

Washington State Communicable Disease Report 2007



Cover Art: **Symbols of Washington State**

State Tree: Western Hemlock

State Bird: Willow Goldfinch

State Flower: Coast Rhododendron

State Fish: Steelhead Trout

State Gem: Petrified Wood

State Grass: Bluebunch Wheatgrass

State Insect: Green Darner Dragonfly

State Fossil: Columbian Mammoth

State Marine

Mammal: Orca

State Dance: Square Dance

State Tartan: Background color green represents the rich forests of Washington, the "Evergreen State." The contrasting colors of the bands represent the following: blue for lakes, rivers and ocean; white for snow-capped mountains; red for apple and cherry crops; yellow for wheat and grain crops; and black for eruptions of Mount St. Helens.

For additional copies of this document or to obtain this document in an alternative format please contact:

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COMMUNICABLE DISEASE REPORT 2007

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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. This is the twenty-third report from the Communicable Disease Epidemiology Section since 1982. In addition to the contributors listed on the previous page, we would like to recognize the staff of our Public Health Laboratories and the thousands of people in local health jurisdictions, clinics, hospitals and clinical laboratories throughout Washington whose disease reports constitute the basis for this document.

Revised December 2008

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Executive Summary – 2007

This report summarizes notifiable communicable diseases reported by local health jurisdictions to the Department of Health in 2007. The most common reports continue to be sexually transmitted conditions, infections caused by enteric bacteria, giardiasis, and pertussis. Rare conditions of interest that were reported include 7 cases of typhoid fever, and 2 West Nile virus infections acquired from transplanted organs.

National foodborne outbreaks affected Washington, including *E. coli* O157:H7 from ground beef, salmonellosis from pot pies, and salmonellosis from a commercial snack.

Cryptococcus gattii is an emerging fungal pathogen in the state; 6 cases were reported in 2007. Notable international travel-associated reports included: a case of hepatitis E acquired in India, brucellosis after travel to India, a case of African tick-bite fever acquired in South Africa, 13 of 60 reported hepatitis A cases (22%), and 10 dengue cases.

We are grateful to healthcare and other professionals who report notifiable conditions and to the staff of Washington's local health jurisdictions who contribute to surveillance, investigation, and prevention of communicable diseases in our state.

Technical Notes

Washington Administrative Code (WAC) Chapters 246-100 and 246-101 outline disease surveillance requirements: healthcare providers and facilities, laboratories, veterinarians, food service establishments, childcare facilities and schools must report certain notifiable conditions including communicable diseases to the local health jurisdiction or Department of Health. In Appendix I, disease summary tables reflect historical years when data are reliable.

Depending on the condition, it is likely only a fraction of the actual number of cases will be reported because cases may not be aware of being infected, do not contact a health care provider, are not confirmed with appropriate tests, or are not reported after diagnosis.

Population estimates used in rate calculations come from the Washington State Office of Financial Management: <http://www.ofm.wa.gov/pop/index.htm>. Rates are not provided for fewer than 5 cases and are not age-adjusted due to the small numbers of cases.

This report is available online at: <http://www.doh.wa.gov/notify/survdata/survdata.htm>.

The online newsletter, *EpiTrends*, contains monthly disease tallies and is available at: http://www.doh.wa.gov/EHSPHL/epitrends/08-epitrends/2008_trend.htm.

Additional information on communicable disease surveillance and case investigation is available at: <http://www.doh.wa.gov/notify/list.htm>.

For other information or to request the report in an alternate format, contact:
Washington State Department of Health, Communicable Disease Epidemiology Section
1610 NE 150th Street
Shoreline, WA 98155
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REPORT A NOTIFIABLE CONDITION

In accordance with Washington State rule (www.doh.wa.gov/notify/other/legal.htm), public health and health care professionals should report notifiable conditions to the local health jurisdiction in the county of the patient's residence. Disease reporting telephone numbers are provided below. If no one is available at the local health jurisdiction and a condition is immediately notifiable, please call the Department of Health 24-hour reporting line: 1-877-539-4344. For a complete list of notifiable conditions for health care providers, hospitals, laboratories and veterinarians, please refer to the posters section at <http://www.doh.wa.gov/notify>.

LOCAL HEALTH JURISDICTIONS

Adams County Health Department
509-659-3315 after hrs: 509-659-3315

Asotin County Health District
509-758-3344 after hrs: 208-798-2648

Benton-Franklin Health District
509-547-9737 x226
after hrs: 509-543-3851

Chelan-Douglas Health District
509-886-6400 after hrs: 509-665-1509

Cllallam County Health Department
360-417-2274 after hrs: 360-415-2005

Clark County Health Department
360-397-8408 after hrs: 1-888-727-6230

Columbia County Health District
509-382-2181 after hrs: 911

Cowlitz County Health Department
360-414-5590 after hrs: 360-636-9595

Garfield County Health District
509-843-3412 after hrs: 509-843-3494

Grant County Health District
509-754-6060 after hrs: 509-398-2083

Grays Harbor Health Department
360-532-8631 after hrs: 360-581-1401

Island County Health Department
360-679-7351 after hrs: 360-679-9567

Jefferson County Health Department
360-385-9400 after hrs: 360-415-2005

King County (Public Health – Seattle and King County)
AIDS/HIV: 206-296-4645
STDs: 206-731-3954
TB: 206-731-4579
Other CD: 206-296-4774 (24/7)
Message: 206-296-4782 (24/7)
After hours: 206-726-2128

Kitsap County Health District
360-337-5235 after hrs: 360-415-2005

Kittitas County Public Health Department
509-962-7515 after hrs: 800-839-1922

Klickitat County Health Department
509-773-4565 after hrs: 911

Lewis County Health Department
360-740-1275 after hrs: 360-740-1275

Lincoln County Health Department
509-725-1001 after hrs: 509-725-1001

Mason County Health Department
360-427-9670 x274 after hrs: 911

Northeast Tri-County Health District
Ferry: 509-775-3111 after hrs: 911
Pend Oreille: 509-447-3131 after hrs: 911
Stevens: 509-684-5048 after hrs: 911

Okanogan County Public Health Department
509-422-7140 after hrs: 911

Pacific County Health Department
360-875-9343 after hrs: 360-875-9397

Pierce County Health Department
253-798-6410 after hrs: 253-798-6534

San Juan County Health Department
360-378-4474 after hrs: 360-410-1676

Skagit County Health Department
360-336-9397 after hrs: 360-336-9397

Skamania County Health Department
1-800-996-2526 after hrs: 1-888-727-6230

Snohomish Health District
425-339-5278 after hrs: 425-339-5295

Spokane Regional Health District
509-324-1449 after hrs: 509-869-3133

Thurston County Health Department
360-786-5470 after hrs: 911

Wahkiakum County Health Department
360-795-6207 after hrs: 360-795-6207

Walla Walla Health Department
509-524-2650 after hrs: 509-524-2650

Whatcom County Health Department
360-676-6724 after hrs: 360-738-2503

Whitman County Health Department
509-397-6280 after hrs: 509-397-6280

Yakima County Health District
509-249-6541 after hrs: 509-575-4040 #1

Notifiable Conditions and the Health Care Provider



The following conditions are notifiable to local public health authorities in Washington in accordance with WAC 246-101. Timeframes for notification are indicated in footnotes. **Immediately notifiable conditions are indicated in bold** and should be reported when suspected or confirmed.

- Acquired immunodeficiency syndrome (AIDS)³ (including AIDS in persons previously reported with HIV infection)
- Animal bites**¹
- Arboviral disease³ (West Nile virus disease, dengue, Eastern & Western equine encephalitis, etc.)
- Botulism**¹ (foodborne, wound and infant)
- Brucellosis**¹
- Campylobacteriosis³
- Chancroid³
- Chlamydia trachomatis*³
- Cholera**¹
- Cryptosporidiosis³
- Cyclosporiasis³
- Diphtheria**¹
- Disease of suspected bioterrorism origin**¹ (including Anthrax and Smallpox)
- Disease of suspected foodborne origin**¹ (clusters only)
- Disease of suspected waterborne origin**¹ (clusters only)
- Enterohemorrhagic *E. coli*, including *E. coli* O157:H7 infection**¹
- Giardiasis³
- Gonorrhea³
- Granuloma inguinale³
- Haemophilus influenzae* invasive disease**¹ (under age five years, excluding otitis media)
- Hantavirus pulmonary syndrome³
- Hemolytic uremic syndrome (HUS)**¹
- Hepatitis A, acute**¹
- Hepatitis B, acute³; chronic^M (initial diagnosis only)
- Hepatitis B, surface antigen positive pregnant women³
- Hepatitis C, acute and chronic^M (initial diagnosis only)
- Hepatitis, unspecified (infectious)³
- Herpes simplex, genital (initial infection only) and neonatal³

- HIV infection³
- Immunization reactions³ (severe, adverse)
- Legionellosis³
- Leptospirosis³
- Listeriosis**¹
- Lyme disease³
- Lymphogranuloma venereum³
- Malaria³
- Measles (rubeola)**¹
- Meningococcal disease**¹
- Mumps³
- Paralytic shellfish poisoning**¹
- Pertussis**¹
- Plague**¹
- Poliomyelitis**¹
- Psittacosis³
- Q fever³
- Rabies**¹
- Rabies post-exposure prophylaxis³
- Relapsing fever (borreliosis)**¹
- Rubella**¹ (including congenital)
- Salmonellosis**¹
- Shigellosis**¹
- Syphilis³ (including congenital)
- Tetanus³
- Trichinosis³
- Tuberculosis**¹
- Tularemia³
- Typhus**¹
- Vibriosis³
- Yellow fever**¹
- Yersiniosis³
- Unexplained critical illness or death**¹
- Rare diseases of public health significance**¹

The following diagnoses are notifiable to the Washington State Department of Health in accordance with WAC 246-101. Timeframes for notification are indicated in footnotes. **Immediately notifiable conditions are indicated in bold** and should be reported when suspected or confirmed.

Notification time frame: ¹ **Immediately**,
³ Within 3 work days, ^M Within one month

- Asthma, occupational (suspected or confirmed)^M 1-888-66-SHARP
- Birth Defects^M: Autism spectrum disorders, Cerebral palsy, Alcohol related birth defects 360-236-3533
- Pesticide Poisoning (hospitalized, fatal, or cluster)**¹ 1-800-222-1222
- Pesticide Poisoning (all other)³ 1-800-222-1222

If no one is available at the local health jurisdiction and a condition is immediately notifiable, please call 1-877-539-4344

For more information, please see WAC 246-101 or <http://www.doh.wa.gov/notify>

Notifiable Conditions and Washington's Hospitals

The following conditions are notifiable to local public health authorities in Washington in accordance with WAC 246-101. Timeframes for notification are indicated in footnotes. **Immediately notifiable conditions are indicated in bold** and should be reported when suspected or confirmed. These notifications are for conditions that occur or are treated in the hospital. Hospital laboratories should use the *Notifiable Conditions & Washington's Laboratories* poster.

Acquired immunodeficiency syndrome (AIDS)³ (including AIDS in persons previously reported with HIV infection)
Animal bites¹
 Arboviral disease³ (West Nile virus disease, dengue, Eastern & Western equine encephalitis, etc.)
Botulism¹ (foodborne, wound and infant)
Brucellosis¹
 Campylobacteriosis³
 Chancroid³
*Chlamydia trachomatis*³
Cholera¹
 Cryptosporidiosis³
 Cyclosporiasis³
Diphtheria¹
Disease of suspected bioterrorism origin¹ (including **Anthrax and Smallpox**)
Disease of suspected foodborne origin¹ (clusters only)
Disease of suspected waterborne origin¹ (clusters only)
Enterohemorrhagic *E. coli*, including *E. coli* O157:H7 infection¹
 Giardiasis³
 Gonorrhea³
 Granuloma inguinale³
***Haemophilus influenzae* invasive disease**¹ (under age five years, excluding otitis media)
 Hantavirus pulmonary syndrome³
Hemolytic uremic syndrome (HUS)¹
Hepatitis A, acute¹
 Hepatitis B, acute³; chronic^M (initial diagnosis only)
 Hepatitis B, surface antigen positive pregnant women³
 Hepatitis C, acute and chronic^M (initial diagnosis only)
 Hepatitis, unspecified (infectious)³
 HIV infection³
 Immunization reactions³ (severe, adverse)
 Legionellosis³

Leptospirosis³
Listeriosis¹
 Lyme disease³
 Lymphogranuloma venereum³
 Malaria³
Measles (rubeola)¹
Meningococcal disease¹
 Mumps³
Paralytic shellfish poisoning¹
Pertussis¹
Plague¹
Poliomyelitis¹
 Psittacosis³
 Q fever³
Rabies¹
 Rabies post-exposure prophylaxis³
Relapsing fever (borreliosis)¹
Rubella¹ (including congenital)
Salmonellosis¹
Shigellosis¹
 Syphilis³ (including congenital)
 Tetanus³
 Trichinosis³
Tuberculosis¹
 Tularemia³
Typhus¹
 Vibriosis³
Yellow fever¹
 Yersiniosis³

Outbreaks of disease that occur or are treated in the hospital (pertussis, influenza, nosocomial infections, viral meningitis, etc.)¹
Unexplained critical illness or death¹
Rare diseases of public health significance¹

The following diagnoses are notifiable to the Washington State Department of Health in accordance with WAC 246-101. Timeframes for notification are indicated in footnotes. **Immediately notifiable conditions are indicated in bold** and should be reported when suspected or confirmed.

Notification time frame: ¹ Immediately,
³ Within 3 work days, ^M Within one month

Asthma, occupational (suspected or confirmed)^M **1-888-66-SHARP**
 Birth Defects^M: Abdominal wall defects, Autism spectrum disorders, Cerebral palsy, Down syndrome, Alcohol related birth defects, Hypospadias, Limb reductions, Neural tube defects, Oral clefts **360-236-3533**
 Gunshot Wounds^M **360-236-2867**
Pesticide Poisoning (hospitalized, fatal, or cluster)¹ **1-800-222-1222**
 Pesticide Poisoning (all other)³ **1-800-222-1222**

If no one is available at the local health jurisdiction and a condition is immediately notifiable, please call 1-877-539-4344

Notifiable Conditions and Washington's Laboratories



The following laboratory results (preliminary or confirmed) are notifiable to local public health authorities in Washington in accordance with WAC 246-101. Timeframes for notification are indicated in footnotes. **Immediately notifiable results are indicated in bold.** Information provided must include: specimen type; name and telephone number of laboratory; date specimen collected; date specimen received; requesting healthcare provider's name and telephone number or address; test result; name of patient (if available) or patient identifier; sex and date of birth or age of patient (if available).

- | | |
|------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------|
| Arboviral disease (West Nile virus disease, dengue, Eastern & Western equine encephalitis, etc.) (detection of viral antigen, antibody, or nucleic acid) ^{2*} | Hepatitis B (detection of viral antigen, antibody, or nucleic acid) ^{M*} |
| Blood lead level (elevated) ^{2&i} | Hepatitis C (detection of antibody or nucleic acid) ^{M*} |
| Blood lead level (non-elevated) ^{M&i} | Human immunodeficiency virus (Western blot, P-24 antigen, or viral culture) ^{2&ii} |
| <i>Bordetella pertussis</i> ^{2*} | Human immunodeficiency virus ^{M&iig} (RNA or DNA nucleic acid tests) |
| <i>Brucella</i> ^{2*1} | <i>Listeria monocytogenes</i> ^{2*} |
| CD4+ counts ^{M&ii} | <i>Mycobacterium tuberculosis</i> ^{2&iii!@} |
| <i>Chlamydia trachomatis</i> ^{2*} | <i>Neisseria gonorrhoeae</i> ^{2*} |
| <i>Clostridium botulinum</i> ^{1*1} | <i>Neisseria meningitidis</i> ^{2*1} |
| <i>Corynebacterium diphtheriae</i> ^{2*1} | Rabies ^{1*} |
| <i>Cryptosporidium parvum</i> ^{2*} | Rubeola ^{1*1} |
| <i>Cyclospora cayetanensis</i> ^{2*1} | <i>Salmonella</i> species ^{2*1} |
| Disease of suspected bioterrorism origin ^{1*1} | <i>Shigella</i> species ^{2*1} |
| Anthrax (<i>Bacillus anthracis</i>) ^{1*1} | <i>Treponema pallidum</i> ^{2!1} |
| Smallpox (<i>Variola virus</i>) ^{1*1} | Rare diseases of public health significance ^{1*} |
| <i>Escherichia coli</i> (Shiga-like toxin only) ^{2*1} | <i>Vibrio cholerae</i> ^{1*1} |
| <i>Francisella tularensis</i> ^{2*1} | <i>Yersinia pestis</i> ^{1*1} |
| Hepatitis A (IgM +) ^{2*} | |

CODE LEGEND

- 1** Immediately notifiable
- ² Notifiable within 2 work days
- ^M Notifiable on a monthly basis
- ^{*} Notifiable to the local health jurisdiction of the patient's residence
- ^{&i} Notifiable to DOH Lead Program **360-236-3359**
- ^{&ii} Notifiable to DOH IDRH Assessment **360-236-3419**
- ^{&iii} Notifiable to DOH TB Reporting Line **360-236-3397**
or TB Reporting Fax Line **360-236-3405**
- [!] Specimen submission required
- [@] Antibiotic sensitivity testing (first isolates only)

To report a Notifiable Condition, contact the local health jurisdiction of the patient's residence, unless the condition is reportable directly to DOH. If the patient's local health jurisdiction is unknown, please notify the local health jurisdiction of the healthcare provider that ordered the diagnostic test.

If no one is available at the local health jurisdiction and a condition is immediately notifiable, please call 1-877-539-4344

Notifiable Conditions and the Veterinarian



Veterinarians, including those working in private practices, laboratories, academic settings, zoos, wildlife centers, animal shelters and government agencies, have an important public health role in the identification and control of zoonotic and vector-borne diseases. **The Washington State Administrative Code (WAC 246-101-405) outlines these responsibilities for veterinarians:**

1. Notify your local public health department* of any suspected or confirmed case or outbreak involving a disease of public health importance (see table below).
2. Cooperate with public health authorities in the investigation of suspected and confirmed cases or outbreaks of zoonotic disease.
3. Cooperate with public health authorities in the implementation of zoonotic disease infection control measures, including isolation and quarantine when necessary.

