such as cattle, puppies, kittens, swine, sheep, rodents, and birds. Person-to-person transmission is uncommon. Commonly recognized exposures include handling or eating undercooked/raw poultry or meat, consuming unpasteurized (raw) milk or dairy products, drinking contaminated and inadequately treated water and having contact with animals, especially young animals with diarrhea or poultry.

Additional risks: Those with weakened immune systems are at increased risk for infection.

Prevention: Avoid eating undercooked poultry and unpasteurized dairy products. Thoroughly clean cutting boards and counters used for raw meat or poultry to prevent contamination of other foods. Wash hands after handling animals, bird feces, or raw meat, particularly poultry.

Recent Washington trends: Campylobacteriosis is the most common reportable enteric disease condition in Washington with 1,500 to 2,000 reports each year. Outbreaks involving person-to-

person transmission are uncommon. An increase in culture-independent laboratory testing has contributed to increased reports since 2015.

2022: 1,883 cases were reported (23.9 cases/100,000 population).

Chlamydia Infection

Cause: Bacterium *Chlamydia trachomatis*.

Illness and treatment: Asymptomatic infection is common. There may be pain during urination, abnormal genital discharge, or, in males, pain and swelling of one or both testicles. Females can have abdominal pain due to pelvic inflammatory disease, which can cause infertility or ectopic pregnancy. The patient and sexual partners should take appropriate antibiotics. Treated patients should be retested in three months or when they next present for medical care.

Sources: Chlamydial infection is sexually transmitted. Pregnant people with chlamydia can also pass the infection to their baby during vaginal childbirth.

Additional risks: Disease rates are highest among sexually active adolescents and young adults, particularly women, due in part to better screening and detection within such groups. Perinatal infection can result in neonatal conjunctivitis or pneumonia. Untreated chlamydia may increase a person's chances of acquiring or transmitting HIV.

Prevention: Use safe sexual practices to reduce transmission. Sexually active women under 25 years, or those with other risk factors such as new or multiple sex partners, should be screened annually. Pregnant people should be screened at their first prenatal visit to detect infection in asymptomatic patients. Test and treat all recent sexual partners of a person diagnosed with chlamydial infection to stop ongoing transmission.

Recent Washington trends: Reported cases decreased over five percent in 2022. However, these case counts reflect only reported cases and may be artificially low due to the impacts of COVID-19 and changes in reporting.

2022: 28,708 cases were reported (365.0 cases/100,000 population).

Cholera

Cause: Bacterial toxin from *Vibrio cholerae* serogroup O1 or O139. Other *V. cholerae* do not produce the toxin associated with epidemic cholera outbreaks and cause a milder vibriosis-like illness which is notifiable as Vibriosis.

Illness and treatment: Illness ranges from mild symptoms to severe sudden profuse watery diarrhea leading to life-threatening dehydration. Treatment is fluid replacement and antibiotics.

Sources: The bacteria are carried in the human intestine and spread mainly through food or water contaminated with human feces. The only environmental reservoir in the United States is the Gulf of Mexico where raw seafood may be contaminated.

Additional risks: Unsafe drinking water, poor hygiene, poor sanitation, and crowded living conditions can cause epidemics, particularly in urban areas of developing countries and in refugee situations in Asia, Africa, and Latin America. Persons with reduced stomach acid (including due to medications acting to decrease acid) are at increased risk.

Prevention: If traveling to risk areas, consult with a travel clinic or the CDC Travelers' Health website for recommendations about vaccination and other measures.

Recent Washington trends: Cases have been reported in 1992 (travel to Cambodia), 2002 (travel to the Philippines), 2005 (travel to Cambodia) and 2013 (travel to Haiti).

2022: No cases were reported.

COVID-19

Cause: COVID-19 (coronavirus disease 2019) is a disease caused by the virus SARS-CoV-2.

Illness and treatment: People with COVID-19 have had a wide range of symptoms reported – ranging from mild symptoms to severe illness. Some people are asymptomatic. Symptoms may appear two to 14 days after exposure to the virus. Initial common symptoms may include cough, fever, chills, shortness of breath, headache, fatigue, muscle aches, sore throat, congestion or runny nose, nausea, diarrhea and loss of taste or smell. COVID-19 can also affect other parts of the body. Some people develop more severe illness, which can include trouble breathing, heart rhythm problems, heart failure, blood clots, or confusion or other problems with the brain. There are several approved antiviral medications used to treat mild to moderate COVID-19 in people who are more likely to get very sick.

Sources: COVID-19 spreads when an infected person breathes out very small particles that contain the virus. Other people can breathe in these particles and become infected. A person might also get infected if these particles get into their mucous membranes (e.g., eyes) through a splash or spray (such as being coughed on) or touch. These particles can also contaminate surfaces they touch, but it is uncommon for COVID-19 to spread in this way.

Additional risks: People who are older, are immunocompromised, have certain disabilities, or have underlying health conditions are at risk of severe illness from COVID-19.

Prevention: To prevent infection and severe disease and to slow transmission of COVID-19, people should stay up to date with COVID-19 vaccines, wear masks in accordance with public health recommendations, choose well-ventilated spaces and/or improve indoor air quality, stay home when sick, and follow public health guidance for testing and isolation.

Recent Washington trends: Reported cases in Washington increased by 56 percent from 2021 to 2022, going up from 634,930 cases in 2021 to 991,579 cases in 2022. Case counts were the highest in January 2022 when the peak of the Omicron wave occurred, followed by May, July, and June; case counts were over 20 times higher in January compared to October. Reported case rates were a

little higher in western Washington than eastern Washington in 2022. Given widespread availability of self-testing, we expect that many cases of COVID-19 are not reported to public health.

2022: 991,579 cases were reported (12,608.5 cases/100,000 population), with 5,068 deaths.

Cryptosporidiosis

Cause: Various species of the protozoan *Cryptosporidium*, which form resistant oocysts.

Illness and treatment: Symptoms may be prolonged (>1 week), and include watery diarrhea, abdominal pain, nausea, vomiting, weight loss and fever. An anti-protozoal drug is available for persistent symptoms.

Sources: Cryptosporidia are common in animals. In this country oocysts are found in most surface waters tested. Transmission is by ingesting fecally contaminated water, milk, or food, or by direct contact with infected animals or humans. Those with asymptomatic infections may infect others. Outbreaks have occurred in water parks, swimming pools and child-care facilities. Some international travelers may be an increased risk in countries with minimal water treatment and sanitation systems.

Additional risks: For persons with weakened immune systems, especially those with advanced HIV infection, the disease can be severe and persistent. Cryptosporidia resist standard chemical disinfectants and may occur in municipal water systems, home filtered water, or bottled water.

Prevention: Wash hands thoroughly after using the toilet or contact with animals, particularly calves or animals with diarrhea. Avoid swallowing water during water recreation. Do not drink untreated surface water. Boil untreated drinking water for one minute or use other appropriate water treatment.

Recent Washington trends: 75 to 245 cases are reported each year. An increase in culture-independent laboratory testing has contributed to increased reports since 2015.

2022: 250 cases were reported (3.2 cases/100,000 population). An increase in international travel in 2022 may have contributed to higher case counts.

Cyclosporiasis

Cause: Protozoan *Cyclospora cayetanensis.*

Illness and treatment: Symptoms include persistent watery diarrhea, nausea, loss of appetite, abdominal pain, fatigue, and weight loss. Antibiotics are available to treat persistent symptoms.

Sources: Cyclospora are common in many developing countries. Transmission occurs through ingestion of contaminated water or contaminated food, often fresh fruit or vegetables. Outbreaks in the United States have been attributed to imported produce such as raspberries, basil, and lettuce. Tests for Cyclospora must be specifically requested at many diagnostic labs in addition to standard

ova and parasite (O&P) testing. Some international travelers may be at an increased risk in countries with minimal water treatment and sanitation systems.

Additional risks: Diarrhea may persist with immunosuppression.

Prevention: Wash produce thoroughly before it is eaten. If traveling to risk areas, consult with a travel clinic or the CDC Travelers' Health website.

Recent Washington trends: Most years there are fewer than 20 cases reported, mainly among people exposed during international travel.

2022: 43 cases were reported, the majority of these cases reported travel to Mexico. An increase in international travel in 2022 may have contributed to higher case counts.

Diphtheria

Cause: Toxigenic strains of the bacterium *Corynebacterium diphtheriae.*

Illness and treatment: Classic diphtheria is a respiratory illness characterized by sore throat, low-grade fever, and an adherent pseudomembrane of the tonsil(s), pharynx, and/or nose, sometimes with neck swelling. Diphtheria can involve almost any mucous membrane and may also be cutaneous. About 10 percent of patients with respiratory diphtheria die from the disease, even with appropriate treatment. Diphtheria antitoxin, antibiotics, and supportive care are the mainstays of treatment. *C. diphtheriae* does not always produce diphtheria toxin. Non-toxin-producing infections with *C. diphtheriae* are not reportable and are not counted as cases of diphtheria, regardless of anatomical site of specimen collection.

Sources: Human carriers are the only reservoir, and asymptomatic carriers may contribute to disease spread. Transmission is by respiratory droplets. Contact with infected skin lesions may also transmit disease. Contaminated raw milk or articles of clothing/bedding soiled with discharges from an infected person may be vehicles for transmission.

Additional risks: Susceptible travelers to areas where routine immunization is lacking are at higher risk for diphtheria infection, especially if an epidemic is in progress.

Prevention: Universal immunization including booster doses prevents infection. Respiratory and hand hygiene prevent transmission.

Recent Washington trends: The last recorded case was in 1981.

2022: No cases of diphtheria were reported. All *C. diphtheriae* infections reported to the Department of Health were found to be non-toxigenic.

Foodborne Outbreaks

Cause: Many infectious agents, including viruses, bacteria, and parasites. Commonly implicated agents include norovirus, *Salmonella*, Shiga toxin-producing *E. coli* (STEC) and *Listeria*

monocytogenes. A foodborne disease outbreak is defined as the occurrence of two or more cases of the same illness resulting from the ingestion of a common food where food is implicated as the source of illness.

Illness and treatment: Illness and treatment depend on the etiologic agent. Most agents cause gasteroenteritis (with or without fever). Listeriosis typically causes invasive illness such as blood infections and meningitis.

Sources: Depends on the agent (see specific condition summaries for listeriosis, salmonellosis, Shiga toxin-producing *E. coli*, vibriosis, hepatitis A, etc.).

Additional risks: Anyone can get foodborne illness but risk factors for severe illness include being very young, very old, pregnant, or immunocompromised.

Prevention: A comprehensive list of tips to prevent foodborne illness can be found at: doh.wa.gov/you-and-your-family/food-safety/food-safety-tips

Recent Washington Trends: Since 2012, 21 to 66 foodborne disease outbreaks have been reported per year.

2022: 45 foodborne disease outbreaks were reported in 2022. 13 of these were multistate outbreaks in which Washington residents became ill.

Table 1. Foodborne Outbreaks 1990-2022

Year	Outbreak-Associated Cases	Outbreaks
1990	665	34
1991	1,154	47
1992	740	53
1993	1,301	130
1994	1,462	151
1995	909	138
1996	695	124
1997	810	108
1998	706	60
1999	1,164	93
2000	938	66
2001	574	69
2002	704	56
2003	620	55
2004	679	58
2005	390	42
2006	677	51
2007	722	43
2008	564	46
2009	307	27
2010	344	37
2011	371	30
2012	552	27
2013	437	37
2014	432	45
2015	505	36
2016	543	49
2017	1,016	66
2018	549	62
2019	564	41
2020	357	21
2021	339	29
2022	343	45

Giardiasis

Cause: Protozoan *Giardia lamblia*, also known as *G. intestinalis* or *G. duodenalis*.

Illness and treatment: Infection may be asymptomatic or may cause diarrhea, abdominal pain, nausea, fatigue, and weight loss. Illness may be self-limited or be prolonged with persistent pale and greasy stools due to fat malabsorption. Anti-protozoal drugs are available.

Sources: Humans and both wild and domestic animals are reservoirs. Exposures include untreated surface water, shallow well water, recreational water, or, less commonly, food contaminated by feces or from a pet. Person-to-person transmission can occur, such as in child-care facilities, or by oral-anal sexual contact.

Additional risks: Children under five years of age are infected more frequently than adults. Concentrations of chlorine used in routine water treatment may not kill *Giardia* cysts, especially if the water is cold. Giardiasis is one of the most common waterborne diseases in the country.

Prevention: Wash hands thoroughly after using the toilet or contact with animals, particularly animals with diarrhea. Avoid swallowing water during water recreation. Do not drink untreated surface water and keep pets from drinking such water. Boil untreated drinking water for one minute or use other appropriate water treatment.

Recent Washington trends: Reported cases have been declining over the last five years. Incidence is highest in the summer and fall months. Most frequently reported exposures include recreational water and international travel. Outbreaks are uncommon. An increase in culture-independent laboratory testing has contributed to increased reporting since 2015.

2022: 276 cases were reported (3.5 cases/100,000 population).

Gonorrhea

Cause: Bacterium *Neisseria gonorrhoeae.*

Illness and treatment: Most women and many men are asymptomatic with infection. When symptoms occur, urethral discharge and painful urination are typical of genital infections. Complications include pelvic inflammatory disease in women, producing a risk of infertility and ectopic pregnancy, or epididymitis in men. It can also cause conjunctivitis, pharyngitis, proctitis, or, rarely, sepsis. Due to increasing drug resistance, treatment with two antibiotics is recommended. Treated patients should be retested in three months or when they next present for medical care.

Sources: Gonorrhea is sexually transmitted or may be passed from an infected birthing parent to child during vaginal birth.

Additional risks: Disease rates are highest among men and sexually active younger adults, with roughly half of all male cases occurring among men who have sex with men (MSM). Perinatal infection can result in neonatal conjunctivitis or sepsis. Untreated gonorrhea can increase a person's risk of acquiring or transmitting HIV.

Prevention: Use safe sexual practices to reduce transmission. Screening to detect asymptomatic patients is only recommended for women at increased risk for infection, including those younger than 25 years who are sexually active and those with new sexual partners, and for men who have sex with men. If gonorrhea is found, also test for other sexually transmitted infections including HIV. Test and treat all recent sexual partners of a person diagnosed with gonorrhea to stop ongoing transmission.

Recent Washington trends: Reported cases increased by 3 percent in 2022, with over 11,000 cases reported each year since 2018.

2022: 11,392 cases were reported (144.9 cases/100,000 population).

Haemophilus influenzae (Invasive Disease, Under Age 5 Years)

Cause: Bacterium *Haemophilus influenzae.* Invasive disease can be caused by any of the six capsular types (including type b, Hib) or the unencapsulated type (non-typeable) and can affect any age group. Invasive illness in a child under five years of age is reportable.

Illness and treatment: The most common invasive disease results in meningitis, an infection of the membranes that cover the brain and spinal cord. Symptoms of meningitis include fever, headache, stiff neck, epiglottitis, vomiting, light sensitivity, and confusion. Epiglottitis, usually caused by an infection, is a swelling in the throat which can cause life-threatening airway obstruction. About 10 percent of cases surviving *H. influenzae* meningitis due to any capsular type have permanent neurological damage. Among cases surviving meningitis due to Hib, 15 to 30 percent have hearing impairment or permanent neurologic damage. Treatment is with antibiotics.

Sources: Humans, including asymptomatic carriers, are the reservoir. Transmission is through respiratory droplets or direct contact with respiratory secretions.

Additional risks: Unimmunized or under-immunized infants and children are at risk for Hib, especially when they are taken into crowded settings.

Prevention: Immunize all infants to prevent *H. influenzae* type b infection. Respiratory and hand hygiene reduces transmission of all serotypes.

Recent Washington trends: During the past decade, five to 17 cases (all serotypes) were reported annually in children less than five years of age. Among the 100 cases reporting in this age group during 2013 to 2022, isolates were available to serotype for 99 cases. Among those, only 14 were due to serotype b (Hib). Non-typable isolates continue to be a large proportion of invasive disease cases in both Washington and nationwide. In the past ten years of invasive *H. influenzae* cases with available isolates, just 50 percent serotyped as one of the six known capsular serotypes.

2022: 17 cases were reported (0.2 cases/100,000 population).

Hantavirus Pulmonary Syndrome (HPS)

Recent Washington trends: Since the recognition of hantavirus in 1993, 57 cases were reported in Washington through 2022 with 18 (32 percent) associated deaths (including a retrospectively identified case from 1985). Zero to five cases are reported each year (median of two cases/year), with most exposures occurring in eastern Washington.

2022: No cases were reported.

Hepatitis A

Cause: Hepatitis A virus.

Illness and treatment: Onset is usually abrupt with fever, nausea, and abdominal pain followed by jaundice. Cases may be asymptomatic, particularly in children but are still communicable. Almost all cases recover but rare infections are fatal or require liver transplantation. Treatment is supportive.

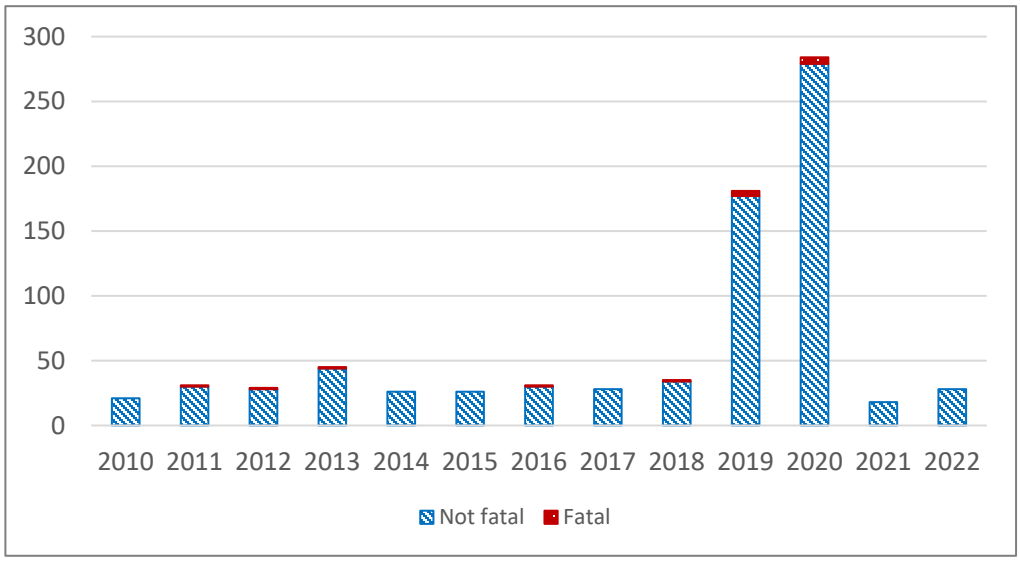
Sources: Acutely infected humans shed virus in the feces and transmit directly (fecal-oral spread) or through fecally contaminated food (produce, shellfish, uncooked items), water, and environment, often encountered during housing instability or international travel. Recent foodborne outbreaks in this country have been associated with imported produce. Transmission can occur within groups having poor hygiene or fecal-oral sexual practices. Bloodborne transmission is very rare.

Prevention: To prevent infection, immunize all children and any adults with risks for exposure, including travel to endemic areas.

Recent Washington trends: Since 1989 when there were 3,273 cases, with increased vaccination, hepatitis A incidence had decreased to fewer than 100 cases a year in Washington until recently. Hepatitis A outbreaks occurred in numerous states between 2019 and 2020, with the primary risk factors being unstable housing or taking illicit drugs, both of which involve poor hygiene. Nine fatalities and a total of 465 illnesses were reported in Washington during the outbreak.

2022: 28 cases were reported (0.4 cases/100,000 population) with zero deaths. Five cases had traveled to another state and nine cases had international travel or contact with an international traveler. Six Washington cases were associated with a multistate outbreak that started in 2022 and was linked to frozen strawberries.

Table 2. Hepatitis A in Washington State, 2010-2022



Hepatitis B

Cause: Hepatitis B virus.

Illness and treatment: Acute infection may be asymptomatic or have abrupt onset with fever, abdominal pain, and jaundice. Chronic infection is typically asymptomatic until complications such as liver damage or cancer develop after decades. Surface antigen positivity (indicating infectiousness) during pregnancy from acute or chronic infection gives a risk of transmitting the virus during delivery. Perinatal infection is typically asymptomatic but carries a high risk for later complications. A specialist can determine treatment options for hepatitis B virus infections.

Sources: Transmission is by contact with the blood, semen, or vaginal secretions of an infected person, and can occur with minor exposures or during childbirth.

Additional risks: After acute infection, about 30 percent of children under five years will become chronically infected compared to about five percent of adults. Infants born to surface antigen positive persons are at extremely high risk (90 percent) of becoming chronically infected, and for developing later complications including liver cancer.

Prevention: To prevent infection, routine hepatitis B immunization of all infants and children is recommended starting at birth. Adults at high risk are also recommended to get the hepatitis B vaccine, including household and sexual contacts of infected persons, health-care workers, men who have sex with men, persons with HIV infection, and adults with diabetes aged 19 to 59 years. The vaccine can also be administered during pregnancy to those at risk. Routine testing is recommended for those born in Asia, Africa, and other regions with ≥2 percent prevalence of chronic infections. For infants born to hepatitis B positive persons, the hepatitis B vaccine and one dose of hepatitis B immune globulin (HBIG) administered within 12 hours after birth are 85 to 95 percent effective in preventing both acute and chronic infections.

Recent Washington trends: Increased vaccination has greatly decreased rates of acute hepatitis B infection over the last several decades, from approximately one thousand cases per year in the late 1980s to an average of 39 cases per year today. Over the last five years, there was an average of 1,704 cases of chronic hepatitis B reported each year. Between 2012 and 2021, 2,921 babies were reported born to HBsAg positive persons in Washington; of these, 97 percent received treatment within one day of birth and only 11 infants who received all recommended treatment and follow-up testing developed chronic hepatitis B infection.

2022: 24 cases of acute hepatitis B were reported (0.3 cases/100,000 population). Four reported using injection drugs and nine had sexual exposures. A total of 1,582 chronic hepatitis B cases were reported (20.1 cases/100,000 population). No perinatal infections were reported in 2022.

Hepatitis C

Cause: Hepatitis C virus (HCV), which has six genotypes.

Illness and treatment: Most acute infections are asymptomatic, but about 20 to 30 percent of cases have abrupt onset with fever, abdominal pain, and jaundice. Chronic infections are typically asymptomatic or mildly symptomatic (with non-specific symptoms like fatigue) until complications such as liver damage or liver cancer develop after several decades.

Effective all-oral hepatitis medications with minimal side effects are currently available (i.e., direct-acting antivirals). These medications, typically prescribed for 8 to 12 weeks, cure hepatitis C in almost everyone living with the virus. Hepatitis C treatment is not currently approved for use during pregnancy, but it is safe for pregnant parents to begin treatment after giving birth and finishing breastfeeding. Children can begin treatment starting at three years of age.

Sources: Transmission is usually blood-to-blood, particularly while sharing equipment used in drug injection, or less commonly through sexual contact with a person living with hepatitis C (particularly among people living with HIV) or through sharing equipment used in drug snorting/smoking. Hepatitis C is transmitted from pregnant parent to baby during pregnancy or childbirth in about 6 percent of pregnancies where the pregnant parent has hepatitis C, and results in perinatal infection.

Developing chronic infection: Chronic infection develops in 75 to 85 percent of people with acute infection and is more likely among males, those infected after 25 years of age, and those who are immunosuppressed, including people living with HIV.

Race/Ethnicity: Though race and ethnicity data are unknown for most reported Washington hepatitis C cases, in the United States during 2020, the rates of newly reported infections of both chronic and acute hepatitis C were highest among non-Hispanic American Indian/Alaska Native people, followed by non-Hispanic White and non-Hispanic Black people.

Prevention: There is no vaccine to prevent acquisition of hepatitis C. It is recommended that people who inject, snort, or smoke drugs avoid sharing drug use equipment. Sexually active people are also advised to use barrier methods, like condoms, when having penetrative sex. Screen blood and tissue products to prevent transmission.

Testing: One-time hepatitis C screening is recommended for all adults 18 years of age and older, and for all pregnant persons during each pregnancy. Routine testing is recommended for those with ongoing risk factors, including people who inject drugs. Re-infection is possible, so people who have cleared hepatitis C should receive routine testing if they have ongoing risk factors.

Recent Washington trends: Among people living in Washington, an average of 113 new acute hepatitis C cases were reported annually from 2018 through 2022, and the number of reported acute cases increased each year except in 2019 and 2022.

An average of 5,227 new chronic hepatitis C cases were reported annually to DOH from 2018 through 2022, with the number of reported chronic cases decreasing each year during this timeframe. This decrease from 2018-2022 may be in part due to reduced screening and reporting since the COVID-19 pandemic in 2020, along with a transition to a new disease surveillance system in 2018, which allowed for improved identification of new infections and reduced duplicate person information in the surveillance system. Hepatitis C is still a public health concern in Washington.

Perinatal hepatitis C has been a nationally notifiable condition since 2018. An average of four new perinatal hepatitis C infections were reported to DOH annually from 2018 through 2022.

2022: There were 106 acute hepatitis C cases (1.0 cases/100,000 population), 3,295 chronic hepatitis C cases (41.9 cases/100,000 population), and four perinatal hepatitis C cases reported to DOH.

Hepatitis D

Cause: Hepatitis D virus. Hepatitis D virus infection always occurs with hepatitis B infection, either with a chronic hepatitis B infection (superinfection) or as two simultaneous new infections (coinfection).

Illness and treatment: Hepatitis D infection may have abrupt onset of fever, nausea, and abdominal pain followed by jaundice; symptoms are often indistinguishable from other types of viral hepatitis. Patients can recover from hepatitis D on their own or become chronically infected. There is currently no treatment available for HDV infection specifically, though a specialist can determine treatment options for the co-occurring hepatitis B infection.

Sources: Humans are the reservoir for hepatitis D, which is usually transmitted by blood or body fluids, particularly through shared drug paraphernalia.

Additional risks: Persons with hepatitis B are at risk for hepatitis D infection, and hepatitis D superinfection accelerates the progression of chronic hepatitis B leading to cirrhosis and liver failure.

Prevention: There is currently no vaccine against hepatitis D virus. Prevent hepatitis D infection by preventing infection with hepatitis B virus: immunize all infants and children as well as any adult with risks for exposure to hepatitis B virus. Use safe sexual practices, avoid sharing drug paraphernalia, and screen blood and tissue products to prevent hepatitis D transmission.

Recent Washington trends: Among cases with chronic hepatitis B infection, each year fewer than ten are found to be co-infected with hepatitis D virus.

2022: Five cases of hepatitis D co-infection were reported in hepatitis B-infected individuals.

Hepatitis E

Cause: Hepatitis E virus.

Illness and treatment: Hepatitis E typically has abrupt onset of fever, nausea, and abdominal pain followed by jaundice. Pregnant persons have higher risk for hepatitis E complications. Japan has reported more virulent hepatitis E strains.

Sources: Although risk factors are not well understood, humans and animals (swine) are the likely reservoirs for hepatitis E, with transmission through fecally-contaminated food and water. Cases of hepatitis E are typically travel associated.

Prevention: Use precautions while traveling to ensure safe food and water to avoid hepatitis E infection.

Cause: Hepatitis E virus.

Illness and treatment: Hepatitis E typically has abrupt onset of fever, nausea, and abdominal pain followed by jaundice. Pregnant persons have higher risk for hepatitis E complications. Japan has reported more virulent hepatitis E strains.

Sources: Although risk factors are not well understood, humans and animals (swine) are the likely reservoirs for hepatitis E, with transmission through fecally contaminated food and water. Cases of hepatitis E are typically travel associated.

Prevention: Use precautions while traveling to ensure safe food and water to avoid hepatitis E infection.

Recent Washington trends: Rare cases of hepatitis E are typically associated with international travel or with domestic wild game, pork, and shellfish.

2022: Two cases of hepatitis E were reported, one with travel to Mexico and the other without an identified risk factor.

Herpes Simplex, Genital and Neonatal

Cause: Herpes simplex virus serotypes HSV-1 and HSV-2.

Illness and treatment: Genital infection is lifelong, ranging from no symptoms to recurring episodes of mild to painful genital ulcers. Flu-like symptoms may also occur. Antiviral medications partially control the frequency and severity of the episodes but are not a cure. Neonatal infection may be severe, involving the liver or brain, or mild, involving the skin, eyes, and mouth.

Sources: Herpes infection is sexually transmitted or transmitted vertically during birth.

Additional risks: Disease rates are higher in younger women.

Prevention: Use safe sexual practices to reduce transmission. During the third trimester, pregnant people without herpes should abstain from sexual contact with partners known or suspected of having herpes.

Recent Washington trends: Reported cases of initial genital herpes infection have declined over the last five years, with a decrease of 39 percent from 2021 to 2022. However, these case counts reflect only reported cases and may be artificially low due to the impacts of COVID-19 and other factors.

2022: 977 cases of initial genital herpes simplex virus infection (12.4 cases/100,000 population) and six cases of neonatal infection were reported.

HIV/AIDS

Cause: HIV disease is caused by the human immunodeficiency virus (HIV). After HIV enters the body, it infects and kills white blood cells (CD4+ T-cell lymphocytes). This weakens the body's immune system, and, if untreated, can eventually cause a person to develop Acquired Immunodeficiency Syndrome (AIDS).

Illness and treatment: After the acute primary infection, most people living in the early stages of HIV do not have any symptoms. Progression to AIDS is defined by a person's CD4+ T-cell count being below 200 cells/mL and/or a broad range of opportunistic illnesses specific to HIV disease. Anti-retroviral therapy is successful in managing HIV infection and preventing progression to AIDS.

Sources and spread: HIV enters the body as a result of direct contact with blood, semen, vaginal fluid, or breast milk from a person with HIV infection. Most HIV cases are the result of unprotected sex with a HIV-positive partner or sharing injection drug equipment with an HIV-positive individual.

Additional risks: Groups at increased risk for HIV include men who have sex with men, people who inject drugs, people who have concurrent sexual relationships, and people recently diagnosed with other sexually transmitted infections.

Prevention: Wear condoms or use barriers during sex. Use clean needles and other equipment used to inject drugs. Limit your number of sexual partners and consider newer HIV prevention methods such as using Truvada as pre-exposure prophylaxis.

Recent Washington trends: Statewide, the number of people living with HIV continues to increase, in part due to the success of treatments in prolonging the life expectancy of those living with the virus. The number of newly diagnosed cases in Washington State remains stable at roughly 400 cases per year. About one in four cases is diagnosed late in the course of his or her HIV illness, or develops AIDS within 12 months of HIV diagnosis. HIV rates are highest among gay and bisexual men as well as racial or ethnic minorities.

2022: 421 cases were reported (5.4/100,000 population).