DISEASE OR CONDITION (report both suspected and confirmed cases or outbreaks)	Report immediately	Report within 7 work days
Animal bite to human	X	
Anthrax (<i>Bacillus anthracis</i>)	X	
Arthropod-borne viruses: West Nile virus; Eastern & Western equine encephalitis	X	
Bat bite or contact exposure to human or domestic animal	X	
Brucellosis (<i>Brucella abortus</i> , <i>B. melitensis</i> , <i>B. suis</i> , <i>B. canis</i> , <i>B. ovis</i>)	X	
Herpes B virus	X	
Leptospirosis	X	
Plague (<i>Yersinia pestis</i>)	X	
Psittacosis/Ornithosis (<i>Chlamydophila psittaci</i>)	X	
Q Fever (<i>Coxiella burnetii</i>)	X	
Rabies	X	
Tick-borne diseases: Babesiosis, Relapsing fever (<i>Borrelia hermsii</i>) Lyme (<i>B. burgdorferi</i>), Rocky Mt. spotted fever (<i>Rickettsia rickettsii</i>)		X
Trichinosis (<i>Trichinella spiralis</i>)		X
Tuberculosis (<i>Mycobacterium tuberculosis</i> , <i>M. bovis</i>)	X	
Tularemia (<i>Francisella tularensis</i>)	X	
Other vector-borne or zoonotic disease of public health significance (examples: spongiform encephalopathies, Baylisascaris infection in a non-raccoon animal, avian influenza, emerging zoonoses as requested by public health officials)	X	

IMPORTANT NOTE: Selected animal diseases, especially in livestock and poultry, must be reported to the Washington State Department of Agriculture, State Veterinarian's Office. These include eradicated diseases (e.g., tuberculosis, brucellosis), suspected foreign animal diseases (e.g., foot and mouth disease, exotic Newcastle disease, hog cholera) and certain domestic diseases (e.g., anthrax, rabies).

For diseases reportable to both the Department of Agriculture and to Public Health, veterinarians can make just one report and the agencies will reciprocally share these reports.

*A list of local health departments can be found at <http://www.doh.wa.gov/LHJMap/LHJMap.htm>.

Communicable Disease Summary

Arboviral Disease

Cause: Various viruses transmitted by arthropods. Arboviral diseases include West Nile virus disease and yellow fever (both discussed separately), dengue fever, eastern and western equine encephalitis, St. Louis encephalitis, Japanese encephalitis, and Chikungunya virus disease.

Illness and treatment: There are 4 main clinical forms: central nervous system (CNS) illnesses; fevers of short duration with or without rash; hemorrhagic fevers; and polyarthritis and rash with or without fevers. Treatment is supportive.

Sources: Transmission is most commonly by the bite of arthropods (e.g., mosquitoes, sandflies, ticks). Rare transmission occurs through blood transfusions.

Prevention: Avoid arthropod bites by wearing appropriate clothing and using insect repellents. If traveling to risk areas, consult with a travel clinic or the CDC Travelers' Health website regarding additional measures, including vaccination for Japanese encephalitis or yellow fever.

Recent Washington trends: Each year, 0 to 10 cases of travel associated dengue fever and other rare travel-associated arboviral diseases are reported (most recently Japanese encephalitis in 2004 and Chikungunya fever in 2006). 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 have occurred historically, primarily east of the Cascade Mountains.

2007: Ten cases of dengue fever were reported following travel to Cambodia, Costa Rica, Dominican Republic, Guatemala, Mexico, Nicaragua, or the Philippines. In addition, 1 case of unspecified flavivirus infection occurred in a patient after travel to North Dakota.

West Nile Virus (WNV) Disease

Cause: West Nile virus.

Illness and treatment: About 80% of those infected are asymptomatic, around 20% have WNV fever (fever, headache, rash), and less than 1% develop WNV neuroinvasive disease (meningitis or encephalitis, paralysis). Treatment is supportive.

Sources: Many bird species are reservoirs and mosquitoes are the vectors, transmitting the virus to humans and other mammals such as horses through bites.

Prevention: Avoid mosquito bites by wearing appropriate clothing and using insect repellents. Make sure windows and doors are "bug tight." Repair or replace window screens. Eliminate breeding sites by draining standing water such as in pots or tires.

Recent Washington trends: Infected birds and horses were detected in 2002. The first locally acquired human infections were reported in 2006 from Pierce and Clark counties.

2007: Five cases of West Nile virus disease were reported, with exposures in Montana, Wyoming, South Dakota, or North Dakota. In addition, 2 asymptomatic infections were identified in patients who received transplanted organs from a common donor. No endemically acquired WNV infections were reported.

Yellow Fever

Cause: Yellow fever virus.

Illness and treatment: Early symptoms include fever, headache, muscle aches, and vomiting. Later signs include jaundice, gum bleeding, bloody vomit, and liver and kidney failure. Twenty to 50% of jaundiced cases are fatal. Treatment is supportive.

Sources: Yellow fever occurs in tropical areas of Africa and South America. There are 2 transmission cycles, a jungle cycle involving non-human primates and an urban cycle involving humans. Transmission is by the bite of an infected mosquito.

Prevention: When traveling in yellow fever endemic countries, avoid mosquito bites by wearing appropriate clothing and using insect repellents, using bed nets, and making sure windows and doors are "bug tight." Consult with a travel clinic or the CDC Travelers' Health website for recommendations about vaccination.

Recent Washington trends: No cases have been reported in over 50 years of surveillance.

2007: No cases were reported in 2007.

Botulism

Cause: Bacterial toxin from *Clostridium botulinum*, mainly Types A, B, and 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 older person), and inhalational botulism (inhaling toxin, which does not happen naturally). 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 hyper-immune globulin (BIG-IV) for infants or botulism antitoxin for older children and adults. Antibiotics are given for wound botulism.

Sources: *C. botulinum* spores are common in soil. No consistent exposure is known for infants. Inadequately processed home-canned foods are implicated in food botulism. Wound botulism is associated with subcutaneous black-tar heroin injection ("skin popping").

Additional risks: Infant botulism cases usually occur in babies under 3 months old (almost always under 6 months), both breast fed and formula fed.

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

Recent Washington trends: Each year there are 0 to 2 reports of foodborne botulism, 0 to 6 reports of intestinal botulism and 0 to 7 reports of wound botulism.

2007: Two cases of wound botulism (one fatal); 1 case of foodborne botulism associated with home canned food; and 1 case of infant botulism were reported. All were type A botulism.

Brucellosis

Cause: Bacteria in the genus *Brucella*.

Illness and treatment: Symptoms include fever, night sweats, fatigue, loss of appetite, weight loss, headache, and joint pain. Treatment is with antibiotics.

Sources: Infection results from contact (through breaks in the skin) with animal tissues, blood, urine, vaginal discharges, aborted fetuses and especially placentas, or by consuming unpasteurized dairy products from infected species (mainly cattle, goats, sheep and swine) in

endemic countries. Airborne infection can occur in laboratories. Vaccine strains of *Brucella* can cause disease in humans if unintentionally injected.

Prevention: Avoid unpasteurized dairy foods. Veterinarians, farmers and hunters should wear gloves when handling sick or dead animals or when assisting an animal giving birth. Laboratory workers should handle all specimens under appropriate biosafety conditions.

Recent Washington trends: Although brucellosis has been eradicated from cattle in the state since 1988, there are 0 to 3 reports of human brucellosis infections each year, primarily due to consumption of raw milk products in foreign countries.

2007: A pregnant woman was diagnosed with *B. melitensis* infection after travel to India. The newborn baby was also blood culture positive, but had no symptoms.

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: Animals such as cattle, puppies, kittens, swine, sheep, rodents and birds are the reservoir. Contamination of raw poultry meat is very common. Exposure may also be through direct animal contact.

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 use for raw meat or poultry to prevent contamination of other foods. Wash hands after handling animals or raw meat. Minimize contact with poultry and their feces.

Recent Washington trends: Campylobacteriosis is the most commonly reported enteric illness in Washington with 900 to 1,100 reports each year. Outbreaks involving multiple persons and person-to-person spread are relatively uncommon. Infections are reported most commonly in children and during the summer months.

2007: 1,020 cases were reported (15.7 cases/100,000 population). The infection was diagnosed twice as commonly in children under the age of 5 years.

Chlamydia Infection

Cause: Bacterium *Chlamydia trachomatis*.

Illness and treatment: Asymptomatic infection is common. There may be pain during urination or abnormal genital discharge. Females can have abdominal pain due to pelvic inflammatory disease, which can cause infertility or ectopic pregnancy. The case and sexual partners should take appropriate antibiotics. Treated cases should be retested in 3 to 4 months.

Sources: Chlamydial infection is sexually transmitted or acquired at birth.

Additional risks: Disease rates are highest among sexually active adolescents and young adults. Female adolescents are physiologically more susceptible to infection than older women. Perinatal infection can result in neonatal conjunctivitis or pneumonia.

Prevention: Use safe sexual practices to reduce transmission. Screen sexually active women at risk to detect asymptomatic cases. If Chlamydia is found, also screen or treat for gonorrhea.

Recent Washington trends: Each year over 17,000 cases are reported.

2007: 19,123 cases were reported (295 cases/100,000 population).

Cholera

Cause: Bacterial toxin from *Vibrio cholerae* serogroup O1 or O139. Other *V. cholerae* do not produce toxin and cause milder illness 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 contaminated food or water. 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 with poor sanitation. Persons with reduced stomach 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: A case was reported in 2002 following travel to Philippines.

2007: No cases were reported.

Cryptosporidiosis

Cause: Various species of protozoan *Cryptosporidium*. Cryptosporidia form resistant oocysts.

Illness and treatment: Symptoms may be prolonged, and include watery diarrhea, abdominal pain, nausea, vomiting, weight loss and fever. An anti-protozoal drug is available to treat 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.

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 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 1 minute or use other appropriate water treatment.

Recent Washington trends: Case numbers have more than doubled from the 63 cases in 2004, which might reflect an increase in diagnostic testing after licensing of a new treatment.

2007: 139 laboratory-confirmed cases were reported (2.3 cases/100,000 population).

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 food or water, often fresh fruit or vegetables. Outbreaks in the United States have been attributed to imported produce such as raspberries, basil and lettuce.

Additional risks: Tests for Cyclospora must be specifically requested if symptoms (prolonged diarrhea) and food or travel history are suggestive of cyclosporiasis.

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: Zero to 11 cases are reported yearly, usually after international travel.

2007: One case was reported following international travel.

Diphtheria

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

Illness and treatment: Classic diphtheria is an upper-respiratory tract illness characterized by sore throat, low-grade fever, and an adherent membrane of the tonsil(s), pharynx, and/or nose, sometimes with neck swelling. Disease can involve other mucous membranes or the skin. Treatment is with antitoxin, antibiotics, and supportive care.

Sources: Humans are the reservoir, typically asymptomatic carriers. Transmission is through respiratory droplets, direct contact or less commonly contaminated items.

Additional risks: Susceptible travelers may be at risk, particularly in areas with endemic diphtheria.

Prevention: Immunize all persons with primary series and adult booster doses to prevent infection. Use respiratory hygiene/cough etiquette to prevent transmission.

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

2007: No cases were reported.

Enterohemorrhagic *Escherichia coli* (EHEC) (includes *E. coli* O157:H7)

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, usually without fever. Serious complications include hemolytic uremic syndrome (HUS) or thrombotic thrombocytopenic purpura (TTP). Most persons will recover without treatment. Treating EHEC diarrhea with antibiotics may increase the risk of developing HUS.

Sources: Cattle are the most important source, although other animals including deer and horses may also carry EHEC. Other known sources are unpasteurized milk, undercooked ground beef

and more recently, contaminated raw produce. There can be person-to-person transmission, but most cases are due to ingesting contaminated food or water.

Additional risks: Children under 5 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: Each year there are around 130 to 150 reports. EHEC has a seasonal pattern. Most cases occur during summer and fall months. STEC strains other than O157:H7 identified in Washington include O26:H11, O121:H19, O146:H21, and O143:H11.

2007: 141 cases were reported in 2007 (2.2 cases/100,000 population). Cases were most frequently diagnosed in children ages 1 to 4 years of age.

Foodborne Outbreaks

Cause: Many infectious agents including viruses, bacteria, and parasites. Common agents causing outbreaks are *E. coli* O157:H7, *Salmonella*, and viral agents.

Illness and treatment: Symptoms and treatment vary with the agent.

Sources: Sources vary with the agent. Foodborne outbreaks can occur from inherently toxic or contaminated ingredients, cross contamination between raw animal products and ready to eat foods, contamination by a food handler, temperature abuse after cooking resulting in microbial growth, and improper cooking.

Additional risks: Risks vary with the agent.

Prevention: Safe food handling from farm to table is essential to prevent foodborne illness: avoid contamination at the source, destroy harmful agents by proper cooking, and prevent bacterial growth by temperature control methods. Provide education programs for food handlers on proper sanitation, cooking and handling practices. Prevent future cases with prompt investigation of foodborne illness complaints, with laboratory evaluation of illness agents and implicated foods. System wide improvements are needed to trace contaminated foods back to the source.

Recent Washington trends: Foodborne outbreaks may be difficult to detect unless a defined group or related persons are affected. There are typically 40 to 60 outbreaks reported annually, each with 2 to dozens or even hundreds of cases in each outbreak (Table 1).

2007: Forty-three foodborne outbreaks were reported, affecting a total of 722 cases (Table 2). A *Clostridium perfringens* outbreak in an institutional setting involved 161 cases. 18 *Campylobacter jejuni* cases were associated with commercial raw milk. Viral agents accounted for 19 outbreaks (44% of total) and 360 cases (50% of total), including a restaurant outbreak with 160 cases. Washington had 34 *Salmonella* I 4,[5],12:i- cases (from poultry potpies) and 11 *Salmonella* Wandsworth cases (from commercial snack food) related to national outbreaks.

**Table 1. Foodborne Outbreaks,
1986-2007**

Year	Cases	Outbreaks
1986	346	58
1987	311	51
1988	545	55
1989	531	51
1990	665	34
1991	1154	47
1992	740	53
1993	1301	130
1994	1462	151
1995	909	138
1996	695	124
1997	810	108
1998	706	60
1999	1164	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

Table 2. Foodborne Outbreaks Reported to Washington State Department of Health, 2007

No.	Month	County	Illness	Total # ill	#Ill lab confirmed	Food source	Setting	Contributing factors
1	Jan	King	<i>Salmonella</i> *	5	--	Fondue meal	Restaurant	Cross-contamination from raw animal product, glove-handed contact, inadequate handwashing
2	Jan	King	<i>Bacillus cereus</i> *	8	--	Pork fried rice	Restaurant	Contaminated raw product/ingredient, inadequate handwashing, prolonged exposure to warm outdoor/room temperature; slow cooling; inadequate cold-holding temperature
3	Jan	King	Viral*	6	--	Restaurant meal	Restaurant	Bare-handed contact; contaminated storage environment
4	Jan	Skagit	Viral*	3	--	Salad	Restaurant	Bare-handed contact; infected food handler
5	Jan	King	Viral*	4	--	Salad	Restaurant	Bare-handed contact; infected food handler
6	Jan	King	Viral*	8	--	Restaurant meal	Restaurant	Unknown
7	Feb	Snohomish	Norovirus	56	5	Restaurant meal	Restaurant	Bare-handed contact; infected food handler
8	Feb	King	Norovirus	14	3	Sandwiches	Catered	Unknown
9	Feb	Snohomish	Bacterial toxin*	6	--	Restaurant meal	Restaurant	Insufficient hot-holding time/temperature
10	Feb	Grant	<i>Salmonella</i> Senftenburg	12	12	Environmental (beef slicer)	Restaurant	Infected food handler; inadequate equipment cleaning
11	Mar	Island	Viral*	20	--	Fruit	Restaurant	Infected food handler
12	Mar	Multiple	<i>Clostridium perfringens</i>	16	2	Beef-vegetable stew	Private club	Slow cooling; inadequate cold-holding temperature; prolonged cold storage; insufficient initial cooking time/temperature
13	Mar	Kitsap	Viral*	8	--	Salad	Restaurant	Unknown
14	Apr	Snohomish	Agent unknown	12	--	Banquet meal	Banquet	Unknown
15	Apr	Multiple	<i>Salmonella</i> Wandsworth	11	11	Snack food	Commercial product	Contaminated raw product/ingredient
16	Apr	King	Viral*	4	--	Salad	Restaurant	Infected food handler
17	May	King	Viral*	2	--	Chicken salad	Restaurant	Infected food handler
18	May	King	Viral*	4	--	Pasta salad	Deli	Infected food handler
19	May	Whatcom	<i>Campylobacter jejuni</i>	3	3	Chicken	Restaurant	Contaminated raw product/ingredient; cross-contamination from raw animal product, glove-handed contact; contaminated storage environment; inadequate handwashing
20	May	King	<i>Salmonella</i> Flint	2	2	Salsa	Restaurant	Contaminated raw product/ingredient; ingestion of contaminated raw product; insufficient initial cooking time/temperature
21	May	Multiple	<i>Salmonella</i> I 4, 5, 12 :i-	34	34	Poultry pot pies	Commercial product	Contaminated raw product/ingredient
22	Jun	Cowlitz	Norovirus	160	4	Salad	Restaurant	Infected food handler
23	Jun	King	Viral*	4	--	Restaurant meal	Restaurant	Bare-handed contact

*Agent not lab confirmed

Table 2. Foodborne Outbreaks Reported to Washington State Department of Health, 2007 (continued)

No.	Month	County	Illness	Total # ill	#Ill lab confirmed	Food source	Setting	Contributing factors
24	Jun	King	<i>Clostridium perfringens</i> *	8	--	Stew	Catered	Prolonged exposure to warm outdoor/room temperature; preparation >1/2 day before serving; insufficient reheating time
25	Jun	Benton	Norovirus	6	3	Restaurant meal	Restaurant	Bare-handed contact
26	Jun	Grays Harbor	Viral*	14	--	Cake	Residence	Bare-handed contact; infected food handler; insufficient handwashing
27	Jun	King	Viral*	3	--	Sushi rolls	Restaurant	Bare-handed contact; inadequate equipment cleaning
28	Jun	King	Viral*	5	--	Restaurant meal	Restaurant	Bare-handed contact; inadequate equipment cleaning; inadequate handwashing
29	Jun	Kitsap	Bacterial toxin*	2	--	Pork	Restaurant	Slow cooling
30	Jul	King	Agent unknown	5	--	Crab	Residence	Toxic substance part of tissue
31	Jul	King	Bacterial toxin*	2	--	Fried rice	Restaurant	Inadequate equipment cleaning; slow cooling
32	Jul	Multiple	<i>E. coli</i> O157:H7	8	6	Ground beef	Commercial product	Contaminated raw product/ingredient; cross-contamination from raw animal product; insufficient initial cooking time/temperature
33	Aug	Walla Walla	<i>Salmonella</i> Typhimurium	15	6	Nachos	Residence	Contaminated raw product/ingredient; cross-contamination from raw animal product; bare-handed contact; prolonged exposure to warm outdoor/room temperature; slow cooling; inadequate cold-holding temperature; preparation >1/2 day before serving; insufficient initial cooking time/temperature
34	Aug	Pierce	<i>Clostridium perfringens</i>	161	3	Institutional meal	Institution	Unknown
35	Aug	Multiple	<i>Vibrio parahaemolyticus</i>	5	1	Oysters	Restaurant	Contaminated raw product/ingredient; ingestion of contaminated raw products; inadequate cold-holding temperature
36	Sep	King	Agent unknown	9	--	Restaurant meal	Restaurant	Cross-contamination from raw animal product; glove-handed contact; infected food handler; prolonged exposure to warm outdoor/room temperature; slow cooling
37	Sep	King	Viral*	3	--	Restaurant meal	Restaurant	Bare-handed contact
38	Oct	King	<i>Salmonella</i> Newport	3	3	Cafeteria meal	Cafeteria	Unknown
39	Oct	King	<i>Salmonella</i> SanDiego	2	2	Tuna salad	Deli	Inadequate equipment cleaning; prolonged exposure to warm outdoor/room temperature
40	Nov	Cowlitz	Scrombroid fish poisoning*	3	--	Tuna	Cafeteria	Toxic substance part of tissue; inadequate cold-holding temperature
41	Nov	Spokane	Bacterial toxin*	12	--	Gravy	Restaurant	Preparation >1/2 day before serving
42	Dec	Multiple	<i>Campylobacter jejuni</i>	18	8	Raw milk	Commercial product	Contaminated raw product/ingredient; ingestion of contaminated raw products
43	Dec	Cowlitz	Norovirus	36	6	Restaurant meal	Restaurant	Glove-handed contact; infected food handler

*Agent not lab confirmed

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. Infection comes from untreated surface water, shallow well water, recreational water, or less commonly food contaminated by feces. Person-to-person transmission can occur, such as in child care facilities, or through oral-anal sexual contact.

Additional risks: Children under 5 years of age are infected more frequently than adults. Concentrations of chlorine used in routine water treatment do 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 contact with animals, particularly animals with diarrhea. Avoid swallowing water during water recreation. Do not drink untreated surface water. Boil untreated drinking water for 1 minute or use other appropriate water treatment.

Recent Washington trends: Reported cases have been declining somewhat over the past decade. Incidence is highest in the summer and fall months. Most frequently reported exposures include recreational water and international travel. Outbreaks are uncommon.

2007: 591 cases were reported (9.1 cases/100,000 population). The infection was diagnosed more than twice as commonly in children 1 to 4 years of age.

Gonorrhea

Cause: Bacterium *Neisseria gonorrhoeae*.

Illness and treatment: About half of women and some men have no symptoms. When symptoms occur, urethral discharge and painful urination are typical of genital infections. Complications include pelvic inflammatory disease in women with a risk of infertility or epididymitis in men. There can be conjunctivitis, pharyngitis, proctitis, or rare bloodstream infection. Treatment is with antibiotics.

Sources: Gonorrhea is sexually transmitted or acquired at birth.

Additional risks: Rates are highest among sexually active adolescents and young adults.

Prevention: Use safe sexual practices to reduce transmission. Screen sexually active women at risk to detect asymptomatic cases. If gonorrhea is found, also screen or treat for Chlamydia.

Recent Washington trends: Each year over 3,500 cases are reported.

2007: 3,646 cases were reported (56 cases/100,000 population).

Haemophilus influenzae (Invasive Disease, Under Age 5 Years)

Cause: Bacterium *Haemophilus influenzae*. Invasive disease with any of the 6 capsular types including type b (Hib) in a child under 5 years is reportable.

Illness and treatment: Invasive disease may cause meningitis, bacteremia, epiglottitis, pneumonia, or bone and joint infections. Symptoms of meningitis include fever, headache, stiff

neck, and often vomiting, light sensitivity and confusion. About 10% of cases surviving *H. influenzae* meningitis have permanent neurological damage. Treatment is with antibiotics.

Sources: Humans including asymptomatic carriers are the reservoir and transmit through respiratory droplets or direct contact.

Additional risks: Unimmunized or underimmunized infants and children are at risk, particularly those in crowded settings.

Prevention: Immunize all infants to prevent *H. influenzae* type b infection. Use respiratory hygiene/cough etiquette to prevent transmission.

Recent Washington trends: Four to 13 cases are reported a year in children under 5 years.

2007: Six cases in children under 5 years were reported with no deaths. There were 3 type b of which 2 were too young for vaccine, 1 type a, 1 type e, and 1 untypable.

Hantavirus Pulmonary Syndrome (HPS)

Cause: Sin Nombre virus in western United States, other viruses elsewhere in the Americas.

Illness and treatment: Symptoms include fever and mild flu-like symptoms followed by acute respiratory distress syndrome (ARDS) with respiratory failure and shock. Treatment is supportive.

Sources: The deer mouse is the major reservoir for Sin Nombre virus. Exposure occurs by inhaling aerosolized virus excreted in mouse urine, feces or saliva, particularly during improper cleaning of deer mouse infested areas.

Prevention: Keep rodents out of your home and workplace. When cleaning rodent infested areas, use appropriate safety precautions.

Recent Washington trends: The disease was recognized in 1993. Through 2007, 34 cases were reported with 11 (32%) associated deaths. Each year there are 1 and 5 reports from throughout the state, more typically in eastern counties.

2007: Two cases were reported: One exposed in eastern Washington, the other exposed in Idaho.

Hemolytic Uremic Syndrome (HUS)

Cause: Complication of infection with Shiga toxin-producing bacteria, most commonly *E. coli* O157:H7. HUS following a diarrheal illness is reported in Washington as suspect Enterohemorrhagic *E. coli*.

Illness and treatment: HUS includes hemolytic anemia (identified microscopically) and kidney damage. Most persons recover with supportive treatment, but some have permanent kidney damage or die from complications.

Sources: For enterohemorrhagic *E. coli* (EHEC) sources include cattle and other animals including deer and horses; known sources are unpasteurized milk, undercooked ground beef and contaminated raw produce. There can be person-to-person transmission of EHEC.

Additional risks: Children are at particular risk for developing HUS as a complication of diarrheal illness caused by a Shiga toxin-producing organism. Using antibiotics to treat EHEC diarrhea may increase the 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: Each year there are 1 to 6 reports.

2007: There were no cases of HUS that did not follow a diarrheal illness. Fourteen cases of HUS following a diarrheal illness are included as suspect EHEC.

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. 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 or through fecally contaminated food (produce, shellfish, uncooked items), water, and environment, often encountered during international travel. Recent outbreaks in this country have been associated with imported produce. Bloodborne transmission is very rare.

Additional risks: Infected young children may have no symptoms but can be communicable. Transmission can occur with groups having poor hygiene or fecal-oral sexual practices.

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, hepatitis A incidence decreased to fewer than 100 cases a year with increased vaccination.

2007: Sixty cases (rate 0.9 cases/100,000 population) were reported.

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 occur. Surface antigen positive (contagious) during pregnancy from acute or more typically chronic infection gives a risk of transmitting the virus during delivery. Perinatal infection is typically asymptomatic but carries a risk for chronic infection.

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

Additional risks: After acute infection about 90% of infants and 30% of children under 5 years will become chronically infected compared to about 5% of adults.

Prevention: To prevent infection, immunize all children and any adults with risks for exposure. Screen during pregnancy to identify infected women. Use safe sexual practices, avoid sharing drug paraphernalia, and screen blood and tissue products to prevent transmission.

Recent Washington trends: Around 60 to 100 cases of acute hepatitis B and 1,100 to 1,200 cases of chronic hepatitis B are reported annually with about 1 death due to fulminant infection.

Acute cases declined with increased vaccination. About 380 hepatitis B surface antigen positive pregnant women are reported each year with 2 to 6 cases of perinatal hepatitis B virus infections. **2007:** Sixty-five acute cases (1.0 cases/100,000 population) with 1 death, 1,622 chronic cases, 344 surface antigen positive pregnant women, and 7 perinatal infections were reported.

Hepatitis C

Cause: Hepatitis C virus, which has 6 genotypes.

Illness and treatment: Most acute infections are asymptomatic but about 20% of cases have abrupt onset with fever, abdominal pain, and jaundice. Chronic infection is typically asymptomatic until complications such as liver damage or cancer develop.

Sources: Transmission is usually by contact with blood, particularly sharing drug paraphernalia or less commonly semen or vaginal secretions of an infected person.

Additional risks: Chronic infection follows acute infection in 75-85% of cases and is more likely for males, age at acute infection over 25 years, or immunosuppression including co-infection with HIV.

Prevention: Use safe sexual practices, avoid sharing drug paraphernalia, and screen blood and tissue products to prevent transmission.

Recent Washington trends: Each year fewer than 30 acute cases and around 5,300 chronic cases are reported.

2007: Eighteen acute cases (0.3 cases/100,000 population) and 4,993 chronic cases were reported.

Hepatitis, Unspecified (Infectious)

Cause: Hepatitis D virus and hepatitis E virus. Hepatitis D virus infection always occurs with hepatitis B infection, either with a chronic hepatitis B infection (superinfection) or as 2 simultaneous new infections (coinfection).

Illness and treatment: Hepatitis D and E typically have abrupt onset of fever, nausea, and abdominal pain followed by jaundice. Hepatitis D may progress to chronic hepatitis.

Sources: Humans are the reservoir for hepatitis D, which is usually transmitted by contact with blood or body fluids, particularly sharing drug paraphernalia. Humans and animals are the reservoir for hepatitis E which is transmitted most commonly through fecally contaminated food, water, and environment.

Additional risks: Pregnant women have higher risk for hepatitis E complications.

Prevention: To avoid hepatitis B infection, immunize all children and any adults with risks for exposure. Use safe sexual practices, avoid sharing drug paraphernalia, and screen blood and tissue products to prevent hepatitis D transmission. Use precautions while traveling to ensure safe food and water to avoid hepatitis E infection.

Recent Washington trends: Reports are rare. Cases of hepatitis D are typically associated with injection drug use. Cases of hepatitis E are typically travel associated.

2007: One case each of hepatitis D and hepatitis E infection was reported; the hepatitis E case was associated with travel to India.

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 painful genital ulcers. 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 acquired at birth.

Additional risks: Oral herpes (cold sores) can transmit to the genital area.

Prevention: Use safe sexual practices to reduce transmission.

Recent Washington trends: Each year there are over 2,000 reports.

2007: 1,952 cases of initial genital HSV infection (30 cases/100,000 population) and 1 case of neonatal infection were reported.

HIV/AIDS

Cause: Human immunodeficiency virus (HIV) causes acquired immunodeficiency syndrome (AIDS) due to depletion of CD4+ T-lymphocytes.

Illness and treatment: Susceptibility is increased for various opportunistic infections and malignancies. Antiretroviral treatment has considerably improved the prognosis for cases with HIV infection.

Sources and spread: HIV is usually transmitted by contact with the blood, semen or vaginal secretions of an infected person.

Additional risks: Groups at increased risk include injection drug users and persons with multiple sexual partners or with another sexually transmitted disease causing genital ulcers.

Prevention: Use safe sexual practices, avoid sharing drug paraphernalia, and screen blood and tissue products to prevent transmission.

Recent Washington trends: New HIV diagnoses have been stable, with 560 to 610 new cases diagnosed every year. Approximately 30% of cases are diagnosed late in the course of infection, developing AIDS within 12 months of their initial HIV diagnosis. Rates are higher among males and racial/ethnic minorities, reflecting risk factors.

2007: 610 cases were reported (9.4/100,000 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*, *L. longbeachae* and *L. dumoffii*.

Illness and treatment: There are 2 clinically and epidemiologically distinct illnesses: Legionnaires' disease with fever, muscle aches, cough, pneumonia; and Pontiac fever, a milder illness without pneumonia. Treatment is with antibiotics.

Sources: The organism is ubiquitous. Hot water systems (showers), air conditioning cooling towers, evaporative condensers, humidifiers, whirlpool spas, respiratory therapy devices, decorative fountains, and potting soil have been implicated epidemiologically in outbreaks.

Additional risks: Illness increases with age (particularly over 50 years), smoking, diabetes, chronic or kidney disease, malignancy, and immunocompromised (particularly due to corticosteroids or organ transplant).

Prevention: Maintain cooling towers properly. Do not use tap water in respiratory therapy devices.

Recent Washington trends: Each year there are fewer than 30 reports, with 1 to 4 deaths.

2007: Twenty-four cases (0.4 cases/100,000 population) were reported with 2 deaths. Ages ranged from 42 to 85 years (median 57 years).

Leptospirosis

Cause: Bacteria (spirochetes) in the genus *Leptospira*.

Illness and treatment: Symptoms include fever, headache, and severe muscle aches. Jaundice, kidney failure, or meningitis can develop. Treatment is with antibiotics.

Sources: Wild and domestic animals including pets can be infected. Transmission occurs by skin and mucous membrane contact with urine or tissue from infected animals, by ingesting contaminated water or food, or through exposure to contaminated water or soil (such as during swimming, wading, rafting, camping, or agricultural work).

Prevention: Avoid contact with urine from infected animals and with water or soil potentially contaminated with animal urine.

Recent Washington trends: Each year there are 0 to 5 reports. Most infections relate to recreational water exposure in Washington or during travel.

2007: Five human cases were reported with no deaths. All cases were exposed in Washington: One case had pet rat exposure and 4 had likely recreational exposure to contaminated water.

Listeriosis

Cause: Bacterium *Listeria monocytogenes*.

Illness and treatment: Diarrhea occurs but is not detected with standard stool culture. Complications include septicemia or meningitis, which cause fever, headache, vomiting, delirium, or coma. Severe infections are treated with antibiotics.

Sources: *Listeria* occur in soil, water, and the intestines of animals and humans. Transmission is mainly through food, such as unpasteurized milk, cheese made from unpasteurized milk, processed meats, deli salads, fruits and vegetables. Uncooked foods 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 women with listeriosis may have few symptoms but have fetal loss or premature birth.

Prevention: If pregnant or with weakened immune system, avoid soft cheeses made with unpasteurized milk, processed ready-to-eat foods, and smoked fish. Also thoroughly cook all foods from animal sources, and 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 17 reports with 0 to 5 deaths.

2007: Twenty-five cases were reported in 2007 (0.4 cases/100,000 population), including 15 in persons over the age of 50 (0.8/100,000) and 1 newborn infant. Two deaths were reported.

Lyme Disease

Cause: Bacterium (spirochete) *Borrelia burgdorferi*.

Illness and treatment: There are skin and systemic “flu-like” symptoms. Joint, nervous system, or heart complications can occur.

Sources: Certain hard tick species transmit Lyme disease from rodent or deer reservoirs. It is likely ticks must attach at least 24 to 48 hours to transmit the disease.

Prevention: During outdoor activities in endemic areas avoid tick bites by wearing appropriate clothing and using repellents. Check the body for ticks. If bitten by a tick, be alert for “flu-like” symptoms or rash over the next month and if symptoms develop contact a health care provider.

Recent Washington trends: Each year there are 7 to 18 reports. Almost all Washington cases are the result of a tick bite out of state. Endemically acquired Lyme disease is not common.

2007: Twelve cases were reported, 2 with exposure in Washington (Skagit and King counties).

Malaria

Cause: *Plasmodium* species, commonly *P. vivax*, *P. falciparum*, *P. ovale*, and *P. malariae*.

Illness and treatment: Classic malaria involves recurrent bouts of fever, chills, sweats, and headache. Many other symptoms can occur, affecting the gastrointestinal, respiratory, muscular, and neurological systems. Treatment is with antimalarial drugs and supportive care.

Sources: Transmission occurs by the bite of infected anopheline mosquitoes.

Additional risks: Although rare in the United States, transmission can occur through blood contact (e.g., transfusions or needle-sharing).

Prevention: When traveling in risk areas avoid mosquito bites, take medication to avoid malaria, and receive proper treatment if infected.

Recent Washington trends: Each year there are 20 to 40 reports among tourists, military personnel, business travelers, mission workers, immigrants and refugees.

2007: Thirty cases (0.5 cases/100,000 population) were reported: 11 *P. falciparum*, 4 *P. ovale*, 12 *P. vivax*, and 3 undetermined. Cases were associated with travel to Africa, Asia, and South America.

Measles

Cause: Measles virus.

Illness and treatment: Symptoms include fever up to 104°F, and 1 or more of: cough, conjunctivitis, or runny nose followed by a generalized rash. Complications include ear infection, diarrhea, pneumonia, and encephalitis with 0.1 to 0.3% case fatality rate in this country. Treatment is supportive.

Sources: Humans are the reservoir and transmit mainly through respiratory droplets, rarely through airborne transmission. Measles is one of the most highly contagious infections. Treatment is supportive.

Additional risks: Risk of death is higher among children under 5 years, adults over 20 years, and malnourished persons. Infection in U.S. residents occurs primarily as a result of international travel involving regions with endemic measles.

Prevention: Immunize all children with 2 vaccine doses to prevent infection. Health care providers born after 1957 and students also need 2 vaccine doses. Use respiratory hygiene/cough etiquette to prevent transmission.

Recent Washington trends: Each year there are 0 to 15 reports, typically under 10.

2007: Three cases were reported, all exposed out of the country.

Meningococcal Disease (Invasive)

Cause: *Neisseria meningitidis*, mainly serogroups B, C, Y, and W135 in this country, and additionally serogroup A elsewhere. Invasive disease is reportable.

Illness and treatment: Symptoms of meningococcal meningitis include fever, headache, stiff neck, and often vomiting, light sensitivity and confusion. Symptoms of meningococemia (blood infection) include fever and often hypotension and shock, as well as a rash or bruise-like skin lesions. Both syndromes may develop. Pneumonia and joint infections can also occur. Treatment is with antibiotics and supportive care.

Sources: Humans including asymptomatic carriers are the reservoir and transmit through respiratory droplets or direct contact.

Additional risks: Rates are highest in infancy although teens and young adults have an increasing proportion of cases. Risk for invasive infection increases with crowded living conditions, low socioeconomic status, tobacco smoke exposure, and certain immune deficiencies including asplenia. Available vaccines do not include serogroup B.

Prevention: Immunize persons aged 2 to 55 years who have elevated risk for meningococcal disease and all adolescents aged 11 to 18 years to prevent infection. Use respiratory hygiene/cough etiquette to prevent infection. Exposed persons should take prophylactic antibiotics.

Recent Washington trends: Each year there are 40 and 80 reports with 1 to 8 deaths.

2007: Thirty-two cases (0.5 cases/100,000 population) were reported with 8 deaths. Of 26 cases with serogroups identified, there were 12 serogroup B, 10 serogroup Y and 4 serogroup C.

Mumps

Cause: Mumps virus.

Illness and treatment: Classic symptoms are inflammation and swelling of the parotid glands. Up to 20% of cases are asymptomatic and another 40 to 50% have mild or mainly respiratory symptoms. Complications include orchitis in post-pubertal males and rarely encephalitis, meningitis, infection of other organs, deafness, or miscarriage. Treatment is supportive.

Sources: Humans including persons with asymptomatic infections are the reservoir and transmit through respiratory droplets or direct contact.

Additional risks: Mumps can occur at any age, regardless of vaccination status, but is rare in fully immunized persons.

Prevention: Immunize all children with 2 vaccine doses to reduce the risk of infection. Health care providers born after 1957 and students also need 2 vaccine doses. Use respiratory hygiene/cough etiquette to prevent transmission.

Recent Washington trends: Zero and 11 reports were received annually prior to 2006, when there was a change in reporting criteria and 42 cases were reported.

2007: Fifty-three cases were reported, reflecting in part a change in reporting criteria as well as increased testing following a very large outbreak in the Midwest in 2006.

Paralytic Shellfish Poisoning (PSP)

Cause: Ingesting shellfish with a toxin from the phytoplankton *Alexandrium catenella*.

Illness and treatment: Symptoms begin minutes or hours after eating contaminated shellfish and may include numbness of the mouths and limbs. Severe poisoning progresses rapidly to paralysis and respiratory arrest. Mild symptoms resolve completely in hours to days. Supportive care, including mechanical ventilation, may be needed in severe cases. There is no anti-toxin.