Legionellosis

Cause: Bacteria in the genus *Legionella*, commonly *L. pneumophila* serogroup 1 but also other serogroups or other species such as *L. micdadei*, *L. bozemanii*, and *L. longbeachae.*

Illness and treatment: People who get sick after being exposed to *Legionella* can develop two different illnesses, collectively known as legionellosis: Legionnaires' disease and Pontiac fever. Legionnaires' disease is very similar to other types of pneumonia with symptoms that include cough, shortness of breath, fever, muscle aches, and headaches. Legionnaires' disease can also be associated with other symptoms such as diarrhea, nausea, and confusion. Pontiac fever is a milder infection than Legionnaires' disease. Symptoms are primarily fever and muscle aches.

Sources: *Legionella* bacteria are found naturally in freshwater environments, like lakes and streams. The bacteria can become a health concern when they grow and spread in human-made building water systems like cooling towers, hot water tanks and heaters, and large complex plumbing systems. After *Legionella* grows and multiplies in a building water system, water containing *Legionella* can spread in droplets small enough for people to breathe in. People can get Legionnaires' disease or Pontiac fever when they breathe in small droplets of water in the air that contain the bacteria. In general, people do not spread Legionnaires' disease and Pontiac fever to other people.

Additional risks: Most healthy people exposed to *Legionella* do not get sick. People at increased risk of getting sick are people 50 years or older, current or former smokers, chronic lung disease or immunosuppression.

Prevention: The key to preventing Legionnaires' disease is to reduce the risk of *Legionella* growth and spread**.** Building owners and managers can use a water management program to reduce the risk of *Legionella* growing and spreading. In addition, it is important to carefully follow manufacturer instructions for respiratory therapy devices including CPAP machines.

Recent Washington trends: The number of cases has been on a generally upward trend with more than 60 cases reported each year since 2019.

2022: 63 cases were reported (0.8 cases/100,000 population) with five deaths. Nationwide as well as in Washington legionellosis incidence is on a generally upward trend, though reasons for the increase are unclear; increased awareness and testing may be a factor.

Leptospirosis

Recent Washington trends: Generally, zero to five cases are reported each year. Most infections relate to recreational water exposure in Washington or during travel.

2022: Two cases were reported, both with recreational exposure to soil and water in Washington state.

Listeriosis

Cause: Bacterium *Listeria monocytogenes*.

Illness and treatment: Symptoms depend on the host. Immunocompromised, neonatal, and elderly persons usually present with sepsis and meningitis. During pregnancy, listeriosis may cause a flu-like illness (i.e., fever, headache, and muscle aches) and may cause miscarriages, preterm births, or stillbirths. Neonates born to an infected parent may develop invasive infection. Immunocompetent persons exposed to listeriosis may experience acute febrile gastroenteritis. Severe infections are treated with antibiotics.

Sources: The organism occurs in soil, water, and the intestines of animals and humans. Transmission is mainly through ready-to-eat refrigerated foods, such as unpasteurized milk, cheese, processed meats, deli salads, fruits, and vegetables. Pasteurized ice cream and ice cream products have been implicated in multiple outbreaks since 2015. Food can be contaminated during or after processing.

Additional risks: Unlike most foodborne pathogens, *Listeria* can multiply in refrigerated foods. Illness may be severe for newborns, the elderly, and persons with weakened immune systems. Pregnant persons with listeriosis may have few symptoms but have fetal loss or premature birth.

Prevention: If pregnant or immunocompromised, avoid soft cheeses made with unpasteurized milk, processed ready-to-eat foods, and smoked fish. Thoroughly cook all foods from animal sources, wash raw produce thoroughly, and heat leftovers, hot dogs and deli meats until steaming before eating.

Recent Washington trends: Each year there are 11 to 29 reports with zero to five deaths.

2022: 23 cases were reported (0.3 cases/100,000 population) with four deaths.

Lyme Disease

Recent Washington trends: Each year, seven to 45 Lyme disease cases are reported in Washington, with an average of 17 case reports. Most cases in Washington residents result from a tick bite that occurred out-of-state, with one to seven cases reporting likely exposure in Washington each year. The few endemic cases have tick exposures predominantly on the west side of the Cascade Mountains, reflecting the known distribution of the *Ixodes* vector ticks. Low levels of *Borrelia burgdorferi* have been found in ticks collected from Washington State.

2022: 23 cases were reported; one was exposed in Washington, 14 were exposed in other states, five were exposed in other countries, and three had an unknown exposure location.

Malaria

Recent Washington trends: Each year there are 15 to 49 reports among tourists, military personnel, business travelers, mission workers, immigrants, and refugees.

2022: 44 cases were reported (0.6 cases/100,000 population). All involved travel exposures outside of the United States, mainly in Africa.

Measles

Cause: Measles virus, family Paramyxovirus, genus *Morbillivirus*.

Illness and treatment: Typical measles includes a two to four-day prodrome that includes a high fever (as high as 103 °F -105 °F) with a cough, conjunctivitis, runny nose, or Koplik spots (small, white spots that occur on the inside of the cheeks). The prodrome is followed by a maculopapular rash which typically starts at the hairline and extends downward to cover the entire body. The rash usually lasts five to six days. Complications are more common among children under five and adults over 20 years of age and can include diarrhea, ear infection, pneumonia, and acute encephalitis. Rarely, measles can occur in a person known to have received a vaccination for measles but the illness in these cases may not be typical. The case fatality rate for measles in the United States is 0.1–0.3 percent, but in parts of the world with poor nutrition and limited access to healthcare, it can be much higher. Treatment is supportive.

Sources: Humans are the reservoir. Measles is highly contagious with transmission occurring primarily through respiratory droplets. However, airborne transmission has been documented to have occurred in closed areas for up to two hours after a person with measles was present.

Additional risks: Measles in the United States is mainly related to international travel by susceptible persons who travel to and from countries where measles is endemic or where an outbreak is occurring. Transmission to additional persons that are not vaccinated can occur, leading to outbreaks. Measles can become especially severe in infants or adults who are malnourished and/or have weakened immune systems.

Prevention: Universal immunization prevents initial infection in almost all exposed persons. Aggressive follow-up with exposed persons, along with respiratory hygiene and isolation of contagious individuals, can prevent further transmission.

Recent Washington trends: Since 1996, when 36 cases were reported related to a large outbreak at Western Washington University, there have typically been fewer than five cases reported annually. However, outbreaks ranging from seven to 33 cases occurred in Washington in 2001, 2004, 2008, and 2014. In 2015, one outbreak occurred with six cases, one of which was fatal. Most recently in 2019, there were two outbreaks of measles in addition to four cases that were not part of an outbreak, totaling 90 cases. Since then, Washington has experienced minimal but sporadic cases due to international travel exposures.

2022: One case was reported.

Meningococcal Disease (Invasive)

Cause: *Neisseria meningitidis*, mainly serogroups B, C, Y, and W in the United States, and additionally serogroup A, elsewhere. Invasive disease is reportable.

Illness and treatment: Invasive meningococcal disease most commonly manifests as either meningitis or meningococcemia (bloodstream infection). Meningitis symptoms include fever, headache, stiff neck, vomiting, light sensitivity, and confusion. Meningococcemia can cause abrupt onset of fever, chills, cold hands and feet, severe muscle, joint, and chest ache or pains; or vomiting and diarrhea. Meningococcal disease can cause a petechial or purpuric rash and severe cases can lead to death. A person can present with both meningitis and meningococcemia. Pneumonia and joint infections can also occur. Even with appropriate antibiotic treatment and supportive care, overall case fatality rate for invasive disease is 10 to 15 percent. Many survivors have permanent sequelae such as hearing loss, loss of a limb, or neurologic damage.

Sources: Humans, including asymptomatic carriers, are the reservoir. Transmission is through respiratory droplets or direct contact with respiratory secretions. Secondary cases are rarely documented, though outbreaks can occur.

Additional risks: Rates are highest for infants under 12 months. An increasing proportion of cases are in adolescents and young adults. Crowded living conditions such as college residence halls and military barracks, travel to countries where disease levels are high, recent history of an upper respiratory illness, or tobacco smoke exposure may increase risk, as do certain immune deficiencies including asplenia.

Prevention: Universal immunization is recommended for all adolescents aged 11 to 18 years and for some persons aged two to 55 years at increased risk for this disease (e.g., persons with HIV, complement disorder, or asplenia, and some microbiologists and travelers at prolonged increased risk for disease exposure). Prophylactic antibiotics are usually advised for persons having recent close contact with a confirmed case. Good respiratory hygiene can reduce transmission risk.

Recent Washington trends: During the past decade, an average of 12 cases (ranging from two to 20) have been reported annually, with as many as three deaths in a year.

2022: Two cases were reported.

Mpox

Cause: Mpox is a rare disease caused by the Mpox (*Orthopoxvirus*) virus.

Illness and treatment: Mpox symptoms often start from 3 to 14 days of the infection. Often, characteristic rashes are present but start in mucosal areas such as genital, perianal, and oral. Skin lesions are scattered or localized to specific body sites but not disseminated. The mpox rash goes through many stages. Flat spots turn into blisters. Over a period of 2 to 4 weeks the blisters fill with pus, scab over and fall off.

Mpox infection is often mild and self-limiting without specific antiviral therapy but can cause significant discomfort in sensitive areas such as the genitals and anus. Vital components of the treatment include relieving mpox symptoms by wound and skin care from mpox rashes, and pain management. Patients with underlying immunocompromise are at risk for severe, systemic, protracted illness and death and will likely need combination therapy. The FDA-approved antiviral Tecovirimat drug for human smallpox is used for mpox treatment.

Sources: The mpox virus spreads from person to person through direct contact with rashes, scabs, or body fluids of a person with mpox. Extended close contact with respiratory droplets, clothes, sheets, blankets, or other materials that have been in contact with rashes or body fluids of an infected person may also lead to transmission of the virus.

Additional risks: Pregnant persons with mpox infection may pass the virus to the child.

Prevention: The following steps are to be taken to prevent infection with or spread of the mpox virus:

- Avoid close contact with people who have a rash that looks like mpox.
- Avoid handling clothes, sheets, blankets, or other materials that have been in contact with an infected animal or person.
- Isolate people who have mpox from susceptible people.
- Wash your hands well with soap and water after any contact with an infected person or animal. If soap and water aren't available, use an alcohol-based hand sanitizer.
- Avoid animals that may carry the virus.
- People who have been exposed or could be at risk of exposure to the virus in the future, such as through their work (e.g. lab workers) or as a community member may get vaccinated, too.

Recent Washington trends: Mpox was extremely rare outside of endemic areas until 2022 when an international outbreak started (see Special Topics). In Washington, 654 cases from January 1, 2022, to December 31, 2022, were reported. A maximum number of new cases were observed in August 2022. Cases have been concentrated primarily among gay, bisexual, and other men who have sex with men, with disproportionate incidence among individuals identifying as Hispanic or Latina/o/x/e.

2022: 654 cases were reported (8.3 cases/100,000 population).

Mumps

Cause: Mumps virus, a paramyxovirus.

Illness and treatment: Mumps causes inflammation of glandular tissue, most commonly the salivary glands (parotitis occurs in 30 to 40 percent of infected persons). Other glandular tissue involvement that can occur includes inflammation of testes (orchitis) or ovaries (oophoritis). Up to 20 percent of

infections have no symptoms and an additional 40 to 50 percent have mild, nonspecific, or primarily respiratory symptoms. Complications include encephalitis or aseptic meningitis (occasionally resulting in deafness), pancreatitis, and myocarditis. Treatment is supportive.

Sources: Humans, including persons with asymptomatic infection, are the reservoir. Transmission is mainly through direct contact with infected respiratory droplets or saliva.

Additional risks: Adults are at greatest risk of complications from mumps. Travel to areas where disease levels are high can increase the risk of being infected. Though vaccination has greatly reduced the number of mumps cases in this country, outbreaks still occur, most commonly among groups of people who have prolonged close contact. A large outbreak of mumps occurred in 2006 in nine midwestern states; the majority of cases were college-aged persons and adults in their 20s. Outbreaks in college settings have continued to occur since that time, including in Washington.

Prevention: Recommendations for universal childhood immunization have greatly reduced the number of infections. Two doses of mumps-containing vaccine are now recommended for school-aged children, college students, and health-care workers born after 1956. Respiratory and hand hygiene can also reduce transmission. A third vaccine dose has been used in some settings to control ongoing outbreaks.

Recent Washington trends: The number of cases reported each year varies, ranging from zero to 779 (during the 2016-2017 multistate outbreak) cases a year over the past two decades. There is also variation among health jurisdictions in the rate of reported disease, reflecting local outbreaks. In years where no outbreaks occur, the rate of reported mumps infections remains low (fewer than 0.5 per 100,00 persons), and cases are mostly associated with out of state and international travel.

2022: 11 cases were reported (0.1 cases/100,000 population).

Pertussis

Cause: Bacterium *Bordetella pertussis*.

Illness and treatment: Classic pertussis symptoms include initial cold-like manifestations followed by an extended cough illness that can include severe spasms of coughing (paroxysms) that are often followed by an inspiratory gasp or whoop, or by vomiting. The coughing can last for weeks. Infants with pertussis may have feeding difficulties and often become apneic (unable to breathe). Treatment is with antibiotics and supportive care.

Sources: Humans. Older adolescents and adults with mild symptoms not recognized as pertussis often serve as a reservoir in the community. Pertussis is transmitted through respiratory droplets or direct contact with respiratory secretions.

Additional risks: Complications, which occur most often in very young infants, can include pneumonia, seizures, encephalopathy, and death.

Prevention: Recommended universal childhood immunization with a booster dose for adolescents and adults can reduce the risk of infection and generally prevents severe illness in most age groups.

Very young infants (under two months of age) too young to be immunized can be protected by vaccinating pregnant persons during the last trimester of each pregnancy. Assuring that others who will have close contact with the infant have been vaccinated is also important. Respiratory and hand hygiene can reduce transmission. Any person with a cough illness should avoid contact with pregnant persons and young infants.

Recent Washington trends: The number of cases reported each year varies considerably, ranging from 15 to 4,916 (during the 2012 outbreak) cases a year over the past two decades. There is also variation among health jurisdictions in the rate of reported disease, reflecting local outbreaks.

2022: 76 cases were reported (1.0 cases/100,000 population).

Plague

Recent Washington trends: Testing of 8,787 wildlife (mostly coyote) serum specimens collected July 1975 to June 2014 in Washington found 226 (2.6 percent) seropositive, a measure of previous exposure, not necessarily current disease. Human infections are rare. The last reported case was an animal trapper in Yakima exposed while skinning a bobcat in 1984. In neighboring Oregon, seven people were diagnosed with plague between 2010 and 2015, along with a positive cat in 2012. No cases have been reported in Oregon since 2015.

2022: No cases were reported.

Polio

Cause: Poliovirus, a member of the enterovirus subgroup, family Picornaviridae. Three serotypes, P1, P2, and P3 (and the related live oral vaccine strains), can cause disease.

Illness and treatment: Over 90 percent of infections are asymptomatic and four to eight percent result in only minor illnesses. Non-paralytic aseptic meningitis with full recovery occurs in one to two percent of infections. Less than one percent of infections result in flaccid paralysis. Treatment is supportive.

Sources: Humans are the reservoir. Transmission is mainly through the fecal-oral route. Virus may be present in the stool of an infected person for three to six weeks.

Additional risks: Travel by susceptible persons to the few countries where polio is still endemic or to countries still routinely using oral polio vaccine can increase the risk of becoming infected.

Prevention: Universal childhood immunization prevents infection. Only inactivated polio vaccine (IPV) – which can prevent paralysis but does not provide intestinal immunity – is now used in this country. Adults who have not previously been vaccinated against polio or who have unknown immune status to polio should receive and complete the polio vaccination series with IPV.

In 2015, surveillance for Acute Flaccid Myelitis (AFM) was implemented in Washington State. Since all patients who present with AFM and no sensory or cognitive loss should be considered as a possible paralytic poliomyelitis case, risk factors and immunization status are reviewed. Testing to

rule out polio is conducted in order to assure that any case of polio that occurs in Washington is rapidly detected to prevent further spread. For more information on AFM surveillance in Washington, see the AFM section.

Recent Washington trends: The last naturally acquired infection with wild-type polio virus was in 1977. In 1993, a case of vaccine-associated paralytic polio occurred in a state resident after a family member received live oral polio vaccine (which is no longer used in the United States).

2022: No cases were reported.

Prion Disease (Human)

Cause: Prions or "proteinaceous infectious particles" are normal cellular proteins in the brain that can fold into abnormal, pathologic forms, causing a fatal neurodegenerative disease known as prion disease or transmissible spongiform encephalopathy (TSE). TSEs are a family of disorders in animals and humans, of which Creutzfeldt-Jakob disease (CJD) is the most common type in humans.

Illness and treatment: Prion diseases present with a wide variety of clinical manifestations. Rapidly progressive dementia is the key clinical feature. Other manifestations include movement abnormalities (myoclonus, tremor), cerebellar signs (ataxia, nystagmus), visual changes (diplopia, hallucinations), sleep disturbances, and akinetic mutism. Variant CJD has more prominent psychiatric and behavioral symptoms at onset with a delay in neurologic signs. All cases are fatal within two years of symptoms, and treatment is supportive.

Sources: Prion diseases can be sporadic (85 percent of cases; unknown cause), familial (10 to 15 percent of cases; inherited), or iatrogenic (acquired through contaminated surgical instruments, dura mater or corneal transplants, or human growth hormone supplements). Variant CJD (vCJD) is associated with ingesting beef products contaminated with the prion that causes bovine spongiform encephalopathy ("mad cow disease"). Variant CJD was discovered in 1996, with most cases in the United Kingdom and some cases in other European countries, the Middle East, Asia, and North America. To date, four variant CJD cases have been reported in the United States, all acquired overseas.

Prevention: Since most cases are sporadic, few personal precautions can be advised. To prevent transmission during invasive medical procedures, a combination of specific chemical and autoclaving methods are used in healthcare facilities to disinfect and sterilize medical instruments. If traveling for prolonged periods of time in Europe, risk might be reduced by avoiding beef products, especially brain parts or other non-muscle meat; however, transmission risk is very low.

Recent Washington trends: During 2013 to 2022, the average number of cases per year was 13 cases (range: five to 19 cases). The incidence of human prion disease in Washington is consistent with reported rates worldwide, with an average incidence of 1.7 cases/million population in the last decade.

2022: Five cases of human prion disease were reported; all five were sporadic.

Psittacosis

Recent Washington trends: Each year there are zero to one report, commonly associated with indoor exposure to pet birds and less commonly farm or wild birds or occupational exposure.

2022: No cases were reported.

Q Fever

Recent Washington trends: In most years there are zero to three cases. A notable exception occurred in 2011, when eight cases were linked to a goat-associated outbreak. In 2016, seven sporadic cases were reported, with no common link identified.

2022: Four cases were reported. For all four cases, exposure occurred most likely occurred in Washington.

Rabies (Human)

Recent Washington trends: Two human cases due to infection with the bat rabies variant of rabies virus were reported in the past 50 years, one in 1995 and one in 1997.

2022: No cases were reported.

Rabies (Suspected Human Exposure)

Recent Washington trends: Suspected rabies exposure includes post-exposure prophylaxis (PEP) administration in situations where the local health jurisdiction agrees with a provider's assessment of rabies risk, PEP administration in situations where there is not enough information to determine possible rabies risk, as well as instances where PEP was advised but declined by patient. In most years, 240 to 340 suspected rabies exposure events are reported. Of bats tested in Washington, three to ten percent are identified as rabid each year. Since 1987, only five rabid domestic animals have been identified; three with bat variant virus (Table 3).

2022: 394 reports of suspected rabies exposure were reported. The most common exposures were bats (76 percent) and dogs (9 percent). Eight (3.7 percent) of 217 tested bats were rabid (Table 4).

Table 3. Rabid Non-Bat Animals and Rabies Strains, Washington, 1987-2022

Year	Animal type (County)	Rabies strain
2015	Cat (Jefferson)	Bat-variant
2002	Cat (Walla Walla)	Bat-variant
1994	Llama (King)	Bat-variant
1992	Horse (Franklin)	Unknown
1987	Dog (Pierce)*	Unknown, but history of bat exposure

* Infection was not confirmed at CDC

Table 4. Washington State Bats Tested for Rabies 2018-2022

	2018		2019		2020		2021		2022		Total	
County	**Positive**	**Total**	**Positive**	**Total**	**Positive**	**Total**	**Positive**	**Total**	**Positive**	**Total**	**Positive**	**Tested**
Adams	0	0	0	2	0	0	0	0	0	0	0	2
Asotin	0	0	0	0	0	0	0	0	0	2	0	2
Benton	2	2	0	3	0	2	0	1	0	2	2	10
Chelan	9	75	0	3	0	7	1	4	0	11	10	100
Clallam	0	6	0	5	0	3	0	3	0	2	0	19
Clark	0	16	0	11	0	5	0	7	0	7	0	46
Columbia	0	0	0	0	0	0	0	0	0	0	0	0
Cowlitz	0	8	2	10	0	10	0	8	0	6	2	42
Douglas	2	25	0	0	0	1	0	0	0	0	2	26
Ferry	0	0	0	0	0	0	0	0	0	0	0	0
Franklin	0	1	0	0	0	0	0	0	0	0	0	1
Garfield	0	0	0	0	0	0	0	0	0	0	0	0
Grant	0	7	0	1	0	1	0	1	0	2	0	12
Grays Harbor	0	2	0	4	0	5	0	0	1	2	1	13
Island	0	12	0	7	1	13	0	7	0	6	1	45
Jefferson	1	11	0	2	0	7	0	2	0	3	1	25
King	10	102	1	73	4	59	6	46	1	46	22	326
Kitsap	2	37	0	18	0	21	1	21	1	26	4	123
Kittitas	0	4	0	0	0	3	0	0	1	1	1	8
Klickitat	1	3	0	1	0	1	0	4	0	3	1	12
Lewis	2	26	1	11	1	12	1	9	0	7	5	65
Lincoln	0	0	0	0	0	0	0	2	0	0	0	2
Mason	0	7	0	5	0	5	0	2	1	3	1	22
Okanogan	0	0	0	1	0	1	0	3	0	0	0	5
Pacific	0	5	0	7	0	1	0	2	0	3	0	18
Pend Oreille	0	2	0	0	1	2	0	0	0	1	1	5
Pierce	0	23	0	12	0	12	0	9	0	8	0	64
San Juan	0	2	0	4	0	1	0	3	0	1	0	11
Skagit	0	10	0	4	0	7	0	10	0	5	0	36
Skamania	0	0	0	0	0	3	0	0	0	0	0	3
Snohomish	1	44	2	16	0	9	0	12	1	19	4	100
Spokane	3	27	0	16	1	13	0	6	0	9	4	71
Stevens	2	5	0	9	0	1	1	5	0	2	3	22
Thurston	2	28	1	15	0	15	1	13	1	27	5	98
Wahkiakum	0	0	0	1	0	0	0	1	0	0	0	2
Walla Walla	1	3	0	1	0	0	0	1	0	0	1	5
Whatcom	2	35	1	10	0	10	0	18	1	9	4	82
Whitman	0	1	0	1	0	0	1	3	0	3	1	8
Yakima	0	2	1	2	0	0	0	0	0	2	1	6
Total	**40**	**531**	**9**	**255**	**8**	**230**	**12**	**203**	**8**	**218**	**77**	**1437**

Table 5. Washington State Animals Tested for Rabies Virus, 1988-2022

Year	Bat		Cat		Dog		Ferret		Raccoon		Skunk		Rodent		Lagomorph		Other Wild		Other Domestic		Total	
	Total	Positive	Total	Positive	Total	Positive	Total	Positive	Total	Positive	Total	Positive	Total	Positive	Total	Positive	Total	Positive	Total	Positive	Total	Positive
1988	69	4	165	0	110	0	15	0	16	0	3	0	12	0	2	0	5	0	3	0	400	4
1989	102	9	124	0	91	0	20	0	9	0	4	0	8	0	1	0	9	0	4	0	372	9
1990	63	4	104	0	82	0	5	0	7	0	5	0	5	0	1	0	14	0	4	0	290	4
1991	90	9	105	0	96	0	13	0	8	0	3	0	13	0	0	0	19	0	2	0	349	9
1992	73	6	132	0	90	0	16	0	14	0	2	0	12	0	0	0	14	0	6	1*	359	7
1993	68	1	122	0	95	0	8	0	4	0	8	0	16	0	2	0	10	0	13	0	346	1
1994	58	14	105	0	90	0	7	0	4	0	3	0	15	0	0	0	16	0	14	1^	312	15
1995	263	15	140	0	114	0	12	0	8	0	1	0	23	0	3	0	15	0	18	0	597	15
1996	257	13	104	0	101	0	8	0	9	0	2	0	14	0	3	0	20	0	12	0	530	13
1997	780	51	155	0	118	0	7	0	17	0	4	0	15	0	2	0	18	0	11	0	1,127	51
1998	447	27	126	0	109	0	8	0	11	0	1	0	6	0	0	0	19	0	16	0	743	27
1999	334	25	103	0	71	0	3	0	11	0	3	0	8	0	1	0	14	0	13	0	561	25
2000	330	23	105	0	60	0	1	0	2	0	4	0	6	0	1	0	9	0	4	0	522	23
2001	263	22	111	0	93	0	2	0	3	0	1	0	8	0	0	0	4	0	5	0	490	22
2002	186	12	99	1	53	0	7	0	2	0	2	0	9	0	1	0	8	0	9	0	376	13
2003	229	23	137	0	72	0	0	0	11	0	1	0	4	0	1	0	9	0	10	0	474	23
2004	311	20	141	0	70	0	3	0	13	0	6	0	11	0	0	0	6	0	10	0	571	20
2005	245	15	132	0	66	0	3	0	12	0	2	0	5	0	1	0	10	0	4	0	480	15
2006	273	15	105	0	70	0	4	0	13	0	1	0	2	0	1	0	8	0	5	0	482	15
2007	315	22	132	0	97	0	1	0	16	0	3	0	5	0	0	0	9	0	3	0	581	22
2008	337	17	143	0	76	0	1	0	10	0	2	0	5	0	1	0	9	0	11	0	595	17
2009	311	14	133	0	90	0	1	0	12	0	5	0	4	0	1	0	7	0	9	0	573	14
2010	200	14	103	0	63	0	0	0	14	0	1	0	6	0	1	0	9	0	10	0	407	14
2011	204	11	87	0	51	0	1	0	9	0	1	0	2	0	0	0	8	0	5	0	368	11
2012	221	9	98	0	54	0	2	0	7	0	0	0	4	0	0	0	7	0	9	0	402	9
2013	284	12	80	0	65	0	0	0	13	0	0	0	3	0	0	0	5	0	9	0	459	12
2014	276	15	75	0	53	0	0	0	12	0	0	0	1	0	1	0	6	0	11	0	435	15
2015	305	9	95	1	49	0	0	0	8	0	2	0	8	0	0	0	11	0	7	0	485	10
2016	298	20	108	0	44	0	0	0	5	0	0	0	4	0	1	0	3	0	3	0	466	20
2017	376	22	81	0	48	0	0	0	8	0	1	0	4	0	0	0	2	0	5	0	525	22
2018	531	40	84	0	44	0	0	0	4	0	0	0	2	0	0	0	2	0	8	0	675	40
2019	255	9	65	0	23	0	0	0	2	0	0	0	2	0	0	0	3	0	7	0	357	9
2020	230	8	56	0	16	0	0	0	4	0	1	0	1	0	0	0	4	0	6	0	318	8
2021	203	12	48	0	16	0	0	0	12	0	1	0	1	0	0	0	1	0	4	0	286	12
2022	218	8	70	0	28	0	0	0	12	0	2	0	4	0	0	0	6	0	5	0	345	8
Total	9,005	550	3,773	2	2,468	0	148	0	322	0	75	0	248	0	25	0	319	0	275	2	16,658	554

Notes:

Lagomorphs include: rabbit, hare, and pika.

Rodents include: beaver, chinchilla, chipmunk, degu, gerbil, gopher, hamster, marmot, mouse, muskrat, nutria, porcupine, prairie dog, rat, squirrel, vole, and woodchuck.

Skunks include: all species of the Mephitidae family and are not identified to species level.

Other domestic include: alpaca, burro, cattle, goat, horse, llama, mule, pig, sheep, and (captive) zebra.

Other wild include: badger, bear, bison, bobcat, cougar, coyote, deer, fox, kinkajou, lynx, marten, mink, mole, nonhuman primate, ocelot, opossum, otter, seal, shrew, sugar glider, weasel, wolf, wolf-hybrid, zorilla (striped polecat).

Species identification: bats are identified to species level using morphological identification keys; all other species are not formally identified unless rabies virus positive.

Numbers reported through 2007 were inclusive of positive and negative test results; beginning in 2008 all specimens submitted (i.e., including unsatisfactory results) are included in counts.

* Horse

^ Llama

Rare Diseases of Public Health Significance*

Rare diseases of public health significance are defined as diseases or conditions of general public health concern, which are not commonly diagnosed in Washington residents.

**The category of conditions titled "Other Rare Diseases of Public Health Significance" has been repealed effective January 1, 2023. The conditions listed above have been integrated within the notifiable conditions chapter WAC 246-101 as specific conditions.*

Anaplasmosis/Ehrlichiosis

Recent Washington trends: From 2004-2021, 13 cases of anaplasmosis were reported; 12 reported exposure in the upper Midwest or the northeastern United States and one had unknown exposure location. One case of ehrlichiosis due to *Ehrlichia chaffeensis* was reported in 2011, associated with travel to the southeastern United States. Low levels of *Anaplasma phagocytophilum* have been found in *Ixodes* ticks collected from the state.

2022: Two cases of anaplasmosis were reported, including the first documented case with exposure in Washington state. The second case reported travel to the upper Midwest and Northeastern United States. One case of ehrlichiosis was reported with exposure in Tennessee.

Babesiosis

Recent Washington trends: From 1990-2021, 15 babesiosis cases were reported. Four of these cases were exposed to *Babesia* in Washington: three cases caused by *B. duncani* (one in 1991 and two in 1994, in a blood transfusion recipient and associated donor); and one caused by the *B. divergens*-like organism (2002). The other babesiosis cases were associated with travel to the upper Midwest or northeastern United States or blood donation from an out-of-state donor and were likely or confirmed *B. microti* (2004, 2008, 2013, 2014, 2015). To date, tick surveillance has not identified *Babesia duncani, B, microti,* or *B. divergens*-like organism-positive ticks in Washington.

2022: One babesiosis case was reported with exposure in Massachusetts.

Baylisascariasis

Recent Washington trends: The first identified case of baylisascariasis in Washington state was reported in 2017. This case was tied to environmental exposure to raccoon feces within Washington state.

2022: One baylisascariasis case was reported with exposure in Washington state. Environmental investigation identified raccoon feces positive for *Baylisascaris procyonis*.