Sources: Bivalve mollusks such as clams, oysters, mussels, and geoduck ingest the plankton and concentrate the toxin. There is no person-to-person spread.

Additional risks: PSP is only rarely associated with reddish discoloration of the water, although the term “red tide” is popularly used. PSP can be present in dangerous amounts even when the harvest site water looks clean. Cooking does not destroy the toxin.

Prevention: Before harvesting shellfish check the Marine Biotxin Hotline (1-800-562-5632) or website for updates on affected sites and site closures, which may not always have signs posted.

Recent Washington trends: Two clusters of PSP have been reported during the past 10 years (7 reports in 2000 and 5 in 1998). Both clusters were associated with mussels gathered recreationally from south Puget Sound waters.

2007: No cases were reported.

Pertussis

Cause: Bacterium *Bordetella pertussis*.

Illness and treatment: Classic symptoms are an extended illness of 2 or more weeks with cold-like symptoms followed by spasms of severe coughing (paroxysms) ending in a gasp, whoop, or

vomiting. Infants may have apnea. Adults may have urinary incontinence. Serious complications include pneumonia, seizures, and encephalopathy. Treatment is with antibiotics and supportive care.

Sources: Humans including asymptomatic cases are the reservoir and transmit through respiratory droplets or direct contact.

Additional risks: Pertussis can occur at any age, regardless of vaccination history. Death and severe complications occur mainly in the very young.

Prevention: Immunize all persons with primary series and booster doses to reduce the risk of infection. Use respiratory hygiene/cough etiquette to prevent transmission. Exposed persons should take prophylactic antibiotics, particularly children under a year of age or pregnant women, and their close contacts including healthcare workers.

Recent Washington trends: There is considerable variation in annual reports, from 184 to 1026 cases. One infant death occurred each year in 1998, 2000, and 2006.

2007: 482 cases (7.4 cases/100,000 population) were reported with no deaths. Rates were highest among children under a year (90.3/100,000) and 1 to 4 years (26.5/100,000).

Plague

Cause: Bacterium *Yersinia pestis*

Illness and treatment: Plague causes 3 clinical syndromes: bubonic (fever, headache, nausea and unilateral lymph node swelling); septicemic (bacteremia and multi-organ system failure); and pneumonic (pneumonia). A patient may have several syndromes. About 14% of plague cases in the United States are fatal. Treatment is with antibiotics and supportive care.

Sources: Wild rodent populations are the natural reservoir where it is maintained by fleas. Humans are infected through flea bites, handling tissues of infected animals, or respiratory droplet spread from animals or people with pneumonic plague.

Prevention: Avoid contact with sick or dead wild animals, rodent-proof houses, prevent pets from contracting fleas, and use repellents on skin and clothing when outdoors.

Recent Washington trends: Serologic sampling of 5,957 wild carnivores collected between 1975 and 2006 in Washington showed 3.8% seropositivity but human infections are rare: the last reported case was an animal trapper in Yakima exposed while skinning a bobcat in 1984.

2007: No human cases of plague were reported.

Polio

Cause: Poliovirus serotypes 1, 2 and 3, and related strains in oral polio vaccine.

Illness and treatment: Most commonly illness is inapparent or involves a nonspecific fever, with 1 to 2% of cases having nonparalytic aseptic meningitis and flaccid paralysis occurring in less than 1% of infections. Treatment is supportive.

Sources: Humans are the reservoir and transmit through the fecal-oral route or less commonly through respiratory secretions.

Additional risks: Susceptible travelers to the few countries where polio is still endemic or to countries still using oral polio vaccine routinely may be at risk.

Prevention: Immunize all persons to prevent infection. Only inactivated polio vaccine is used routinely in this country.

Recent Washington trends: The last naturally acquired infection was in 1977. In 1993 there was a case of vaccine-associated paralytic polio.

2007: No cases were reported.

Psittacosis

Cause: Bacterium *Chlamydophila* (previously *Chlamydia*) *psittaci*.

Illness and treatment: Abrupt onset of fever, chills, headache, and nonproductive cough may progress to shortness of breath and pneumonia. Treatment is with antibiotics.

Sources: Birds in the parrot family are common sources, less often poultry, pigeons, canaries, and sea birds. Infection usually occurs when a person inhales organisms in aerosolized dried feces or respiratory tract secretions of infected birds.

Prevention: Avoid purchasing or selling birds that appear ill; practice preventive husbandry; and wear protective clothing when cleaning cages or handling infected birds. If respiratory or influenza-like symptoms occur after bird caretaking, seek medical attention and inform the health care provider about the bird contact.

Recent Washington trends: Each year there are 0 to 4 reports, commonly associated with indoor exposure to pet birds and less commonly farm or wild birds.

2007: No cases were reported.

Q Fever

Cause: Bacterium *Coxiella burnetii*.

Illness and treatment: Acute Q fever symptoms are fevers, chills, retrobulbar headache, malaise, weakness, and severe sweats. Chronic Q fever manifests primarily as endocarditis. Treatment is with antibiotics.

Sources: The most common reservoirs are sheep, cattle, and goats. Infected animals are usually asymptomatic, but shed the organism in urine, feces, milk and especially birth products. Common exposure is inhalation of dust from premises contaminated by placental tissues, birth fluids or excreta of infected animals.

Prevention: Consume only pasteurized milk and milk products. Appropriately dispose of animal birth products. Restrict access to barns and other facilities housing potentially infected animals.

Recent Washington trends: Each year there are 0 to 2 reports.

2007: One case of chronic Q fever was reported in a state resident with past exposure in Australia.

Rabies Post-Exposure Prophylaxis

Information about post-exposure prophylaxis is available in “Human Rabies Prevention – United States, 2008, Recommendations of the Advisory Committee on Immunization Practices” at <http://www.cdc.gov/mmwr/preview/mmwrhtml/rr57e507a1.htm>. Also see Rabies (Human).

2007: There were 225 reports of post-exposure prophylaxis. The most common exposures were bats (71%), raccoons (14%), dogs (9%), and cats (3%). 24 people received prophylaxis after exposure to an animal testing positive for rabies (19 from bat exposure, 5 from a rabid dog from India). Six persons receiving rabies PEP reported exposures out of state and 20 reported exposures outside of the country.

Rabies (Human)

Cause: Rabies virus.

Illness and treatment: Initial neurologic symptoms include abnormal skin sensation or pain, often affecting the site of the bite, and subtle personality changes. Later neurologic symptoms include seizures, excess salivation, fear of water, delirium, agitation, and paralysis. Symptomatic illness is considered fatal; experimental treatment saved 1 Wisconsin case.

Sources: In Washington, Oregon, and Idaho, bats are the primary reservoir. Skunks, raccoons and foxes are additional reservoirs in this country. In some countries, dogs and other carnivores are the main reservoirs. Rabies is transmitted when saliva or other potentially infectious material contaminates the skin or mucosa of a susceptible mammal. Person to person transmission is documented only by tissue/organ transplantation.

Prevention: Obtain rabies post-exposure prophylaxis for exposure to a rabid or potentially rabid animal. Certain high risk groups should have pre-exposure vaccinations. Keep vaccinations up-to-date for all dogs, cats and ferrets, avoid direct contact with unfamiliar animals, and keep bats out of your home.

Recent Washington trends: Two human cases due to infection with the bat rabies variant of rabies virus were reported in the past 50 years, 1 in 1995 and 1 in 1997. Of bats tested in Washington 5 to 10% are identified as rabid. Since 1987, 4 rabid domestic animals were identified; 2 with bat variant virus (Table 3).

2007: No human rabies cases were reported. 22 of 315 (7 %) bats, but no other animals tested in Washington were identified as rabid (Tables 4 and 5).

Table 3. Rabid Non-Bat Animals and Rabies Strain, Washington, 1987–2007

Year	Animal type (County)	Rabies strain
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, 2003-2007 (Positive and negative only)

Counties	2003		2004		2005		2006		2007		County Total	
	Positive	Total	Positive	Total	Positive	Total	Positive	Total	Positive	Total	Positive Tested	
Adams	0	0	0	1	0	1	0	0	0	0	0	2
Asotin	0	2	0	1	0	0	0	4	1	1	1	8
Benton	0	2	0	6	0	2	0	1	0	4	0	15
Chelan	0	3	0	5	0	8	1	8	0	1	1	25
Clallam	0	1	0	3	0	4	0	7	1	2	1	17
Clark	1	8	0	10	1	6	0	8	1	15	3	47
Columbia	0	0	0	1	0	0	0	0	0	1	0	2
Cowlitz	0	8	1	9	0	10	1	8	1	9	3	44
Douglas	0	0	0	1	0	0	0	1	0	0	0	2
Ferry	0	0	0	0	0	1	0	1	1	1	1	3
Franklin	0	0	0	1	0	2	0	0	0	0	0	3
Garfield	0	0	0	0	0	0	0	0	0	0	0	0
Grant	0	1	0	1	0	1	0	2	0	0	0	5
Grays Harbor	0	4	1	8	1	6	0	2	1	3	3	23
Island	2	6	0	4	1	12	1	15	0	8	4	45
Jefferson	0	0	0	0	0	0	0	2	0	1	0	3
King	4	38	5	69	1	50	3	58	4	98	17	313
Kitsap	1	13	2	26	1	15	1	13	3	20	8	87
Kittitas	0	0	0	2	0	1	0	1	0	0	0	4
Klickitat	0	0	0	0	0	2	0	0	0	2	0	4
Lewis	2	25	0	12	0	12	0	13	0	15	2	77
Lincoln	0	0	0	1	1	2	0	0	0	1	1	4
Mason	0	6	0	12	0	5	0	3	1	8	1	34
Okanogan	1	3	0	3	0	1	0	2	1	2	2	11
Pacific	1	3	1	9	0	7	0	0	0	1	2	20
Pend Oreille	2	3	0	0	0	1	1	2	0	0	3	6
Pierce	0	21	1	28	2	15	1	20	2	29	6	113
San Juan	0	3	0	1	0	0	0	1	0	3	0	8
Skagit	0	4	0	7	0	3	0	6	1	4	1	24
Skamania	0	0	0	1	0	0	1	1	0	2	1	4
Snohomish	3	17	3	24	0	19	3	25	0	24	9	109
Spokane	2	16	3	12	2	21	0	18	3	18	10	85
Stevens	0	4	1	4	0	3	0	8	0	3	1	22
Thurston	2	26	1	28	1	9	1	19	0	24	5	106
Wahkiakum	0	0	0	1	0	4	0	1	0	1	0	7
Walla Walla	0	0	0	4	2	3	0	1	0	3	2	11
Whatcom	2	10	1	14	2	17	1	20	1	7	7	68
Whitman	0	1	0	2	0	0	0	0	0	1	0	4
Yakima	0	1	0	0	0	2	0	2	0	3	0	8
Total	23	229	20	311	15	245	15	273	22	315	95	1,373
% Positive	10.0%		6.4%		6.1%		5.5%		7.0%		7.0%	

**Table 5. Washington State Animals Tested for Rabies, 1988-2007
(Rabid animals in parentheses)**

Year	Bat	Cat	Dog	Ferret	Raccoon	Skunk	Rodents	Lago- morphs	Other Wild	Other Domestic	Total
1988	69 (4)	165	110	15	16	3	12	2	5	3	400
1989	102 (9)	124	91	20	9	4	8	1	9	4	372
1990	63 (4)	104	82	5	7	5	5	1	14	4	290
1991	90 (9)	105	96	13	8	3	13	0	19	2	349
1992	73 (6)	132	90	16	14	2	12	0	14	6 (1)*	359
1993	68 (1)	122	95	8	4	8	16	2	10	13	346
1994	58 (14)	105	90	7	4	3	15	0	16	14 (1)^	312
1995	263 (15)	140	114	12	8	1	23	3	15	18	597
1996	257 (13)	104	101	8	9	2	14	3	20	12	530
1997	780 (51)	155	118	7	17	4	15	2	18	11	1127
1998	447 (27)	126	109	8	11	1	6	0	19	16	743
1999	334 (25)	103	71	3	11	3	8	1	14	13	561
2000	330 (23)	105	60	1	2	4	6	1	9	4	522
2001	263 (22)	111	93	2	3	1	8	0	4	5	490
2002	186 (12)	99 (1)	53	7	2	2	9	1	8	9	376
2003	229 (23)	137	72	0	11	1	4	1	9	10	474
2004	311 (20)	141	70	3	13	6	11	0	6	10	571
2005	245 (15)	132	66	3	12	2	5	1	10	4	480
2006	273 (15)	105	70	4	13	1	2	1	8	5	482
2007	315 (22)	132	97	1	16	3	5	0	9	3	581
Total 1988- 2007	4,756 (330)	2,447 (1)	1,748	143	190	59	197	20	236	166 (2)	9,962 (333)

* Horse

^ Llama

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

Lagomorphs include: rabbit and pika

Other domestic include: burro, cattle, goat, horse, llama, mule, pig, sheep

Other wild include: badger, bear, bison, bobcat, cougar, coyote, deer, fox, kinkajou, lynx, marten, mink, mole, monkey/non-human primates, ocelot, opossum, otter, seal, shrew, weasel, wolf, wolf hybrid, zorilla (striped pole cat)

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.

African Tick Bite Fever

Cause: *Rickettsia africae*.

Illness and treatment: Symptoms include fever, skin ulcers and swollen lymph nodes. Treatment is with antibiotics.

Sources: Certain hard tick species transmit the disease from various mammals in sub-Saharan Africa.

Prevention: During outdoor activities in endemic areas wear appropriate clothing, use repellents and check the body for ticks.

Recent Washington trends: Two state residents were infected in South Africa in 2005.

2007: One case was reported in a state resident after travel to South Africa.

Creutzfeldt-Jakob Disease (CJD)

Cause: Prions, or “proteinaceous infectious particles” in which normal cellular prion proteins in the brain fold into abnormal, pathologic forms.

Illness and treatment: CJD is a rare, fatal neurodegenerative disease. About 85% of CJD cases are sporadic (sCJD) while 15% are inherited. Sporadic CJD is characterized by rapidly progressive dementia, poor balance, visual changes or muscle jerks. Treatment is supportive.

Sources: The cause of sporadic CJD is not known. In 1996, a new variant of CJD (vCJD) recognized in United Kingdom was associated with cattle infected with a related infection (“mad cow disease”). To date, no cases of vCJD have been acquired in the United States.

Prevention: There are no specific precautions.

Recent Washington trends: During 2000 to 2006, 4 to 10 cases of CJD were reported annually.

2007: Five cases were reported, but death certificates had not been finalized for 2007 as of publication of this report.

Cryptococcosis

Cause: Fungus *Cryptococcus*. Notifiable condition surveillance is only for *C. gattii*.

Illness and treatment: Symptoms include severe cough and shortness of breath, chills, night sweats, and loss of appetite. Infection of the lungs, brain, kidneys, prostate, and bone may also occur. Treatment is with antifungal agents.

Sources: *C. gattii* is an environmental fungus that has been isolated from native trees, soil, air, and water in the Pacific Northwest. Exposure is through inhaling the organism.

Prevention: There are no specific precautions. Consult a health care provider for any severe or persistent respiratory symptoms.

Recent Washington trends: In 2005, 3 cats living near the Canadian border were diagnosed with *C. gattii*. In 2006, *C. gattii* was found in soil from Whatcom County and 2 state residents with cryptococcal disease that year may have been locally exposed.

2007: Six human cases were reported from Whatcom, King and Island counties. Of these cases 4 were in Washington during their entire exposure period.

Ehrlichiosis

Cause: Bacteria in the genus *Ehrlichia*.

Illness and treatment: Usual symptoms are fever, headache and muscle aches. There may be vomiting, diarrhea, cough, joint pains, confusion, and rash. Treatment is with antibiotics.

Sources: Certain hard ticks transmit from animal reservoirs such as deer, dogs, and rodents.

Prevention: During outdoor activities in endemic areas wear appropriate clothing, use repellents and check the body for ticks.

Recent Washington trends: Rare cases of travel associated ehrlichiosis are reported.

2007: One case was reported in a state resident who was exposed in Massachusetts.

Tick Paralysis

Cause: A tick-produced neurotoxin affecting the nervous system.

Illness and treatment: Cases have acute paralysis. If unrecognized, tick paralysis can progress to respiratory failure. About 10% of cases are fatal. Treatment requires removing the tick; complete recovery usually follows.

Sources: Neurotoxin produced by certain hard ticks is usually released only after a tick has attached to a person for several days.

Prevention: During outdoor activities in endemic areas wear appropriate clothing, use repellents, and check the body for ticks, especially on the head or neck.

Recent Washington trends: Occasional cases are reported from eastern Washington, most often in young girls whose long hair conceals attached ticks.

2007: Two cases were reported, both young girls from eastern Washington.

Rare Sexually Transmitted Diseases

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

Illness and treatment: These are 3 rare genital ulcer diseases. Treatment recommendations are available from CDC.

Sources: The infections are sexually transmitted.

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

Prevention: Use safe sexual practices to reduce transmission.

Recent Washington trends: In the past decade there were 4 chancroid cases, no granuloma inguinale cases, and 5 lymphogranuloma venereum cases.

2007: One lymphogranuloma venereum case, no chancroid cases, and no granuloma inguinale cases were reported.

Relapsing Fever

Cause: Bacteria (spirochetes) *Borrelia hermsii* for tick-borne relapsing fever and *B. recurrentis* for louse-borne relapsing fever.

Illness and treatment: Symptoms include a fever lasting 2 to 7 days cycling with afebrile periods of 4 to 14 days, with 1 to 10 cycles if untreated. Along with fever there may be shaking chills, sweats, headache, muscle or joint pain, or sometimes a rash. Treatment is with antibiotics.

Sources: The most common reservoirs in Washington for tick-borne relapsing fever appear to be wild rodents and soft ticks, with infection through tick bites. Louse-borne disease, carried by body lice, is not endemic to the United States but may occur in travelers; disease is acquired by crushing an infective louse so that it contaminates the bite wound or mucous membranes.

Prevention: Avoid sleeping in rodent infested buildings in regions with endemic tick-borne disease. Rodent-proof structures to prevent future colonization by rodents and their soft ticks.

Recent Washington trends: Each year there are 1 to 12 reports. Tick-borne disease cases are almost always associated with overnight stays in rural cabins. Louse-borne disease is rare even in travelers.

2007: Nine cases were reported, including 7 with exposures in eastern Washington counties and 2 with exposures in Idaho.

Rubella

Cause: Rubella virus.

Illness and treatment: Acquired rubella is usually mild, with fever and rash, although half of cases are inapparent. Adults may have arthritis or rarely encephalitis. Congenital rubella from infection during pregnancy may cause congenital malformations (most often deafness) or fetal death. Pregnant women may receive immune globulin treatment to prevent congenital rubella.

Sources: Humans are the reservoir. Transmission is airborne or through respiratory droplets. Infected infants may shed for extended periods.

Additional risks: Adult women are more likely to have arthritis and adults to have encephalitis.

Prevention: Immunize all persons to prevent infection. Use respiratory hygiene/cough etiquette to prevent transmission.

Recent Washington trends: Each year there are 0 to 8 reports. Rubella is no longer endemic in the country but congenital rubella can occur among recent immigrants.

2007: No cases were reported.

Salmonellosis (Non-Typhoid)

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

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* chronically and be a direct source for human infection. Most human cases result

from contaminated food. Common exposures include contaminated eggs, unpasteurized milk, poultry and produce. Person-to-person transmission can 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.

Prevention: Use good food handling and personal hygiene practices, including thorough handwashing after contact with animals. 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 approximately 600 to 800 cases reported per year. Infections occur year round with some increase during the spring and summer months. Many serotypes are reported (Table 6).

2007: 758 cases were reported (11.7 cases/100,000 population). The infection was diagnosed most frequently in infants under 1 year and children 1 to 4 years of age.

Table 6. *Salmonella* Serotypes, 2007

Serotype	No.	%
Typhimurium	121	16.4
Enteritidis	120	16.2
Newport	58	7.8
4,[5],12:I:-	45	6.1
Heidelberg	39	5.3
Montevideo	32	4.3
Saintpaul	31	4.2
Senftenberg	29	3.9
Stanley	21	2.8
Paratyphi B Tar + Java	17	2.3
Agona	13	1.8
Muenchen	12	1.6
Oranienburg	12	1.6
Thompson	11	1.5
Infantis	10	1.3
Javiana	10	1.3
Braenderup	9	1.2
4,12:I:--	8	1.1
Hadar	7	0.9
Mbandaka	7	0.9
Dublin	6	0.8
Unknown	18	2.4

2-5 Cases Each: Poona; Sandiego; Wandsworth; Brandenburg; Anatum; Panama; Paratyphi A; Tennessee; 41:Z4,Z23:-; Chester; Cubana; Dusseldorf; Flint; Havana; Hvittingfoss; Manhattan; Meleagridis; Paratyphi B; Telelkebir; Westhampton; Worthington

1 Case Each: 18:Z4,Z23:--; 42:Z10:--; 44:Z36:-; 44:Z4C,Z32:--; 45:G;Z51:-; 50:K:Z; 50:Z4,Z32:--; 50:Z52:Z35; 61:C:Z35; Albany; Apapa; Baildon; Ball; Bareilly; Chicago; Cholera-Suis; Clackamas; Concord; Corvallis; Daytona; Florida; Guildford; Jangwani; Kentucky; Kiambu; Kisarawe; Kottbus; Lexington; Litchfield; Marina; Minnesota; Monschau; Muenster; Ohio; Oslo; Poano; Potsdam; Reading; Riverside; Schwarzengrund; Singapore; Uganda; Urbana; Virchow; Weltevreden; Yoruba

Shigellosis

Cause: Bacteria in the genus *Shigella*, typically *S. sonnei*. Other species including *S. flexneri*, *S. boydii*, or *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 sex. Outbreaks are occasionally associated with child care or food service facilities.

Additional risks: Ingesting very few organisms can cause infection. Outbreaks occur under conditions of crowding and poor hygiene, putting institutions for children, mental hospitals, prisons, and refugee facilities 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 133 to 501 reports.

2007: 159 cases were reported (2.5 cases/100,000 population). Shigellosis was diagnosed most frequently in the age groups 1 to 4 years and 5 to 9 years.

Syphilis

Cause: Spirochete *Treponema pallidum*.

Illness and treatment: The disease has 4 stages. Primary syphilis involves a painless ulcer at the site of infection. Secondary syphilis involves fever, diffuse rash, headache, hair loss, and muscle aches. Early latent and late/late latent syphilis, which are infections acquired in the past, can result in damage to the brain, heart, or other organs. Congenital syphilis may result in organ damage and bone deformities. Antibiotics treat the infection but organ damage is permanent.

Sources: Syphilis is sexually transmitted or acquired before birth.

Additional risks: Risk for syphilis is higher among men who have sex with men.

Prevention: Use safe sexual practices to reduce transmission.

Recent Washington trends: Rates have increased since 1996, when 9 cases were reported. Recently over 150 primary and secondary cases have been reported annually. Rates are higher among males.

2007: 168 cases of primary and secondary syphilis were reported (2.5 cases/100,000 population).

Tetanus

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

Illness and treatment: Most cases are generalized, with a descending rigidity and painful spasms of skeletal muscles starting with the jaw and neck (referred to as “lockjaw”). Treatment is with human tetanus immune globulin, antibiotics, wound care, and supportive care. The patient should also be vaccinated.

Sources: Spores are found in soil, in the intestines and feces of many domestic animals and fowl, on the skin, and in heroin. Spores can grow in a wound, even a minor one.

Additional risks: Older adults may not have received primary vaccination series.

Prevention: Immunize all persons with primary series and adult booster doses to prevent infection.

Recent Washington trends: There was 1 case each in 2000 and 2005.

2007: No cases were 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 occur 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 wild game to reliably kill larvae. Regulations to prevent trichinosis require the cooking of garbage and offal fed to swine.

Recent Washington trends: In the past decade only 2 cases have been reported. Recent exposures have included bear and cougar meat eaten raw or undercooked.

2007: No cases were reported.

Tuberculosis

Cause: Bacterium *Mycobacterium tuberculosis*.

Illness and treatment: Infection may be latent, and not communicable, or active. Typical symptoms are fever, weight loss, night sweats, cough, bloody sputum, and chest pain. Other parts of the body than the lung may also be affected.

Sources and spread: Humans transmit through respiratory droplets or direct contact.

Additional risks: Disease rate is higher in persons 65 years of age and older. About three-quarters of cases in Washington are among foreign-born persons from countries with high rates of tuberculosis. Risk of infection is higher for persons with HIV infection or AIDS.

Prevention: Persons at risk can be screened for tuberculosis. Completing treatment prevents the spread of tuberculosis and the development of resistant strains.

Washington trends: Each year there are around 250 reports with 2 to 18 deaths.

2007: 291 cases (4.5/100,000 population) and 12 deaths were reported.

Tularemia

Cause: Bacterium *Francisella tularensis*.

Illness and treatment: Symptoms reflect the route of transmission and can include fever, malaise, swollen lymph nodes, skin ulcers, eye infection, sore throat, abdominal pain, diarrhea and pneumonia; any infection can cause sepsis. Treatment is with antibiotics.

Sources: The reservoir is wild mammals (especially rabbits, hares, voles, squirrels, muskrats, beavers); arthropods (e.g., ticks, deerflies) biting these mammals maintain the organism's life cycle may be infective for prolonged periods. Infection can occur through direct contact with an infected animal, arthropod bite, contaminated meat or water, or inhaling the organism.

Prevention: Wear gloves when skinning wild game and keep hands or gloves away from the eyes. Drink only treated water when in wilderness areas. In endemic areas avoid tick and insect bites.

Recent Washington trends: Each year there are 1 to 10 reports. Exposures include insect and animal bites, contaminated water, and aerosol exposure while farming or landscaping with power tools. In 2004-2005 a statewide serosurvey of over 360 outdoor pet cats and dogs found 0.6% exposed to tularemia overall but 4.5% exposed in southwest Washington.

2007: One case was reported in a state resident with exposure to dead wild rodents.

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. Re-culture patients after antibiotic treatment to confirm clearance of the infection.

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 Asia. Each year there are approximately 5 to 10 reports.

2007: Seven cases were reported.

Typhus

Cause: *Rickettsia typhi* or *R. felis* for fleaborne (endemic or murine) typhus and *R. prowazekii* for louseborne (epidemic) typhus.

Illness and treatment: Louseborne typhus is characterized by fevers, chills, headache, muscle aches, and rash. Fleaborne or murine typhus resembles louseborne typhus, but symptoms are milder. Treatment is with antibiotics.

Sources: Apparently healthy rats are the reservoir and fleas the vector for fleaborne typhus. Humans are the reservoir and the body louse is the vector for louse-borne typhus. Both forms of typhus are acquired by rubbing flea or louse feces into a bite or other fresh skin wound.

Additional risks: Endemic typhus is rarely reported in the United States. Most cases occur in southern California, southern Texas, the southeastern Gulf Coast, and Hawaii.

Prevention: Keep rodents, especially rats, away from human habitations.

Recent Washington trends: The last reported case was in 1994 after travel to Asia.

2007: No cases were reported.

Vibriosis (Non-Cholera)

Cause: Bacteria in the *Vibrio* genus, including *V. parahaemolyticus*, *V. vulnificus*, non-toxin-producing *V. cholerae* and other less common species. Infections caused by toxin-producing *V. cholerae* are notifiable as Cholera.

Illness and treatment: Symptoms include abdominal pain, watery diarrhea, vomiting, headache and fever. Skin infections can occur. *V. vulnificus*, a species occurring mainly in the Gulf of Mexico, can cause life-threatening septicemia in persons with weakened immune systems. Most persons recover without treatment but antibiotics may be needed for severe cases.

Sources: *V. parahaemolyticus* occur naturally in Pacific coastal waters, especially during warmer months. Transmission of vibriosis usually occurs through ingesting contaminated raw or undercooked shellfish or through skin injuries exposed to seawater.

Additional risks: Persons with liver disease, alcoholics, and others with weakened immune systems should be warned not to eat raw or undercooked seafood.

Prevention: Keep shellfish cold throughout the transport from harvest to preparation. To lessen risk of illness, consume raw or undercooked shellfish from only approved harvest areas and only during cooler months of the year.

Recent Washington trends: Two large outbreaks occurred in years when environmental conditions favored growth of *Vibrio* (1997 and 2006). During normal years 20 to 30 cases are reported, with a mixture of locally acquired and travel associated exposures.

2007: Twenty-five cases were reported (0.4 cases/100,000 population) with 22 reporting shellfish ingestion. The age group most affected was persons 50 to 59 years.

Waterborne Outbreaks

Cause: Many infectious agents including viruses, bacteria, and parasites. Common agents are norovirus, *Giardia*, and *Cryptosporidium*, less commonly bacterial agents.

Illness and treatment: Symptoms and treatment vary with the agent.

Sources: Sources vary with the agent. Waterborne outbreaks can occur from drinking water, recreational water, pools, or interactive fountains.

Additional risks: Risks vary with the agent.

Prevention: Test private wells at least every 3 years and after potential contamination such as floods. If ill with diarrhea do not enter recreational water, pools, or interactive fountains.

Recent Washington trends: Waterborne outbreaks are often difficult to detect. There are 0 to 3 outbreaks reported each year, each with 2 to dozens or even hundreds of cases (Table 7).

2007: Three waterborne outbreaks were reported: a cryptosporidiosis outbreak at a lake involving 12 ill; a cryptosporidiosis outbreak at a pool involving 14 ill; and a norovirus outbreak associated with restaurant well water involving 32 ill.

**Table 7. Waterborne Outbreaks,
1991-2007**

Year	Cases	Outbreaks
1991	8	2
1992	10	1
1993	617	3
1994	8	2
1995	0	0
1996	18	1
1997	2	1
1998	306	2
1999	150	3
2000	0	0
2001	0	0
2002	0	0
2003	12	1
2004	0	0
2005	0	0
2006	0	0
2007	58	3

Yersiniosis

Cause: Bacteria in the genus *Yersinia*, usually *Y. enterocolitica*.

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: Rates have been stable with about 20 to 30 reports each year.

2007: Twenty-eight cases were reported in 2007 (0.4 cases/100,000 population). Yersiniosis was most frequently diagnosed in infants less than 1 year of age.

APPENDIX I

Disease Incidence and Mortality Rates

ARBOVIRAL DISEASE TYPES

Year	Total Cases	Yellow Fever	West Nile Virus	Japanese Encephalitis	Dengue	Chikungunya	Unknown flavivirus
2002	1	1 ^V	0	0	0	0	0
2003	8	0	8 ^T	0	0	0	0
2004	3	0	1 ^T	1 ^T	1 ^T	0	0
2005	6	0	3 ^T	0	3 ^T	0	0
2006	13	0	8 (5 ^T , 3 ^E)	0	4 ^T	1 ^T	0
2007	16	0	5 ^T	0	10 ^T	0	1 ^T

^V Vaccine-associated

^T Travel-associated

^E Endemically acquired

BOTULISM

Cases, Rate/100,000 Pop., Deaths

Year	Food	Infant	Wound	Combined	
				Rate	Deaths
1985	5	4	0	0.2	0
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	0.1	0
1991	0	3	0	0.1	0
1992	0	2	0	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

BRUCELLOSIS

Cases, Rate/100,000 Pop., Deaths

Year	Cases	Rate	Deaths
1986	1	0.0	0
1987	1	0.0	0
1988	1	0.0	0
1989	1	0.0	0
1990	0	0.0	0
1991	3	0.1	0
1992	1	0.0	0
1993	0	0.0	0
1994	0	0.0	0
1995	0	0.0	0
1996	2	0.0	0
1997	3	0.1	0
1998	3	0.1	0
1999	0	0.0	0
2000	0	0.0	0
2001	0	0.0	0
2002	2	0.0	0
2003	1	0.0	0
2004	2	0.0	0
2005	0	0.0	0
2006	0	0.0	0
2007	1	0.0	0

CAMPYLOBACTERIOSIS

Cases, Rate/100,000 Population

Counties	2003		2004		2005		2006		2007	
	Cases	Rate								
Adams	2	*	3	*	4	*	2	*	1	*
Asotin	1	*	1	*	0	0.0	0	0.0	0	0.0
Benton	40	26.4	20	12.9	26	16.4	23	14.3	24	14.7
Chelan	8	11.8	7	10.2	9	13.0	11	15.7	4	*
Clallam	8	12.3	2	*	7	10.5	6	8.8	6	8.8
Clark	67	18.0	74	19.3	57	14.6	57	14.1	70	16.9
Columbia	0	0.0	2	*	0	0.0	0	0.0	1	*
Cowlitz	4	*	11	11.5	16	16.7	12	12.4	14	14.3
Douglas	4	*	5	14.6	0	0.0	1	*	2	*
Ferry	2	*	0	0.0	2	*	0	0.0	0	0.0
Franklin	13	24.3	5	8.8	6	9.9	11	17.1	14	20.8
Garfield	0	0.0	1	*	1	*	0	0.0	0	0.0
Grant	24	31.1	18	23.0	19	24.0	11	13.6	12	14.5
Grays Harbor	14	20.3	19	27.5	10	14.3	11	15.6	12	16.9
Island	6	8.1	5	6.7	10	13.2	7	9.1	6	7.7
Jefferson	4	*	2	*	8	29.0	1	*	3	*
King	270	15.2	266	14.9	337	18.6	258	14.1	263	14.1
Kitsap	20	8.4	24	10.0	28	11.6	24	9.9	16	6.5
Kittitas	5	14.2	2	*	6	16.4	3	*	1	*
Klickitat	3	*	2	*	4	*	3	*	3	*
Lewis	5	7.1	0	0.0	16	22.3	6	8.2	15	20.2
Lincoln	0	0.0	0	0.0	1	*	1	*	0	0.0
Mason	7	13.9	2	*	5	9.6	7	13.2	10	18.3
Okanogan	2	*	8	20.2	0	0.0	2	*	6	15.1
Pacific	2	*	3	*	3	*	3	*	1	*
Pend Oreille	0	0.0	2	*	0	0.0	0	0.0	2	*
Pierce	32	4.4	33	4.4	48	6.4	50	6.5	69	8.7
San Juan	2	*	5	33.1	2	*	4	*	3	*
Skagit	19	17.8	23	21.1	22	19.8	24	21.2	29	25.2
Skamania	0	0.0	0	0.0	2	*	0	0.0	0	0.0
Snohomish	96	15.1	88	13.6	110	16.8	94	14.0	117	17.0
Spokane	67	15.6	49	11.3	74	17.0	67	15.1	73	16.2
Stevens	13	32.0	2	*	2	*	1	*	1	*
Thurston	25	11.6	28	12.8	26	11.6	30	13.0	50	21.0
Wahkiakum	0	0.0	1	*	0	0.0	2	*	1	*
Walla Walla	6	10.8	6	10.6	2	*	3	*	3	*
Whatcom	47	26.9	48	27.1	66	36.5	56	30.4	64	34.0
Whitman	5	12.2	6	14.4	0	0.0	0	0.0	1	*
Yakima	120	53.1	88	38.7	116	50.6	202	87.1	123	52.5

CAMPYLOBACTERIOSIS			
STATEWIDE BY YEAR			
Cases, Rate/100,000 Pop., Deaths			
Year	Cases	Rate	Deaths
1980	8	0.2	0
1981	106	2.5	0
1982	299	7.0	0
1983	149	3.5	0
1984	146	3.4	1
1985	250	5.7	0
1986	347	7.9	0
1987	420	9.4	1
1988	709	15.5	1
1989	899	19.3	0
1990	899	18.5	0
1991	930	18.6	4
1992	1,060	20.7	1
1993	1,051	20.1	0
1994	1,050	19.7	0
1995	1,050	19.3	4
1996	1,139	20.6	1
1997	1,150	20.5	0
1998	901	15.8	1
1999	950	16.5	2
2000	1,006	17.1	2
2001	991	16.6	0
2002	1,032	17.1	1
2003	943	15.5	0
2004	861	14.0	0
2005	1,045	16.7	0
2006	993	15.6	0
2007	1020	15.7	0

STATEWIDE TOTAL

CASES	943	15.5	861	14.0	1,045	16.7	993	15.6	1020	15.7
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* Incidence rates not calculated for < 5 cases.