Chagas Disease

Recent Washington trends: Zero to five cases are reported each year, all with significant travel to or previous residence in a country with endemic Chagas disease transmission.

2022: Five cases were reported. Countries of exposure included Bolivia, El Salvador, Guatemala, and Mexico.

Coccidioidomycosis (Valley Fever)

Recent Washington trends: Coccidioidomycosis was made reportable as a rare disease of public health significance in 2014. Prior to 2014, up to six travel-associated cases were reported each year. Since 2014, 60 to 120 cases are reported each year, most with exposure during travel to the southwestern United States. During 2010-2021, 18 cases with exposure in south-central Washington State were reported.

2022: 96 cases were reported; 71 were travel-related, one was exposed in south-central Washington, and 24 had unknown exposure location.

Histoplasmosis

Recent Washington trends: Zero to three cases are reported each year. Most cases report travel to an endemic area. For some cases, exposure location cannot be determined. No cases determined to have exposure in Washington state have been identified to-date.

2022: Three cases were reported.

Spotted Fever Rickettsiosis

Recent Washington trends: Rocky Mountain spotted fever (RMSF) was reported at greater numbers in the first half of the twentieth century than in recent years, e.g., 90 cases during 1920-1949 (median annual cases, two; range, zero to nine), in contrast to 24 cases during 2004-2021 (median cases per year, zero; range, zero to three). Locally acquired cases of RMSF in Washington were reported in 2011, 2019, and 2020. **African tick bite fever** was reported in 12 Washington residents from 2005 to 2021; all reported travel exposure and most were exposed in South Africa. **Mediterranean spotted fever** was reported in two cases with travel to South Africa (one in 2011 and one in 2015), and in one case with unknown travel history in 2015. In 2013, one **spotted fever rickettsiosis case of undetermined etiology** was reported in a case with exposure in Southeast Asia; in 2018 another case of undetermined etiology was reported in a case with travel to South Africa.

2022: Two spotted fever rickettsioses cases were reported; both were Rocky Mountain spotted fever (*Rickettsia rickettsii*). Both cases reported travel outside of Washington state.

Tick Paralysis

Recent Washington trends: Each year, zero to two cases are reported, generally associated with tick exposure in eastern Washington.

2022: One tick paralysis case was reported, with most likely exposure in Idaho.

Typhus

Recent Washington trends: Each year, zero to two cases are reported, generally associated with travel to areas with endemic typhus. A substantial increase in infections due to *Rickettsia typhi* has been observed in southern California in recent years, with 171 cases reported from Los Angeles alone in 2022.

2022: Two typhus cases were reported. One case was determined to be caused by infection with *Rickettsia felis,* with possible exposure in Washington state. The second case was associated with travel to southern California, where outbreaks of flea-borne typhus caused by *Rickettsia typhi* are ongoing.

Rare Sexually Transmitted Diseases

Cause: Bacterium *Haemophilus ducreyi* causes chancroid*;* bacterium *Calymmatobacterium granulamatis* causes granuloma inguinale; and L1, L2 and L3 serovars of bacterium *Chlamydia trachomatis* cause lymphogranuloma venereum.

Illness and treatment: These are three rare genital ulcer diseases. Treatment recommendations are available from CDC.

Sources: The infections are sexually transmitted.

Additional risks: These diseases are endemic in some tropical and subtropical regions.

Prevention: Use safe sexual practices to reduce transmission.

Recent Washington trends: In the past decade, there were seven lymphogranuloma venereum cases, three chancroid cases, and no granuloma inguinale cases.

2022: One lymphogranuloma venereum case, two chancroid cases, and no granuloma inguinale cases were reported.

Relapsing Fever

Recent Washington trends: Each year, about one to ten tick-borne relapsing fever (TBRF) cases are reported. Most are associated with overnight stays in rustic summer cabins, but some are exposed in their primary homes. Louse-borne disease is rare, even in travelers; no cases have been reported in recent years.

2022: Four cases of TBRF were reported; two with exposure in Washington State and two with exposure in Utah.

Rubella

Cause: Rubella virus, family Togaviridae, genus *Rubivirus*.

Illness and treatment: Acquired rubella is a mild illness that usually includes fever and a maculopapular rash that starts on the face and spreads downward to include the entire body. The rash usually lasts three days and may itch. However, up to 50 percent of infections can be sub-clinical or inapparent. Older children and adults may have malaise, lymph node swelling, and upper respiratory symptoms before the rash. Arthritis and arthralgia frequently accompany the disease in adults, especially in persons who identify as women. Complications including encephalitis (one in 6,000 cases) are uncommon and occur more often in adults. Congenital rubella syndrome (CRS) in an infant can result if the pregnant person acquires rubella during pregnancy, especially in the first trimester. The virus may cause a variety of congenital malformations, the most common of which is deafness. Fetal death or premature delivery may also occur.

Sources: Humans are the only reservoir. Transmission is through droplet spread of the respiratory secretions of infected persons (or less commonly airborne), including those with asymptomatic or subclinical infections. Infants with CRS can shed virus for extended periods, but a true carrier state does not occur.

Additional risks: Since 2004, rubella is no longer considered endemic in the United States. Most reported rubella cases in the country are now among adults born in areas where rubella vaccine was not routinely used, or in unimmunized persons who travel outside the United States to areas where rubella is still endemic.

Prevention: Universal childhood immunization has been effective in preventing infection and eliminating endemic circulation of rubella in this country. Respiratory and hand hygiene can also reduce the risk of transmission. Pregnant persons are routinely tested at initial prenatal visits to verify immunity to rubella. The primary goal of public health action in response to confirmed rubella cases is to prevent and attenuate disease transmission, especially to pregnant persons.

Recent Washington trends: Due to the success of universal vaccination programs for rubella, only seven cases of rubella were reported in Washington State between 2001 and 2022, with the last reported case in 2013. In 2000, an infant with congenital rubella syndrome born to a mother born outside the United States was the most recent case reported in Washington State.

2022: No cases were reported.

Salmonellosis (Non-Typhoid)

Cause: Myriad serotypes in the bacterial genus *Salmonella*, excluding *S.* Typhi (see Typhoid Fever).

Illness and treatment: Typical symptoms are fever, headache, diarrhea, nausea, and abdominal pain, with or without vomiting. Most persons recover without treatment. Occasionally bacteria enter the bloodstream and infect internal organs. Treatment for severe cases is with antibiotics.

Sources: Healthy animals, especially reptiles, chickens, cattle, dogs, and cats, can carry *Salmonella* without illness and be a source for human infection. Most human cases result from consumption of contaminated food. Common exposures include contaminated eggs, unpasteurized milk, undercooked poultry, and produce. Person-to-person transmission can also occur.

Additional risks: Illness including serious dehydration may be severe in the very young, the elderly, or those with chronic diseases. Incidence is highest in infants and young children. Infection may become invasive, spreading to the blood (bacteremia), and may lead to sepsis.

Prevention: Use good food handling and personal hygiene practices, including thorough handwashing after contact with animals or handling raw meat or poultry. Prevent contact between young children or persons with weakened immune systems and reptiles, farm animals, or birds.

Recent Washington trends: Salmonellosis is the second most common notifiable enteric infection with 640 to 1,034 cases reported per year. Infections occur year-round with some increase during the spring and summer months. Many serotypes are reported (Table 6).

2022: 750 cases were reported (9.5 cases/100,000 population) with one death.

Table 6. Salmonella Serotypes, 2022

Known serotypes (N=545)	Count
Enteritidis	157
Typhimurium	54
Newport	31
Oranienburg	27
I 4,[5],12:i:-	23
Hadar	19
Saintpaul	16
Muenchen	13
Infantis	13
Senftenberg	12
Thompson	10
Braenderup	10
Montevideo	8
Sandiego	7
Anatum	7
I 4,5,12:b:- L(+) Tartrate+	7
Dublin	7
Panama	7
Paratyphi A	6
Paratyphi B var. L(+) Tartrate+	6
Stanley	5
Kentucky	5
Muenster	5
Multiple others (below):	

Two to Four Cases Each: Bareilly, Uganda, Berta, Adelaide, Agona, I 4,12:i:-, Chester, Poona, Daytona, Javiana, Weltevreden, Heidelberg, Paratyphi B, Durban, Virchow, Havana, Corvallis, Schwarzengrund, Brandenburg, IIIb 61:l,v:1,5,7

One Case Each: Abony, Agbeni, Alachua, Apapa, Cerro, Clackamas, Concord, Ealing, Fluntern, Give, Haifa, Hartford, Hvittingfoss, I Rough:r:1,5, IIIa 48:g,z51:-, IIIb 16:z10:e,n,x,z15, IIIb 18:1,v:z, IIIb 50:k:z, IIIb 50:r:z, Indiana, IV 44:z4,z32:-, IV 45:g,z51:-, IV 50:g,z51:-, IV 50:z4,z23:-, Lattenkamp, Litchfield, Liverpool, Minnesota, Mississippi, Ohio, Okatie, Oslo, Reading, Urbana

Shellfish Poisoning, Paralytic, Domoic Acid, or Diarrhetic

Cause: Saxitoxin from the phytoplankton *Alexandrium catenella* causes paralytic shellfish poisoning (PSP). Domoic acid from the diatom Pseudo-*nitzschia* causes domoic acid shellfish poisoning (DASP). Diarrhetic toxin from dinoflagellates Pseudo-*nitzschia* causes diarrhetic shellfish poisoning (DSP).

Illness and treatment: Paralytic shellfish poisoning symptoms begin minutes or hours after consumption with numbness of the mouth and limbs. Severe poisoning progresses rapidly to paralysis and respiratory arrest. With domoic acid poisoning, gastrointestinal symptoms of vomiting, diarrhea and abdominal cramps begin within 24 hours of shellfish ingestion and there may be later confusion, seizures, and permanent short-term memory loss. Diarrhetic shellfish poisoning begins in 30 minutes to 36 hours, with severe diarrhea and sometimes vomiting. There are no anti-toxins. Acute supportive care may be needed.

Sources:

- Paralytic shellfish poisoning (PSP): Saxitoxin produced by microscopic algae contaminate bivalve shellfish (such as clams, mussels, oysters, geoducks, etc.) that feed on these algae. Crab can become contaminated by feeding on other shellfish.
- Domoic acid (amnesic) shellfish poisoning (DASP): Domoic acid produced by the diatom Pseudo-*nitzschia* sp. contaminate bivalve shellfish (especially razor clams) that feed on these diatoms. Dungeness clams can become contaminated by feeding on razor clams and other shellfish.
- Diarrhetic shellfish poisoning (DSP): Okadeic acid produced by the dinoflagellate *Dinophysis* contaminate bivalve shellfish that feed on *Dinophysis.*

Prevention: Commercial shellfish are routinely tested for biotoxins and are unlikely to cause shellfish poisoning. Before harvesting shellfish recreationally, check the Marine Biotoxin Hotline (1-800-562-5632) or the Shellfish Safety Map for updates on affected sites and site closures.

Recent Washington trends: Three clusters of paralytic shellfish poisoning have been reported during the past 20 years (seven reports in 2012, seven reports in 2000, and five reports in 1998). There are no recent reports of diarrhetic acid shellfish poisoning. A diarrhetic shellfish poisoning cluster in 2011 was from mussels gathered in Puget Sound.

2022: One confirmed paralytic shellfish case occurred in a person who consumed clams harvested from an area that had been closed for recreational harvest because of elevated levels of PSP toxin.

Shiga Toxin-producing *Escherichia coli* (STEC)

Cause: Shiga toxin-producing *E. coli* strains (STEC) including *E. coli* O157:H7.

Illness and treatment: Symptoms include abdominal cramping and severe or bloody diarrhea, often without fever. Serious complications include hemolytic uremic syndrome (HUS) or thrombotic thrombocytopenic purpura (TTP). Most persons will recover without treatment. Treating STEC infection with antibiotics may increase the risk of developing HUS.

Sources: Cattle are the most important source, although other herbivores also may carry STEC. Other known sources are unpasteurized milk, undercooked ground beef and contaminated raw produce, especially leafy greens, such as romaine lettuce and spinach. There can be person-to-person and animal-to-person transmission, but most cases are due to consuming contaminated food.

Additional risks: Children under five years of age are diagnosed most frequently and are at the greatest risk of developing HUS.

Prevention: Wash hands thoroughly after contact with farm animals, visiting farm environments, and handling raw meat. Thoroughly cook ground beef and venison, and wash preparation areas to avoid contaminating other foods. Wash produce thoroughly before eating.

Recent Washington trends: For the past several years there have been 308 to 506 cases reports each year. STEC has a seasonal pattern with most cases occurring during summer and fall months.

2022: 507 cases were reported (6.4 cases/100,000 population), with one death.

Table 7. STEC Serotypes, 2022

Known serotypes (n=264)	Count
O26	55
O157:H7	45
O103	41
O111	30
O121	20
O186:H2	10
O5:H9	7
O118:H16	6
O118:H2	6
Multiple others (below)	

Three Cases Each: O145, O45, O71:H11, O77:H45, O undetermined:H19

Two Cases Each: O146:H21, O156:H25, O undetermined:H11, O undetermined:H7

One Case Each: O113:H21, O14:H4, O148:H8, O157:NM, O174:H21, O177:H25, O185:H7, O22:H8, O5:H19, O69:H11, O7:H15, O76:H19, O8:H9, O84:H2, O91:H14, O undetermined:H14, O undetermined:H16, O undetermined:H2, O undetermined:H21, O undetermined:H25, O undetermined:H28, O undetermined:H8, O undetermined:H9

Shigellosis

Cause: Bacteria in the genus *Shigella*, typically *S. sonnei* or S. *flexneri*. Other species including *S. boydii and S. dysenteriae* are more common in developing countries.

Illness and treatment: Symptoms include fever, watery or bloody diarrhea, abdominal pain, fatigue and headache. Most persons will recover without treatment. Antibiotics may be used to shorten the duration of intestinal excretion of the organism.

Sources: Humans are the only reservoir, transmitting through feces-contaminated food or water or through person-to-person transmission, including oral-anal sexual contact. Outbreaks are occasionally associated with childcare or food service facilities, and rarely with recreational water exposure such as swimming.

Additional risks: Ingesting very few organisms can cause infection. Outbreaks occur under conditions of crowding and poor hygiene, putting institutions for children, mental hospitals, homeless shelters and encampments, and prisons at additional risk.

Prevention: Wash hands carefully including cleaning under the nails with soap and water after defecation or changing diapers and before food handling.

Recent Washington trends: Each year there are 100 to 391 reports. An increase in culture-independent laboratory testing has contributed to increased reports since 2015. Additionally, multiple person-to-person outbreaks among people experiencing homelessness also contributed to the increase in reports since 2017.

2022: 393 cases were reported (5.0 cases/100,000 population).

Syphilis

Cause: Spirochete bacterium *Treponema pallidum*.

Illness and treatment: The disease has four stages. Primary syphilis involves a painless ulcer at the site of infection. Secondary syphilis involves fever, diffuse rash, headache, hair loss, and muscle aches. Latent syphilis, which can last for years, is asymptomatic. Late syphilis can result in damage to the brain, heart, or other organs. If untreated, symptoms can spread to the brain, spinal cord, and nervous system, resulting in neurosyphilis; or spread to the eye, causing ocular syphilis. This can occur during any stage of syphilis. Congenital syphilis may result in organ damage, particularly liver, spleen, eyes, and brain, and bone deformities. Antibiotics treat a syphilis infection but any damage to organs is permanent.

Sources: Syphilis is transmitted sexually or vertically through the placenta to the fetus before birth.

Additional risks: Disease rates are highest among men, with a higher incidence among men who have sex with men.

Prevention: Use safe sexual practices to reduce transmission. If syphilis is found, also test for other sexually transmitted infections including HIV. Screen pregnant persons during early pregnancy to prevent congenital syphilis in the newborn, and sexually active men who have sex with men yearly. Test and treat all recent sexual partners of a person diagnosed with the early stages of syphilis to stop ongoing transmission.

Recent Washington trends: From 2018 to 2022, total reported cases of primary and secondary syphilis increased by 137 percent. This increase has been particularly pronounced among pregnancy-capable persons, with a 57 percent increase from 2021 to 2022. There has also been a notable shift in the patient profile, evidenced by an increase of cases reported among patients who report having opposite sex partners. Health disparities for MSM, people living with HIV (PLWH), and people of color continue to persist.

2022: 1,915 cases of primary and secondary syphilis were reported (24.4 cases/100,000 population).

Tetanus

Cause: Neurotoxin produced by the bacterium *Clostridium tetani*.

Illness and treatment: Of the four types of known tetanus presentation, by far the majority of cases present as generalized tetanus, characterized by descending rigidity and painful spasms of the skeletal muscles beginning with jaw and neck spasms (commonly referred to as "lockjaw"). Spasms can continue for three to four weeks and progress to total body spasms known as opisthotonos. Complications include bone fractures and abnormal heart rhythms. Complete recovery can take months, with lengthy and expensive hospitalizations for some patients. Case fatality rate for generalized tetanus is ten percent or higher, depending on available care, with more deaths occurring in infants and elderly persons. Neonatal tetanus is a form of generalized tetanus that occurs in a newborn infant born under unhygienic conditions to an inadequately immunized person, and therefore, lack protective passive immunity. Local tetanus and cephalic tetanus are less common presentations which often progress to generalized tetanus.

Treatment includes tetanus immune globulin (TIG), wound care, and supportive care including pharmacotherapy to control spasms. Theoretically, antibiotics may reduce bacterial multiplication in the wound and thereby prevent further toxin production. Vaccination should be undertaken soon as the person is medically stable because recovering from tetanus disease may not necessarily confer immunity to future infections. There is no laboratory testing available for tetanus, so diagnosis is based on symptoms and risk factors only.

Sources: Bacterial spores are widely distributed in soil and in the intestinal tracts (and feces) of animals and humans. The spores can also be found on skin and occasionally in contaminated street drugs, such as heroin. *C. tetani* usually enters the body through a wound (which may or may not be apparent) and grows best deep within damaged tissue in an anaerobic environment. Tetanus is not transmitted person to person.

Additional risks: Almost all reported cases of tetanus are in persons with either no history of vaccination with tetanus toxoid, or without a vaccine booster in the preceding decade. Any person presenting with a wound who has fewer than three documented doses of tetanus toxoid should be considered at risk for tetanus. Injection drug use, especially intramuscular and subcutaneous use, can lead to individual cases and occasionally to outbreaks in specific populations.

Prevention: Universal childhood immunization with regular booster doses for adolescents and adults is effective in preventing tetanus.

Recent Washington trends: Typically, zero to two cases per year are reported in Washington State. There have been one to two cases reported every year since 2018.

2022: One case of tetanus was reported.

Trichinosis (Trichinellosis)

Cause: Intestinal roundworm *Trichinella spiralis.*

Illness and treatment: Ingested larvae migrate and become encapsulated in muscle. Infection ranges from asymptomatic to severe, depending on the dose. Diarrhea may occur first. There is usually sudden onset of muscle pain, swelling of the upper eyelids, and recurring fever. Death can result from damage to heart muscle. Treatment depends on the stage of illness at diagnosis.

Sources: The infection is caused by ingesting raw or insufficiently cooked meat from infected animals. Historically, undercooked pork was a risk. Wild game is now the most likely exposure in North America. There is no person-to-person spread.

Additional risks: Freezing meat will not necessarily inactivate larvae of arctic strains.

Prevention: Cook or irradiate all wild game to reliably kill larvae. Commercial regulations to prevent trichinosis require the cooking of garbage or offal fed to swine.

Washington trends: In the past decade only six cases have been reported. Cases reported consuming bear and venison meat.

2022: Two cases were reported, both cases reported consuming venison.

Tuberculosis

Washington trends: Over the last decade, incidence rates of TB in Washington have progressed downward overall, with a significant decrease in 2020 followed by significant increases in 2021 and 2022. This is similar to the trend seen in the United States (U.S.) as a whole. Recent fluctuations in case rate can partially be explained by the impacts of COVID-19 (e.g. potential misdiagnoses, social distancing, delayed care seeking) and an outbreak in Washington correctional facilities (n=27; 2021-2022). From 2018 to 2022, there were between six and ten TB-related deaths per year in Washington.

2022: In 2022, 251 cases of TB disease were reported in Washington, an average of almost five cases per week. This represents a 26.1 percent increase from the 199 cases in 2021. In 2022, four Washington counties reported 10 or more TB cases. Together, these four counties accounted for 72.1 percent of the 251 cases counted in Washington.

Tularemia

Recent Washington trends: There are generally one to ten reports annually. Exposures include

animal or tick bites, contaminated water, exposure to wild rabbits or rodents, and inhalation while farming or landscaping with power tools. In 2004 to 2005 a statewide serosurvey of 370 outdoor pet cats and dogs found 0.6 percent positive overall but 4.5 percent positive in southwest counties.

2022: Six cases were reported; five with exposure in Washington State, and one with exposure during international travel.

Typhoid Fever

Cause: Bacterium *Salmonella* Typhi.

Illness and treatment: Symptoms include fever, headache, rash, constipation or diarrhea, and lymph node swelling. Severity ranges from mild febrile illness to severe disease with multiple complications. Treatment is with antibiotics.

Sources: Humans are the reservoir and transmit through fecal contamination of food, water or milk, or directly person-to-person.

Additional risks: There can be a prolonged intestinal carrier state, sometimes due to gallbladder infection. It is important to re-test patients after antibiotic treatment to confirm clearance of the infection. Test of cure is required for food workers, healthcare providers, and people who work in or attend childcare.

Prevention: If traveling to risk areas, consult with a travel clinic or the CDC Travelers' Health website for recommendations about vaccination and other measures.

Recent Washington trends: Cases occur mainly after international travel, most commonly to South Asia. Case counts range from 10 to 26 reports each year.

2022: 18 cases were reported (0.2 cases/100,000 population).

Vibriosis (Non-Cholera)

Cause: Bacteria in the family Vibrionaceae, including *V. parahaemolyticus*, *V. vulnificus*, non-toxin-producing *V. cholera,* other less common *Vibrio* species, and *Grimontia hollisae*. Infections caused by toxin-producing *V. cholerae* (serotypes O1 or O139) are notifiable as Cholera.

Illness and treatment: Enteric vibriosis symptoms include abdominal pain, watery diarrhea, vomiting, headache and fever. Skin and outer-ear (otitis externa) infections (usually caused by *V. alginolyticus)* also occur. Most people with vibriosis recover without treatment but antibiotics may be needed for severe cases. *V. vulnificus* can cause life-threatening enteric and wound infections that can lead to sepsis and/or necrotizing fasciitis in persons with weakened immune systems. Most *V. vulnificus* infections in the US are associated with consumption of seafood from the Gulf of Mexico or skin exposure to water in southern states during the

summer. *V. vulnificus* is present in Washington State marine and estuarine waters and has been identified in Washington State oysters during routine environmental testing but no reported *V. vulnificus* infection cases associated with skin exposure to Washington water or with consumption of shellfish harvested in Washington have been reported.

Sources: *V. parahaemolyticus* occurs naturally worldwide in marine and estuarine waters. Warmer water favors growth of *V. parahaemolyticus* which is why most Washington State cases occur during the summer. Transmission of vibriosis usually occurs through ingestion of raw or undercooked bivalve shellfish (especially oysters). Bivalves are a common source of infection because they filter the water in which they are grown in while feeding allowing *Vibrio* spp. to become concentrated in the meat.

Additional risks: Persons with liver disease, alcoholism or weakened immune systems are especially at risk for vibriosis infections and should avoid eating raw or undercooked seafood (especially bivalves).

Prevention: To prevent vibriosis eat only bivalve shellfish that have been cooked to 145°F for at least 15 seconds. Keep cooked seafood separate from raw seafood to avoid cross contamination. Stay out of salt or brackish (a mix of salt and fresh water commonly found in estuaries) if you have a wound. Wash open wounds and cuts thoroughly with soap and water if they come in contact with salt water, brackish water, raw seafood, or raw seafood juices or drippings.

Recent Washington trends: In the last ten years (2013-2022) annual case counts have ranged from 90 to 217. Cases among out-of-state residents associated with consumption of Washington shellfish are not included in these counts.

2022: 104 cases were reported (1.3 cases/100,000 population).

Waterborne Outbreaks

Cause: Many infectious agents including viruses, bacteria, and parasites. Commonly implicated agents include norovirus, *Giardia, Cryptosporidium*, and *Legionella*. Also includes waterborne disease outbreaks due to non-infectious agents, e.g., harmful algal bloom-associated toxins.

Illness and treatment: Illness depends on the etiologic agent, e.g., gastrointestinal, dermatologic, or respiratory. Treatment also depends on the involved agent.

Sources: Sources vary with the agent. Exposure can occur through various means, such as ingestion, skin contact, or inhalation. Waterborne outbreaks can occur from exposure to drinking water, recreational water, or other water sources. **Drinking** water sources include water intended for drinking, such as bottled water or community or private water systems. **Recreational** sources include treated water (e.g., swimming pools, interactive fountains, hot tubs) and untreated natural water (e.g., lakes, rivers). **Other** sources can include water not intended for drinking or recreation, such as cooling towers, ornamental water, misters, etc.

Additional risks: Risks vary with the agent.

Prevention: Test private wells every year for coliform bacteria and nitrate, as well as after potential contamination such as floods. Shower thoroughly with soap before entering recreational water. If ill with diarrhea, do not enter recreational water, pools, or interactive fountains. Check infants' diapers frequently when using recreational water.

Recent Washington trends: Waterborne outbreaks are often difficult to detect or investigate. From 2007 to 2022, zero to three outbreaks were reported each year (median, one outbreak per year). Distinct outbreaks have ranged in size from very small (two cases) to very large (hundreds of cases) (Table 8).

2022: One waterborne outbreak was reported and was associated with untreated recreational water.

Table 8. Waterborne Disease Outbreaks 1995-2022

Excluding spa-associated folliculitis outbreaks and illness outbreaks associated with harmful algal blooms.

Year	Agent	Water Type	County	Cases
1995	*Giardia*	Drinking	Yakima	87
1996	*Cryptosporidium*	Drinking	Yakima	18
1997	STEC	Drinking	Yakima	2
1998	Suspect viral	Recreational – Untreated	Kitsap	248
	Suspect viral	Recreational – Untreated	Snohomish	58
	Unknown	Drinking	Klickitat	6
1999	Unknown	Drinking	Lincoln	46
	E. coli O157:H7	Recreational – Untreated	Clark	36
	Suspect viral	Drinking	Spokane	68
2003	*Campylobacter*	Drinking	Walla Walla	110
2007	Suspect viral	Drinking	Okanogan	32
	Cryptosporidium	Recreational – Untreated	Clark	12
	Cryptosporidium	Recreational – Treated	Whatcom	14
2011	*Legionella*	Drinking	Spokane	3
2012	*Shigella sonnei*	Recreational – Untreated	Clark	3
2013	Norovirus	Recreational – Treated	King	11
2014	Norovirus	Recreational – Untreated	Kitsap	260+
	Norovirus	Recreational – Untreated	Clark	20
2015	*Legionella*	Drinking	Thurston	3
	Legionella	Other (cooling tower)	Chelan	10
2016	Norovirus	Recreational – Treated	King	17
	Legionella	Drinking	King	4
2017	*Legionella*	Unknown	King	2
	Legionella	Recreational – Treated	Benton-	3
	Legionella	Recreational – Treated	Yakima	2
2018	Swimmer's Itch (cercarial dermatitis)	Recreational – Untreated	Adams	3
	Norovirus	Recreational – Untreated	Kitsap	156
	Shigella sonnei	Recreational – Untreated	Clark	19
2019	No outbreaks reported			
2020	No outbreaks reported			
2021	No outbreaks reported			
2022	Suspect norovirus	Recreational – Untreated	Lincoln	39

Yersiniosis

Cause: Bacteria in the genus Y*ersinia*, usually *Y. enterocolitica or Y. pseudotuberculosis*.

Illness and treatment: Symptoms are acute fever, diarrhea and abdominal pain that may mimic appendicitis. Complications are uncommon. Antibiotics may be used for severe cases.

Sources: Wild and domestic animals, particularly pigs, are reservoirs. Transmission occurs by ingesting contaminated food or water, or by direct contact with animals. Raw or undercooked pork and pork products, such as chitterlings, have been particularly associated with the illness. Person-to-person transmission appears to be rare.

Additional risks: Illness is more severe in children. *Yersinia* can multiply under refrigeration.

Prevention: Do not eat undercooked or raw pork or unpasteurized milk. Wash hands thoroughly after touching animals or raw pork and before eating. Dispose of animal feces in a sanitary way.

Recent Washington trends: 40 to 123 cases have been reported each year. An increase in culture-independent laboratory testing has contributed to increased reports since 2015. Outbreaks are uncommon, with most cases occurring sporadically.

2022: 123 cases were reported (1.6 cases/100,000 population).

Disease Incidence and Mortality Rates

Acute Flaccid Myelitis (AFM)

Year	Cases	Rate*	Deaths
2014	2	0	0
2015	0	0	0
2016	10	0.1	0
2017	3	0	0
2018	11	0.1	0
2019	1	0	0
2020	0	0	0
2021	0	0	0
2022	0	0	0

* All rates are cases per 100,000 population.

Arboviral Disease Types

Year	Total Cases	Chikungunya	Colorado Tick Fever	Dengue	Japanese Encephalitis	St. Louis Encephalitis	West Nile Virus	Yellow Fever	Zika Virus	Other/Unknown flavivirus
2003	8	0	0	0	0	0	8[T]	0	0	0
2004	3	0	0	1[T]	1[T]	0	1[T]	0	0	0
2005	6	0	0	3[T]	0	0	3[T]	0	0	0
2006	13	1[T]	0	4[T]	0	0	8 (5[T], 3[E])	0	0	0
2007	16	0	0	10[T]	0	0	5[T]	0	0	1[T]
2008	19	0	1[T]	14[T]	1[T]	0	3[E]	0	0	0
2009	52	0	0	11[T]	0	1[T]	38 (36[E], 2[U])	0	0	2 (1[T], 1[E])
2010	24	3[T]	0	19[T]	0	0	2 (1[E], 1[T])	0	0	0
2011	9	0	0	9[T]	0	0	0	0	0	0
2012	20	0	0	16[T]	0	0	4 (2[E], 2[T])	0	0	0
2013	15	0	0	14[T]	0	0	1[T]	0	0	0
2014*	36	15[T]	0	9[T]	0	0	12 (10[E], 2[T])	0	0	0
2015	84	40[T]	0	19[T]	0	0	24 (22[E], 2[T])	0	0	1[T]
2016	113	10[T]	0	23[T]	0	0	9[E]	0	68[T]	3[T]
2017	55	3[T]	0	19[T]	0	0	13 (8[E], 5[T])	0	16[T]	4[T]
2018	14	2[T]	0	9[T]	0	0	3(1[E], 2[T])	0	0	0
2019	28	4[T]	0	19[T]	0	0	5 (4[E], 1[U])	0	0	0
2020	11	2[T]	0	7[T]	0	0	2[E]	0	0	0
2021	9	2[T]	1[T]	2[T]	0	0	3[E], 1[T]	0	0	0
2022	23	1[T]	0	18[T]	0	0	3[T], 1[U]	0	0	0

[V] Vaccine-associated
[T] Travel-associated
[E] Endemically acquired
[U] Unknown exposure location
*2014 data updated since the 2014 annual report

Botulism

Year	Food	Infant	Wound	Combined Rate*	Deaths
1986	2	4	0	0.1	0
1987	1	1	1	0.1	0
1988	3	4	0	0.2	0
1989	10	0	0	0.2	0
1990	1	0	0	0	0
1991	0	3	0	0.1	0
1992	0	2	0	0	0
1993	4	5	0	0.2	0
1994	3	2	0	0.1	0
1995	4	2	0	0.1	0
1996	2	0	2	0.1	0
1997	0	1	2	0.1	0
1998	2	4	0	0.1	0
1999	2	4	1	0.1	0
2000	1	4	0	0.1	0
2001	1	6	0	0.1	0
2002	1	1	4	0.1	0
2003	1	3	7	0.2	0
2004	1	3	5	0.1	0
2005	0	2	4	0.1	0
2006	0	9	1	0.2	0
2007	1	1	2	0.1	1
2008	0	1	2	0	0
2009	4	2	4	0.1	1
2010	0	3	1	0.1	0
2011	0	3	4	0.1	0
2012	1	4	2	0.1	1
2013	2	4	4	0.1	0
2014	0	3	0	0	0
2015	0	6	2	0.1	0
2016	2	1	1	0.1	2
2017	0	6	4	0.1	0
2018	1	7	0	0.1	0
2019	0	4	1	0.1	0
2020	0	5	0	0.1	0
2021	0	3	1	0.1	0
2022	2	9	0	0.1	1

*All rates are cases per 100,000 population.

Brucellosis

Year	Cases	Rate*	Deaths
1987	1	0	0
1988	1	0	0
1989	1	0	0
1990	0	0	0
1991	3	0.1	0
1992	1	0	0
1993	0	0	0
1994	0	0	0
1995	0	0	0
1996	2	0	0
1997	3	0.1	0
1998	3	0.1	0
1999	0	0	0
2000	0	0	0
2001	0	0	0
2002	2	0	0
2003	1	0	0
2004	2	0	0
2005	0	0	0
2006	0	0	0
2007	1	0	0
2008	1	0	0
2009	1	0	0
2010	0	0	0
2011	1	0	0
2012	0	0	0
2013	1	0	0
2014	4	0.1	0
2015	4	0.1	0
2016	0	0	0
2017	1	0	0
2018	1	0	0
2019	3	0	0
2020	2	0	0
2021	1	0	1
2022	4	0.1	0

* All rates are cases per 100,000 population.

Campylobacteriosis

County	2018 Cases	2018 Rate*	2019 Cases	2019 Rate*	2020 Cases	2020 Rate*	2021 Cases	2021 Rate*	2022 Cases	2022 Rate*
Adams	3	+	9	44.4	6	29.1	5	23.9	6	28.4
Asotin	4	+	1	+	0	0	1	+	0	0
Benton	44	22.2	39	19.2	18	8.7	26	12.4	29	13.7
Chelan	13	16.8	27	34.6	30	37.9	20	25	12	14.9
Clallam	14	18.5	17	22.3	17	22	26	33.4	16	20.6
Clark	93	19.2	112	22.7	93	18.5	126	24.6	108	20.7
Columbia	1	+	0	0	0	0	1	+	2	+
Cowlitz	23	21.4	21	19.2	21	19	33	29.6	18	16
Douglas	7	16.9	10	23.7	7	16.3	13	29.9	15	34.1
Ferry	2	+	0	0	0	0	0	0	0	0
Franklin	17	18.4	13	13.7	11	11.4	10	10.2	10	10
Garfield	0	0	1	+	0	0	0	0	0	0
Grant	32	33.1	26	26.6	14	14.1	14	13.9	28	27.5
Grays Harbor	14	18.8	21	28	30	39.7	19	25	14	18.3
Island	32	37.7	26	30.2	25	28.8	24	27.6	17	19.4
Jefferson	12	37.2	14	42.9	12	36.4	23	69.5	24	72
King	673	30.6	617	27.6	485	21.4	594	26	604	26.1
Kitsap	82	30.4	78	28.6	74	26.8	104	37.5	128	45.6
Kittitas	6	13.5	11	24.4	13	28	18	39.8	22	46.6
Klickitat	4	+	9	40.1	11	48.4	14	60.9	5	21.6
Lewis	19	23.8	24	29.5	32	39	26	31.4	14	16.8
Lincoln	0	0	1	+	2	+	1	+	1	+
Mason	37	57.7	34	52.3	9	13.7	12	18.3	7	10.6
Okanogan	9	21.6	11	26.3	5	11.9	9	21.3	2	+
Pacific	1	+	6	26.1	5	21.4	4	+	4	+
Pend Oreille	0	0	3	+	5	37.3	1	+	4	+
Pierce	248	27.9	206	22.7	256	27.8	209	22.5	198	21.1
San Juan	1	+	4	+	6	33.7	5	28	9	49.6
Skagit	53	42.1	49	38.2	47	36.3	25	19.2	25	19
Skamania	1	+	2	+	2	+	4	+	4	+
Snohomish	242	30.1	214	26.2	140	16.9	184	22	171	20.2
Spokane	92	17.6	96	18.1	63	11.7	86	15.9	94	17.1
Stevens	17	37.4	21	45.6	14	30.1	11	23.5	18	38.3
Thurston	66	23.2	47	16.2	54	18.3	70	23.5	91	30.3
Wahkiakum	0	0	2	+	1	+	1	+	1	+
Walla Walla	43	69.6	34	54.7	13	20.8	22	35.4	18	28.7
Whatcom	61	27.8	60	26.7	37	16.3	62	27.4	68	29.4
Whitman	10	21.2	0	0	1	+	9	20.2	16	33.5
Yakima	101	39.8	113	44.3	50	19.5	71	27.5	80	30.8
State Totals	2,077	27.8	1,979	26.1	1,609	20.9	1883	24.2	1883	23.9

Statewide by Year

Year	Cases	Rate*	Deaths
1983	149	3.5	0
1984	146	3.4	1
1985	250	5.7	0
1986	347	7.8	0
1987	420	9.3	1
1988	709	15.4	1
1989	899	19.0	0
1990	899	18.5	0
1991	930	18.5	4
1992	1,060	20.6	1
1993	1,051	20.0	0
1994	1,050	19.6	0
1995	1,050	19.2	4
1996	1,139	20.5	1
1997	1,150	20.3	0
1998	901	15.7	1
1999	950	16.3	2
2000	1,006	17.1	2
2001	991	16.6	0
2002	1,032	17.0	1
2003	943	15.4	0
2004	861	13.9	0
2005	1,045	16.6	0
2006	993	15.5	0
2007	1,020	15.6	0
2008	1,069	16.2	0
2009	1,030	15.4	1
2010	1,315	19.6	2
2011	1,538	22.7	0
2012	1,551	22.7	3
2013	1,631	23.6	6
2014	1,591	22.8	0
2015	1,847	26.0	2
2016	1,911	26.5	1
2017	2,214	30.1	1
2018	2,077	27.8	4
2019	1,979	26.1	1
2020	1,609	20.9	1
2021	1,883	24.2	1
2022	1,883	23.9	2

*All incidence rates are cases per 100,000 population.
+County incidence rates not calculated for <5 cases.

Chlamydia‡

County	2018 Cases	2018 Rate*	2019 Cases	2019 Rate*	2020 Cases	2020 Rate*	2021 Cases	2021 Rate*	2022 Cases	2022 Rate*
Adams	90	447.3	116	572.8	80	388.1	127	607.7	121	573.5
Asotin	60	270.8	65	292.6	69	309.6	61	271.1	46	203.5
Benton	906	456.2	1,019	502.0	976	471.8	981	468.5	971	457.4
Chelan	285	367.5	279	357.4	265	334.8	282	352.5	287	355.9
Clallam	190	251.7	185	242.1	134	173.7	154	198.1	136	175.2
Clark	1,971	408.0	2,086	423.6	1,859	369.4	1,925	375.2	1,871	359.2
Columbia	4	+	8	+	3	+	8	+	9	+
Cowlitz	501	465.5	558	510.8	466	420.8	411	368.6	395	351.6
Douglas	181	435.8	157	372.5	156	363.3	178	408.7	164	372.7
Ferry	12	+	13	+	10	+	11	+	29	397.3
Franklin	537	580.2	694	733.0	626	647.0	651	661.9	637	638.6
Garfield	1	+	0	0.0	0	0.0	3	+	3	+
Grant	382	394.7	466	476.0	394	397.5	511	506.9	542	532.4
Grays Harbor	289	388.5	296	394.6	248	327.9	213	280.1	182	238.2
Island	194	228.4	232	269.8	199	229.1	184	211.3	190	216.6
Jefferson	46	142.8	63	193.2	47	142.5	42	126.9	42	125.9
King	10,476	476.6	11,547	516.7	8,290	365.3	7,499	327.9	7,187	310.1
Kitsap	1,184	438.6	1,240	453.9	1,086	394.0	1,062	382.4	1,011	359.9
Kittitas	231	521.4	278	616.4	205	441.2	184	406.9	170	360.2
Klickitat	53	240.9	69	307.7	57	250.7	63	273.9	46	198.7
Lewis	279	349.0	305	375.5	331	402.9	273	330.1	288	345.3
Lincoln	12	+	26	240.6	24	220.7	15	+	19	171.9
Mason	238	371.4	247	379.6	214	325.6	196	298.1	220	332.3
Okanogan	122	292.4	142	339.3	122	289.8	107	252.7	155	363.0
Pacific	32	141.4	42	182.5	44	188.3	32	136.6	23	97.5
Pend Oreille	30	227.7	26	195.0	23	171.6	22	163.3	29	212.8
Pierce	5,947	669.6	6,300	695.2	5,567	604.9	5,383	579.9	4,498	479.8
San Juan	19	110.5	18	102.5	12	+	11	+	15	+
Skagit	470	373.3	495	385.5	433	334.3	384	295.4	401	305.5
Skamania	21	184.0	29	251.9	12	+	17	144.7	13	+
Snohomish	2,699	335.8	2,932	359.0	2,604	314.5	2,382	284.3	2,191	258.6
Spokane	2,644	507.0	2,655	500.6	2,469	457.8	2,562	472.6	2,388	433.6
Stevens	107	235.5	97	210.7	83	178.7	91	194.8	84	178.5
Thurston	1,200	421.2	1,202	415.5	1,227	416.2	920	308.9	826	274.9
Wahkiakum	3	+	8	+	6	+	3	+	8	+
Walla Walla	218	352.6	314	504.8	219	349.9	275	442.8	270	431.1
Whatcom	838	381.6	882	393.1	725	319.6	752	332.3	833	359.6
Whitman	495	1050.1	436	911.8	319	665.0	401	899.1	401	838.9
Yakima	1,787	703.7	2,114	829.1	1,819	708.5	1,976	765.6	2,007	772.1
State Totals‡	34,754	465.1	37,641	495.7	31,423	407.8	30,352	390.8	28,708	365.0

Statewide by Year

Year	Cases	Rate*	Deaths
1990	12,709	261.1	0
1991	12,917	257.2	0
1992	11,762	228.8	0
1993	10,331	196.2	0
1994	10,575	197.1	0
1995	9,463	173.0	0
1996	9,237	165.9	0
1997	9,523	168.1	0
1998	10,998	191.3	0
1999	11,964	205.2	0
2000	13,066	221.7	0
2001	13,631	228.3	0
2002	14,936	246.5	0
2003	16,796	274.1	0
2004	17,635	284.0	0
2005	18,617	295.6	0
2006	17,819	277.5	0
2007	19,123	293.1	0
2008	21,327	322.7	0
2009	21,178	317.4	0
2010	21,401	318.3	0
2011	23,237	343.1	0
2012	24,600	360.2	0
2013	25,013	362.5	0
2014	26,246	375.3	0
2015	28,721	405.0	0
2016	31,193	432.1	0
2017	32,454	441.6	0
2018	34,754	465.1	0
2019	37,641	495.7	0
2020	31,423	407.8	0
2021	30,352	390.8	0
2022	28,708	365.0	0

Note: Data prior to 2009 are based on year reported rather than year diagnosed.

‡State Totals for 2019-2022 also include supplementary ELR records for which county was unspecificed.
*All incidence rates are cases per 100,000 population.
+County incidence rates based on counts ≤16 are suppressed due to statistical instability.
Note: Cases are included in this table if they are residing in Washington based on reported address at the time of diagnosis, are a reportable case in the relevant calendar year (January 1, XXXX - December 31, XXXX), and are given a valid DOH case classification of Probable or Confirmed as determined by the current CDC case definition.
Data sources: PHIMS-STD 6/15/2023, WELRS (for 2019-2022 data only).

Cholera

Year	Cases	Rate*	Deaths
1985	0	0	0
1986	0	0	0
1987	0	0	0
1988	0	0	0
1989	0	0	0
1990	0	0	0
1991	0	0	0
1992	2	0	0
1993	0	0	0
1994	0	0	0
1995	0	0	0
1996	0	0	0
1997	0	0	0
1998	0	0	0
1999	0	0	0
2000	0	0	0
2001	0	0	0
2002	1	0	0
2003	0	0	0
2004	0	0	0
2005	0	0	0
2006	0	0	0
2007	0	0	0
2008	0	0	0
2009	0	0	0
2010	0	0	0
2011	0	0	0
2012	0	0	0
2013	1	0	0
2014	0	0	0
2015	0	0	0
2016	0	0	0
2017	0	0	0
2018	0	0	0
2019	0	0	0
2020	0	0	0
2021	0	0	0
2022	0	0	0

*All rates are cases per 100,000 population.

COVID-19

County	2020 Cases	2020 Rate*	2021 Cases	2021 Rate*	2022 Cases	2022 Rate*
Adams	1,735	8417.0	1,714	8201.0	2,123	10061.6
Asotin	1,131	5075.2	2,091	9293.3	2,310	10221.2
Benton	11,749	5679.3	22,397	10695.8	27,001	12718.3
Chelan	5,065	6400.0	7,922	9902.5	10,881	13491.6
Clallam	741	960.4	5,824	7490.7	8,963	11546.5
Clark	14,187	2818.7	38,201	7445.1	57,795	11095.2
Columbia	96	2429.2	336	8506.3	309	7822.8
Cowlitz	2,774	2505.2	13,029	11685.2	11,203	9971.5
Douglas	2,706	6302.1	4,275	9816.3	6,169	14020.5
Ferry	181	2521.6	763	10524.1	836	11452.1
Franklin	9,264	9575.3	12,361	12568.4	14,876	14913.3
Garfield	96	4199.5	181	7869.6	217	9434.8
Grant	7,028	7090.2	11,838	11744.0	12,906	12677.8
Grays Harbor	2,605	3444.1	8,038	10569.4	9,523	12464.7
Island	966	1112.2	4,219	4843.9	8,290	9452.7
Jefferson	233	706.6	1,321	3990.9	3,142	9421.3
King	66,395	2925.3	150,489	6580.0	321,612	13876.3
Kitsap	4,177	1515.5	17,303	6230.8	29,935	10656.8
Kittitas	1,863	4009.2	4,216	9322.3	4,204	8906.8
Klickitat	536	2357.6	1,891	8221.7	1,860	8034.6
Lewis	2,548	3101.7	9,602	11610.6	8,426	10103.1
Lincoln	270	2482.5	1,289	11825.7	1,090	9864.3
Mason	1,835	2791.9	5,481	8336.1	8,179	12355.0
Okanogan	1,882	4469.9	3,973	9381.3	4,582	10730.7
Pacific	574	2456.7	1,724	7359.7	2,426	10279.7
Pend Oreille	498	3716.1	1,263	9372.9	1,190	8733.9
Pierce	27,898	3031.1	92,708	9987.9	119,159	12711.6
San Juan	75	421.6	451	2526.6	1,417	7807.2
Skagit	3,368	2600.3	11,098	8536.9	13,554	10326.9
Skamania	201	1732.2	742	6314.9	836	7025.2
Snohomish	23,331	2817.9	62,231	7427.9	114,644	13530.5
Spokane	28,145	5218.4	54,738	10097.4	68,208	12385.7
Stevens	1,229	2646.1	4,520	9673.6	4,118	8752.4
Thurston	5,063	1717.5	23,210	7793.8	33,472	11138.8
Wahkiakum	52	1175.9	265	5921.8	319	7049.7
Walla Walla	3,783	6044.7	6,020	9694.0	8,848	14128.5
Whatcom	3,629	1599.8	17,802	7866.5	27,024	11665.9
Whitman	2,841	5922.1	3,441	7715.2	3,686	7711.3
Yakima	21,039	8195.1	26,630	10317.7	34,817	13393.7
Unknown	919	NA	652	NA	1,429	NA
State Totals	262,708	3409.0	636,249	8191.7	991,579	12608.5

Statewide by Year

Year	Cases	Rate*	Deaths
2020	262,708	3409.0	3,735
2021	636,249	8191.7	6,414
2022	991,579	12608.5	5,068

Note: Deaths are included in this table if there was any mention of COVID-19 or other equal term associated with a positive COVID-19 test, or natural death associated with a positive COVID-19 test shortly before the date of death on the death certificate in the relevant calendar year (January 1, 2XXX- December 31, 2XXX). Death counts reflect only deaths reported to Washington State through submission of death certificates and positive lab results into the WDRS reporting system. Death data may be underrepresented due to the lack of available testing early in the pandemic, coding limitations related to nonstandard naming practices of "COVID-19", and inconsistent use of diagnosis for the cause of death on the death certificate. Deaths with only home kit testing may not be included in the data.

Note: 2020 and 2021 data have been updated since last annual report, due to delays in case counts prior to publication.

*All incidence rates are cases per 100,000 population.

Note: Cases are included in this table if they received a positive molecular (PCR) or antigen test from CLIA-certified or CLIA-waived laboratories, are a reportable case in the relevant calendar year (January 1, 2XXX - December 31, 2XXX) and are given a valid DOH case classification of Probable or Confirmed as determined by the current CDC case definition. Cases identified only through home tests are not represented in the data and may be artificially low for 2022 due to widespread use of at-home-tests. Washington residents tested in other states are generally not included in the data set. Therefore, case data represented on the dashboard underestimates the true number of people infected with COVID-19 in Washington and may be biased towards certain populations more likely to receive tests in a health care setting.

Data sources: WDRS for case data; Death Certificate Data for deaths

Cryptosporidiosis

County	2018 Cases	2018 Rate*	2019 Cases	2019 Rate*	2020 Cases	2020 Rate*	2021 Cases	2021 Rate*	2022 Cases	2022 Rate*
Adams	0	0	0	0	0	0	0	0	0	0
Asotin	1	+	1	+	0	0	0	0	0	0
Benton	1	+	8	3.9	4	+	2	+	5	2.4
Chelan	0	0	1	+	3	+	2	+	11	13.6
Clallam	4	+	3	+	0	0	6	7.7	4	+
Clark	15	3.1	15	3	2	+	5	1	10	1.9
Columbia	0	0	0	0	0	0	0	0	0	0
Cowlitz	3	+	5	4.6	0	0	3	+	0	0
Douglas	0	0	4	+	1	+	0	0	5	11.4
Ferry	1	+	0	0	1	+	0	0	0	0
Franklin	0	0	0	0	0	0	0	0	1	+
Garfield	0	0	0	0	0	0	0	0	0	0
Grant	3	+	1	+	1	+	2	+	4	+
Grays Harbor	1	+	1	+	1	+	1	+	1	+
Island	0	0	0	0	2	+	2	+	1	+
Jefferson	2	+	0	0	3	+	2	+	4	+
King	92	4.2	114	5.1	82	3.6	86	3.8	103	4.4
Kitsap	2	+	1	+	8	2.9	1	+	4	+
Kittitas	0	0	3	+	3	+	3	+	5	10.6
Klickitat	2	+	2	+	1	+	0	0	0	0
Lewis	2	+	1	+	2	+	0	0	5	6
Lincoln	0	0	0	0	0	0	0	0	0	0
Mason	2	+	1	+	1	+	0	0	1	+
Okanogan	0	0	1	+	2	+	1	+	1	+
Pacific	0	0	1	+	0	0	0	0	1	+
Pend Oreille	0	0	0	0	0	0	0	0	0	0
Pierce	23	2.6	27	3	13	1.4	9	1	19	2
San Juan	2	+	1	+	1	+	2	+	1	+
Skagit	5	4	3	+	11	8.5	3	+	5	3.8
Skamania	0	0	1	+	1	+	0	0	1	+
Snohomish	12	1.5	9	1.1	14	1.7	19	2.3	22	2.6
Spokane	2	+	7	1.3	5	0.9	4	+	19	3.5
Stevens	0	0	0	0	0	0	0	0	0	0
Thurston	6	2.1	6	2.1	4	+	6	2	5	1.7
Wahkiakum	0	0	0	0	0	0	1	+	0	0
Walla Walla	4	+	3	+	2	+	2	+	1	+
Whatcom	4	+	5	2.2	0	0	1	+	2	+
Whitman	0	0	0	0	0	0	0	0	1	+
Yakima	9	3.5	7	2.7	4	+	5	1.9	8	3.1
State Totals	198	2.6	232	3.1	172	2.2	168	2.2	250	3.2

*All incidence rates are cases per 100,000 population.
+County incidence rates not calculated for <5 cases.

Statewide by Year

Year	Cases	Rate*	Deaths
2001	73	1.2	0
2002	62	1.0	0
2003	65	1.1	0
2004	63	1.0	0
2005	94	1.5	0
2006	95	1.5	0
2007	139	2.1	0
2008	99	1.5	0
2009	102	1.5	0
2010	102	1.5	0
2011	88	1.3	0
2012	101	1.5	0
2013	84	1.2	0
2014	75	1.1	0
2015	113	1.6	0
2016	131	1.8	0
2017	150	2.0	0
2018	198	2.6	0
2019	232	3.1	0
2020	172	2.2	1
2021	168	2.2	1
2022	250	3.2	0

Cyclosporiasis‡

Year	Cases	Rate*	Deaths
2002	5	0.1	0
2003	0	0	0
2004	11	0.2	0
2005	5	0.1	0
2006	1	0	0
2007	1	0	0
2008	1	0	0
2009	0	0	0
2010	2	0	0
2011	4	0.1	0
2012	0	0	0
2013	0	0	0
2014	2	0	0
2015	5	0.1	0
2016	3	0	0
2017	9	0.1	0
2018	23	0.3	0
2019	17	0.2	0
2020	11	0.1	0
2021	19	0.2	0
2022	43	0.5	0

‡Cyclosporiasis first became a notifiable condition in Washington in 12/2000.
*All rates are cases per 100,000 population.

Diphtheria

Year	Cases	Rate*	Deaths
1985	0	0	0
1986	0	0	0
1987	0	0	0
1988	0	0	0
1989	0	0	0
1990	0	0	0
1991	0	0	0
1992	0	0	0
1993	0	0	0
1994	0	0	0
1995	0	0	0
1996	0	0	0
1997	0	0	0
1998	0	0	0
1999	0	0	0
2000	0	0	0
2001	0	0	0
2002	0	0	0
2003	0	0	0
2004	0	0	0
2005	0	0	0
2006	0	0	0
2007	0	0	0
2008	0	0	0
2009	0	0	0
2010	0	0	0
2011	0	0	0
2012	0	0	0
2013	0	0	0
2014	0	0	0
2015	0	0	0
2016	0	0	0
2017	0	0	0
2018	0	0	0
2019	0	0	0
2020	0	0	0
2021	0	0	0
2022	0	0	0

*All rates are cases per 100,000 population.

Giardiasis

County	2018 Cases	2018 Rate*	2019 Cases	2019 Rate*	2020 Cases	2020 Rate*	2021 Cases	2021 Rate*	2022 Cases	2022 Rate*
Adams	0	0	0	0	0	0	0	0	1	+
Asotin	4	+	2	+	0	0	0	0	0	0
Benton	4	+	5	2.5	2	+	6	2.9	4	+
Chelan	7	9	3	+	0	0	0	0	3	+
Clallam	7	9.3	6	7.9	4	+	4	+	6	7.7
Clark	22	4.6	11	2.2	9	1.8	22	4.3	27	5.2
Columbia	0	0	0	0	0	0	0	0	1	+
Cowlitz	6	5.6	1	+	0	0	1	+	8	7.1
Douglas	1	+	0	0	0	0	1	+	3	+
Ferry	0	0	1	+	0	0	0	0	0	0
Franklin	1	+	4	+	1	+	2	+	4	+
Garfield	2	+	0	0	0	0	0	0	0	0
Grant	3	+	1	+	2	+	0	0	1	+
Grays Harbor	3	+	4	+	0	0	4	+	1	+
Island	2	+	4	+	5	5.8	4	+	8	9.1
Jefferson	6	18.6	7	21.5	8	24.3	0	0	5	15
King	156	7.1	59	2.6	9	0.4	40	1.7	18	0.8
Kitsap	18	6.7	13	4.8	4	+	12	4.3	18	6.4
Kittitas	1	+	1	+	1	+	4	+	10	21.2
Klickitat	3	+	2	+	0	0	1	+	2	+
Lewis	1	+	3	+	0	0	1	+	2	+
Lincoln	1	+	0	0	1	+	0	0	0	0
Mason	6	9.4	3	+	2	+	0	0	0	0
Okanogan	4	+	2	+	3	+	2	+	1	+
Pacific	0	0	0	0	0	0	0	0	1	+
Pend Oreille	0	0	1	+	1	+	0	0	0	0
Pierce	31	3.5	43	4.7	28	3	24	2.6	38	4.1
San Juan	1	+	0	0	0	0	0	0	2	+
Skagit	8	6.4	10	7.8	12	9.3	7	5.4	13	9.9
Skamania	0	0	2	+	0	0	1	+	1	+
Snohomish	55	6.8	46	5.6	50	6	46	5.5	47	5.5
Spokane	32	6.1	29	5.5	8	1.5	13	2.4	15	2.7
Stevens	3	+	1	+	1	+	0	0	3	+
Thurston	21	7.4	12	4.1	22	7.5	22	7.4	16	5.3
Wahkiakum	1	+	0	0	0	0	0	0	0	0
Walla Walla	4	+	0	0	0	0	1	+	0	0
Whatcom	18	8.2	9	4	11	4.8	14	6.2	14	6
Whitman	2	+	2	+	0	0	2	+	0	0
Yakima	4	+	1	+	0	0	3	+	3	+
State Totals	438	5.9	288	3.8	184	2.4	237	3.1	276	3.5

Statewide by Year

Year	Cases	Rate*	Deaths
1983	706	16.4	0
1984	710	16.3	0
1985	779	17.6	0
1986	811	18.2	0
1987	827	18.3	0
1988	851	18.4	0
1989	980	20.7	0
1990	792	16.3	0
1991	876	17.4	1
1992	860	16.7	1
1993	747	14.2	0
1994	722	13.5	0
1995	855	15.6	0
1996	668	12.0	0
1997	738	13.0	0
1998	740	12.9	1
1999	560	9.6	1
2000	622	10.6	1
2001	512	8.6	0
2002	510	8.4	0
2003	435	7.1	0
2004	444	7.2	0
2005	437	6.9	0
2006	451	7.0	0
2007	590	9.0	0
2008	486	7.4	0
2009	467	7.0	0
2010	521	7.7	0
2011	529	7.8	0
2012	512	7.5	0
2013	548	7.9	0
2014	515	7.4	0
2015	604	8.5	0
2016	672	9.3	0
2017	668	9.1	0
2018	438	5.9	0
2019	288	3.8	0
2020	184	2.4	0
2021	237	3.1	0
2022	276	3.5	0

*All incidence rates are cases per 100,000 population.

+County incidence rates not calculated for <5 cases.

Gonorrhea

County	2018 Cases	2018 Rate*	2019 Cases	2019 Rate*	2020 Cases	2020 Rate*	2021 Cases	2021 Rate*	2022 Cases	2022 Rate*
Adams	23	114.3	11	+	10	+	22	105.3	11	+
Asotin	6	+	24	108.0	26	116.7	17	75.6	8	+
Benton	240	120.8	235	115.8	379	183.2	337	160.9	284	133.8
Chelan	45	58.0	36	46.1	40	50.5	37	46.3	60	74.4
Clallam	21	27.8	29	38.0	9	+	29	37.3	49	63.1
Clark	658	136.2	548	111.3	677	134.5	638	124.3	568	109.0
Columbia	2	+	3	+	1	+	1	+	7	+
Cowlitz	134	124.5	101	92.5	72	65.0	84	75.3	80	71.2
Douglas	34	81.9	26	61.7	25	58.2	20	45.9	29	65.9
Ferry	2	+	7	+	2	+	3	+	8	+
Franklin	124	134.0	133	140.5	170	175.7	184	187.1	182	182.5
Garfield	1	+	1	+	0	0	0	0	1	+
Grant	110	113.7	97	99.1	127	128.1	112	111.1	103	101.2
Grays Harbor	48	64.5	72	96.0	83	109.7	77	101.2	54	70.7
Island	37	43.6	41	47.7	29	33.4	29	33.3	32	36.5
Jefferson	8	+	5	+	10	+	4	+	14	+
King	4,431	201.6	4,706	210.6	4,277	188.4	4,310	188.5	4,450	192.0
Kitsap	306	113.4	241	88.2	255	92.5	260	93.6	275	97.9
Kittitas	30	67.7	29	64.3	19	40.9	18	39.8	42	89.0
Klickitat	10	+	17	75.8	8	+	14	+	13	+
Lewis	54	67.6	50	61.6	50	60.9	67	81.0	53	63.5
Lincoln	3	+	7	+	6	+	1	+	10	+
Mason	69	107.7	45	69.2	23	35.0	56	85.2	51	77.0
Okanogan	13	+	46	109.9	41	97.4	25	59.0	52	121.8
Pacific	5	+	4	+	4	+	7	+	8	+
Pend Oreille	9	+	1	+	11	+	4	+	20	146.8
Pierce	1,923	216.5	2,132	235.2	2,208	239.9	1,786	192.4	1,735	185.1
San Juan	2	+	2	+	0	0	1	+	7	+
Skagit	108	85.8	117	91.1	136	105.0	99	76.2	86	65.5
Skamania	2	+	4	+	1	+	1	+	6	+
Snohomish	875	108.9	760	93.0	796	96.1	799	95.4	893	105.4
Spokane	755	144.8	1,073	202.3	900	166.9	879	162.1	1,047	190.1
Stevens	24	52.8	32	69.5	25	53.8	20	42.8	31	65.9
Thurston	289	101.4	279	96.4	305	103.5	262	88.0	258	85.9
Wahkiakum	1	+	0	0	0	0	1	+	1	+
Walla Walla	48	77.6	78	125.4	60	95.9	48	77.3	41	65.5
Whatcom	171	77.9	157	70.0	188	82.9	216	95.4	222	95.8
Whitman	38	80.6	34	71.1	23	47.9	34	76.2	45	94.1
Yakima	556	218.9	665	260.8	584	227.5	596	230.9	556	213.9
State Totals	11,215	150.1	11,848	156.0	11,580	150.3	11,098	142.9	11,392	144.9

Statewide by Year

Year	Cases	Rate*	Deaths
1990	5,009	103.0	0
1991	4,441	88.4	0
1992	4,169	81.1	0
1993	3,740	71.0	0
1994	2,893	53.9	0
1995	2,765	50.5	0
1996	2,020	36.3	0
1997	1,955	34.5	0
1998	1,948	33.9	0
1999	2,132	36.6	0
2000	2,419	41.0	0
2001	2,991	50.1	0
2002	2,925	48.3	0
2003	2,754	44.9	0
2004	2,810	45.3	0
2005	3,738	59.3	0
2006	4,231	65.9	0
2007	3,646	55.9	0
2008	3,116	47.2	0
2009	2,268	34.0	0
2010	2,865	42.6	0
2011	2,730	40.3	0
2012	3,282	48.1	0
2013	4,390	63.6	0
2014	6,136	87.8	0
2015	7,203	101.6	0
2016	8,165	113.1	0
2017	10,022	136.4	0
2018	11,215	150.1	0
2019	11,848	156.0	0
2020	11,580	150.3	0
2021	11,098	142.9	0
2022	11,392	144.9	0

Note: Data prior to 2009 are based on year reported rather than year diagnosed.