CHLAMYDIA TRACHOMATIS

Cases, Rate/100,000 Population

Counties	2003		2004		2005		2006		2007	
	Cases	Rate								
Adams	30	180.7	24	143.7	32	188.2	70	404.6	39	221.6
Asotin	52	252.4	41	198.1	37	177.0	40	189.6	29	136.2
Benton	348	229.6	406	261.8	406	256.8	375	233.5	506	310.6
Chelan	168	247.4	169	247.1	174	251.4	165	235.4	139	195.2
Clallam	156	238.9	151	229.1	145	217.1	142	209.4	135	197.1
Clark	844	226.7	891	232.5	916	234.0	818	202.7	899	216.6
Columbia	1	*	9	219.5	4	*	3	*	2	*
Cowlitz	196	206.5	235	246.6	322	335.8	369	381.2	324	331.3
Douglas	69	205.4	85	248.5	72	207.5	78	218.5	64	176.3
Ferry	8	109.6	14	191.8	16	216.2	26	346.7	18	238.4
Franklin	188	350.7	192	366.8	221	365.3	284	442.4	252	373.9
Garfield	0	0.0	0	0.0	1	*	0	0.0	3	*
Grant	216	280.2	234	298.9	188	237.7	195	241.9	209	253.3
Grays Harbor	153	222.4	189	273.1	164	235.0	155	220.2	140	197.7
Island	175	236.5	177	236.6	183	240.8	171	221.5	205	261.5
Jefferson	59	221.0	37	137.0	57	206.5	30	106.4	36	125.9
King	5,169	290.5	5,336	298.4	5,604	309.9	5,244	285.7	6015	323.2
Kitsap	671	283.1	672	280.6	660	274.5	683	280.6	688	281.0
Kittitas	90	255.7	94	262.6	155	423.5	102	272.7	85	221.9
Klickitat	35	181.3	41	212.4	26	133.3	17	85.9	16	80.4
Lewis	141	200.3	196	277.2	162	226.3	150	205.8	143	193.0
Lincoln	6	59.4	8	78.4	5	49.5	5	49.0	9	87.4
Mason	109	217.1	119	234.3	162	312.1	110	207.2	126	230.8
Okanogan	116	292.9	133	335.9	124	313.1	123	309.0	92	231.2
Pacific	37	177.0	33	157.1	33	154.9	19	88.4	19	88.0
Pend Oreille	16	135.6	14	117.7	10	82.0	9	73.2	18	142.9
Pierce	2,820	384.4	2,687	361.2	3,428	453.5	3,031	391.9	3357	424.7
San Juan	10	67.6	21	139.1	10	64.5	12	76.4	12	75.5
Skagit	270	253.0	327	330.6	294	265.1	283	250.2	303	262.8
Skamania	13	131.3	19	188.1	9	87.4	8	75.5	10	93.5
Snohomish	1,467	230.1	1,632	253.1	1,556	237.3	1,503	223.7	1416	206.3
Spokane	988	230.5	1,101	254.9	1,071	245.5	1,121	252.6	1259	279.0
Stevens	59	145.3	44	108.1	72	174.8	46	109.3	47	109.3
Thurston	511	237.9	552	252.6	528	235.6	576	249.2	602	252.9
Wahkiakum	3	*	3	*	5	128.2	7	179.5	4	*
Walla Walla	80	143.4	138	243.4	160	278.3	93	160.6	144	247.0
Whatcom	436	249.9	462	260.6	480	265.5	519	281.6	450	239.0
Whitman	133	324.4	147	352.5	152	358.5	117	273.4	126	295.1
Yakima	953	421.7	1,002	440.4	973	424.3	1,120	483.2	1182	504.7

CHLAMYDIA TRACHOMATIS STATEWIDE BY YEAR

Cases, Rate/100,000 Pop., Deaths			
Year	Cases	Rate	Deaths
1987**	5,071	113.2	0
1988	12,534	274.6	0
1989	10,865	233.1	0
1990	12,709	261.1	0
1991	12,917	258.3	0
1992	11,762	229.9	0
1993	10,331	197.1	0
1994	10,575	198.2	0
1995	9,463	174.3	0
1996	9,237	167.4	0
1997	9,523	169.8	0
1998	10,998	193.4	0
1999	11,964	207.7	0
2000	13,066	224.5	0
2001	13,631	228.1	0
2002	14,936	247.2	0
2003	16,796	275.4	0
2004	17,635	285.9	0
2005	18,617	297.6	0
2006	17,819	279.5	0
2007	19,123	294.7	0

**First year reported, July - December

STATEWIDE TOTAL

CASES	16,796	275.4	17,635	285.9	18,617	297.6	17,819	279.5	19,123	294.7
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* Incidence rates not calculated for < 5 cases.

CHOLERA

Cases, Rate/100,000 Pop., Deaths			
Year	Cases	Rate	Deaths
1985	0	0.0	0
1986	0	0.0	0
1987	0	0.0	0
1988	0	0.0	0
1989	0	0.0	0
1990	0	0.0	0
1991	0	0.0	0
1992	2	0.0	0
1993	0	0.0	0
1994	0	0.0	0
1995	0	0.0	0
1996	0	0.0	0
1997	0	0.0	0
1998	0	0.0	0
1999	0	0.0	0
2000	0	0.0	0
2001	0	0.0	0
2002	1	0.0	0
2003	0	0.0	0
2004	0	0.0	0
2005	0	0.0	0
2006	0	0.0	0
2007	0	0.0	0

CRYPTOSPORIDIOSIS⁺

Cases, Rate/100,000 Population

Counties	2003		2004		2005		2006		2007	
	Cases	Rate								
Adams	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Asotin	1	*	0	0.0	0	0.0	0	0.0	2	*
Benton	2	*	3	*	4	*	3	*	0	0.0
Chelan	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Clallam	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Clark	7	1.9	6	1.6	7	1.8	5	1.2	9	2.2
Columbia	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Cowlitz	0	0.0	3	*	3	*	1	*	7	7.2
Douglas	1	*	0	0.0	0	0.0	0	0.0	0	0.0
Ferry	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Franklin	0	0.0	1	*	0	0.0	1	*	0	0.0
Garfield	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Grant	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Grays Harbor	0	0.0	0	0.0	0	0.0	1	*	1	*
Island	0	0.0	0	0.0	1	*	1	*	0	0.0
Jefferson	0	0.0	0	0.0	0	0.0	0	0.0	2	*
King	35	2.0	31	1.7	55	3.0	46	2.5	43	2.3
Kitsap	3	*	2	*	2	*	1	*	5	2.0
Kittitas	2	*	0	0.0	2	*	1	*	2	*
Klickitat	0	0.0	0	0.0	0	0.0	0	0.0	1	*
Lewis	0	0.0	0	0.0	1	*	0	0.0	2	*
Lincoln	0	0.0	0	0.0	2	*	0	0.0	0	0.0
Mason	0	0.0	0	0.0	1	*	1	*	1	*
Okanogan	0	0.0	0	0.0	0	0.0	1	*	0	0.0
Pacific	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Pend Oreille	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Pierce	2	*	8	1.1	4	*	7	0.9	21	2.7
San Juan	0	0.0	0	0.0	0	0.0	0	0.0	1	*
Skagit	0	0.0	0	0.0	0	0.0	1	*	0	0.0
Skamania	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Snohomish	7	1.1	6	0.9	2	*	9	1.3	14	2.0
Spokane	1	*	0	0.0	0	0.0	4	*	6	1.3
Stevens	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Thurston	1	*	0	0.0	1	*	3	*	4	*
Wahkiakum	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Walla Walla	0	0.0	0	0.0	1	*	0	0.0	0	0.0
Whatcom	0	0.0	0	0.0	1	*	3	*	3	*
Whitman	0	0.0	1	*	0	0.0	0	0.0	0	0.0
Yakima	3	*	2	*	7	3.1	6	2.6	15	6.4

CRYPTOSPORIDIOSIS STATEWIDE BY YEAR			
Cases, Rate/100,000 Pop., Deaths			
Year	Cases	Rate	Deaths
2001	73	1.2	0
2002	62	1	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

STATEWIDE TOTAL

CASES	65	1.1	63	1.0	94	1.5	95	1.5	139	2.1
DEATHS	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0

+ Cryptosporidiosis first became a notifiable condition in Washington in 12/2000.

* Incidence rates not calculated for < 5 cases.

CYCLOSPORIASIS*

Cases, Rate/100,000 Pop., Deaths			
Year	Cases	Rate	Deaths
2002	5	0.1	0
2003	0	0.0	0
2004	11	0.2	0
2005	5	0.1	0
2006	1	0.0	0
2007	1	0.0	0

* Cyclosporiasis first became a notifiable condition in Washington in 12/2000

DIPHTHERIA

Cases, Rate/100,000 Pop., Deaths			
Year	Cases	Rate	Deaths
1985	0	0.0	0
1986	0	0.0	0
1987	0	0.0	0
1988	0	0.0	0
1989	0	0.0	0
1990	0	0.0	0
1991	0	0.0	0
1992	0	0.0	0
1993	0	0.0	0
1994	0	0.0	0
1995	0	0.0	0
1996	0	0.0	0
1997	0	0.0	0
1998	0	0.0	0
1999	0	0.0	0
2000	0	0.0	0
2001	0	0.0	0
2002	0	0.0	0
2003	0	0.0	0
2004	0	0.0	0
2005	0	0.0	0
2006	0	0.0	0
2007	0	0.0	0

ENTEROHEMORRHAGIC *E. COLI*

Cases, Rate/100,000 Population

Counties	2003		2004		2005		2006		2007	
	Cases	Rate								
Adams	0	0.0	0	0.0	0	0.0	0	0.0	1	*
Asotin	0	0.0	0	0.0	1	*	1	*	1	*
Benton	4	*	9	5.8	3	*	3	*	2	*
Chelan	0	0.0	0	0.0	1	*	5	7.1	0	0.0
Clallam	0	0.0	0	0.0	1	*	0	0.0	1	*
Clark	13	3.5	21	5.5	30	7.7	14	3.5	9	2.2
Columbia	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Cowlitz	2	*	0	0.0	7	7.3	2	*	3	*
Douglas	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Ferry	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Franklin	2	*	2	*	2	*	1	*	1	*
Garfield	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Grant	2	*	0	0.0	0	0.0	5	6.2	0	0.0
Grays Harbor	1	*	2	*	2	*	0	0.0	0	0.0
Island	0	0.0	0	0.0	2	*	1	*	1	*
Jefferson	1	*	0	0.0	0	0.0	0	0.0	0	0.0
King	40	2.2	43	2.4	43	2.4	45	2.5	44	2.4
Kitsap	3	*	4	*	9	3.7	7	2.9	6	2.5
Kittitas	2	*	0	0.0	1	*	0	0.0	0	0.0
Klickitat	0	0.0	0	0.0	1	*	0	0.0	3	*
Lewis	2	*	0	0.0	1	*	4	*	0	0.0
Lincoln	1	*	0	0.0	0	0.0	1	*	0	0.0
Mason	0	0.0	0	0.0	1	*	0	0.0	0	0.0
Okanogan	1	*	0	0.0	0	0.0	0	0.0	2	*
Pacific	2	*	2	*	0	0.0	0	0.0	0	0.0
Pend Oreille	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Pierce	6	0.8	28	3.8	6	0.8	22	2.8	14	1.8
San Juan	1	*	0	0.0	0	0.0	1	*	0	0.0
Skagit	5	4.7	1	*	2	*	1	*	5	4.3
Skamania	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Snohomish	12	1.9	20	3.1	17	2.6	17	2.5	19	2.8
Spokane	10	2.3	2	*	3	*	9	2.0	3	*
Stevens	1	*	0	0.0	0	0.0	0	0.0	1	*
Thurston	7	3.3	6	2.7	4	*	6	2.6	8	3.4
Wahkiakum	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Walla Walla	2	*	0	0.0	0	0.0	0	0.0	1	*
Whatcom	4	*	5	2.8	9	5.0	10	5.4	11	5.8
Whitman	0	0.0	5	12.0	0	0.0	2	*	0	0.0
Yakima	4	*	3	*	3	*	5	2.2	5	2.1

ENTEROHEMORRHAGIC <i>E. COLI</i>			
STATEWIDE BY YEAR			
Cases, Rate/100,000 Pop., Deaths			
Year	Cases	Rate	Deaths
1988	167	3.7	0
1989	157	3.4	1
1990	220	4.5	0
1991	164	3.3	0
1992	300	5.9	2
1993	741	14.1	3
1994	174	3.3	2
1995	140	2.6	1
1996	187	3.4	1
1997	149	2.7	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

STATEWIDE TOTAL

CASES	128	2.1	153	2.5	149	2.4	162	2.5	141	2.2
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* Incidence rates not calculated for < 5 cases.

GIARDIASIS

Cases, Rate/100,000 Population

Counties	2003		2004		2005		2006		2007	
	Cases	Rate								
Adams	0	0.0	0	0.0	1	*	0	0.0	0	0.0
Asotin	2	*	0	0.0	0	0.0	1	*	3	*
Benton	8	5.3	4	*	7	4.4	22	13.7	4	*
Chelan	5	7.4	2	*	2	*	2	*	1	*
Clallam	4	*	8	12.1	5	7.5	5	7.4	8	11.7
Clark	26	7.0	40	10.4	31	7.9	26	6.4	33	8.0
Columbia	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Cowlitz	8	8.4	4	*	1	*	2	*	6	6.1
Douglas	0	0.0	1	*	2	*	0	0.0	0	0.0
Ferry	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Franklin	4	*	2	*	1	*	4	*	5	7.4
Garfield	0	0.0	1	*	0	0.0	0	0.0	0	0.0
Grant	1	*	2	*	6	7.6	3	*	2	*
Grays Harbor	2	*	7	10.1	3	*	4	*	8	11.3
Island	5	6.8	4	*	3	*	2	*	13	16.6
Jefferson	4	*	2	*	7	25.4	6	21.3	4	*
King	117	6.6	119	6.7	140	7.7	125	6.8	143	7.7
Kitsap	8	3.4	11	4.6	10	4.2	12	4.9	16	6.5
Kittitas	2	*	0	0.0	1	*	2	*	0	0.0
Klickitat	1	*	2	*	6	30.8	1	*	3	*
Lewis	5	7.1	0	0.0	1	*	5	6.9	6	8.1
Lincoln	0	0.0	0	0.0	4	*	0	0.0	2	*
Mason	6	12.0	5	9.8	6	11.6	4	*	5	9.2
Okanogan	3	*	0	0.0	1	*	4	*	3	*
Pacific	1	*	0	0.0	4	*	0	0.0	1	*
Pend Oreille	1	*	1	*	0	0.0	0	0.0	0	0.0
Pierce	27	3.7	26	3.5	21	2.8	17	2.2	53	6.7
San Juan	0	0.0	0	0.0	0	0.0	0	0.0	1	*
Skagit	14	13.1	7	6.4	2	*	5	4.4	5	4.3
Skamania	0	0.0	0	0.0	0	0.0	1	*	0	0.0
Snohomish	43	6.7	63	9.8	54	8.2	62	9.2	73	10.6
Spokane	46	10.7	44	10.2	54	12.4	56	12.6	57	12.6
Stevens	3	*	6	14.7	0	0.0	0	0.0	1	*
Thurston	25	11.6	33	15.1	17	7.6	21	9.1	48	20.2
Wahkiakum	0	0.0	0	0.0	0	0.0	1	*	0	0.0
Walla Walla	2	*	2	*	3	*	0	0.0	0	0.0
Whatcom	34	19.5	18	10.2	16	8.8	27	14.7	37	19.6
Whitman	2	*	1	*	0	0.0	0	0.0	2	*
Yakima	26	11.5	29	12.7	28	12.2	31	13.4	47	20.1

GIARDIASIS			
STATEWIDE BY YEAR			
Case, Death Rate/100,000 Population			
Year	Cases	Rate	Deaths
1980	840	20.3	0
1981	547	12.9	0
1982	956	22.4	0
1983	706	16.5	0
1984	710	16.4	0
1985	779	17.8	0
1986	811	18.4	0
1987	827	18.5	0
1988	851	18.6	0
1989	980	21.0	0
1990	792	16.3	0
1991	876	17.5	1
1992	860	16.8	1
1993	747	14.3	0
1994	722	13.5	0
1995	855	15.7	0
1996	668	12.1	0
1997	738	13.2	0
1998	740	13.0	1
1999	560	9.7	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	7.0	0
2006	451	7.1	0
2007	590	9.1	0

STATEWIDE TOTAL

CASES	435	7.1	444	7.2	437	7.0	451	7.1	590	9.1
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* Incidence rates not calculated for < 5 cases.

GONORRHEA

Cases, Rate/100,000 Population

Counties	2003		2004		2005		2006		2007	
	Cases	Rate	Cases	Rate	Cases	Rate	Cases	Rate	Cases	Rate
Adams	4	*	3	*	5	29.4	3	*	1	*
Asotin	2	*	2	*	1	*	1	*	2	*
Benton	18	11.9	19	12.3	21	13.3	43	26.8	30	18.4
Chelan	2	*	2	*	6	8.7	2	*	6	8.4
Clallam	8	12.3	8	12.1	21	31.4	17	25.1	13	19.0
Clark	158	42.4	191	49.8	206	52.6	129	32	160	38.6
Columbia	0	0.0	0	0.0	2	*	0	0.0	0	0.0
Cowlitz	15	15.8	51	53.5	104	108.4	223	230.4	128	130.9
Douglas	3	*	2	*	2	*	0	0.0	2	*
Ferry	0	0.0	0	0.0	0	0.0	0	0.0	1	*
Franklin	2	*	7	12.3	17	28.1	18	28	15	22.3
Garfield	0	0.0	0	0.0	1	*	0	0.0	0	0.0
Grant	13	16.9	15	19.2	13	16.4	11	13.6	10	12.1
Grays Harbor	7	10.2	4	*	5	7.2	30	42.6	15	21.2
Island	23	31.1	14	18.7	31	40.8	24	31.1	27	34.4
Jefferson	2	*	3	*	2	*	6	21.3	4	*
King	1,351	75.9	1,265	70.7	1,785	98.7	1,937	105.5	1,492	80.2
Kitsap	91	38.4	70	29.2	76	31.6	72	29.6	98	40.0
Kittitas	7	19.9	3	*	8	21.9	4	*	5	13.1
Klickitat	2	*	8	41.5	5	25.6	3	*	0	0.0
Lewis	6	8.5	13	18.4	12	16.8	44	60.4	28	37.8
Lincoln	0	0.0	1	*	0	0.0	1	*	2	*
Mason	13	25.9	5	9.8	14	27.0	9	16.9	15	27.5
Okanogan	6	15.2	6	15.2	1	*	4	*	9	22.6
Pacific	4	*	1	*	3	*	8	37.2	4	*
Pend Oreille	0	0.0	1	*	2	*	1	*	1	*
Pierce	538	73.3	452	60.8	675	89.3	825	106.7	830	105.0
San Juan	2	*	0	0.0	0	0.0	1	*	0	0.0
Skagit	25	23.4	20	18.4	32	28.9	37	32.7	17	14.7
Skamania	0	0.0	2	*	3	*	0	0.0	0	0.0
Snohomish	139	21.8	166	25.7	244	37.2	317	47.2	296	43.1
Spokane	97	22.6	152	35.2	121	27.7	120	27	207	45.9
Stevens	5	12.3	2	*	5	12.1	3	*	2	*
Thurston	37	17.2	43	19.7	56	25.0	58	25.1	47	19.7
Wahkiakum	0	0.0	1	*	0	0.0	3	*	0	0.0
Walla Walla	2	*	8	14.1	1	*	3	*	3	*
Whatcom	57	32.7	65	36.7	117	64.7	103	55.9	52	27.6
Whitman	8	19.5	7	16.8	2	*	5	11.7	11	25.8
Yakima	107	47.3	198	87.0	139	60.6	166	71.6	113	48.2

GONORRHEA STATEWIDE BY YEAR			
Cases, Rate/100,00 Pop., Deaths			
Year	Cases	Rate	Deaths
1980	14,215	344.2	0
1981	13,204	310.7	0
1982	11,381	266.9	0
1983	9,895	230.9	0
1984	9,158	211.6	0
1985	10,073	229.8	0
1986	9,848	222.8	0
1987	8,909	198.8	0
1988	7,154	156.7	0
1989	6,369	136.7	0
1990	5,009	105.7	0
1991	4,441	88.8	0
1992	4,169	81.5	0
1993	3,740	71.4	0
1994	2,893	54.2	0
1995	2,765	50.9	0
1996	2,020	36.6	0
1997	1,955	34.9	0
1998	1,948	34.3	0
1999	2,132	37.0	0
2000	2,419	41.6	0
2001	2,991	50.1	0
2002	2,925	48.4	0
2003	2,754	45.2	0
2004	2,810	45.6	0
2005	3,738	59.7	0
2006	4,231	66.4	0
2007	3,646	56.2	0

STATEWIDE TOTAL

CASES	2,754	45.2	2,810	45.6	3,738	59.7	4,231	66.4	3,646	56.2
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* Incidence rates not calculated for < 5 cases.