*All incidence rates are cases per 100,000 population.

+County incidence rates based on counts ≤16 are suppressed due to statistical instability.

Note: Cases are included in this table if they are residing in Washington based on reported address at the time of diagnosis, are a reportable case in the relevant calendar year (January 1, XXXX - December 31, XXXX), and are given a valid DOH case classification of Probable or Confirmed as determined by the current CDC case definition.

Data source: PHIMS-STD 6/15/2023.

Haemophilus Influenzae Invasive Disease

Year	Cases	Rate*	Deaths
1982	149	3.5	6
1983	123	2.9	5
1984	110	2.5	5
1985	153	3.5	6
1986	319	7.1	11
1987	271	6.0	6
1988	200	4.3	0
1989	163	3.4	2
1990	123	2.5	6
1991	51	1.0	0
1992	22	0.4	1
1993	17	0.3	0
1994	10	0.2	0
1995	11	0.2	3
1996	10	0.2	0
1997	6	0.1	0
1998	11	0.2	1
1999	5	0.1	1
2000	8	0.1	0
2001*	7	1.8	0
2002*	5	1.2	0
2003*	13	3.2	1
2004*	4	1	0
2005*	5	1.2	0
2006*	5	1.2	0
2007*	6	1.4	0
2008*	2	0.5	0
2009*	9	2.1	0
2010*	10	2.3	1
2011*	8	1.8	1
2012*	4	0.9	0
2013*	11	2.5	0
2014*	9	2.1	0
2015*	5	1.1	0
2016*	9	2	0
2017*	7	1.5	0
2018*	13	2.9	0
2019*	16	3.5	0
2020*	6	1.3	0
2021*	7	1.6	0
2022*	17	3.9	0

*All rates are cases per 100,000 population. Rates for 2001-2022 are for population aged 0-4 years; rates before 2001 are for the entire population.

Hantavirus Pulmonary Syndrome‡

Year	Cases	Rate*	Deaths
1985	2	0	1
1994	4	0.1	2
1995	4	0.1	2
1996	3	0.1	1
1997	2	0	0
1998	5	0.1	1
1999	1	0	0
2000	1	0	0
2001	1	0	0
2002	2	0	1
2003	2	0	0
2004	1	0	0
2005	3	0	2
2006	2	0	0
2007	2	0	1
2008	2	0	1
2009	3	0	1
2010	2	0	0
2011	2	0	1
2012	2	0	2
2013	0	0	0
2014	1	0	0
2015	1	0	0
2016	1	0	0
2017	5	0.1	3
2018	2	0	0
2019	1	0	0
2020	0	0	0
2021	1	0	0
2022	0	0	0

‡Hantavirus Pulmonary Syndrome first became a notifiable condition in Washington in 12/2000.
*All rates are cases per 100,000 population.

Hepatitis A, Acute

County	2018 Cases	2018 Rate*	2019 Cases	2019 Rate*	2020 Cases	2020 Rate*	2021 Cases	2021 Rate*	2022 Cases	2022 Rate*
Adams	0	0	0	0	2	+	0	0	0	0
Asotin	0	0	0	0	0	0	0	0	0	0
Benton	1	+	0	0	1	+	0	0	1	+
Chelan	0	0	1	+	0	0	0	0	0	0
Clallam	1	+	0	0	0	0	0	0	0	0
Clark	3	+	4	+	1	+	0	0	1	+
Columbia	0	0	0	0	0	0	0	0	0	0
Cowlitz	0	0	1	+	0	0	0	0	0	0
Douglas	0	0	0	0	0	0	0	0	1	+
Ferry	0	0	0	0	0	0	0	0	0	0
Franklin	0	0	1	+	0	0	2	+	0	0
Garfield	0	0	0	0	0	0	0	0	0	0
Grant	0	0	0	0	0	0	0	0	0	0
Grays Harbor	0	0	0	0	0	0	0	0	0	0
Island	0	0	0	0	2	+	0	0	2	+
Jefferson	2	+	0	0	0	0	0	0	0	0
King	14	0.6	45	2	148	6.5	6	0.3	8	0.3
Kitsap	2	+	4	+	4	+	0	0	0	0
Kittitas	0	0	0	0	6	12.9	2	+	1	+
Klickitat	1	+	1	+	0	0	0	0	0	0
Lewis	0	0	0	0	0	0	0	0	0	0
Lincoln	0	0	0	0	0	0	2	+	1	+
Mason	0	0	0	0	1	+	0	0	0	0
Okanogan	0	0	4	+	4	+	0	0	1	+
Pacific	1	+	0	0	0	0	0	0	0	0
Pend Oreille	0	0	1	+	0	0	0	0	0	0
Pierce	2	+	3	+	20	2.2	0	0	2	+
San Juan	0	0	0	0	0	0	0	0	0	0
Skagit	1	+	2	+	0	0	0	0	0	0
Skamania	0	0	0	0	0	0	0	0	0	0
Snohomish	2	+	15	1.8	39	4.7	3	+	7	0.8
Spokane	1	+	74	14	25	4.6	0	0	2	+
Stevens	1	+	0	0	1	+	0	0	0	0
Thurston	2	+	1	+	5	1.7	0	0	1	+
Wahkiakum	0	0	0	0	0	0	0	0	0	0
Walla Walla	0	0	0	0	0	0	0	0	0	0
Whatcom	0	0	1	+	1	+	0	0	0	0
Whitman	0	0	0	0	0	0	0	0	0	0
Yakima	1	+	23	9	24	9.3	3	+	0	0
State Totals	35	0.5	181	2.4	284	3.7	18	0.2	28	0.4

Statewide by Year

Year	Cases	Rate*	Deaths
1983	268	6.2	1
1984	373	8.6	0
1985	702	15.9	2
1986	1,385	31.0	1
1987	2,589	57.2	1
1988	2,669	57.8	7
1989	3,273	69.2	5
1990	1,380	28.4	1
1991	608	12.1	3
1992	865	16.8	1
1993	926	17.6	1
1994	1,119	20.9	2
1995	937	17.1	9
1996	1,001	18.0	3
1997	1,019	18.0	1
1998	1,037	18.0	2
1999	505	8.7	1
2000	298	5.1	1
2001	184	3.1	0
2002	162	2.7	0
2003	50	0.8	0
2004	69	1.1	0
2005	63	1.0	1
2006	52	0.8	2
2007	60	0.9	0
2008	51	0.8	0
2009	42	0.6	1
2010	21	0.3	0
2011	31	0.5	1
2012	29	0.4	1
2013	45	0.7	1
2014	26	0.4	0
2015	26	0.4	0
2016	31	0.4	1
2017	28	0.4	0
2018	35	0.5	1
2019	181	2.4	4
2020	284	3.7	5
2021	18	0.2	0
2022	28	0.4	0

*All incidence rates are cases per 100,000 population.
+County incidence rates not calculated for <5 cases.

Hepatitis B, Acute‡

County	2018 Cases	2018 Rate*	2019 Cases	2019 Rate*	2020 Cases	2020 Rate*	2021 Cases	2021 Rate*	2022 Cases	2022 Rate*
Adams	0	0	0	0	0	0	0	0	0	0
Asotin	0	0	0	0	0	0	0	0	0	0
Benton	0	0	0	0	1	+	2	+	0	0
Chelan	0	0	0	0	0	0	1	+	0	0
Clallam	0	0	0	0	0	0	0	0	0	0
Clark	0	0	2	+	0	0	2	+	1	+
Columbia	0	0	0	0	0	0	0	0	0	0
Cowlitz	2	+	1	+	0	0	0	0	0	0
Douglas	0	0	0	0	0	0	0	0	0	0
Ferry	0	0	0	0	0	0	0	0	0	0
Franklin	0	0	0	0	0	0	0	0	0	0
Garfield	0	0	0	0	0	0	0	0	0	0
Grant	0	0	0	0	0	0	0	0	0	0
Grays Harbor	3	+	3	+	0	0	0	0	0	0
Island	0	0	0	0	0	0	0	0	1	+
Jefferson	0	0	0	0	0	0	0	0	0	0
King	9	0.4	17	0.8	11	0.5	11	0.5	9	0.4
Kitsap	1	+	0	0	0	0	1	+	0	0
Kittitas	0	0	1	+	0	0	0	0	0	0
Klickitat	1	+	0	0	0	0	1	+	0	0
Lewis	0	0	1	+	2	+	0	0	0	0
Lincoln	1	+	0	0	0	0	0	0	0	0
Mason	1	+	0	0	0	0	0	0	0	0
Okanogan	0	0	0	0	0	0	0	0	0	0
Pacific	0	0	0	0	0	0	0	0	0	0
Pend Oreille	0	0	0	0	0	0	0	0	0	0
Pierce	6	0.7	4	+	6	0.7	1	+	4	+
San Juan	0	0	0	0	0	0	0	0	0	0
Skagit	1	+	0	0	0	0	0	0	1	+
Skamania	0	0	0	0	0	0	0	0	0	0
Snohomish	7	0.9	7	0.9	2	+	2	+	1	+
Spokane	13	2.6	7	1.4	7	1.3	7	1.3	5	0.9
Stevens	1	+	1	+	0	0	0	0	0	0
Thurston	3	+	5	1.7	3	*	0	0	0	0
Wahkiakum	0	0	0	0	0	0	0	0	0	0
Walla Walla	1	+	0	0	0	0	0	0	0	0
Whatcom	1	+	3	+	4	+	1	+	1	+
Whitman	0	0	0	0	0	0	0	0	0	0
Yakima	0	0	0	0	1	+	0	0	1	+
Unspecified‡	0	-	1	-	0	-	0	-	0	-
State Totals	51	0.7	53	0.7	37	0.5	29	0.4	24	0.3

Statewide by Year

Year	Cases	Rate*	Deaths
1982	358	8.4	2
1983	307	7.1	3
1984	317	7.3	2
1985	484	11.0	6
1986	989	22.2	8
1987	1,126	24.9	4
1988	979	21.2	6
1989	1,055	22.3	9
1990	616	12.7	7
1991	470	9.4	5
1992	399	7.8	1
1993	247	4.7	0
1994	255	4.8	2
1995	226	4.1	2
1996	158	2.8	1
1997	114	2.0	2
1998	136	2.4	0
1999	111	1.9	1
2000	132	2.2	5
2001	171	2.9	0
2002	83	1.4	0
2003	90	1.5	1
2004	64	1.0	1
2005	80	1.3	0
2006	80	1.2	2
2007	71	1.1	1
2008	56	0.8	0
2009	48	0.7	0
2010	50	0.7	1
2011	35	0.5	0
2012	34	0.5	1
2013	34	0.5	1
2014	44	0.6	0
2015	34	0.5	0
2016	45	0.6	0
2017	43	0.6	0
2018	51	0.7	0
2019	53	0.7	0
2020	37	0.5	1
2021	29	0.4	1
2022	24	0.3	1

‡Includes cases diagnosed in correctional facilities and cases entered at the state level into Washington State surveillance databases.
*All incidence rates are cases per 100,000 population.
+County incidence rates not calculated for <5 cases.
Note: Cases of acute hepatitis B are included in this table if they are a resident of Washington at the time of initial diagnosis/report, are a reportable case in the relevant calendar year (January 1, XXXX – December 31, XXXX), and are given a valid DOH case classification of Confirmed as determined by the CDC case definition.
Data sources: Washington Disease Reporting System (WDRS), 09/01/2023; Washington State Department of Health, Center for Health Statistics, Death Certificate Data, 1990–2022

Hepatitis B, Chronic‡

County	2018 Cases	2018 Rate*	2019 Cases	2019 Rate*	2020 Cases	2020 Rate*	2021 Cases	2021 Rate*	2022 Cases	2022 Rate*
Adams	3	+	3	+	0	0	1	+	2	+
Asotin	1	+	0	0	1	+	1	+	0	0
Benton	49	24.8	64	31.7	36	17.5	28	13.6	18	8.5
Chelan	5	6.4	9	11.5	3	+	4	5.0	4	+
Clallam	11	14.6	6	7.9	2	+	4	5.2	4	+
Clark	115	24.0	108	22.1	89	17.8	90	18.0	124	23.8
Columbia	0	0	0	0	0	0	0	0	1	+
Cowlitz	9	8.4	12	11.0	9	8.1	6	5.4	15	13.4
Douglas	4	+	3	+	3	+	1	+	2	+
Ferry	0	0	0	0	0	0	1	+	0	0
Franklin	15	16.2	19	20.1	10	10.3	4	+	6	6.0
Garfield	0	0	0	0	0	0	1	+	0	0
Grant	2	+	5	5.1	3	+	4	+	6	5.9
Grays Harbor	17	23.1	12	16.2	10	13.4	7	9.4	7	9.2
Island	10	11.9	7	8.3	5	5.8	7	8.2	4	+
Jefferson	2	+	0	0	2	+	4	+	0	0
King	887	40.5	939	42.2	668	29.5	769	34.0	840	36.2
Kitsap	51	19.1	41	15.2	25	9.2	27	9.9	25	8.9
Kittitas	3	+	0	0	2	+	1	+	2	+
Klickitat	1	+	3	+	2	+	3	+	0	0
Lewis	9	11.5	4	+	3	+	13	16.2	7	8.4
Lincoln	1	+	1	+	1	+	1	+	1	+
Mason	8	12.5	10	15.4	2	+	11	16.8	8	12.1
Okanogan	2	+	3	+	1	+	6	13.9	4	+
Pacific	0	0	6	27.7	1	+	1	+	2	+
Pend Oreille	0	0	1	+	1	+	2	+	0	0
Pierce	186	21.3	191	21.5	135	15.0	171	19.0	147	15.7
San Juan	1	+	2	+	0	0	0	0	0	0
Skagit	11	8.7	13	10.1	4	+	12	9.2	7	5.3
Skamania	0	0	1	+	1	+	2	+	1	+
Snohomish	258	32.0	243	29.7	172	20.7	151	18.2	198	23.4
Spokane	102	20.1	93	18.0	73	14.0	62	11.9	83	15.1
Stevens	7	15.5	2	+	4	+	2	+	4	+
Thurston	45	16.0	42	14.7	47	16.2	44	15.1	34	11.3
Wahkiakum	1	+	0	0	0	0	0	0	0	0
Walla Walla	8	12.9	5	8.0	12	19.2	5	8.0	4	+
Whatcom	18	8.2	19	8.4	21	9.2	17	7.5	12	5.2
Whitman	12	24.4	6	12.0	8	15.8	3	+	5	10.5
Yakima	19	7.5	20	7.8	12	4.6	13	5.0	6	2.3
Unspecified‡	5	-	2	-	2	-	4	-	0	-
State Totals	1,878	25.3	1,895	25.1	1,370	17.9	1,483	19.4	1583	20.1

Statewide by Year

Year	Cases	Rate*	Deaths
2001	1,078	18.1	55
2002	979	16.2	52
2003	950	15.5	48
2004	939	15.3	55
2005	1,034	16.4	49
2006	1,119	17.4	39
2007	1,138	17.4	47
2008	1,464	22.2	52
2009	1,194	17.9	64
2010	1,238	18.4	47
2011	1,030	15.2	54
2012	1,139	16.7	47
2013	901	13.1	60
2014	1,119	16.1	56
2015	1,310	18.6	48
2016	1,521	21.2	47
2017	1,816	24.9	47
2018	1,878	25.3	53
2019	1,895	25.1	49
2020	1,370	17.9	49
2021	1,483	19.4	58
2022	1,583	20.1	60

‡Includes cases diagnosed in correctional facilities and cases entered at the state level into Washington State surveillance databases.
*All incidence rates are cases per 100,000 population.
+County incidence rates not calculated for <5 cases.
Note: Cases of chronic hepatitis B are included in this table if they are a resident of Washington at the time of initial diagnosis/report, are a reportable case in the relevant calendar year (January 1, XXXX – December 31, XXXX), and are given a valid DOH case classification of Probable or Confirmed as determined by the CDC case definition.
Data sources: Washington Disease Reporting System (WDRS), 09/01/2022; Washington State DOH, Center for Health Statistics, Death Certificate Data, 1990–2022

Hepatitis B, Perinatal

Year	Cases
2017	0
2018	1
2019	0
2020	0
2021	1
2022	0

Note: Cases of perinatal hepatitis B are included in this table if they are a resident of Washington at the time of initial diagnosis/report, are a reportable case in the relevant calendar year (January 1, XXXX – December 31, XXXX), and are given a valid DOH case classification of Confirmed as determined by the CDC case definition.

Data source: Washington Disease Reporting System (WDRS), 09/01/2023

Hepatitis C, Acute‡

County	2018 Cases	2018 Rate*	2019 Cases	2019 Rate*	2020 Cases	2020 Rate*	2021 Cases	2021 Rate*	2022 Cases	2022 Rate*
Adams	0	0	0	0	0	0	0	0	0	0
Asotin	0	0	0	0	0	0	0	0	0	0
Benton	0	0	0	0	2	+	0	0	0	0
Chelan	0	0	0	0	0	0	0	0	2	+
Clallam	0	0	1	+	2	+	1	+	0	0
Clark	3	+	6	1.2	5	1.0	14	2.7	9	1.7
Columbia	0	0	0	0	0	0	0	0	0	0
Cowlitz	0	0	1	+	2	+	0	0	1	+
Douglas	0	0	0	0	1	+	0	0	0	0
Ferry	0	0	0	0	0	0	0	0	0	0
Franklin	0	0	0	0	0	0	0	0	1	+
Garfield	0	0	0	0	0	0	0	0	0	0
Grant	0	0	1	+	0	0	0	0	0	0
Grays Harbor	0	0	0	0	2	+	4	+	1	+
Island	0	0	0	0	0	0	0	0	0	0
Jefferson	2	+	0	0	0	0	0	0	1	+
King	28	1.3	34	1.5	32	1.4	29	1.3	38	1.6
Kitsap	0	0	0	0	3	+	4	+	3	+
Kittitas	0	0	0	0	3	+	0	0	1	+
Klickitat	0	0	0	0	0	0	0	0	0	0
Lewis	0	0	0	0	1	+	0	0	0	0
Lincoln	0	0	0	0	0	0	1	+	0	0
Mason	1	+	0	0	1	+	1	+	3	+
Okanogan	0	0	0	0	2	+	0	0	0	0
Pacific	0	0	0	0	1	+	1	+	1	+
Pend Oreille	0	0	0	0	0	0	1	+	0	0
Pierce	41	4.6	20	2.2	20	2.2	18	1.9	7	0.7
San Juan	0	0	0	0	0	0	0	0	0	0
Skagit	3	+	1	+	2	+	1	+	4	+
Skamania	0	0	0	0	0	0	0	0	0	0
Snohomish	7	0.9	10	1.2	10	1.2	4	+	7	0.8
Spokane	15	2.9	15	2.8	19	3.5	22	4.1	10	1.8
Stevens	1	+	0	0	0	0	0	0	2	+
Thurston	4	+	0	0	3	+	4	+	3	+
Wahkiakum	0	0	0	0	0	0	0	0	0	0
Walla Walla	0	0	0	0	0	0	0	0	1	+
Whatcom	13	5.9	8	3.6	8	3.5	16	7.1	4	+
Whitman	1	+	0	0	0	0	0	0	0	0
Yakima	0	0	0	0	1	+	1	+	3	+
Unspecified‡	0	-	0	-	0	-	0	-	4	-
State Totals	119	1.6	97	1.3	120	1.6	122	1.6	106	1.3

Statewide by Year

Year	Cases	Rate*	Deaths
1983	151	3.5	1
1984	131	3.0	2
1985	145	3.3	1
1986	167	3.7	7
1987	207	4.6	1
1988	232	5.0	2
1989	208	4.4	4
1990	141	2.9	6
1991	164	3.3	4
1992	186	3.6	1
1993	219	4.2	1
1994	294	5.5	0
1995	234	4.3	1
1996	66	1.2	1
1997	42	0.7	0
1998	29	0.5	0
1999	24	0.4	0
2000	44	0.7	0
2001	31	0.5	0
2002	27	0.4	0
2003	21	0.3	0
2004	23	0.4	1
2005	21	0.3	0
2006	23	0.4	0
2007	18	0.3	0
2008	25	0.4	0
2009	22	0.3	0
2010	25	0.4	0
2011	41	0.6	0
2012	54	0.8	0
2013	63	0.9	0
2014	83	1.2	0
2015	63	0.9	0
2016	95	1.3	0
2017	75	1.0	0
2018	119	1.6	0
2019	97	1.3	0
2020	120	1.6	0
2021	122	1.6	0
2022	106	1.3	0

‡Includes cases diagnosed in state facilities.

*All incidence rates are cases per 100,000 population.

+County incidence rates not calculated for <5 cases.

~Cases of acute hepatitis C are included in this table if they are a resident of Washington at the time of initial diagnosis/report, are a reportable case in the relevant calendar year (January 1, XXXX – December 31, XXXX), and are given a valid DOH case classification of Probable or Confirmed as determined by the CDC case definition. The most recent case definition update occurred in 2020.

Data sources: Legacy DOH Hepatitis Surveillance Records (1983-2016 data); Washington Disease Reporting System (WDRS): 2017-2021 data extracted on 9/2022 & 2022 data extracted on 8/2023; Washington State Department of Health, Center for Health Statistics, Death Certificate Data

Hepatitis C, Chronic‡

County	2018 Cases	2018 Rate*	2019 Cases	2019 Rate*	2020 Cases	2020 Rate*	2021 Cases	2021 Rate*	2022 Cases	2022 Rate*
Adams	4	+	6	29.6	2	+	6	28.7	7	33.2
Asotin	45	203.1	41	184.5	23	103.2	23	102.2	21	92.9
Benton	175	88.1	192	94.6	238	115.0	150	71.6	105	49.5
Chelan	66	85.1	38	48.7	29	36.6	33	41.3	27	33.5
Clallam	112	148.4	123	161.0	70	90.7	81	104.2	47	60.5
Clark	653	135.2	487	98.9	378	75.1	211	41.1	191	36.7
Columbia	4	+	5	126.7	5	126.5	2	+	0	0
Cowlitz	244	226.7	130	119.0	102	92.1	120	107.6	72	64.1
Douglas	31	74.6	17	40.3	13	30.3	17	39.0	12	27.3
Ferry	21	291.8	9	125.5	10	139.3	6	82.8	5	68.5
Franklin	86	92.9	88	92.9	50	51.7	47	47.8	45	45.1
Garfield	3	+	3	+	1	+	1	+	0	0
Grant	53	54.8	63	64.4	38	38.3	35	34.7	25	24.6
Grays Harbor	145	194.9	176	234.6	82	108.4	68	89.4	69	90.3
Island	68	80.1	42	48.8	34	39.1	32	36.7	31	35.3
Jefferson	34	105.5	36	110.4	26	78.8	21	63.4	14	42.0
King	1,479	67.3	1,268	56.7	848	37.4	840	36.7	733	31.6
Kitsap	203	75.2	144	52.7	116	42.1	110	39.6	80	28.5
Kittitas	34	76.7	21	46.6	31	66.7	17	37.6	20	42.4
Klickitat	19	86.4	20	89.2	15	66.0	13	56.5	12	51.8
Lewis	135	168.9	102	125.6	59	71.8	71	85.9	61	73.1
Lincoln	12	112.3	7	64.8	4	+	2	+	4	+
Mason	88	137.3	96	147.5	60	91.3	54	82.1	36	54.4
Okanogan	49	117.5	36	86.0	32	76.0	38	89.7	24	56.2
Pacific	46	203.3	42	182.5	38	162.6	37	158.0	23	97.5
Pend Oreille	26	197.3	12	90.0	10	74.6	5	37.1	15	110.1
Pierce	782	88.0	690	76.1	423	46.0	491	52.9	360	38.4
San Juan	8	46.5	15	85.4	2	+	5	28.0	6	33.1
Skagit	170	135.0	118	91.9	77	59.4	64	49.2	61	46.5
Skamania	17	148.9	11	95.5	11	94.8	8	68.1	9	75.6
Snohomish	816	101.5	741	90.7	390	47.1	363	43.3	286	33.8
Spokane	830	159.2	759	143.1	449	83.3	388	71.6	339	61.6
Stevens	57	125.4	65	141.2	38	81.8	30	64.2	28	59.5
Thurston	257	90.2	240	83.0	140	47.5	153	51.4	135	44.9
Wahkiakum	3	+	5	114.2	5	113.1	2	+	1	+
Walla Walla	85	137.5	61	98.1	29	46.3	29	46.7	18	28.7
Whatcom	214	97.4	168	74.9	124	54.7	80	35.4	62	26.8
Whitman	24	50.9	17	35.6	16	33.4	8	17.9	7	14.6
Yakima	249	98.1	207	81.2	109	42.5	116	44.9	100	38.5
Unspecified‡	305	-	429	-	331	-	221	-	204	-
State Totals	7,652	102.4	6,730	88.6	4,458	57.8	3,998	51.5	3,295	41.9

Statewide by Year

Year	Cases	Rate*	Deaths
2001	6,052	101.4	296
2002	5,218	86.1	335
2003	4,142	67.6	299
2004	4,681	75.4	362
2005	4,708	74.7	322
2006	5,296	82.5	355
2007	5,481	84.0	444
2008	6,450	97.6	473
2009	5,511	82.6	550
2010	5,619	83.6	560
2011	5,066	74.8	580
2012	4,865	71.2	604
2013	4,438	64.3	584
2014	5,995	58.7	645
2015	7,085	99.9	651
2016	8,118	112.5	511
2017	8,865	120.6	531
2018	7,652	102.4	468
2019	6,730	88.6	440
2020	4,458	57.8	444
2021	3,998	51.5	481
2022	3,295	41.9	427

‡Includes cases diagnosed in correctional and other state facilities.

*All incidence rates are cases per 100,000 population.

+County incidence rates not calculated for <5 cases.

Due to prior and ongoing person deduplication and data clean-up, case data from 2017-2021 & death data from 2016-2021 has been updated.

Cases of chronic hepatitis C are included in this table if they are a resident of Washington at the time of initial diagnosis/report, are a reportable case in the relevant calendar year (January 1, XXXX – December 31, XXXX), and are given a valid DOH case classification of Probable or Confirmed as determined by the CDC case definition. The most recent case definition update occurred in 2020.

Data sources: Washington Disease Reporting System (WDRS), 09/2022; Washington State Department of Health, Center for Health Statistics, Death Certificate Data

Hepatitis C, Perinatal

Year	Cases
2018	4
2019	3
2020	5
2021	2
2022	4

Note: Cases of perinatal hepatitis C are included in this table if they are a resident of Washington at the time of initial diagnosis/report, are a reportable case in the relevant calendar year (January 1, XXXX – December 31, XXXX), and are given a valid DOH case classification of Confirmed as determined by the CDC case definition.

Data source:
Washington Disease Reporting System (WDRS), 08/2023

Herpes Simplex

County	2018 Cases	2018 Rate*	2019 Cases	2019 Rate*	2020 Cases	2020 Rate*	2020 Cases	2021 Rate*	2022 Cases	2022 Rate*
Adams	5	+	1	+	2	+	1	+	1	+
Asotin	0	0	2	+	0	0	1	+	0	0
Benton	69	34.7	58	28.6	77	37.2	64	30.6	35	16.5
Chelan	9	+	8	+	2	+	0	0	0	0
Clallam	21	27.8	10	+	8	+	11	+	8	+
Clark	281	58.2	278	56.5	136	27.0	47	9.2	18	3.5
Columbia	0	0	0	0	0	0	0	0	0	0
Cowlitz	28	26.0	13	+	15	+	16	+	17	15.1
Douglas	2	+	3	+	1	+	2	+	0	0
Ferry	1	+	3	+	0	0	0	0	1	+
Franklin	31	33.5	27	28.5	34	35.1	20	20.3	16	+
Garfield	0	0	0	0	0	0	0	0	0	0
Grant	25	25.8	27	27.6	13	+	11	+	12	+
Grays Harbor	7	+	18	24.0	14	+	15	+	20	26.2
Island	26	30.6	19	22.1	18	20.7	15	+	10	+
Jefferson	2	+	2	+	0	0	2	+	1	+
King	15	+	17	0.8	9	+	12	+	10	+
Kitsap	75	27.8	86	31.5	84	30.5	117	42.1	81	28.8
Kittitas	9	+	16	+	8	+	6	+	10	+
Klickitat	2	+	1	+	1	+	1	+	1	+
Lewis	10	+	1	+	7	+	0	0	14	+
Lincoln	0	0	0	0	1	+	1	+	1	+
Mason	12	+	8	+	8	+	12	+	12	+
Okanogan	3	+	13	+	14	+	1	+	5	+
Pacific	5	+	0	0	3	+	1	+	0	0
Pend Oreille	3	+	3	+	2	+	0	0	0	0
Pierce	482	54.3	561	61.9	445	48.3	403	43.4	278	29.7
San Juan	1	+	2	+	0	0	2	+	0	0
Skagit	42	33.4	50	38.9	34	26.3	27	20.8	22	16.8
Skamania	0	0	2	+	0	0	0	0	0	0
Snohomish	92	11.4	137	16.8	174	21.0	155	18.5	161	19.0
Spokane	148	28.4	138	26.0	64	11.9	78	14.4	65	11.8
Stevens	7	+	4	+	11	+	6	+	4	+
Thurston	77	27.0	90	31.1	84	28.5	69	23.2	67	22.3
Wahkiakum	1	+	0	0	0	0	1	+	0	0
Walla Walla	7	+	19	30.5	7	+	6	+	2	+
Whatcom	61	27.8	58	25.9	63	27.8	23	10.2	45	19.4
Whitman	7	+	8	+	7	+	12	+	11	+
Yakima	46	18.1	57	22.4	29	11.3	51	19.8	49	18.8
State Totals[+]	1,612	21.6	1,740	22.9	1,375	17.8	1,189	15.3	977	12.4

Statewide by Year

Year	Cases	Rate*	Deaths
2003	2,073	33.8	0
2004	2,153	34.7	0
2005	2,331	37.0	0
2006	2,446	38.1	0
2007	1,952	29.9	0
2008	2,009	30.4	0
2009	1,875	28.1	0
2010	2,028	30.2	0
2011	2,149	31.7	0
2012	2,197	32.2	0
2013	2,207	32.0	0
2014	2,082	29.8	0
2015	2,524	35.6	0
2016	2,548	35.3	0
2017	2,058	28.0	0
2018	1,612	21.6	0
2019	1,740	22.9	0
2020	1,375	17.8	0
2021	1,189	15.3	0
2022	977	12.4	0

Note: Data prior to 2009 are based on year reported rather than year diagnosed.

*All incidence rates are cases per 100,000 population

+County incidence rates based on counts ≤16 are suppressed due to statistical instability.

Note: Cases are included in this table if they are residing in Washington based on reported address at the time of diagnosis, are a reportable case in the relevant calendar year (January 1, XXXX - December 31, XXXX), and are given a valid DOH case classification of Probable or Confirmed as determined by the current CDC case definition.

Data source: PHIMS-STD 6/15/2023.

Human Immunodeficiency Virus (HIV)‡

County	2018 Cases	2018 Rate*	2019 Cases	2019 Rate*	2020 Cases	2020 Rate*	2021 Cases	2021 Rate*	2022 Cases	2022 Rate*
Adams	0	0	1	+	1	+	0	0	2	+
Asotin	0	0	0	0	0	0	0	0	0	0
Benton	0	0	13	6.4	6	2.9	10	4.8	5	2.4
Chelan	3	+	2	+	1	+	5	6.3	4	+
Clallam	5	6.6	2	+	1	+	5	6.4	0	0
Clark	21	4.3	28	5.7	22	4.4	26	5.1	26	5.0
Columbia	0	0	0	0	0	0	0	0	0	0
Cowlitz	1	+	3	+	2	+	5	4.5	3	+
Douglas	1	+	2	+	2	+	0	0	1	+
Ferry	0	0	0	0	0	0	0	0	1	+
Franklin	5	5.4	6	6.3	-	-	7	7.1	5	5.0
Garfield	0	0	0	0	0	0	0	0	0	0
Grant	4	+	2	+	3	+	1	+	6	5.9
Grays Harbor	0	0	2	+	1	+	4	+	5	6.5
Island	2	+	5	5.8	3	+	0	0	3	+
Jefferson	1	+	0	0	0	0	0	0	1	+
King	225	10.2	189	8.5	169	7.4	180	7.9	194	8.4
Kitsap	9	3.3	9	3.3	4	+	6	2.2	10	3.6
Kittitas	1	+	2	+	1	+	0	0	1	+
Klickitat	0	0	0	0	1	+	0	0	0	0
Lewis	1	+	2	+	1	+	4	+	3	+
Lincoln	0	0	0	0	0	0	1	+	0	0
Mason	5	7.8	5	7.7	4	+	2	+	3	+
Okanogan	0	0	1	+	0	0	0	0	0	0
Pacific	1	+	0	0	0	0	0	0	0	0
Pend Oreille	0	0	1	+	0	0	0	0	0	0
Pierce	49	5.5	52	5.7	51	5.5	59	6.4	60	6.4
San Juan	0	0	0	0	0	0	0	0	0	0
Skagit	3	+	3	+	5	3.9	2	+	3	+
Skamania	0	0	0	0	0	0	0	0	0	0
Snohomish	20	2.5	29	3.6	23	2.8	32	3.8	28	3.3
Spokane	16	3.1	26	4.9	32	5.9	23	4.2	29	5.3
Stevens	0	0	0	0	2	+	1	+	0	0
Thurston	8	2.8	6	2.1	8	2.7	17	5.7	9	3.0
Wahkiakum	0	0	0	0	0	0	0	0	0	0
Walla Walla	1	+	0	0	1	+	1	+	1	+
Whatcom	3	+	5	2.2	3	+	3	+	10	4.3
Whitman	3	+	0	0	1	+	4	+	0	0
Yakima	10	3.9	8	3.1	6	2.3	10	3.9	8	3.1
State Totals	398	5.3	404	5.3	358	4.6	408	5.3	421	5.4

Statewide by Year‡‡

Year	PLWH[α]	Rate*	Deaths**
2004	8,218	132.4	168
2005	8,629	137.0	207
2006	9,082	141.5	171
2007	9,554	146.4	174
2008	9,977	151.0	166
2009	10,350	155.1	176
2010	10,802	160.6	156
2011	11,030	162.8	160
2012	11,355	166.3	141
2013	11,730	170.0	154
2014	12,070	172.6	162
2015	12,538	176.8	139
2016	12,939	179.3	164
2017	13,452	183.0	165
2018	13,862	185.5	204
2019	14,070	185.3	172
2020	14,285	185.4	180
2021	14,452	186.1	224
2022	14,872	189.1	N/A

‡‡**People Living with HIV Disease and related deaths.**

[α]People Living With HIV. Includes resident cases of HIV disease reported to the health department and presumed living in Washington at a specific point in time, regardless of where each case was diagnosed.

**Death Data has a reporting delay of 2 years and includes death by any cause.

‡Data reflects cases reported through 6/30/2023. Cases are presented by year of initial HIV diagnosis, regardless of diagnostic status (HIV or AIDS), and by county of residence at time of diagnosis.
*All rates are cases per 100,000 population.
+County incidence rates not calculated for <5 cases.
Note: Cases of HIV are included in this table if they are a resident of Washington at the time of initial diagnosis/report, are a reportable case in the relevant calendar year (January 1, XXXX – December 31, XXXX), and are given a valid DOH case classification of HIV and/or AIDS as determined by the CDC case definitions.

Legionellosis

Year	Cases	Rate*	Deaths
1985	7	0.2	2
1986	15	0.3	8
1987	24	0.5	3
1988	29	0.6	4
1989	30	0.6	5
1990	18	0.4	4
1991	15	0.3	5
1992	15	0.3	5
1993	12	0.2	2
1994	13	0.2	2
1995	22	0.4	6
1996	7	0.1	2
1997	11	0.2	0
1998	15	0.3	2
1999	21	0.4	4
2000	19	0.3	1
2001	10	0.2	1
2002	8	0.1	3
2003	14	0.2	1
2004	15	0.2	4
2005	18	0.3	1
2006	20	0.3	1
2007	24	0.4	2
2008	19	0.3	1
2009	29	0.4	2
2010	35	0.5	4
2011	43	0.6	4
2012	30	0.4	5
2013	52	0.8	5
2014	63	0.9	8
2015	58	0.8	2
2016	72	1	10
2017	56	0.8	6
2018	54	0.7	7
2019	76	1	6
2020	68	0.9	4
2021	85	1.1	8
2022	63	0.8	5

*All rates are cases per 100,000 population.

Leptospirosis

Year	Cases	Rate*	Deaths
1986	0	0	0
1987	0	0	0
1988	0	0	0
1989	0	0	0
1990	0	0	0
1991	0	0	0
1992	0	0	0
1993	0	0	0
1994	0	0	0
1995	0	0	0
1996	2	0	0
1997	2	0	0
1998	0	0	0
1999	0	0	0
2000	0	0	0
2001	4	0.1	0
2002	0	0	0
2003	1	0	0
2004	0	0	0
2005	4	0.1	0
2006	1	0	0
2007	5	0.1	0
2008	1	0	0
2009	0	0	0
2010	1	0	0
2011	0	0	0
2012	2	0	0
2013	0	0	0
2014	0	0	0
2015	2	0	0
2016	2	0	0
2017	0	0	0
2018	3	0	0
2019	4	0.1	0
2020	2	0	0
2021	2	0	0
2022	2	0	0

*All rates are cases per 100,000 population.

Listeriosis

Year	Cases	Rate*	Deaths
1985	21	0.5	1
1986	37	0.8	5
1987	36	0.8	6
1988	38	0.8	4
1989	21	0.4	2
1990	22	0.5	3
1991	18	0.4	6
1992	13	0.3	0
1993	21	0.4	2
1994	13	0.2	3
1995	24	0.4	1
1996	11	0.2	3
1997	17	0.3	1
1998	12	0.2	3
1999	19	0.3	5
2000	12	0.2	2
2001	15	0.3	1
2002	11	0.2	0
2003	13	0.2	3
2004	13	0.2	3
2005	14	0.2	3
2006	18	0.3	3
2007	25	0.4	2
2008	29	0.4	3
2009	24	0.4	4
2010	24	0.4	1
2011	19	0.3	2
2012	26	0.4	5
2013	21	0.3	1
2014	24	0.3	5
2015	21	0.3	3
2016	14	0.2	2
2017	17	0.2	3
2018	15	0.2	2
2019	18	0.2	5
2020	14	0.2	2
2021	20	0.3	9
2022	23	0.3	4

*All rates are cases per 100,000 population.

Lyme Disease

Year	Cases	Rate*	Deaths
1986	1	0	0
1987	10	0.2	0
1988	12	0.3	0
1989	37	0.8	0
1990	33	0.7	0
1991	7	0.1	0
1992	14	0.3	0
1993	9	0.2	0
1994	4	0.1	0
1995	10	0.2	0
1996	18	0.3	0
1997	10	0.2	0
1998	7	0.1	0
1999	14	0.2	0
2000	9	0.2	0
2001	9	0.2	0
2002	12	0.2	0
2003	7	0.1	0
2004	14	0.2	0
2005	13	0.2	0
2006	8	0.1	0
2007	12	0.2	0
2008	23	0.3	0
2009	16	0.2	0
2010	16	0.2	0
2011	19(2[E])	0.3	0
2012	15(2[E])	0.2	0
2013	21(3[E])	0.3	0
2014	15(1[E])	0.2	0
2015	24(2[E])	0.3	0
2016	31(6[E])	0.4	0
2017	39(7[E])	0.5	0
2018	24(3[E])	0.3	0
2019	45(4[E])	0.6	0
2020	20(3[E])	0.3	0
2021	43(4[E])	0.6	0
2022	23(1[E])	0.3	0

*All rates are cases per 100,000 population.

[T] Travel-associated

[E] Endemically acquired

[U] Unknown

Location of exposure tracking for Lyme disease was implemented in 2011

Malaria

Year	Cases	Rate*	Deaths
1983	15	0.3	0
1984	20	0.5	0
1985	34	0.8	0
1986	35	0.8	0
1987	28	0.6	0
1988	24	0.5	0
1989	44	0.9	0
1990	33	0.7	0
1991	29	0.6	0
1992	21	0.4	0
1993	41	0.8	0
1994	45	0.8	0
1995	23	0.4	0
1996	41	0.7	0
1997	49	0.9	0
1998	30	0.5	0
1999	43	0.7	0
2000	43	0.7	0
2001	19	0.3	0
2002	26	0.4	0
2003	34	0.6	0
2004	24	0.4	0
2005	24	0.4	0
2006	43	0.7	1
2007	30	0.5	0
2008	32	0.5	0
2009	26	0.4	1
2010	39	0.6	0
2011	24	0.4	0
2012	26	0.4	0
2013	30	0.4	0
2014	41	0.6	0
2015	23	0.3	0
2016	46	0.6	0
2017	34	0.5	0
2018	40	0.5	0
2019	31	0.4	0
2020	15	0.2	0
2021	20	0.3	0
2022	44	0.6	0

*All rates are cases per 100,000 population.

Measles

County	2018 Cases	2018 Rate*	2019 Cases	2019 Rate*	2020 Cases	2020 Rate*	2021 Cases	2021 Rate*	2022 Cases	2022 Rate*
Adams	0	0	0	0	0	0	0	0	0	0
Asotin	0	0	0	0	0	0	0	0	0	0
Benton	0	0	0	0	0	0	0	0	0	0
Chelan	0	0	0	0	0	0	0	0	0	0
Clallam	0	0	0	0	0	0	0	0	0	0
Clark	1	+	71	14.4	0	0	0	0	0	0
Columbia	0	0	0	0	0	0	0	0	0	0
Cowlitz	0	0	0	0	0	0	0	0	0	0
Douglas	0	0	0	0	0	0	0	0	0	0
Ferry	0	0	0	0	0	0	0	0	0	0
Franklin	0	0	0	0	0	0	0	0	0	0
Garfield	0	0	0	0	0	0	0	0	0	0
Grant	0	0	0	0	0	0	0	0	0	0
Grays Harbor	0	0	0	0	0	0	0	0	0	0
Island	0	0	0	0	0	0	0	0	0	0
Jefferson	0	0	0	0	0	0	0	0	0	0
King	1	+	16	0.7	1	+	0	0	0	0
Kitsap	0	0	0	0	0	0	0	0	0	0
Kittitas	0	0	0	0	0	0	0	0	0	0
Klickitat	0	0	0	0	0	0	0	0	0	0
Lewis	0	0	0	0	0	0	0	0	0	0
Lincoln	0	0	0	0	0	0	0	0	0	0
Mason	0	0	0	0	0	0	0	0	0	0
Okanogan	0	0	0	0	0	0	0	0	0	0
Pacific	0	0	0	0	0	0	0	0	0	0
Pend Oreille	0	0	0	0	0	0	0	0	0	0
Pierce	0	0	2	+	0	0	0	0	0	0
San Juan	0	0	0	0	0	0	0	0	0	0
Skagit	0	0	0	0	0	0	0	0	0	0
Skamania	0	0	0	0	0	0	0	0	0	0
Snohomish	6	0.7	1	+	0	0	0	0	1	+
Spokane	0	0	0	0	0	0	0	0	0	0
Stevens	0	0	0	0	0	0	0	0	0	0
Thurston	0	0	0	0	0	0	0	0	0	0
Wahkiakum	0	0	0	0	0	0	0	0	0	0
Walla Walla	0	0	0	0	0	0	0	0	0	0
Whatcom	0	0	0	0	0	0	0	0	0	0
Whitman	0	0	0	0	0	0	0	0	0	0
Yakima	0	0	0	0	0	0	0	0	0	0
State Totals	8	0.1	90	1.2	1	0	0	0	1	0

Statewide by Year

Year	Cases	Rate*	Deaths
1983	43	1	0
1984	178	4.1	0
1985	178	4	0
1986	176	3.9	0
1987	47	1	0
1988	7	0.2	0
1989	56	1.2	0
1990	357	7.3	2
1991	67	1.3	0
1992	11	0.2	0
1993	0	0	0
1994	5	0.1	0
1995	17	0.3	0
1996	38	0.7	0
1997	2	0	0
1998	1	0	0
1999	5	0.1	0
2000	3	0.1	0
2001	15	0.3	0
2002	1	0	0
2003	0	0	0
2004	7	0.1	0
2005	1	0	0
2006	1	0	0
2007	3	0	0
2008	19	0.3	0
2009	1	0	0
2010	1	0	0
2011	4	0.1	0
2012	0	0	0
2013	4	0.1	0
2014	33	0.5	0
2015	10	0.1	1
2016	0	0	0
2017	3	0	0
2018	8	0.1	0
2019	90	1.2	0
2020	1	0	0
2021	0	0	0
2022	1	0	0

*All incidence rates are cases per 100,000 population.

+County incidence rates not calculated for <5 cases.

Meningococcal Disease

County	2018 Cases	2018 Rate*	2019 Cases	2019 Rate*	2020 Cases	2020 Rate*	2021 Cases	2021 Rate*	2022 Cases	2022 Rate*
Adams	0	0	0	0	0	0	0	0	0	0
Asotin	0	0	0	0	0	0	0	0	0	0
Benton	0	0	0	0	0	0	0	0	0	0
Chelan	0	0	0	0	0	0	0	0	0	0
Clallam	0	0	0	0	0	0	0	0	0	0
Clark	1	+	0	0	0	0	2	+	1	+
Columbia	0	0	0	0	0	0	0	0	0	0
Cowlitz	2	+	0	0	0	0	1	+	0	0
Douglas	0	0	0	0	0	0	0	0	0	0
Ferry	0	0	0	0	0	0	0	0	0	0
Franklin	0	0	1	+	0	0	0	0	0	0
Garfield	0	0	0	0	0	0	0	0	0	0
Grant	1	+	0	0	0	0	0	0	0	0
Grays Harbor	0	0	0	0	0	0	0	0	0	0
Island	0	0	1	+	0	0	0	0	0	0
Jefferson	0	0	0	0	0	0	0	0	0	0
King	5	0.2	4	+	4	+	0	0	0	0
Kitsap	0	0	0	0	0	0	0	0	1	+
Kittitas	0	0	0	0	0	0	0	0	0	0
Klickitat	0	0	0	0	0	0	0	0	0	0
Lewis	1	+	0	0	0	0	0	0	0	0
Lincoln	0	0	0	0	0	0	0	0	0	0
Mason	0	0	0	0	0	0	0	0	0	0
Okanogan	0	0	0	0	0	0	0	0	0	0
Pacific	0	0	0	0	1	+	0	0	0	0
Pend Oreille	0	0	0	0	0	0	0	0	0	0
Pierce	7	0.8	4	+	0	0	0	0	0	0
San Juan	0	0	0	0	0	0	0	0	0	0
Skagit	0	0	0	0	0	0	0	0	0	0
Skamania	0	0	0	0	0	0	0	0	0	0
Snohomish	0	0	1	+	0	0	0	0	0	0
Spokane	2	+	2	+	0	0	1	+	0	0
Stevens	0	0	0	0	0	0	0	0	0	0
Thurston	1	+	0	0	1	+	0	0	0	0
Wahkiakum	0	0	0	0	0	0	0	0	0	0
Walla Walla	0	0	0	0	0	0	0	0	0	0
Whatcom	0	0	1	+	1	+	0	0	0	0
Whitman	0	0	0	0	0	0	0	0	0	0
Yakima	0	0	0	0	0	0	0	0	0	0
State Totals	20	0.3	14	0.2	7	0.1	4	0.1	2	0

Statewide by Year

Year	Cases	Rate*	Deaths
1983	48	1.1	3
1984	56	1.3	3
1985	67	1.5	6
1986	62	1.4	5
1987	87	1.9	4
1988	76	1.6	3
1989	96	2	12
1990	80	1.6	5
1991	73	1.5	8
1992	92	1.8	5
1993	97	1.8	6
1994	111	2.1	7
1995	126	2.3	7
1996	116	2.1	10
1997	115	2	11
1998	77	1.3	7
1999	93	1.6	4
2000	71	1.2	6
2001	71	1.2	6
2002	76	1.3	8
2003	61	1	7
2004	42	0.7	4
2005	53	0.8	4
2006	45	0.7	1
2007	32	0.5	8
2008	40	0.6	4
2009	26	0.4	3
2010	33	0.5	3
2011	22	0.3	0
2012	24	0.4	1
2013	20	0.3	3
2014	17	0.2	2
2015	10	0.1	1
2016	13	0.2	1
2017	11	0.1	1
2018	20	0.3	0
2019	14	0.2	0
2020	7	0.1	1
2021	4	0.1	1
2022	2	0	0

*All incidence rates are cases per 100,000 population.

+County incidence rates not calculated for <5 cases.

Mpox‡

County	2022 Cases	2022 Rate*
Adams	0	0
Asotin	0	0
Benton	2	+
Chelan	1	+
Clallam	1	+
Clark	13	2.5
Columbia	0	0
Cowlitz	2	+
Douglas	0	0
Ferry	0	0
Franklin	0	0
Garfield	0	0
Grant	1	+
Grays Harbor	1	+
Island	2	+
Jefferson	0	0
King	499	21.5
Kitsap	5	1.8
Kittitas	3	+
Klickitat	0	0
Lewis	2	+
Lincoln	0	0
Mason	1	+
Okanogan	0	0
Pacific	0	0
Pend Oreille	0	0
Pierce	59	6.3
San Juan	0	0
Skagit	1	+
Skamania	0	0
Snohomish	39	4.6
Spokane	8	1.5
Stevens	0	0
Thurston	3	+
Wahkiakum	0	0
Walla Walla	1	+
Whatcom	5	2.2
Whitman	0	0
Yakima	5	1.9
State Totals	654	8.3

Statewide by Year

Year	Cases	Rate*	Death
2022	654	8.3	-

‡Case counts and case rates were calculated by using the date reported to DOH, January 1-December 31, 2022
Death counts were calculated based on the date of death from January 1-December 31, 2022
*All incidence rates are cases per 100,000 population

Mumps

Year	Cases	Rate*	Deaths
1981	165	3.9	0
1982	102	2.4	0
1983	55	1.3	0
1984	56	1.3	0
1985	42	1	0
1986	30	0.7	0
1987	70	1.5	0
1988	44	1	0
1989	59	1.2	0
1990	66	1.4	0
1991	178	3.5	0
1992	18	0.4	0
1993	14	0.3	0
1994	23	0.4	0
1995	16	0.3	0
1996	26	0.5	0
1997	21	0.4	0
1998	11	0.2	0
1999	2	0	0
2000	10	0.2	0
2001	2	0	0
2002	0	0	0
2003	11	0.2	0
2004	2	0	0
2005	3	0	0
2006	42	0.7	0
2007	53	0.8	0
2008	14	0.2	0
2009	6	0.1	0
2010	7	0.1	0
2011	2	0	0
2012	2	0	0
2013	2	0	0
2014	9	0.1	0
2015	7	0.1	0
2016	152	2.1	0
2017	779	10.6	0
2018	58	0.8	0
2019	55	0.7	0
2020	4	0.1	0
2021	1	0	0
2022	11	0.1	0

*All rates are cases per 100,000 population.

Pertussis

County	2018 Cases^	2018 Rate*^	2019 Cases	2019 Rate*	2020 Cases	2020 Rate*	2021 Cases	2021 Rate*	2022 Cases	2022 Rate*
Adams	0	0	0	0	0	0	0	0	0	0
Asotin	0	0	0	0	0	0	0	0	0	0
Benton	7	3.5	2	+	0	0	0	0	1	+
Chelan	10	12.9	3	+	0	0	0	0	1	+
Clallam	0	0	5	6.5	1	+	0	0	0	0
Clark	106	21.9	123	25	16	3.2	1	+	4	+
Columbia	0	0	0	0	0	0	0	0	0	0
Cowlitz	63	58.5	36	33	3	+	0	0	0	0
Douglas	3	+	1	+	1	+	0	0	0	0
Ferry	0	0	7	97.6	0	0	0	0	0	0
Franklin	5	5.4	1	+	0	0	0	0	0	0
Garfield	0	0	0	0	0	0	0	0	0	0
Grant	13	13.4	2	+	0	0	0	0	0	0
Grays Harbor	4	+	1	+	3	+	0	0	0	0
Island	2	+	5	5.8	6	6.9	0	0	0	0
Jefferson	0	0	0	0	0	0	0	0	0	0
King	103	4.7	54	2.4	29	1.3	3	+	10	0.4
Kitsap	6	2.2	6	2.2	5	1.8	0	0	1	+
Kittitas	16	36.1	0	0	0	0	0	0	0	0
Klickitat	0	0	0	0	1	+	0	0	0	0
Lewis	7	8.8	16	19.7	13	15.8	0	0	1	+
Lincoln	5	46.8	1	+	0	0	0	0	0	0
Mason	0	0	2	+	1	+	0	0	0	0
Okanogan	18	43.1	4	+	2	+	0	0	1	+
Pacific	0	0	0	0	1	+	0	0	0	0
Pend Oreille	1	+	2	+	1	+	0	0	0	0
Pierce	59	6.6	66	7.3	18	2	1	+	5	0.5
San Juan	0	0	0	0	0	0	0	0	0	0
Skagit	7	5.6	2	+	2	+	0	0	0	0
Skamania	1	+	0	0	0	0	1	+	0	0
Snohomish	43	5.3	19	2.3	10	1.2	1	+	0	0
Spokane	62	11.9	178	33.6	90	16.7	1	+	16	2.9
Stevens	0	0	9	19.5	1	+	0	0	0	0
Thurston	24	8.4	11	3.8	11	3.7	2	+	3	+
Wahkiakum	0	0	1	+	0	0	0	0	0	0
Walla Walla	2	+	4	+	0	0	0	0	0	0
Whatcom	53	24.1	33	14.7	25	11.0	4	+	32	13.8
Whitman	0	0	0	0	0	0	0	0	1	+
Yakima	11	4.3	4	+	3	+	1	+	0	0
State Totals	631	8.4	598	7.9	243	3.2	15	0.2	76	1.0

Statewide by Year

Year	Cases	Rate*	Deaths
1983	20	0.5	0
1984	326	7.5	1
1985	92	2.1	0
1986	163	3.7	2
1987	110	2.4	0
1988	130	2.8	1
1989	201	4.3	0
1990	227	4.7	0
1991	149	3.0	0
1992	241	4.7	0
1993	96	1.8	0
1994	140	2.6	0
1995	491	9.0	0
1996	830	14.9	1
1997	481	8.5	0
1998	406	7.1	1
1999	739	12.7	0
2000	458	7.8	1
2001	184	3.1	0
2002	575	9.5	0
2003	844	13.8	0
2004	842	13.6	0
2005	1,026	16.3	0
2006	377	5.9	1
2007	482	7.4	0
2008	460	7.0	1
2009	291	4.4	0
2010	607	9.0	2
2011	962	14.2	2
2012	4,916	72.0	0
2013	748	10.8	0
2014	600	8.6	0
2015	1,383	19.5	0
2016	618	8.6	0
2017	740	10.1	0
2018	631^	8.4	0
2019	598	7.9	0
2020	243	3.2	0
2021	15	0.2	0
2022	76	1.0	0

*All incidence rates are cases per 100,000 population.

^Previously reported as 847 cases. Has now been amended to include four cases that are not included in the CDC's 2018 count for WA state. Additionally, the previous case count erroneously included 220 suspected cases, which have now been removed. The final corrected 2018 pertussis case count for WA is 631.

Plague

Year	Cases	Rate*	Deaths
1986	0	0	0
1987	0	0	0
1988	0	0	0
1989	0	0	0
1990	0	0	0
1991	0	0	0
1992	0	0	0
1993	0	0	0
1994	0	0	0
1995	0	0	0
1996	0	0	0
1997	0	0	0
1998	0	0	0
1999	0	0	0
2000	0	0	0
2001	0	0	0
2002	0	0	0
2003	0	0	0
2004	0	0	0
2005	0	0	0
2006	0	0	0
2007	0	0	0
2008	0	0	0
2009	0	0	0
2010	0	0	0
2011	0	0	0
2012	0	0	0
2013	0	0	0
2014	0	0	0
2015	0	0	0
2016	0	0	0
2017	0	0	0
2018	0	0	0
2019	0	0	0
2020	0	0	0
2021	0	0	0
2022	0	0	0

*All rates are cases per 100,000 population.

Poliomyelitis

Year	Cases	Rate*	Deaths
1985	0	0	0
1986	0	0	0
1987	1‡	0	0
1988	1‡	0	0
1989	0	0	0
1990	0	0	0
1991	1‡	0	0
1992	1‡	0	0
1993	1‡	0	0
1994	0	0	0
1995	0	0	0
1996	0	0	0
1997	0	0	0
1998	0	0	0
1999	0	0	0
2000	0	0	0
2001	0	0	0
2002	0	0	0
2003	0	0	0
2004	0	0	0
2005	0	0	0
2006	0	0	0
2007	0	0	0
2008	0	0	0
2009	0	0	0
2010	0	0	0
2011	0	0	0
2012	0	0	0
2013	0	0	0
2014	0	0	0
2015	0	0	0
2016	0	0	0
2017	0	0	0
2018	0	0	0
2019	0	0	0
2020	0	0	0
2021	0	0	0
2022	0	0	0

*All rates are cases per 100,000 population.

‡Vaccine-associated cases.

Prion Disease, Human

Year	sCJD	Familial CJD	Iatrogenic CJD	VPSPr	GSS Syndrome	Total (Definate or Probable)
2008	17	0	0	0	0	17
2009	7	2	0	0	0	9
2010	7	1	0	0	0	8
2011	9	0	0	0	0	9
2012	14	1	0	1	0	16
2013	13	0	1	0	1	15
2014	11	1	0	0	0	12
2015	11	1	0	0	0	12
2016	17	1	0	0	0	18
2017	10	0	0	0	0	10
2018	15	0	0	0	0	15
2019	10	0	0	0	0	10
2020	19	0	0	0	0	19
2021	16	0	0	0	0	16
2022	5	0	0	0	0	5

sCJD: Spontaneous CJD

GSS: Gerstmann-Straussler-Scheinker disease

VPSPr: Variably protease-sensitive prionopath

Note: RT-QuIC testing became standard in 2015 and integrated in the case definition in 2018.

Psittacosis

Year	Cases	Rate*	Deaths
1985	3	0.1	1
1986	7	0.2	0
1987	12	0.3	0
1988	8	0.2	0
1989	4	0.1	1
1990	5	0.1	0
1991	6	0.1	0
1992	13	0.3	0
1993	4	0.1	0
1994	4	0.1	0
1995	7	0.1	0
1996	4	0.1	0
1997	0	0	0
1998	3	0.1	0
1999	0	0	0
2000	1	0	0
2001	0	0	0
2002	0	0	0
2003	0	0	0
2004	0	0	0
2005	1	0	0
2006	0	0	0
2007	0	0	0
2008	0	0	0
2009	0	0	0
2010	0	0	0
2011	0	0	0
2012	0	0	0
2013	0	0	0
2014	0	0	0
2015	0	0	0
2016	0	0	0
2017	0	0	0
2018	0	0	0
2019	0	0	0
2020	0	0	0
2021	1	0	0
2022	0	0	0

*All rates are cases per 100,000 population.

Q Fever

Year	Cases	Rate*	Deaths
1986	2	0	0
1987	1	0	1
1988	1	0	0
1989	0	0	0
1990	2	0	0
1991	0	0	0
1992	1	0	0
1993	0	0	0
1994	0	0	0
1995	1	0	0
1996	0	0	0
1997	0	0	0
1998	0	0	0
1999	1	0	0
2000	0	0	0
2001	0	0	0
2002	0	0	0
2003	0	0	0
2004	0	0	0
2005	2	0	0
2006	0	0	0
2007	1	0	0
2008	0	0	0
2009	1	0	0
2010	3	0	1
2011	8	0.1	0
2012	3	0	2
2013	3	0	0
2014	1	0	0
2015	3	0	0
2016	7	0.1	0
2017	2	0	0
2018	3	0	0
2019	3	0	0
2020	1	0	0
2021	3	0	1
2022	4	0.1	0

*All rates are cases per 100,000 population.