***HAEMOPHILUS INFLUENZAE* INVASIVE DISEASE**

Cases, Rate/100,000 Pop., * Deaths

Year	Cases	Rate	Deaths
1980	126	3.0	0
1981	156	3.7	0
1982	149	3.5	6
1983	123	2.8	5
1984	110	2.5	5
1985	153	3.5	6
1986	319	7.1	11
1987	271	5.9	6
1988	200	4.3	0
1989	163	3.3	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	1.3	0
2003*	13	3.3	1
2004*	4	1.0	0
2005*	5	1.2	0
2006*	5	1.2	0
2007*	6	1.4	0

* Rates for 2001-2007 are for 0-4 age populations.

HANTAVIRUS PULMONARY SYNDROME*

Cases, Rate/100,000 Pop., Deaths

Year	Cases	Rate	Deaths
1994	2	0.0	1
1995	4	0.1	2
1996	4	0.1	2
1997	3	0.0	1
1998	2	0.0	0
1999	5	0.1	1
2000	1	0.0	0
2001	1	0.0	0
2002	1	0.0	0
2003	2	0.0	1
2004	2	0.0	0
2005	1	0.0	0
2006	3	0.0	2
2007	2	0.0	0

* Hantavirus Pulmonary Syndrome first became a notifiable condition in Washington 12/2000.

Note: 1 retrospective case from 1985 was reported, for a total of 34 cases reported in Washington.

HEMOLYTIC UREMIC SYNDROME*

Cases, Rate/100,000 Pop., Deaths

Year	Cases	Rate	Deaths
2001	3	0.1	0
2002	1	0.0	0
2003	1	0.0	0
2004	6	0.1	0
2005	4	0.1	0
2006	1	0.0	0
2007	2	0.0	0

* Hemolytic uremic syndrome first became a notifiable condition in Washington 12/2000.

HEPATITIS A, ACUTE

Cases, Rate/100,000 Population

Counties	2003		2004		2005		2006		2007	
	Cases	Rate								
Adams	1	*	0	0.0	0	0.0	0	0.0	1	*
Asotin	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Benton	*	0.7	2	*	1	*	0	0.0	0	0.0
Chelan	*	0.0	2	*	1	*	0	0.0	1	*
Clallam	*	4.6	0	0.0	3	*	0	0.0	1	*
Clark	3	*	10	2.6	7	1.8	1	*	3	*
Columbia	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Cowlitz	*	0.0	2	*	2	*	0	0.0	1	*
Douglas	1	*	2	*	0	0.0	0	0.0	0	0.0
Ferry	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Franklin	*	3.7	0	0.0	0	0.0	0	0.0	0	0.0
Garfield	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Grant	*	3.9	1	*	5	6.3	1	*	1	*
Grays Harbor	*	1.5	1	*	0	0.0	1	*	1	*
Island	*	0.0	1	*	0	0.0	0	0.0	0	0.0
Jefferson	0	0.0	0	0.0	0	0.0	0	0.0	2	*
King	28	1.6	17	1.0	16	0.9	16	0.9	18	1.0
Kitsap	0	0.0	3	*	1	*	0	0.0	2	*
Kittitas	*	2.8	0	0.0	0	0.0	0	0.0	0	0.0
Klickitat	0	0.0	2	*	0	0.0	0	0.0	1	*
Lewis	*	0.0	1	*	0	0.0	1	*	0	0.0
Lincoln	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Mason	*	2.0	0	0.0	0	0.0	0	0.0	1	*
Okanogan	2	*	1	*	0	0.0	6	15.1	0	0.0
Pacific	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Pend Oreille	0	0.0	2	*	0	0.0	0	0.0	0	0.0
Pierce	6	0.8	2	*	5	0.7	3	*	5	0.6
San Juan	*	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Skagit	*	0.0	1	*	1	*	1	*	2	*
Skamania	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Snohomish	5	0.8	5	0.8	11	1.7	8	1.2	9	1.3
Spokane	*	0.9	2	*	1	*	5	1.1	3	*
Stevens	0	0.0	0	0.0	0	0.0	0	0.0	1	*
Thurston	3	*	3	*	3	*	1	*	1	*
Wahkiakum	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Walla Walla	0	0.0	2	*	0	0.0	1	*	0	0.0
Whatcom	*	5.2	5	2.8	2	*	6	3.3	6	3.2
Whitman	1	*	0	0.0	1	*	0	0.0	0	0.0
Yakima	*	0.4	2	*	3	*	1	*	0	0.0

STATEWIDE TOTAL

CASES	50	0.8	69	1.1	63	1.0	52	0.8	60	0.9
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* Incidence rates not calculated for < 5 cases.

HEPATITIS A, ACUTE			
STATEWIDE BY YEAR			
Cases, Rate/100,000 Pop., Deaths			
Year	Cases	Rate	Deaths
1980	554	13.4	2
1981	791	18.6	0
1982	494	11.6	1
1983	268	6.3	1
1984	373	8.6	0
1985	702	16.0	2
1986	1,385	31.3	1
1987	2,589	57.8	1
1988	2,669	58.5	7
1989	3,273	70.2	5
1990	1,380	28.4	1
1991	608	12.2	3
1992	865	16.9	1
1993	926	17.7	1
1994	1,119	21.0	2
1995	937	17.3	9
1996	1,001	18.1	3
1997	1,019	18.2	1
1998	1,037	18.2	2
1999	505	8.8	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

HEPATITIS B, ACUTE

Cases, Rate/100,000 Population

Counties	2003		2004		2005		2006		2007	
	Cases	Rate								
Adams	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Asotin	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Benton	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Chelan	0	0.0	0	0.0	0	0.0	0	0.0	1	*
Clallam	0	0.0	1	*	0	0.0	0	0.0	1	*
Clark	2	*	6	1.6	13	3.3	6	1.5	1	*
Columbia	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Cowlitz	3	*	3	*	5	5.2	3	*	3	*
Douglas	2	*	0	0.0	0	0.0	0	0.0	0	0.0
Ferry	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Franklin	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Garfield	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Grant	0	0.0	1	*	1	*	0	0.0	0	0.0
Grays Harbor	1	*	0	0.0	1	*	4	*	1	*
Island	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Jefferson	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
King	34	1.9	22	1.2	23	1.3	21	1.1	20	1.1
Kitsap	3	*	0	0.0	6	2.5	6	2.5	2	*
Kittitas	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Klickitat	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Lewis	2	*	0	0.0	0	0.0	0	0.0	0	0.0
Lincoln	0	0.0	0	0.0	0	0.0	0	0.0	1	*
Mason	1	*	1	*	0	0.0	1	*	0	0.0
Okanogan	0	0.0	0	0.0	0	0.0	0	0.0	1	*
Pacific	0	0.0	0	0.0	0	0.0	1	*	0	0.0
Pend Oreille	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Pierce	5	0.7	4	*	5	0.7	5	0.6	11	1.4
San Juan	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Skagit	2	*	0	0.0	0	0.0	1	*	2	*
Skamania	0	0.0	1	*	0	0.0	0	0.0	0	0.0
Snohomish	9	1.4	11	1.7	6	0.9	6	0.9	3	*
Spokane	12	2.8	9	2.1	14	3.2	19	4.3	21	4.7
Stevens	0	0.0	0	0.0	0	0.0	0	0.0	1	*
Thurston	3	*	0	0.0	1	*	2	*	0	0.0
Wahkiakum	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Walla Walla	1	*	0	0.0	0	0.0	0	0.0	0	0.0
Whatcom	9	5.2	1	*	4	*	0	0.0	0	0.0
Whitman	1	*	0	0.0	0	0.0	0	0.0	1	*
Yakima	0	0.0	4	*	1	*	5	2.2	1	*

HEPATITIS B, ACUTE STATEWIDE BY YEAR			
Cases, Rate/100,000 Pop., Deaths			
Year	Cases	Rate	Deaths
1980	257	6.2	6
1981	345	8.1	11
1982	358	8.4	2
1983	307	7.2	3
1984	317	7.3	2
1985	484	11.0	6
1986	989	22.4	8
1987	1,126	25.1	4
1988	979	21.4	6
1989	1,055	22.6	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	4.2	2
1996	158	2.9	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	1.3	2
2007	71	1.1	1

STATEWIDE TOTAL

CASES	90	1.5	64	1.0	80	1.3	80	1.3	71	1.1
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* Incidence rates not calculated for < 5 cases.

HEPATITIS C, ACUTE

Cases, Rate/100,000 Population

Counties	2003		2004		2005		2006		2007	
	Cases	Rate								
Adams	0	0.0	0	0.0	0	0.0	0	0.0	1	*
Asotin	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Benton	0	0.0	1	*	0	0.0	0	0.0	0	0.0
Chelan	0	0.0	0	0.0	0	0.0	1	*	1	*
Clallam	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Clark	0	0.0	0	0.0	0	0.0	1	*	0	0.0
Columbia	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Cowlitz	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Douglas	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Ferry	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Franklin	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Garfield	0	0.0	0	0.0	0	0.0	0	0.0	1	*
Grant	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Grays Harbor	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Island	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Jefferson	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
King	8	0.4	8	0.4	9	0.5	8	0.4	7	0.4
Kitsap	0	0.0	0	0.0	0	0.0	1	*	0	0.0
Kittitas	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Klickitat	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Lewis	1	*	1	*	0	0.0	0	0.0	0	0.0
Lincoln	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Mason	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Okanogan	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Pacific	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Pend Oreille	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Pierce	3	*	3	*	5	0.7	3	*	3	*
San Juan	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Skagit	0	0.0	3	*	2	*	2	*	1	*
Skamania	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Snohomish	2	*	0	0.0	1	*	0	0.0	0	0.0
Spokane	1	*	6	1.4	2	*	5	1.1	2	*
Stevens	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Thurston	4	*	0	0.0	0	0.0	0	0.0	1	*
Wahkiakum	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Walla Walla	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Whatcom	0	0.0	0	0.0	0	0.0	1	*	0	0.0
Whitman	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Yakima	2	*	1	*	2	*	1	*	1	*

HEPATITIS C, ACUTE STATEWIDE BY YEAR			
Cases, Rate/100,000 Pop., Deaths			
Year	Cases	Rate	Deaths
1981	54	1.3	8
1982	94	2.2	0
1983	151	3.5	1
1984	131	3.0	2
1985	145	3.3	1
1986	167	3.8	7
1987	207	4.6	1
1988	232	5.1	2
1989	208	4.5	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

STATEWIDE TOTAL

CASES	21	0.3	23	0.4	21	0.3	23	0.4	18	0.3
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* Incidence rates not calculated for < 5 cases.

HERPES SIMPLEX

Cases, Rate/100,000 Population

Counties	2003		2004		2005		2006		2007	
	Cases	Rate								
Adams	4	*	3	*	2	*	2	*	3	*
Asotin	17	82.5	9	43.5	18	86.1	18	85.3	4	*
Benton	59	38.9	40	25.8	38	24.0	38	23.7	55	33.8
Chelan	19	28.0	27	39.5	23	33.2	23	32.8	27	37.9
Clallam	32	49.0	24	36.4	29	43.4	25	36.9	24	35.0
Clark	44	11.8	42	11.0	72	18.4	37	9.2	44	10.6
Columbia	0	0.0	0	0.0	2	*	1	*	0	0.0
Cowlitz	18	19.0	18	18.9	30	31.3	55	56.8	42	42.9
Douglas	9	26.8	8	23.4	15	43.2	11	30.8	11	30.3
Ferry	0	0.0	3	*	0	0.0	0	0.0	0	0.0
Franklin	10	18.7	11	19.3	15	24.8	22	34.3	16	23.7
Garfield	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Grant	15	19.5	30	38.3	22	27.8	11	13.6	12	14.5
Grays Harbor	9	13.1	10	14.5	11	15.8	17	24.1	25	35.3
Island	20	27.0	35	46.8	34	44.7	47	60.9	63	80.4
Jefferson	7	26.2	11	40.7	14	50.7	9	31.9	12	42.0
King	688	38.7	700	39.1	798	44.1	769	41.9	618	33.2
Kitsap	64	27.0	54	22.5	67	27.9	68	27.9	75	30.6
Kittitas	9	25.6	8	22.3	18	49.2	29	77.5	10	26.1
Klickitat	3	*	3	*	0	0.0	0	0.0	0	0.0
Lewis	15	21.3	19	26.9	25	34.9	23	31.6	22	29.7
Lincoln	1	*	1	*	2	*	0	0.0	1	*
Mason	15	29.9	14	27.6	20	38.5	21	39.5	13	23.8
Okanogan	16	40.4	12	30.3	13	32.8	11	27.6	4	*
Pacific	2	*	3	*	2	*	5	23.3	2	*
Pend Oreille	4	*	4	*	4	*	3	*	4	*
Pierce	236	32.2	194	26.1	231	30.6	307	39.7	184	23.3
San Juan	2	*	5	33.1	2	*	1	*	2	*
Skagit	41	38.4	84	77.2	65	58.6	62	54.8	52	45.1
Skamania	0	0.0	3	*	0	0.0	0	0.0	0	0.0
Snohomish	268	42.0	286	44.4	305	46.5	395	58.8	270	39.3
Spokane	163	38.0	172	39.8	155	35.5	148	33.3	132	29.3
Stevens	6	14.8	6	14.7	5	12.1	5	11.9	8	18.6
Thurston	87	40.5	70	32.0	82	36.6	121	52.4	91	38.2
Wahkiakum	1	*	1	*	0	0.0	1	*	0	0.0
Walla Walla	15	26.9	23	40.6	22	38.3	12	20.7	20	34.3
Whatcom	80	45.8	87	49.1	77	42.6	67	36.4	53	28.1
Whitman	12	29.3	8	19.2	14	33.0	12	28.0	3	*
Yakima	82	36.3	125	54.9	99	43.2	70	30.2	50	21.3
STATEWIDE TOTAL										
CASES	2,073	34.0	2,153	34.9	2,331	37.3	2,446	38.4	1,952	30.1

* Incidence rates not calculated for < 5 cases.

HUMAN IMMUNODEFICIENCY VIRUS (HIV)*
New Diagnoses, Rate/100,000 Population

Counties	2003		2004		2005		2006		2007	
	Cases	Rate								
Adams	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Asotin	0	0.0	2	*	1	*	1	*	0	0.0
Benton	2	*	0	0.0	2	*	8	5.0	5	3.1
Chelan	2	*	3	*	5	7.2	4	*	3	*
Clallam	2	*	2	*	4	*	1	*	1	*
Clark	25	6.7	25	6.5	28	7.2	20	5.0	43	10.7
Columbia	1	*	0	0.0	0	0.0	0	0.0	2	*
Cowlitz	3	*	2	*	4	*	6	6.2	5	5.2
Douglas	0	0.0	0	0.0	0	0.0	0	0.0	2	*
Ferry	0	0.0	0	0.0	0	0.0	0	0.0	1	*
Franklin	5	9.3	5	8.8	6	9.9	2	*	3	*
Garfield	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Grant	2	*	4	*	1	*	3	*	3	*
Grays Harbor	2	*	4	*	6	8.6	2	*	2	*
Island	6	8.1	2	*	0	0.0	2	*	2	*
Jefferson	0	0.0	1	*	0	0.0	3	*	1	*
King	359	20.2	343	19.2	327	18.1	327	17.8	325	17.7
Kitsap	10	4.2	10	4.2	9	3.7	14	5.8	9	3.7
Kittitas	1	*	1	*	3	*	3	*	0	0.0
Klickitat	2	*	0	0.0	0	0.0	2	*	1	*
Lewis	1	*	1	*	0	0.0	4	*	1	*
Lincoln	0	0.0	1	*	0	0.0	0	0.0	0	0.0
Mason	5	10.0	2	*	4	*	1	*	7	13.2
Okanogan	1	*	5	12.6	0	0.0	0	0.0	1	*
Pacific	3	*	0	0.0	3	*	3	*	2	*
Pend Oreille	0	0.0	0	0.0	0	0.0	1	*	0	0.0
Pierce	50	6.8	40	5.4	62	8.2	61	7.9	66	8.5
San Juan	0	0.0	1	*	0	0.0	1	*	1	*
Skagit	4	*	7	6.4	6	5.4	5	4.4	3	*
Skamania	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Snohomish	33	5.2	38	5.9	53	8.1	43	6.4	47	7.0
Spokane	23	5.4	27	6.3	23	5.3	25	5.6	36	8.1
Stevens	2	*	1	*	1	*	1	*	0	0.0
Thurston	6	2.8	16	7.3	10	4.5	9	3.9	15	6.5
Wahkiakum	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Walla Walla	1	*	0	0.0	1	*	1	*	0	0.0
Whatcom	6	3.4	7	3.9	8	4.4	8	4.3	10	5.4
Whitman	0	0.0	0	0.0	2	*	1	*	0	0.0
Yakima	8	3.5	9	4.0	10	4.4	8	3.5	13	5.6

STATEWIDE TOTAL

CASES	565	9.3	559	9.1	579	9.2	570	8.9	610	9.4
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*Incidence rates not calculated for < 5 cases.

Note: 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.

This presentation is different from previous editions of this report, which displayed separate columns for HIV and AIDS, and cannot be compared.