Rabies (Human)

Year	Cases	Rate*	Deaths
1985	0	0	0
1986	0	0	0
1987	0	0	0
1988	0	0	0
1989	0	0	0
1990	0	0	0
1991	0	0	0
1992	0	0	0
1993	0	0	0
1994	0	0	0
1995	1	0	1
1996	0	0	0
1997	1	0	1
1998	0	0	0
1999	0	0	0
2000	0	0	0
2001	0	0	0
2002	0	0	0
2003	0	0	0
2004	0	0	0
2005	0	0	0
2006	0	0	0
2007	0	0	0
2008	0	0	0
2009	0	0	0
2010	0	0	0
2011	0	0	0
2012	0	0	0
2013	0	0	0
2014	0	0	0
2015	0	0	0
2016	0	0	0
2017	0	0	0
2018	0	0	0
2019	0	0	0
2020	0	0	0
2021	0	0	0
2022	0	0	0

*All rates are cases per 100,000 population.

Rabies (Suspected Exposure‡)

Year	Cases	Rate*	Deaths
2011	231	2.9	0
2012	236	3.0	0
2013	287	3.6	0
2014	238	3.0	0
2015	242	3.1	0
2016	328	4.2	0
2017	335	4.3	0
2018	397	5.0	0
2019	318	4.0	0
2020	258	3.3	0
2021	240	3.1	0
2022	394	5.0	0

‡"Rabies, suspected exposure" cases are included in this table if they are a resident of Washington at the time of initial diagnosis/report, are a reportable case in the relevant MMWR year, and are given a valid DOH case classification of Confirmed or Suspected as determined by the Washington Dept. of Health case definition.
*All rates are cases per 100,000 population.

Rare Diseases

Disease	2017	2018	2019	2020	2021	2022
Amebic meningitis	1E	0	0	0	0	1E
Anaplasmosis	1	0	1	1	4	2 (1E)
Babesiosis	1	0	1	0	0	1
Baylisascariasis	1	0	0	0	0	1
Burkholderia infection	2	0	0	0	0	0
Chagas disease	0	0	3	2	2 (1U)	5
Coccidioidomycosis	69 (2E , 9U)	63 (3E , 14U)	62 (7U)	64 (8U)	120 (2E , 27U)	96 (1 E, 24U)
Cryptococcosis (by *Cryptococcus gattii*)	1E	4 (1E , 3U)	2 (1E , 1U)	3 (1E , 2U)	3U	0
Histoplasmosis	1	0	1U	2 (1U)	1U	3(2U)
Spotted Fever Rickettsiosis	5	3 (1U)	4 (1E)	2E	1	2
Tick Paralysis	0	2E	2E	0	0	1
Typhus	1	0	0	0	1	2

All cases acquired through travel, unless otherwise noted. Case counts are subject to change since cases are often reported late.

E Endemically acquired
U Unknown exposure location
*The category of conditions titled “Other Rare Diseases of Public Health Significance” has been repealed effective January 1, 2023 and conditions listed above have been integrated within the notifiable conditions chapter (WAC 246-101).

Rare Sexually Transmitted Infections

Year	Total	Chancroid	Granuloma inguinale	Lymphogranuloma venereum
1987	7	1	1	5
1988	1	0	0	1
1989	13	6	0	7
1990	3	1	1	1
1991	7	3	2	2
1992	4	2	0	2
1993	4	0	0	4
1994	4	1	0	3
1995	6	5	0	1
1996	2	1	0	1
1997	2	2	0	0
1998	1	1	0	0
1999	0	0	0	0
2000	1	0	0	1
2001	0	0	0	0
2002	1	1	0	0
2003	1	0	0	1
2004	0	0	0	0
2005	3	0	0	3
2006	0	0	0	0
2007	1	0	0	1
2008	5	1	0	4
2009	2	0	0	2
2010	3	1	0	2
2011	1	0	0	1
2012	0	0	0	0
2013	0	0	0	0
2014	0	0	0	0
2015	1	0	0	1
2016	1	0	0	1
2017	1	0	0	1
2018	2	1	0	1
2019	2	0	0	2
2020	0	0	0	0
2021	0	0	0	0
2022	3	2	0	1

Data source: PHIMS-STD 6/15/2023.

Note: Cases are included in this table if they are residing in Washington based on reported address at the time of diagnosis, are a reportable case in the relevant calendar year (January 1, XXXX - December 31, XXXX), and are given a valid DOH case classification of Probable or Confirmed as determined by the current CDC case definition.

Relapsing Fever

Year	Cases	Rate*	Deaths
1986	2	0	0
1987	7	0.2	1
1988	5	0.1	0
1989	5	0.1	0
1990	4	0.1	0
1991	6	0.1	0
1992	6	0.1	0
1993	2	0	0
1994	9	0.2	0
1995	12	0.2	0
1996	8	0.1	0
1997	4	0.1	0
1998	5	0.1	0
1999	3	0.1	0
2000	5	0.1	1
2001	1	0	0
2002	7	0.1	0
2003	6	0.1	0
2004	6	0.1	0
2005	6	0.1	0
2006	2	0	0
2007	9	0.1	0
2008	4	0.1	0
2009	5	0.1	0
2010	7	0.1	0
2011	11	0.2	0
2012	6	0.1	0
2013	4	0.1	0
2014	7	0.1	0
2015	3	0	0
2016	1	0	0
2017	3	0	0
2018	9	0.1	0
2019	4	0.1	0
2020	2	0	0
2021	2	0	0
2022	4	0.1	0

*All rates are cases per 100,000 population.

Rubella

Year	Cases	Rate*	Deaths
1982	58	1.4	0
1983	10	0.2	0
1984	2	0	0
1985	16	0.4	0
1986	15	0.3	0
1987	2	0	0
1988	0	0	0
1989	2	0	0
1990	6	0.1	0
1991	8	0.2	0
1992	8	0.2	0
1993	3	0.1	0
1994	0	0	0
1995	2	0	0
1996	15	0.3	0
1997	5	0.1	0
1998	5	0.1	0
1999	5	0.1	0
2000	8	0.1	0
2001	0	0	0
2002	2	0	0
2003	0	0	0
2004	0	0	0
2005	1	0	0
2006	0	0	0
2007	0	0	0
2008	0	0	0
2009	0	0	0
2010	1	0	0
2011	2	0	0
2012	0	0	0
2013	1	0	0
2014	0	0	0
2015	0	0	0
2016	0	0	0
2017	0	0	0
2018	0	0	0
2019	0	0	0
2020	0	0	0
2021	0	0	0
2022	0	0	0

*All rates are cases per 100,000 population.

Salmonellosis

County	2018 Cases	2018 Rate*	2019 Cases	2019 Rate*	2020 Cases	2020 Rate*	2021 Cases	2021 Rate*	2022 Cases	2022 Rate*
Adams	2	+	1	+	0	0	2	+	1	+
Asotin	1	+	1	+	1	+	2	+	2	+
Benton	15	7.6	15	7.4	18	8.7	5	2.4	13	6.1
Chelan	9	11.6	6	7.7	14	17.7	7	8.8	9	11.2
Clallam	9	11.9	8	10.5	8	10.4	10	12.9	3	+
Clark	64	13.2	52	10.6	44	8.7	41	8	36	6.9
Columbia	0	0	0	0	1	+	0	0	0	0
Cowlitz	17	15.8	12	11	7	6.3	7	6.3	14	12.5
Douglas	1	+	1	+	4	+	5	11.5	3	+
Ferry	0	0	0	0	0	0	0	0	0	0
Franklin	6	6.5	7	7.4	7	7.2	2	+	6	6
Garfield	1	+	0	0	1	+	0	0	1	+
Grant	9	9.3	12	12.3	8	8.1	10	9.9	12	11.8
Grays Harbor	6	8.1	6	8	2	+	9	11.8	5	6.5
Island	6	7.1	9	10.5	11	12.7	11	12.6	5	5.7
Jefferson	2	+	3	+	9	27.3	2	+	2	+
King	310	14.1	248	11.1	172	7.6	176	7.7	264	11.4
Kitsap	19	7	18	6.6	33	12	20	7.2	22	7.8
Kittitas	1	+	1	+	8	17.2	3	+	3	+
Klickitat	2	+	2	+	1	+	3	+	4	+
Lewis	5	6.3	7	8.6	10	12.2	14	16.9	8	9.6
Lincoln	0	0	1	+	5	46	3	+	2	+
Mason	2	+	8	12.3	14	21.3	2	+	5	7.6
Okanogan	2	+	7	16.7	6	14.3	4	+	2	+
Pacific	0	0	3	+	2	+	1	+	1	+
Pend Oreille	0	0	0	0	1	+	0	0	0	0
Pierce	76	8.6	73	8.1	68	7.4	75	8.1	93	9.9
San Juan	2	+	1	+	4	+	1	+	0	0
Skagit	17	13.5	11	8.6	19	14.7	11	8.5	13	9.9
Skamania	2	+	1	+	0	0	0	0	2	+
Snohomish	94	11.7	80	9.8	79	9.5	75	9	88	10.4
Spokane	38	7.3	34	6.4	37	6.9	35	6.5	44	8
Stevens	2	+	5	10.9	4	+	4	+	5	10.6
Thurston	27	9.5	30	10.4	39	13.2	31	10.4	22	7.3
Wahkiakum	0	0	0	0	1	+	0	0	0	0
Walla Walla	5	8.1	13	20.9	15	24	14	22.5	12	19.2
Whatcom	27	12.3	22	9.8	27	11.9	21	9.3	24	10.4
Whitman	1	+	2	+	0	0	2	+	4	+
Yakima	48	18.9	34	13.3	23	9	32	12.4	20	7.7
State Totals	828	11.1	725	9.5	703	9.1	640	8.2	750	9.5

Statewide by Year

Year	Cases	Rate*	Deaths
1983	739	17.2	0
1984	515	11.8	0
1985	565	12.8	0
1986	783	17.5	2
1987	660	14.6	1
1988	612	13.3	0
1989	630	13.3	2
1990	634	13.0	6
1991	791	15.8	1
1992	609	11.8	1
1993	830	15.8	0
1994	863	16.1	0
1995	691	12.6	0
1996	734	13.2	0
1997	675	11.9	0
1998	703	12.2	2
1999	792	13.6	2
2000	659	11.2	1
2001	681	11.4	2
2002	655	10.8	0
2003	699	11.4	1
2004	660	10.6	2
2005	626	9.9	0
2006	627	9.8	3
2007	758	11.6	2
2008	846	12.8	3
2009	820	12.3	2
2010	780	11.6	3
2011	589	8.7	2
2012	842	12.3	0
2013	671	9.7	1
2014	741	10.6	2
2015	1,034	14.6	1
2016	754	10.4	2
2017	810	11.0	4
2018	828	11.1	3
2019	725	9.5	0
2020	703	9.1	5
2021	640	8.2	2
2022	750	9.5	1

*All incidence rates are cases per 100,000 population.

+County incidence rates not calculated for <5 cases.

Shellfish Poisoning: Paralytic, Domoic Acid, Diarrhetic

Year	Cases	Rate*	Deaths
1986	0	0	0
1987	0	0	0
1988	7	0.2	0
1989	0	0	0
1990	0	0	0
1991	0	0	0
1992	0	0	0
1993	0	0	0
1994	0	0	0
1995	0	0	0
1996	0	0	0
1997	0	0	0
1998	5	0.1	0
1999	0	0	0
2000	7	0.1	0
2001	0	0	0
2002	0	0	0
2003	0	0	0
2004	0	0	0
2005	1	0	0
2006	1	0	0
2007	0	0	0
2008	0	0	0
2009	0	0	0
2010	0	0	0
2011	0	0	0
2012	9	0.1	0
2013	0	0	0
2014	0	0	0
2015	1	0	0
2016	0	0	0
2017	0	0	0
2018	0	0	0
2019	0	0	0
2020	0	0	0
2021	0	0	0
2022	0	0	0

*All rates are cases per 100,000 population.

Shiga Toxin-Producing *Escherichia Coli* (STEC)

County	2018 Cases	2018 Rate*	2019 Cases	2019 Rate*	2020 Cases	2020 Rate*	2021 Cases	2021 Rate*	2022 Cases	2022 Rate*
Adams	1	+	0	0	1	+	1	+	0	0
Asotin	0	0	1	+	0	0	1	+	0	0
Benton	10	5	15	7.4	5	2.4	9	4.3	6	2.8
Chelan	4	+	0	0	2	+	5	6.3	7	8.7
Clallam	2	+	2	+	2	+	0	0	0	0
Clark	27	5.6	25	5.1	25	5	30	5.8	23	4.4
Columbia	0	0	2	+	0	0	0	0	3	+
Cowlitz	5	4.6	3	+	2	+	1	+	2	+
Douglas	2	+	1	+	0	0	1	+	4	+
Ferry	1	+	0	0	0	0	2	+	0	0
Franklin	6	6.5	4	+	4	+	5	5.1	3	+
Garfield	1	+	0	0	0	0	0	0	0	0
Grant	5	5.2	6	6.1	3	+	7	6.9	1	+
Grays Harbor	2	+	1	+	3	+	4	+	0	0
Island	4	+	6	7	2	+	5	5.7	7	8
Jefferson	5	15.5	1	+	4	+	1	+	7	21
King	198	9	197	8.8	101	4.4	176	7.7	193	8.3
Kitsap	11	4.1	5	1.8	7	2.5	6	2.2	10	3.6
Kittitas	4	+	5	11.1	6	12.9	13	28.7	17	36
Klickitat	1	+	2	+	0	0	4	+	1	+
Lewis	6	7.5	4	+	7	8.5	2	+	3	+
Lincoln	0	0	0	0	1	+	1	+	1	+
Mason	2	+	2	+	0	0	3	+	1	+
Okanogan	3	+	4	+	2	+	0	0	3	+
Pacific	0	0	1	+	0	0	1	+	0	0
Pend Oreille	1	+	0	0	0	0	0	0	1	+
Pierce	45	5.1	37	4.1	18	2	30	3.2	45	4.8
San Juan	4	+	3	+	0	0	1	+	0	0
Skagit	18	14.3	12	9.3	8	6.2	10	7.7	16	12.2
Skamania	0	0	0	0	0	0	1	+	17	142.9
Snohomish	49	6.1	53	6.5	39	4.7	51	6.1	61	7.2
Spokane	26	5	21	4	26	4.8	18	3.3	28	5.1
Stevens	2	+	3	+	2	+	3	+	2	+
Thurston	31	10.9	21	7.3	12	4.1	15	5	8	2.7
Wahkiakum	0	0	1	+	0	0	0	0	0	0
Walla Walla	4	+	2	+	3	+	7	11.3	4	+
Whatcom	16	7.3	10	4.5	3	+	16	7.1	6	2.6
Whitman	1	+	0	0	1	+	1	+	3	+
Yakima	43	16.9	15	5.9	19	7.4	29	11.2	24	9.2
State Totals	540	7.2	465	6.1	308	4	460	5.9	507	6.4

Statewide by Year

Year	Cases	Rate*	Deaths
1988	167	3.6	0
1989	157	3.3	1
1990	220	4.5	0
1991	164	3.3	0
1992	300	5.8	2
1993	741	14.1	3
1994	174	3.2	2
1995	140	2.6	1
1996	187	3.4	1
1997	149	2.6	0
1998	144	2.5	0
1999	186	3.2	0
2000	237	4.0	0
2001	150	2.5	0
2002	166	2.7	0
2003	128	2.1	0
2004	153	2.5	3
2005	149	2.4	0
2006	162	2.5	0
2007	141	2.2	0
2008	189	2.9	1
2009	206	3.1	0
2010	226	3.4	1
2011	203	3.0	1
2012	239	3.5	0
2013	330	4.8	3
2014	229	3.3	2
2015	419	5.9	1
2016	340	4.7	0
2017	404	5.5	1
2018	540	7.2	2
2019	465	6.1	2
2020	308	4.0	2
2021	460	5.9	3
2022	507	6.4	1

*All incidence rates are cases per 100,000 population.

+County incidence rates not calculated for <5 cases.

Shigellosis

County	2018 Cases	2018 Rate*	2019 Cases	2019 Rate*	2020 Cases	2020 Rate*	2021 Cases	2021 Rate*	2022 Cases	2022 Rate*
Adams	3	+	2	+	0	0	0	0	0	0
Asotin	0	0	0	0	0	0	0	0	0	0
Benton	6	3	10	4.9	4	+	6	2.9	6	2.8
Chelan	3	+	1	+	2	+	1	+	6	7.4
Clallam	2	+	6	7.9	3	+	3	+	2	+
Clark	13	2.7	12	2.4	11	2.2	19	3.7	18	3.5
Columbia	0	0	0	0	0	0	0	0	2	+
Cowlitz	2	+	0	0	4	+	2	+	1	+
Douglas	1	+	0	0	0	0	0	0	3	+
Ferry	0	0	0	0	0	0	0	0	0	0
Franklin	2	+	2	+	0	0	4	+	0	0
Garfield	0	0	0	0	0	0	0	0	0	0
Grant	3	+	2	+	0	0	1	+	1	+
Grays Harbor	3	+	0	0	0	0	0	0	0	0
Island	1	+	1	+	0	0	4	+	2	+
Jefferson	2	+	1	+	0	0	2	+	1	+
King	268	12.2	178	8	131	5.8	293	12.8	218	9.4
Kitsap	7	2.6	6	2.2	1	+	7	2.5	7	2.5
Kittitas	1	+	1	+	0	0	0	0	1	+
Klickitat	0	0	1	+	1	+	0	0	0	0
Lewis	0	0	2	+	2	+	1	+	1	+
Lincoln	0	0	0	0	0	0	0	0	0	0
Mason	1	+	2	+	2	+	1	+	0	0
Okanogan	0	0	1	+	0	0	0	0	1	+
Pacific	0	0	1	+	0	0	0	0	0	0
Pend Oreille	0	0	0	0	0	0	0	0	0	0
Pierce	20	2.3	27	3	16	1.7	34	3.7	46	4.9
San Juan	0	0	1	+	0	0	1	+	0	0
Skagit	7	5.6	3	+	3	+	9	6.9	6	4.6
Skamania	0	0	1	+	1	+	0	0	0	0
Snohomish	35	4.4	21	2.6	20	2.4	38	4.5	42	5
Spokane	7	1.3	7	1.3	3	+	3	+	9	1.6
Stevens	2	+	0	0	1	+	0	0	0	0
Thurston	9	3.2	8	2.8	15	5.1	10	3.4	5	1.7
Wahkiakum	0	0	0	0	0	0	0	0	0	0
Walla Walla	0	0	6	9.6	0	0	2	+	1	+
Whatcom	2	+	3	+	2	+	2	+	3	+
Whitman	1	+	1	+	0	0	0	0	0	0
Yakima	18	7.1	7	2.7	3	+	7	2.7	11	4.2
State Totals	419	5.6	314	4.1	225	2.9	450	5.8	393	5.0

Statewide by Year

Year	Cases	Rate*	Deaths
1983	370	8.6	0
1984	224	5.1	0
1985	144	3.3	0
1986	321	7.2	0
1987	318	7.0	0
1988	306	6.6	0
1989	232	4.9	0
1990	278	5.7	0
1991	405	8.1	0
1992	439	8.5	0
1993	797	15.1	0
1994	478	8.9	0
1995	426	7.8	0
1996	333	6.0	1
1997	318	5.6	0
1998	277	4.8	0
1999	172	2.9	0
2000	501	8.5	0
2001	236	4.0	0
2002	230	3.8	0
2003	188	3.1	0
2004	133	2.1	0
2005	185	2.9	0
2006	170	2.6	0
2007	159	2.4	0
2008	116	1.8	0
2009	153	2.3	0
2010	112	1.7	0
2011	104	1.5	0
2012	133	1.9	0
2013	122	1.8	0
2014	157	2.2	0
2015	152	2.1	0
2016	191	2.6	0
2017	285	3.9	0
2018	419	5.6	0
2019	314	4.1	1
2020	225	2.9	0
2021	450	5.8	0
2022	393	5.0	0

*All incidence rates are cases per 100,000 population.

+County incidence rates not calculated for <5 cases.

Syphilis (Primary and Secondary)

County	2018 Cases	2018 Rate*	2019 Cases	2019 Rate*	2020 Cases	2020 Rate*	2021 Cases	2021 Rate*	2022 Cases	2022 Rate*
Adams	0	0	2	+	1	+	2	+	3	+
Asotin	0	0	0	0	1	+	0	0	1	+
Benton	9	+	24	11.8	31	15.0	35	16.7	51	24.0
Chelan	2	+	3	+	0	0	6	+	18	22.3
Clallam	2	+	2	+	1	+	6	+	1	+
Clark	33	6.8	37	7.5	62	12.3	76	14.8	92	17.7
Columbia	1	+	0	0	0	0	1	+	0	0
Cowlitz	27	25.1	20	18.3	5	+	15	+	8	+
Douglas	1	+	1	+	1	+	3	+	3	+
Ferry	0	0	0	0	0	0	0	0	1	+
Franklin	4	+	11	+	14	+	16	+	17	17.0
Garfield	0	0	0	0	0	0	0	0	1	+
Grant	2	+	7	+	8	+	10	+	22	21.6
Grays Harbor	13	+	8	+	13	+	21	27.6	9	+
Island	1	+	1	+	1	+	5	+	8	+
Jefferson	1	+	0	0	0	0	1	+	1	+
King	397	18.1	346	15.5	335	14.8	602	26.3	677	29.2
Kitsap	24	8.9	22	8.1	10	+	27	9.7	39	13.9
Kittitas	0	0	2	+	1	+	2	+	4	+
Klickitat	2	+	0	0	0	0	2	+	2	+
Lewis	6	+	10	+	6	+	12	+	16	+
Lincoln	0	0	0	0	0	0	0	0	0	0
Mason	10	+	8	+	8	+	11	+	15	+
Okanogan	4	+	0	0	1	+	5	+	12	+
Pacific	1	+	0	0	1	+	2	+	3	+
Pend Oreille	2	+	0	0	0	0	2	+	3	+
Pierce	66	7.4	92	10.2	111	12.1	241	26.0	360	38.4
San Juan	0	0	1	+	1	+	2	+	0	0
Skagit	3	+	6	+	10	+	16	+	10	+
Skamania	0	0	1	+	0	0	1	+	0	0
Snohomish	43	5.3	47	5.8	62	7.5	91	10.9	97	11.4
Spokane	104	19.9	129	24.3	80	14.8	112	20.7	125	22.7
Stevens	4	+	2	+	4	+	1	+	1	+
Thurston	18	6.3	26	9.0	30	10.2	45	15.1	51	17.0
Wahkiakum	0	0	0	0	0	0	0	0	0	0
Walla Walla	6	+	0	0	1	+	15	+	10	+
Whatcom	9	+	11	+	13	+	17	7.5	18	7.8
Whitman	2	+	3	+	3	+	2	+	1	+
Yakima	12	+	8	+	22	8.6	83	32.2	235	90.4
State Totals	809	10.8	830	10.9	837	10.9	1488	19.2	1915	24.4

Statewide by Year

Year	Cases	Rate*	Deaths
1990	354	7.3	0
1991	178	3.5	0
1992	85	1.7	0
1993	67	1.3	0
1994	36	0.7	0
1995	17	0.3	0
1996	9	0.2	0
1997	17	0.3	0
1998	44	0.8	0
1999	77	1.3	0
2000	66	1.1	0
2001	57	1.0	0
2002	70	1.2	0
2003	82	1.3	0
2004	150	2.4	0
2005	152	2.4	0
2006	182	2.8	0
2007	168	2.6	0
2008	181	2.7	0
2009	135	2.0	0
2010	261	3.9	0
2011	329	4.9	0
2012	300	4.4	0
2013	285	4.1	0
2014	337	4.8	0
2015	452	6.4	0
2016	566	7.8	0
2017	674	9.2	0
2018	809	10.8	0
2019	830	10.9	0
2020	837	10.9	0
2021	1,488	19.2	0
2022	1,915	24.4	0

Note: Data prior to 2009 are based on year reported rather than year diagnosed.

*All incidence rates are cases per 100,000 population.

+County incidence rates based on counts ≤16 are suppressed due to statistical instability.

Data source: PHIMS-STD 6/15/2023.

Note: Cases are included in this table if they are residing in Washington based on reported address at the time of diagnosis, are a reportable case in the relevant calendar year (January 1, XXXX - December 31, XXXX), and are given a valid DOH case classification of Probable or Confirmed as determined by the current CDC case definition.

Tetanus

Year	Cases	Rate*	Deaths
1985	0	0	0
1986	0	0	0
1987	1	0	0
1988	1	0	0
1989	1	0	0
1990	1	0	0
1991	1	0	0
1992	3	0.1	0
1993	1	0	0
1994	1	0	0
1995	0	0	0
1996	1	0	0
1997	1	0	0
1998	0	0	0
1999	0	0	0
2000	1	0	0
2001	0	0	0
2002	0	0	0
2003	0	0	0
2004	0	0	0
2005	1	0	0
2006	0	0	0
2007	0	0	0
2008	0	0	0
2009	0	0	0
2010	0	0	0
2011	0	0	0
2012	1	0	0
2013	0	0	0
2014	3	0	1
2015	0	0	0
2016	0	0	0
2017	0	0	0
2018	1	0	0
2019	2	0	0
2020	1	0	0
2021	2	0	0
2022	1	0	0

*All rates are cases per 100,000 population.

Trichinosis

Year	Cases	Rate*	Deaths
1986	0	0	0
1987	0	0	0
1988	0	0	0
1989	2	0	0
1990	1	0	0
1991	0	0	0
1992	1	0	0
1993	1	0	0
1994	0	0	0
1995	0	0	0
1996	0	0	0
1997	0	0	0
1998	0	0	0
1999	0	0	0
2000	1	0	0
2001	0	0	0
2002	0	0	0
2003	0	0	0
2004	0	0	0
2005	0	0	0
2006	1	0	0
2007	0	0	0
2008	0	0	0
2009	0	0	0
2010	0	0	0
2011	0	0	0
2012	0	0	0
2013	0	0	0
2014	2	0	0
2015	1	0	0
2016	0	0	0
2017	1	0	0
2018	0	0	0
2019	0	0	0
2020	0	0	0
2021	0	0	0
2022	2	0	0

*All rates are cases per 100,000 population.

Tuberculosis (TB)‡

County	2018 Cases	2018 Rate*	2019 Cases	2019 Rate*	2020 Cases	2020 Rate*	2021 Cases	2021 Rate*	2022 Cases	2022 Rate*
Adams	1	+	0	0	1	+	0	0	4	+
Asotin	0	0	0	0	0	0	0	0	0	0
Benton	2	+	2	+	2	+	1	+	4	+
Chelan	2	+	0	0	1	+	2	+	0	0
Clallam	0	0	0	0	0	0	1	+	1	+
Clark	7	1.5	8	1.6	9	1.8	8	1.6	13	2.5
Columbia	0	0	0	0	0	0	0	0	0	0
Cowlitz	1	+	2	+	1	+	1	+	3	+
Douglas	0	0	0	0	0	0	1	+	1	+
Ferry	0	0	0	0	1	+	0	0	0	0
Franklin	3	+	2	+	0	0	0	0	0	0
Garfield	0	0	0	0	0	0	0	0	0	0
Grant	0	0	0	0	0	0	0	0	0	0
Grays Harbor	0	0	2	+	0	0	1	+	1	+
Island	2	+	0	0	0	0	0	0	1	+
Jefferson	0	0	0	0	0	0	1	+	1	+
King	94	4.3	132	5.9	90	4.0	103	4.5	111	4.8
Kitsap	1	+	3	+	2	+	2	+	6	2.1
Kittitas	1	+	0	0	0	0	0	0	0	0
Klickitat	0	0	0	0	0	0	1	+	0	0
Lewis	2	+	0	0	1	+	1	+	1	+
Lincoln	0	0	0	0	0	0	0	0	0	0
Mason	0	0	0	0	0	0	0	0	5	7.6
Okanogan	0	0	0	0	0	0	0	0	0	0
Pacific	1	+	0	0	0	0	0	0	0	0
Pend Oreille	0	0	0	0	0	0	0	0	0	0
Pierce	19	2.2	23	2.6	15	1.6	19	2.0	27	2.9
San Juan	0	0	0	0	0	0	0	0	0	0
Skagit	1	+	0	0	1	+	2	+	0	0
Skamania	0	0	0	0	0	0	0	0	0	0
Snohomish	21	2.6	24	2.9	21	2.5	27	3.2	30	3.5
Spokane	11	2.2	9	1.7	5	0.9	8	1.5	7	1.3
Stevens	0	0	0	0	0	0	0	0	0	0
Thurston	5	1.8	1	+	5	1.7	7	2.4	3	+
Wahkiakum	0	0	0	0	0	0	0	0	0	0
Walla Walla	0	0	1	+	0	0	0	0	1	+
Whatcom	5	2.3	4	+	6	2.6	2	+	2	+
Whitman	0	0	0	0	0	0	0	0	1	+
Yakima	5	2.0	5	2.0	2	+	9	3.5	5	1.9
Unassigned**	6	NA	3	NA	0	NA	2	NA	23	NA
State Totals‡	190	2.6	221	2.9	163	2.1	199	2.6	251	3.2

Statewide by Year

Year	Cases	Rate*	Deaths
1982	301	7.0	6
1983	239	5.5	10
1984	207	4.8	6
1985	220	5.0	5
1986	218	4.9	3
1987	255	5.6	10
1988	236	5.1	9
1989	248	5.2	4
1990	284	5.8	12
1991	309	6.2	7
1992	306	6.0	7
1993	283	5.5	7
1994	260	4.9	6
1995	277	5.1	2
1996	283	5.2	3
1997	305	5.5	6
1998	265	4.7	5
1999	258	4.5	5
2000	258	4.4	2
2001	261	4.4	6
2002	252	4.2	4
2003	250	4.1	11
2004	245	3.9	9
2005	255	4.0	14
2006	262	4.1	18
2007	291	4.5	12
2008	228	3.5	2
2009	255	3.8	5
2010	233	3.5	8
2011	197	2.9	6
2012	185	2.7	6
2013	210	3.1	6
2014	194	2.8	4
2015	207	2.9	5
2016	204	2.8	9
2017	207	2.8	4
2018	190	2.6	10
2019	221	2.9	7
2020	163	2.1	6
2021	199	2.6	10
2022	251	3.2	9

TB-related deaths prior to 2009 are reported here as per year of death in the TB surveillance record. TB-related deaths 2009 and later are reported here as per year case was counted.

‡Includes cases entered at the state level into the Washington Disease Reporting System (WDRS).
*All incidence rates are cases per 100,000 population using the Office of Financial Management (OFM) population estimates. Based on county where diagnostic evaluation was initiated.
+Due to rate instability, rates are not reported for case counts <5.
**Cases counted by state or federal corrections and/or the Department of Health. Rates not calculated (NA).
Note: Cases of tuberculosis are included in this table if they are a resident of Washington at the time of initial diagnostic evaluation, are a reportable case in the relevant calendar year (January 1, XXXX – December 31, XXXX) per CDC reporting guidelines for tuberculosis, and are entered and counted prior to the end of the relevant calendar year.

Tularemia

Year	Cases	Rate*	Deaths
1986	1	0	0
1987	4	0.1	0
1988	1	0	0
1989	2	0	0
1990	4	0.1	0
1991	2	0	0
1992	2	0	0
1993	2	0	0
1994	1	0	0
1995	4	0.1	0
1996	2	0	0
1997	2	0	0
1998	8	0.1	0
1999	2	0	0
2000	2	0	0
2001	5	0.1	0
2002	3	0	0
2003	2	0	0
2004	4	0.1	0
2005	10	0.2	0
2006	1	0	0
2007	1	0	0
2008	4	0.1	0
2009	5	0.1	1
2010	3	0	0
2011	5	0.1	0
2012	5	0.1	0
2013	5	0.1	0
2014	4	0.1	0
2015	4	0.1	0
2016	1	0	0
2017	6	0.1	0
2018	4	0.1	0
2019	4	0.1	0
2020	5	0.1	1
2021	3	0	0
2022	6	0.1	0

*All rates are cases per 100,000 population.

Typhoid Fever

Year	Cases	Rate*	Deaths
1985	3	0.1	0
1986	3	0.1	0
1987	9	0.2	0
1988	13	0.3	0
1989	11	0.2	0
1990	22	0.5	0
1991	10	0.2	0
1992	11	0.2	0
1993	8	0.2	0
1994	12	0.2	0
1995	4	0.1	0
1996	4	0.1	0
1997	7	0.1	0
1998	8	0.1	0
1999	8	0.1	0
2000	6	0.1	0
2001	7	0.1	0
2002	7	0.1	0
2003	4	0.1	0
2004	6	0.1	0
2005	11	0.2	0
2006	7	0.1	0
2007	7	0.1	0
2008	15	0.2	0
2009	4	0.1	0
2010	22	0.3	0
2011	9	0.1	0
2012	11	0.2	0
2013	11	0.2	0
2014	15	0.2	0
2015	10	0.1	0
2016	13	0.2	0
2017	14	0.2	0
2018	12	0.2	0
2019	26	0.3	0
2020	10	0.1	0
2021	15	0.2	0
2022	18	0.2	0

*All rates are cases per 100,000 population.

Vibriosis

Year	Cases	Rate*	Deaths
1985	4	0.1	0
1986	7	0.2	0
1987	18	0.4	0
1988	11	0.2	0
1989	4	0.1	0
1990	30	0.6	0
1991	4	0.1	0
1992	7	0.1	0
1993	33	0.6	0
1994	9	0.2	0
1995	6	0.1	0
1996	3	0.1	0
1997	58	1.0	0
1998	41	0.7	0
1999	21	0.4	0
2000	20	0.3	0
2001	9	0.2	0
2002	25	0.4	0
2003	18	0.3	0
2004	28	0.5	0
2005	20	0.3	0
2006	80	1.2	0
2007	25	0.4	0
2008	29	0.4	0
2009	48	0.7	0
2010	59	0.9	0
2011	45	0.7	0
2012	67	1	0
2013	90	1.3	0
2014	92	1.3	0
2015	68	1	0
2016	63	0.9	1
2017	95	1.3	0
2018	217	2.9	1
2019	159	2.1	0
2020	90	1.2	0
2021	160	2.1	1
2022	104	1.3	0

*All rates are cases per 100,000 population.

Yersiniosis

County	2018 Cases	2018 Rate*	2019 Cases	2019 Rate*	2020 Cases	2020 Rate*	2021 Cases	2021 Rate*	2022 Cases	2022 Rate*
Adams	0	0	0	0	1	+	0	0	0	0
Asotin	0	0	0	0	0	0	0	0	0	0
Benton	0	0	1	+	1	+	3	+	0	0
Chelan	0	0	0	0	0	0	0	0	1	+
Clallam	0	0	0	0	1	+	1	+	0	0
Clark	7	1.4	7	1.4	2	+	1	+	3	+
Columbia	0	0	0	0	0	0	0	0	0	0
Cowlitz	0	0	0	0	2	+	0	0	1	+
Douglas	0	0	0	0	0	0	0	0	1	+
Ferry	0	0	0	0	0	0	0	0	0	0
Franklin	1	+	0	0	0	0	1	+	2	+
Garfield	0	0	0	0	0	0	0	0	0	0
Grant	0	0	2	+	0	0	0	0	0	0
Grays Harbor	1	+	0	0	0	0	0	0	0	0
Island	2	+	1	+	1	+	0	0	1	+
Jefferson	0	0	1	+	4	+	1	+	2	+
King	39	1.8	59	2.6	35	1.5	47	2.1	62	2.7
Kitsap	3	+	2	+	1	+	2	+	2	+
Kittitas	0	0	0	0	0	0	1	+	2	+
Klickitat	0	0	0	0	0	0	0	0	0	0
Lewis	0	0	1	+	1	+	1	+	0	0
Lincoln	0	0	0	0	0	0	0	0	1	+
Mason	1	+	0	0	1	+	0	0	2	+
Okanogan	0	0	0	0	0	0	0	0	0	0
Pacific	0	0	0	0	0	0	0	0	4	+
Pend Oreille	0	0	0	0	0	0	0	0	0	0
Pierce	5	0.6	4	+	6	0.7	5	0.5	6	0.6
San Juan	2	+	0	0	1	+	0	0	0	0
Skagit	2	+	3	+	1	+	6	4.6	5	3.8
Skamania	0	0	0	0	0	0	1	+	0	0
Snohomish	8	1	16	2	8	1	15	1.8	18	2.1
Spokane	2	+	1	+	2	+	1	+	2	+
Stevens	0	0	2	+	0	0	0	0	1	+
Thurston	2	+	2	+	2	+	4	+	2	+
Wahkiakum	0	0	0	0	0	0	0	0	0	0
Walla Walla	1	+	2	+	0	0	0	0	1	+
Whatcom	2	+	2	+	2	+	1	+	2	+
Whitman	0	0	0	0	0	0	0	0	1	+
Yakima	1	+	0	0	0	0	1	+	1	+
State Totals	79	1.1	106	1.4	72	0.9	92	1.2	123	1.6

Statewide by Year

Year	Cases	Rate*	Deaths
1988	15	0.3	0
1989	40	0.8	0
1990	37	0.8	0
1991	28	0.6	0
1992	34	0.7	0
1993	50	0.9	0
1994	40	0.7	0
1995	50	0.9	0
1996	37	0.7	0
1997	30	0.5	0
1998	39	0.7	0
1999	32	0.5	0
2000	33	0.6	0
2001	23	0.4	0
2002	26	0.4	0
2003	28	0.5	0
2004	34	0.5	0
2005	19	0.3	0
2006	22	0.3	0
2007	28	0.4	0
2008	19	0.3	1
2009	15	0.2	0
2010	25	0.4	0
2011	21	0.3	0
2012	36	0.5	0
2013	34	0.5	0
2014	36	0.5	0
2015	40	0.6	0
2016	56	0.8	0
2017	81	1.1	0
2018	79	1.1	0
2019	106	1.4	0
2020	72	0.9	0
2021	92	1.2	0
2022	123	1.6	0

*All incidence rates are cases per 100,000 population.

+County incidence rates not calculated for <5 cases.

Appendix I: Other Tables

Foodborne Disease Outbreaks 2022

#	Local Health Jurisdictions Affected	Month of 1st WA Illness Onset	Agent	Total # WA Cases*	Total # Outbreak-Associated Cases^	Implicated Food	Contributing Factors	Transmission Setting
1	Kitsap	1	Suspected bacterial toxin	2	2	Beef burrito with beans and rice	P4 - Inadequate cold holding temperature due to an improper practice, P5 - Inadequate hot holding temperature due to malfunctioning equipment, P7 - Improper cooling of food, S2 - Inadequate time and temperature control during reheating of food	Restaurant
2	King	1	Suspected bacterial toxin	5	5	Duck	P2 - Allowing foods to remain out of temperature control for a prolonged period of time during food service or display, P7 - Improper cooling of food	Restaurant
3	Kitsap	1	Suspected norovirus	4	4	Oysters (raw), recreationally harvested	C7 - Food contaminated by animal or environmental source before arriving at point of final preparation, S5 - No attempt was made to inactivate the contaminant through initial cooking / thermal processing, freezing, or chemical processes	Private home/ residence
4	King	2	Suspected norovirus	13	13	Unknown/ undetermined	C11 - Contamination from infectious food worker/ handler through unknown type of hand contact with food or indirect contact with food	Restaurant
5	King	2	*Salmonella* Dublin	2	2	Raw beef	C7 - Food contaminated by animal or environmental source before arriving at point of final preparation, S5 - No attempt was made to inactivate the contaminant through initial cooking / thermal processing, freezing, or chemical processes	Private home/ residence

*In prior years, this column was labeled “Total # Cases.”
^Includes cases from other states that are part of the outbreak.

#	Local Health Jurisdictions Affected	Month of 1st WA Illness Onset	Agent	Total # WA Cases*	Total # Outbreak-Associated Cases^	Implicated Food	Contributing Factors	Transmission Setting
6	Spokane	3	Suspected norovirus	15	15	Unknown/ undetermined	C11 - Contamination from infectious food worker/handler through unknown type of hand contact with food or indirect contact with food	Restaurant
7	King, Snohomish, Clark (multistate)	3	Norovirus	74	193	Raw oysters	C7 - Food contaminated by animal or environmental source before arriving at point of final preparation, C8 - Cross-contamination of foods, excluding infectious food workers/handlers, S5 - No attempt was made to inactivate the contaminant through initial cooking / thermal processing, freezing, or chemical processes	Distributed product
8	Benton-Franklin	3	Norovirus	6	6	Sandwiches	C10 - Contamination from infectious food worker/handler through gloved-hand contact with food, C11 - Contamination from infectious food worker/handler through unknown type of hand contact with food or indirect contact with food, C9 - Contamination from infectious food worker/handler through bare-hand contact with food	Restaurant
9	King	3	Norovirus	3	3	Raw oysters	C7 - Food contaminated by animal or environmental source before arriving at point of final preparation, S5 - No attempt was made to inactivate the contaminant through initial cooking / thermal processing, freezing, or chemical processes	Restaurant

*Prior to 2019, this column was labeled "Total # Cases."
^Includes cases from other states that are part of the outbreak.

#	Local Health Jurisdictions Affected	Month of 1st WA Illness Onset	Agent	Total # WA Cases*	Total # Outbreak-Associated Cases^	Implicated Food	Contributing Factors	Transmission Setting
10	Kitsap	3	Suspected norovirus	15	15	Unknown/ undetermined	C9 - Contamination from infectious food worker/handler through bare-hand contact with food	School/college /university
11	King	4	Suspected norovirus	11	11	Unknown/ undetermined	C13 No hot water in restroom, wiping cloths not stored in sanitizer between use	Restaurant
12	King	4	Suspected norovirus	5	5	Unknown/ undetermined	C11 - Contamination from infectious food worker/handler through unknown type of hand contact with food or indirect contact with food	Restaurant
13	Whitman (multistate)	4	*Salmonella* Senftenberg	1	10	Peanut Butter	Unknown/undetermined	Distributed product
14	Pierce, Clark, King (multistate)	4	*E. coli* O26:H11	4	7	Unknown/ undetermined	Unknown/undetermined	Unknown/ undetermined
15	Pierce (multistate)	5	*Salmonella* Enteritidis	1	50	Chicken	Unknown/undetermined	Distributed product
16	Pierce. Clark (multistate)	*5*	*E. coli* O121	2	21	Unknown/ undetermined	Unknown/undetermined	Unknown/ undetermined
17	Pierce	6	Suspected bacterial toxin	5	5	Fried Rice	P7 - Improper cooling of food	Restaurant
18	Snohomish	7	Suspected bacterial toxin	2	2	Rice	P7 - Improper cooling of food	Restaurant
19	King, Spokane (multistate)	7	*E. coli* O157:H7	2	11	Spinach	Unknown/undetermined	Distributed product

*Prior to 2019, this column was labeled "Total # Cases."
^Includes cases from other states that are part of the outbreak.

#	Local Health Jurisdictions Affected	Month of 1st WA Illness Onset	Agent	Total # WA Cases*	Total # Outbreak-Associated Cases^	Implicated Food	Contributing Factors	Transmission Setting
20	Island, King, Spokane, Snohomish (multistate)	7	*Salmonella* Typhimurium	7	20	Unknown/ undetermined	Unknown/undetermined	Unknown/ undetermined
21	Franklin, King, Pierce (multistate)	7	*Salmonella* Senftenberg	5	36	Tomatoes	Unknown/undetermined	Distributed product
22	Snohomish	8	Unknown gastroenteritis	15	15	Unknown/ undetermined	Unknown/undetermined	Hospital
23	Pacific	8	Suspected bacterial toxin	4	4	Ground sausage	P7 - Improper cooling of food	Restaurant
24	Pierce	8	Suspected bacterial toxin	7	7	Beef Tamale	P1 - Allowing foods to remain out of temperature control for a prolonged period of time during preparation, P6 - Inadequate hot holding temperature due to an improper practice, P7 - Improper cooling of food, S2 - Inadequate time and temperature control during reheating of food	Restaurant
25	King (multistate)	8	*E. coli* O157:H7	1	7	Ground Beef	Unknown/undetermined	Distributed product
26	King	9	*Vibrio para-haemolyticus*	2	2	Raw oysters	C7 - Food contaminated by animal or environmental source before arriving at point of final preparation, S5 - No attempt was made to inactivate the contaminant through initial cooking / thermal processing, freezing, or chemical processes	Restaurant

*Prior to 2019, this column was labeled "Total # Cases."
^Includes cases from other states that are part of the outbreak.

#	Local Health Jurisdictions Affected	Month of 1st WA Illness Onset	Agent	Total # WA Cases*	Total # Outbreak-Associated Cases^	Implicated Food	Contributing Factors	Transmission Setting
27	King	9	*Salmonella* Typhimurium	3	3	Unknown/ undetermined	C13 - Lack of adequate handwashing, C8 - Cross-contamination of foods, excluding infectious food workers/handlers, P1 - Allowing foods to remain out of temperature control for a prolonged period of time during preparation	Restaurant
28	King	9	*E. coli* O26:H11	3	3	Unknown/ undetermined	C8 - Cross-contamination of foods, excluding infectious food workers/handlers	Restaurant
29	Kitsap	9	Suspected norovirus	2	2	French Fries	C10 - Contamination from infectious food worker/handler through gloved-hand contact with food, C11 - Contamination from infectious food worker/handler through unknown type of hand contact with food or indirect contact with food, C12 - Contamination from infectious non-food worker/handler through direct or indirect contact with food	Restaurant
30	Spokane	9	Suspected norovirus	14	14	Unknown/ undetermined	C10 - Contamination from infectious food worker/handler through gloved-hand contact with food, C11 - Contamination from infectious food worker/handler through unknown type of hand contact with food or indirect contact with food, C9 - Contamination from infectious food worker/handler through bare-hand contact with food	Restaurant
31	Clark, Snohomish (multistate)	9	*E. coli* O121:H19	2	8	Unknown/ undetermined	Unknown/undetermined	Unknown/ undetermined

*Prior to 2019, this column was labeled "Total # Cases."

^Includes cases from other states that are part of the outbreak.

#	Local Health Jurisdictions Affected	Month of 1st WA Illness Onset	Agent	Total # WA Cases*	Total # Outbreak-Associated Cases^	Implicated Food	Contributing Factors	Transmission Setting
32	King, Clark (multistate)	9	*E. coli* O157:H7	3	8	Raw beef	C6 - Food contaminated by animal or environmental source at point of final preparation/sale, C7 - Food contaminated by animal or environmental source before arriving at point of final preparation, S5 - No attempt was made to inactivate the contaminant through initial cooking / thermal processing, freezing, or chemical processes	Multiple
33	King, Snohomish, Pierce	11	*Shigella* spp.	8	8	Salad	Unknown/undetermined	Hospital
34	Snohomish	11	Suspected norovirus	3	3	Unknown/ undetermined	Unknown/undetermined	Restaurant
35	Skamania	11	*E. coli* O157:H7	14	14	Sushi	C8 - Cross-contamination of foods, excluding infectious food workers/handlers	Grocery store/bakery/ deli/ convenience store
36	Pierce	11	Suspected bacterial toxin	8	8	Egg Rolls	P4 - Inadequate cold holding temperature due to an improper practice, P7 - Improper cooling of food	Restaurant

*Prior to 2019, this column was labeled "Total # Cases."
^Includes cases from other states that are part of the outbreak.

#	Local Health Jurisdictions Affected	Month of 1st WA Illness Onset	Agent	Total # WA Cases*	Total # Outbreak-Associated Cases^	Implicated Food	Contributing Factors	Transmission Setting
37	Spokane	11	Suspected norovirus	13	13	Unknown/ undetermined	C11 - Contamination from infectious food worker/handler through unknown type of hand contact with food or indirect contact with food, C9 - Contamination from infectious food worker/handler through bare-hand contact with food	Restaurant
38	King	12	Suspected norovirus	9	9	Unknown/ undetermined	C11 - Contamination from infectious food worker/handler through unknown type of hand contact with food or indirect contact with food, C9 - Contamination from infectious food worker/handler through bare-hand contact with food	Restaurant
39	Pierce	12	Suspected *Clostridium perfringens*	3	3	Lobster Bisque	P7 - Improper cooling of food	Restaurant
40	Snohomish	12	Suspected *Bacillus cereus*	9	9	Meat pasta sauce	P7 - Improper cooling of food	Restaurant
41	Snohomish	12	Suspected norovirus	3	3	Unknown/ undetermined	C11 - Contamination from infectious food worker/handler through unknown type of hand contact with food or indirect contact with food	Restaurant
42	Whatcom	12	Suspected norovirus	22	22	Unknown/ undetermined	C12 - Contamination from infectious non-food worker/handler through direct or indirect contact with food, C13 - Lack of adequate handwashing	Long-term care facility

*Prior to 2019, this column was labeled "Total # Cases."
^Includes cases from other states that are part of the outbreak.

#	Local Health Jurisdictions Affected	Month of 1st WA Illness Onset	Agent	Total # WA Cases*	Total # Outbreak-Associated Cases^	Implicated Food	Contributing Factors	Transmission Setting
43	Mason	12	Suspected norovirus	4	4	Raw oysters	C11 - Contamination from infectious food worker/handler through unknown type of hand contact with food or indirect contact with food, S5 - No attempt was made to inactivate the contaminant through initial cooking / thermal processing, freezing, or chemical processes	Restaurant
44	King, Snohomish, Kittitas (multistate)	12	Hepatitis A	6	10	Frozen organic strawberries	Unknown/undetermined	Distributed product
45	King (multistate)	5 (2023) ‡	*Salmonella* Infantis	1‡	14	Raw Flour	Unknown/undetermined	Distributed product

‡This outbreak began in 2022 but this WA case developed illness in 2023.

*Prior to 2019, this column was labeled "Total # Cases."
^Includes cases from other states that are part of the outbreak.

Haemophilus influenzae Invasive Disease (Age < 5 Years) 2013-2022

***H. influenzae* Cases Among Children < 5 Years by Serotype, Washington State**

Year	Number of cases	No specimen available (n)	Case was serotyped (n)	Serotyping results			
				Serotype b (n)	Other serotypes (n)	Not typeable (n)	Vaccine-preventable (Serotype b) (%)
2013	11	0	11	2	2	7	18
2014	9	0	9	4	2	3	44
2015	5	0	5	1	2	2	20
2016	9	1	8	1	2	5	13
2017	7	0	7	1	3	3	14
2018	13	0	13	4	7	2	31
2019	16	0	16	0	4	12	0
2020	6	0	6	0	3	3	0
2021	7	0	7	1	5	1	14
2022	17	0	17	0	5	12	0
Total	100	1	99	14	35	50	14

Highly Antibiotic Resistant Organism Surveillance 2012-2022

Carbapenemase-producing Carbapenem-resistant Enterobacterales (CRE) Cases by Genus, Washington State

Genus	Carbapenamase^	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022
Enterobacter spp.	KPC	0	0	1	1	2	1	2	5	1	3	2
	NDM	0	0	0	0	2	4	0	3	8	3	0
	OXA-48	0	0	0	0	0	0	0	0	0	0	1
Escherichia spp.	KPC	0	1	0	1	1	1	0	2	2	0	3
	NDM	0	2	2	3	5	5	7	5	10	4	16
	OXA-48	0	0	1	2	4	1	3	2	0	1	4
Klebsiella spp.	IMP	0	2	0	0	0	0	0	0	0	0	0
	KPC	1	3	13	5	3	10	9	10	7	9	11
	NDM	0	1	2	0	2	1	4	2	5	5	9
	OXA-48	0	0	2	4	1	1	5	1	2	2	6
	VIM	0	0	0	0	0	0	1	0	0	0	0
Year total		1	9	21	16	20	24	31	30	35	27	52

*spp.: species
^KPC: *Klebsiella pneumoniae* carbapenemase
NDM: New Delhi metallo-β-lactamase
OXA-48: Oxacillin-hydrolyzing β-lactamase-48
VIM: Verona integron-encoded metallo-β-lactamase
IMP: Imipenem-hydrolyzing β-lactamase

Note: All years of the table now incorporate a change in taxonomy in 2018 from *Enterobacter aerogenes* to *Klebsiella aerogenes*. Carbapenemase producing organism (CPO) cases are counted using the 2018 CSTE case definition. A case is counted once for each genus/species/carbapenemase profile per patient every 365 days. Samples producing more than one carbapenemase are counted once for each type. CPO counts include any person diagnosed in Washington and Washington residents diagnosed out-of-state.

Meningococcal Disease (Invasive) 2013-2022

Meningococcal Disease Cases by Serogroup, Washington State

Year	Number of cases	No specimen available (n)	Case was serogrouped (n)	Serogrouping results						
				Group B (n)	Group C (n)	Group Y (n)	Group W (n)	Other/Non-Groupable (n)	Vaccine-preventable	
									Men ACWY (%)	MenB (%)
2013	20	3	17	9	2	3	2	1	41	53
2014	17	0	17	6	5	4	1	1	59	35
2015	10	0	10	3	4	1	2	0	70	30
2016	13	1	12	3	6	1	1	1	67	25
2017	11	0	11	3	6	0	0	2	55	27
2018	20*	0	20*	4*	13	1	0	2	70*	20*
2019	14	0	14	1	6	3	2	2	79	7
2020	7	0	7	3	1	1	2	0	57	43
2021	4	1	3	0	3	0	0	0	100	0
2022	2	0	2	1	1	0	0	0	50	50
Total	118	5	113	33	47	14	10	9	63	29

Footnote:
*Previously it was reported that there were 21 cases of meningococcal disease in 2018. Now amended to be 20 cases, of which four (not five) were serogroup B. The percentage of vaccine-preventable serogroup results have also been updated for that year.

Other Rare Diseases of Public Health Significance 2017-2022*

All cases acquired through travel, unless otherwise noted. Case counts are subject to change since cases are often reported late.

Rare Disease	2017	2018	2019	2020	2021	2022
Amebic meningitis	1[E]	0	0	0	0	1[E]
Anaplasmosis	1	0	1	1	4	2(1[E])
Babesiosis	1	0	1	0	0	1
Baylisascariasis	1	0	0	0	0	1
Burkholderia infection	2	0	0	0	0	0
Chagas disease	0	0	3	2	2 (1[U])	5
Coccidioidomycosis	69 (2[E], 9[U])	63 (3[E], 14[U])	62 (7[U])	64 (8[U])	120 (2[E], 27[U])	93 (1[E], 23[U])
Cryptococcosis (by *Cryptococcus gattii*)	1[E]	4 (1[E], 3[U])	2 (1[E], 1[U])	3 (1[E], 2[U])	3[U]	0
Histoplasmosis	1	0	1[U]	2 (1[U])	1[U]	3(2[U])
Spotted Fever Rickettsiosis	5	3 (1[U])	4 (1[E])	2[E]	1	2
Tick Paralysis	0	2[E]	2[E]	0	0	1
Typhus	1	0	0	0	1	2

[E] Endemically acquired

[U] Unknown exposure location

*The category of conditions titled “Other Rare Diseases of Public Health Significance” has been repealed effective January 1, 2023. The conditions listed above have been integrated within the notifiable conditions chapter WAC 246-101 as specific conditions.

Appendix II: Influenza Summary

The Department of Health (DOH), in collaboration with healthcare providers, laboratories, local health jurisdictions, and the Centers for Disease Control and Prevention (CDC), performs surveillance for influenza using several different systems. Laboratory-confirmed influenza-associated deaths and suspected and confirmed influenza outbreaks are reportable to the local health jurisdiction and in turn reportable to DOH. Novel or unsubtypable influenza is immediately notifiable to DOH.

The purpose of influenza surveillance and reporting is to assist healthcare providers with treatment decisions by tracking the geographic spread of influenza activity, estimating influenza-related mortality, monitoring the epidemiology of severe influenza infection, and detecting emerging threats such as avian and other novel influenza strains.

Current and historic summaries of influenza activity in Washington State can be found on the DOH Influenza Surveillance Data page.

Appendix III: Special Topic

Mpox 2022 Outbreak in Washington State

Washington Department of Health, Benjamin Meana

In May 2022, the World Health Organization (WHO) reported multiple cases of mpox (formerly known as monkeypox) in countries where the disease was not regularly occurring. This outbreak, unlike previous mpox outbreaks in the past, was primarily driven by transmission through close sexual and intimate contact, which disproportionately but not exclusively affected men who have sex with men (MSM).

In late May, Washington State Department of Health (DOH) was notified of the first local case of mpox in a King County resident. Public Health - Seattle & King County (PHSKC) responded by creating a testing site at their Sexual Health Clinic, which later became a main site for vaccine administration as well. Cases of mpox steadily rose until they peaked in late July of 2022 at around 275 total cases and steadily declined. Case investigations conducted by local health jurisdictions and DOH prioritized linking people with mpox to medical care and notifying close contacts link them to post-exposure prophylaxis vaccination. In 2022, a total of 654 cases were reported, the majority of these cases were residents of King County (76.9 percent), identified as male (94.1 percent), were between the ages of 25-44 (68.3 percent), and were disproportionately from communities of color. Fortunately, this outbreak resulted in less severe cases of mpox with less than three percent of cases requiring hospitalization and zero total deaths in Washington.

In June, the JYNNEOS vaccine was allocated to Washington for use as post-exposure prophylaxis for close contacts of mpox cases. On August 3, 2022, Washington then adopted a post-exposure prophylaxis vaccination strategy (known as PEP++) to vaccinate individuals who were at highest risk of acquiring mpox. PHSKC and DOH Care-a-Van worked with community organizations to host various community vaccination events that prioritized communities and areas that have been disproportionately affected by this outbreak. In 2022, the total number of doses of JYNNEOS vaccine administered in Washington was estimated to be 30,115 doses. JYNNEOS vaccine continues to be administered in Washington.

On January 31, 2023, the Public Health Emergency declaration under the Public Health Service Act for mpox expired as case counts continued to remain low and consistent. While mpox cases continue to be reported in Washington, the decline of mpox cases can be attributed to variety of factors, but it is important to highlight that affected communities, such as the LGBTQ+ community, stepped up, changed behaviors, and sought out getting vaccinated to prevent further spread.

Appendix IV: State Demographics

Washington State Population Estimates 1985-2022

Year	Estimate	Year	Estimate
1985	4,415,785	1986	4,462,212
1987	4,527,098	1988	4,616,886
1989	4,728,077	1990	4,866,692
1991	5,021,335	1992	5,141,177
1993	5,265,688	1994	5,364,338
1995	5,470,104	1996	5,567,764
1997	5,663,763	1998	5,750,033
1999	5,830,835	2000	5,894,141
2001	5,970,330	2002	6,059,316
2003	6,126,885	2004	6,208,515
2005	6,298,816	2006	6,420,258
2007	6,525,086	2008	6,608,244
2009	6,672,159	2010	6,724,540
2011	6,773,172	2012	6,828,888
2013	6,899,903	2014	6,992,553
2015	7,091,020	2016	7,218,292
2017	7,349,908	2018	7,472,136
2019	7,593,944	2020	7,706,310
2021	7,766,975	2022	7,864,400

Estimates for 1985-1999 are from State of Washington Office of Financial Management December 20, 2022 Population Trends (Accessed 06/12/2023). Estimates for 2000-2022 are from Population Interim Estimates (PIE), December 2022, developed by Public Health - Seattle & King County.

Washington State Population Estimates by County 2022

County	Estimate	County	Estimate	County	Estimate
Adams	21,100	Asotin	22,600	Benton	212,300
Chelan	80,650	Clallam	77,625	Clark	520,900
Columbia	3,950	Cowlitz	112,350	Douglas	44,000
Ferry	7,300	Franklin	99,750	Garfield	2,300
Grant	101,800	Grays Harbor	76,400	Island	87,700
Jefferson	33,350	King	2,317,700	Kitsap	280,900
Kittitas	47,200	Klickitat	23,150	Lewis	83,400
Lincoln	11,050	Mason	66,200	Okanogan	42,700
Pacific	23,600	Pend Oreille	13,625	Pierce	937,400
San Juan	18,150	Skagit	131,250	Skamania	11,900
Snohomish	847,300	Spokane	550,700	Stevens	47,050
Thurston	300,500	Wahkiakum	4,525	Walla Walla	62,625
Whatcom	231,650	Whitman	47,800	Yakima	259,950

State Total: 7,864,400

Population Interim Estimates (PIE), December 2022, developed by Public Health - Seattle & King County

Washington State Population by Age and Sex 2022

Age (years)	Male	Female	Total
0-4	224,164	213,786	437,950
5-9	243,603	232,449	476,052
10-14	253,742	240,940	494,682
15-19	245,594	235,315	480,909
20-24	251,486	238,687	490,173
25-29	287,496	271,221	558,717
30-34	299,744	282,344	582,088
35-39	291,115	275,521	566,636
40-44	264,102	254,145	518,247
45-49	240,519	233,974	474,493
50-54	235,740	229,961	465,701
55-59	240,825	241,448	482,273
60-64	240,056	248,847	488,903
65-69	214,534	232,122	446,656
70-74	174,002	194,480	368,482
75-79	117,851	134,956	252,807
80-84	65,326	80,409	145,735
85+	51,105	82,791	133,896
Total	3,941,004	3,923,396	7,864,400

Population Interim Estimates (PIE), December 2022, developed by Public Health - Seattle & King County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