Data reflect cases reported through 6/30/08

Deaths Attributed to HIV Disease*			
Diagnoses/100,000 Pop., Deaths			
Year	Cases	Rate	Deaths
1990	1081	22.2	351
1991	1015	20.2	429
1992	985	19.2	368
1993	930	17.7	573
1994	804	15.0	598
1995	696	12.7	570
1996	685	12.3	399
1997	608	10.7	180
1998	530	9.2	119
1999	587	10.1	98
2000	697	11.8	117
2001	568	9.5	109
2002	571	9.5	104
2003	565	9.3	140
2004	559	9.1	118
2005	579	9.2	114
2006	570	8.9	80
2007	610	9.4	83

*Includes only deaths attributed to HIV/AIDS

LEGIONELLOSIS

Cases, Rate/100,000 Pop., Deaths

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

LEPTOSPIROSIS

Cases, Rate/100,000 Pop., Deaths

Year	Cases	Rate	Deaths
1986	0	0.0	0
1987	0	0.0	0
1988	0	0.0	0
1989	0	0.0	0
1990	0	0.0	0
1991	0	0.0	0
1992	0	0.0	0
1993	0	0.0	0
1994	0	0.0	0
1995	0	0.0	0
1996	2	0.0	0
1997	2	0.0	0
1998	0	0.0	0
1999	0	0.0	0
2000	0	0.0	0
2001	4	0.1	0
2002	0	0.0	0
2003	1	0.0	0
2004	0	0.0	0
2005	4	0.1	0
2006	1	0.0	0
2007	5	0.1	0

LISTERIOSIS

Cases, Rate/100,000 Pop., Deaths

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	0.5	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	0.2	3
2007	25	0.4	2

LYME DISEASE

Cases, Rate/100,000 Pop., Deaths

Year	Cases	Rate	Deaths
1986	1	0.0	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

MALARIA

Cases, Rate/100,00 Pop., Deaths

Year	Cases	Rate	Deaths
1981	30	0.7	0
1982	24	0.6	0
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

MEASLES

Cases, Rate/100,000 Population

Counties	2003		2004		2005		2006		2007	
	Cases	Rate								
Adams	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Asotin	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Benton	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Chelan	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Clallam	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Clark	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Columbia	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Cowlitz	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Douglas	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Ferry	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Franklin	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Garfield	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Grant	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Grays Harbor	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Island	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Jefferson	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
King	0	0.0	6	0.3	1	*	0	0.0	1	*
Kitsap	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Kittitas	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Klickitat	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Lewis	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Lincoln	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Mason	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Okanogan	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Pacific	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Pend Oreille	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Pierce	0	0.0	0	0.0	0	0.0	1	*	0	0.0
San Juan	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Skagit	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Skamania	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Snohomish	0	0.0	1	*	0	0.0	0	0.0	1	*
Spokane	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Stevens	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Thurston	0	0.0	0	0.0	0	0.0	0	0.0	1	*
Wahkiakum	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Walla Walla	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Whatcom	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Whitman	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Yakima	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0

MEASLES				
STATEWIDE BY YEAR				
Cases, Rate/100,000 Pop., Deaths				
Year	Cases	Rate	Deaths	Rate
1980	178	4.2	0	0.0
1981	3	0.1	0	0.0
1982	42	1.0	0	0.0
1983	43	1.0	0	0.0
1984	178	4.1	0	0.0
1985	178	4.0	0	0.0
1986	176	3.9	0	0.0
1987	47	1.0	0	0.0
1988	7	0.2	0	0.0
1989	56	1.2	0	0.0
1990	357	7.1	2	0.0
1991	67	1.3	0	0.0
1992	11	0.2	0	0.0
1993	0	0.0	0	0.0
1994	5	0.1	0	0.0
1995	17	0.3	0	0.0
1996	38	0.7	0	0.0
1997	2	0.0	0	0.0
1998	1	0.0	0	0.0
1999	5	0.1	0	0.0
2000	3	0.1	0	0.0
2001	15	0.3	0	0.0
2002	1	0.0	0	0.0
2003	0	0.0	0	0.0
2004	7	0.1	0	0.0
2005	1	0.0	0	0.0
2006	1	0.0	0	0.0
2007	3	0.0	0	0.0

STATEWIDE TOTAL

CASES	0	0.0	7	0.1	1	0.0	1	0.0	3	0.0
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* Incidence rates not calculated for < 5 cases.

MENINGOCOCCAL DISEASE

Cases, Rate/100,000 Population

Counties	2003		2004		2005		2006		2007	
	Cases	Rate								
Adams	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Asotin	1	*	0	0.0	0	0.0	0	0.0	0	0.0
Benton	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Chelan	1	*	0	0.0	0	0.0	0	0.0	0	0.0
Clallam	0	0.0	0	0.0	1	*	0	0.0	0	0.0
Clark	5	1.3	3	*	6	1.5	6	1.5	5	1.2
Columbia	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Cowlitz	2	*	0	0.0	3	*	1	*	1	*
Douglas	0	0.0	0	0.0	0	0.0	0	0.0	1	*
Ferry	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Franklin	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Garfield	0	0.0	1	*	1	*	0	0.0	0	0.0
Grant	0	0.0	1	*	1	*	0	0.0	1	*
Grays Harbor	1	*	0	0.0	1	*	0	0.0	0	0.0
Island	2	*	1	*	0	0.0	1	*	0	0.0
Jefferson	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
King	8	0.4	17	1.0	14	0.8	12	0.7	5	0.3
Kitsap	3	*	2	*	1	*	1	*	0	0.0
Kittitas	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Klickitat	1	*	0	0.0	0	0.0	0	0.0	2	*
Lewis	5	7.1	0	0.0	2	*	1	*	0	0.0
Lincoln	0	0.0	0	0.0	1	*	0	0.0	0	0.0
Mason	0	0.0	1	*	0	0.0	1	*	0	0.0
Okanogan	1	*	0	0.0	0	0.0	0	0.0	0	0.0
Pacific	1	*	1	*	1	*	1	*	1	*
Pend Oreille	0	0.0	1	*	0	0.0	0	0.0	0	0.0
Pierce	10	1.4	4	*	7	0.9	4	*	0	0.0
San Juan	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Skagit	4	*	0	0.0	0	0.0	3	*	1	*
Skamania	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Snohomish	6	0.9	3	*	4	*	5	0.7	4	*
Spokane	4	*	3	*	5	1.1	3	*	3	*
Stevens	0	0.0	0	0.0	0	0.0	2	*	1	*
Thurston	1	*	1	*	0	0.0	1	*	2	*
Wahkiakum	0	0.0	0	0.0	0	0.0	0	0.0	1	*
Walla Walla	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Whatcom	2	*	0	0.0	3	*	1	*	2	*
Whitman	0	0.0	1	*	0	0.0	1	*	0	0.0
Yakima	3	*	2	*	2	*	1	*	2	*

MENINGOCOCCAL DISEASE			
STATEWIDE BY YEAR			
Cases, Rate/100,000 Pop., Deaths			
Year	Cases	Rate	Deaths
1980	67	1.6	2
1981	78	1.8	3
1982	56	1.3	2
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	1.7	3
1989	96	2.1	12
1990	80	1.6	5
1991	73	1.5	8
1992	92	1.8	5
1993	97	1.9	6
1994	111	2.1	7
1995	126	2.3	7
1996	116	2.1	10
1997	115	2.1	11
1998	77	1.4	7
1999	93	1.6	4
2000	71	1.2	6
2001	71	1.2	6
2002	76	1.3	8
2003	61	1.0	7
2004	42	0.7	4
2005	53	0.8	4
2006	45	0.7	1
2007	32	0.5	8

STATEWIDE TOTAL

CASES	61	1.0	42	0.7	53	0.8	45	0.7	32	0.5
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* Incidence rates not calculated for < 5 cases.

MUMPS

Cases, Rate/100,000 Pop., Deaths

Year	Cases	Rate	Deaths
1980	166	4.0	0
1981	165	3.9	0
1982	102	2.4	0
1983	55	1.3	0
1984	56	1.3	0
1985	42	1.0	0
1986	30	0.7	0
1987	70	1.6	0
1988	44	1.0	0
1989	59	1.3	0
1990	66	1.4	0
1991	178	3.6	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	0
2000	10	0.2	0
2001	2	0.0	0
2002	0	0.0	0
2003	11	0.2	0
2004	2	0.0	0
2005	3	0.0	0
2006	42	0.7	0
2007	53	0.8	0

PARALYTIC SHELLFISH POISONING

Cases, Rate/100,000 Pop., Deaths

Year	Cases	Rate	Deaths
1985	3	0.1	0
1986	0	0.0	0
1987	0	0.0	0
1988	7	0.2	0
1989	0	0.0	0
1990	0	0.0	0
1991	0	0.0	0
1992	0	0.0	0
1993	0	0.0	0
1994	0	0.0	0
1995	0	0.0	0
1996	0	0.0	0
1997	0	0.0	0
1998	5	0.1	0
1999	0	0.0	0
2000	7	0.1	0
2001	0	0.0	0
2002	0	0.0	0
2003	0	0.0	0
2004	0	0.0	0
2005	1	0.0	0
2006	1	0.0	0
2007	0	0.0	0

PERTUSSIS

Cases, Rate/100,000 Population

Counties	2003		2004		2005		2006		2007	
	Cases	Rate	Cases	Rate	Cases	Rate	Cases	Rate	Cases	Rate
Adams	2	*	1	*	0	0.0	0	0.0	0	0.0
Asotin	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Benton	5	3.3	0	0.0	7	4.4	5	3.1	3	*
Chelan	2	*	2	*	1	*	1	*	5	7.0
Clallam	2	*	2	*	5	7.5	1	*	0	0.0
Clark	38	10.2	21	5.5	61	15.6	22	5.5	26	6.3
Columbia	1	*	0	0.0	0	0.0	0	0.0	0	0.0
Cowlitz	3	*	10	10.5	4	*	13	13.4	2	*
Douglas	0	0.0	0	0.0	0	0.0	0	0.0	1	*
Ferry	0	0.0	0	0.0	0	0.0	0	0.0	1	*
Franklin	2	*	1	*	2	*	3	*	5	7.4
Garfield	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Grant	0	0.0	0	0.0	4	*	1	*	4	*
Grays Harbor	0	0.0	2	*	2	*	1	*	4	*
Island	21	28.4	6	8.0	5	6.6	2	*	0	0.0
Jefferson	1	*	19	70.4	8	29.0	0	0.0	0	0.0
King	294	16.5	190	10.6	316	17.5	94	5.1	130	7.0
Kitsap	15	6.3	8	3.3	60	25.0	18	7.4	24	9.8
Kittitas	1	*	0	0.0	5	13.7	2	*	3	*
Klickitat	1	*	6	31.1	0	0.0	1	*	0	0.0
Lewis	2	*	0	0.0	14	19.6	5	6.9	2	*
Lincoln	0	0.0	1	*	1	*	0	0.0	0	0.0
Mason	2	*	3	*	5	9.6	1	*	2	*
Okanogan	0	0.0	2	*	0	0.0	0	0.0	8	20.1
Pacific	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Pend Oreille	0	0.0	1	*	0	0.0	0	0.0	0	0.0
Pierce	211	28.8	68	9.1	70	9.3	36	4.7	23	2.9
San Juan	18	121.6	1	*	12	77.4	3	*	44	276.7
Skagit	45	42.2	8	7.4	40	36.1	15	13.3	3	*
Skamania	0	0.0	1	*	0	0.0	0	0.0	0	0.0
Snohomish	95	14.9	40	6.2	55	8.4	21	3.1	46	6.7
Spokane	4	*	43	10.0	19	4.4	39	8.8	34	7.5
Stevens	0	0.0	1	*	0	0.0	0	0.0	0	0.0
Thurston	13	6.1	13	5.9	14	6.2	11	4.8	6	2.5
Wahkiakum	0	0.0	0	0.0	0	0.0	2	*	0	0.0
Walla Walla	0	0.0	0	0.0	4	*	0	0.0	0	0.0
Whatcom	46	26.4	303	170.9	120	66.4	58	31.5	66	35.1
Whitman	2	*	23	55.2	3	*	1	*	3	*
Yakima	18	8.0	66	29.0	189	82.4	21	9.1	37	15.8

PERTUSSIS STATEWIDE BY YEAR			
Cases, Rate/100,000 Pop., Deaths			
Year	Cases	Rate	Deaths
1980	77	1.9	0
1981	58	1.4	1
1982	36	0.8	1
1983	20	0.5	0
1984	326	7.5	1
1985	92	2.1	0
1986	163	3.7	2
1987	110	2.5	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	15.0	1
1997	481	8.6	0
1998	406	7.1	1
1999	739	12.8	0
2000	458	7.8	1
2001	184	3.1	0
2002	575	9.5	0
2003	844	13.8	0
2004	842	13.7	0
2005	1,026	16.4	0
2006	377	5.9	1
2007	482	7.4	0

STATEWIDE TOTAL

CASES	844	13.8	842	13.7	1,026	16.4	377	5.9	482	7.4
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* Incidence rates not calculated for < 5 cases.

PLAGUE

Cases, Rate/100,000 Pop., Deaths			
Year	Cases	Rate	Deaths
1986	0	0.0	0
1987	0	0.0	0
1988	0	0.0	0
1989	0	0.0	0
1990	0	0.0	0
1991	0	0.0	0
1992	0	0.0	0
1993	0	0.0	0
1994	0	0.0	0
1995	0	0.0	0
1996	0	0.0	0
1997	0	0.0	0
1998	0	0.0	0
1999	0	0.0	0
2000	0	0.0	0
2001	0	0.0	0
2002	0	0.0	0
2003	0	0.0	0
2004	0	0.0	0
2005	0	0.0	0
2006	0	0.0	0
2007	0	0.0	0

POLIOMYELITIS

Cases, Rate/100,000 Pop., Deaths			
Year	Cases	Rate	Deaths
1985	0	0.0	0
1986	0	0.0	0
1987	1*	0.0	0
1988	1*	0.0	0
1989	0	0.0	0
1990	0	0.0	0
1991	1*	0.0	0
1992	1*	0.0	0
1993	1*	0.0	0
1994	0	0.0	0
1995	0	0.0	0
1996	0	0.0	0
1997	0	0.0	0
1998	0	0.0	0
1999	0	0.0	0
2000	0	0.0	0
2001	0	0.0	0
2002	0	0.0	0
2003	0	0.0	0
2004	0	0.0	0
2005	0	0.0	0
2006	0	0.0	0
2007	0	0.0	0

*Vaccine-associated cases.

PSITTACOSIS

Cases, Rate/100,000 Pop., Deaths			
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	0
1998	3	0.1	0
1999	0	0.0	0
2000	1	0.0	0
2001	0	0.0	0
2002	0	0.0	0
2003	0	0.0	0
2004	0	0.0	0
2005	1	0.0	0
2006	0	0.0	0
2007	0	0.0	0

Q FEVER

Cases, Rate/100,000 Pop., Deaths			
Year	Cases	Rate	Deaths
1986	2	0.0	0
1987	1	0.0	1
1988	1	0.0	0
1989	0	0.0	0
1990	2	0.0	0
1991	0	0.0	0
1992	1	0.0	0
1993	0	0.0	0
1994	0	0.0	0
1995	1	0.0	0
1996	0	0.0	0
1997	0	0.0	0
1998	0	0.0	0
1999	1	0.0	0
2000	0	0.0	0
2001	0	0.0	0
2002	0	0.0	0
2003	0	0.0	0
2004	0	0.0	0
2005	2	0.0	0
2006	0	0.0	0
2007	1	0.0	0

RABIES

Cases, Rate/100,000 Pop.,
Deaths

Year	Cases	Rate	Deaths
1985	0	0.0	0
1986	0	0.0	0
1987	0	0.0	0
1988	0	0.0	0
1989	0	0.0	0
1990	0	0.0	0
1991	0	0.0	0
1992	0	0.0	0
1993	0	0.0	0
1994	0	0.0	0
1995	1	0.0	1
1996	0	0.0	0
1997	1	0.0	1
1998	0	0.0	0
1999	0	0.0	0
2000	0	0.0	0
2001	0	0.0	0
2002	0	0.0	0
2003	0	0.0	0
2004	0	0.0	0
2005	0	0.0	0
2006	0	0.0	0
2007	0	0.0	0

RARE SEXUALLY TRANSMITTED DISEASES

Statewide Total Cases

Year	Total	Chancroid	Granuloma inguinale	Lymphogranuloma venereum
1986	1	1	0	0
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

RELAPSING FEVER

Cases, Rate/100,000 Pop., Deaths

Year	Cases	Rate	Deaths
1986	2	0.0	0
1987	7	0.1	1
1988	5	0.1	0
1989	5	0.0	0
1990	4	0.1	0
1991	6	0.1	0
1992	6	0.1	0
1993	2	0.0	0
1994	9	0.2	0
1995	12	0.2	0
1996	8	0.2	0
1997	4	0.1	0
1998	5	0.1	0
1999	3	0.1	0
2000	5	0.1	1
2001	1	0.1	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	0
2007	9	0.1	0

RUBELLA

Cases, Rate/100,000 Pop., Deaths

Year	Cases	Rate	Deaths
1981	108	2.5	0
1982	58	1.4	0
1983	10	0.2	0
1984	2	0.1	0
1985	16	0.4	0
1986	15	0.3	0
1987	2	0.0	0
1988	0	0.0	0
1989	2	0.0	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	0
1995	2	0.0	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	0
2002	2	0.0	0
2003	0	0.0	0
2004	0	0.0	0
2005	1	0.0	0
2006	0	0.0	0
2007	0	0.0	0

SALMONELLOSIS

Cases, Rate/100,000 Population

Counties	2003		2004		2005		2006		2007	
	Cases	Rate								
Adams	1	*	1	*	4	*	2	*	2	*
Asotin	7	34.0	5	24.2	2	*	0	0.0	2	*
Benton	24	15.8	21	13.5	19	12.0	18	11.2	25	15.3
Chelan	5	7.4	2	*	8	11.6	15	21.4	7	9.8
Clallam	1	*	5	7.6	4	*	3	*	11	16.1
Clark	39	10.5	36	9.4	40	10.2	53	13.1	43	10.4
Columbia	2	*	1	*	0	0.0	0	0.0	2	*
Cowlitz	5	5.3	18	18.9	4	*	1	*	8	8.2
Douglas	7	20.8	0	0.0	0	0.0	0	0.0	3	*
Ferry	0	0.0	0	0.0	0	0.0	0	0.0	6	79.5
Franklin	7	13.1	13	22.8	7	11.6	11	17.1	0	0.0
Garfield	0	0.0	1	*	1	*	0	0.0	0	0.0
Grant	7	9.1	5	6.4	5	6.3	10	12.4	24	29.1
Grays Harbor	9	13.1	12	17.3	3	*	7	9.9	6	8.5
Island	5	6.8	1	*	10	13.2	5	6.5	7	8.9
Jefferson	4	*	2	*	2	*	3	*	2	*
King	246	13.8	236	13.2	214	11.8	203	11.1	247	13.3
Kitsap	12	5.1	14	5.8	19	7.9	16	6.6	13	5.3
Kittitas	3	*	2	*	4	*	3	*	2	*
Klickitat	1	*	6	31.1	2	*	3	*	4	*
Lewis	2	*	1	*	2	*	11	15.1	10	13.5
Lincoln	2	*	0	0.0	0	0.0	1	*	0	0.0
Mason	6	12.0	2	*	4	*	2	*	3	*
Okanogan	8	20.2	2	*	2	*	1	*	8	20.1
Pacific	3	*	1	*	2	*	2	*	2	*
Pend Oreille	1	*	0	0.0	0	0.0	0	0.0	0	0.0
Pierce	64	8.7	69	9.3	52	6.9	71	9.2	85	10.8
San Juan	0	0.0	3	*	1	*	1	*	1	*
Skagit	8	7.5	11	10.1	13	11.7	11	9.7	8	6.9
Skamania	0	0.0	0	0.0	0	0.0	1	*	1	*
Snohomish	70	11.0	67	10.4	69	10.5	65	9.7	73	10.6
Spokane	30	7.0	31	7.2	40	9.2	30	6.5	37	8.2
Stevens	13	32.0	1	*	1	*	0	0.0	1	*
Thurston	17	7.9	24	11.0	23	10.3	15	6.5	36	15.1
Wahkiakum	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Walla Walla	10	17.9	3	5.3	1	*	2	*	16	27.4
Whatcom	23	13.2	19	10.7	16	8.8	22	11.9	23	12.2
Whitman	2	*	10	24.0	0	0.0	5	11.7	6	14.1
Yakima	55	24.3	35	15.4	52	22.7	34	14.7	34	14.5

SALMONELLOSIS STATEWIDE BY YEAR			
Cases, Rate/100,000 Pop., Deaths			
Year	Cases	Rate	Deaths
1980	462	11.2	0
1981	574	13.5	5
1982	749	17.6	0
1983	739	17.2	0
1984	515	11.9	0
1985	565	12.9	0
1986	783	17.7	2
1987	660	14.7	1
1988	612	13.4	0
1989	630	13.5	2
1990	634	13.4	6
1991	791	15.8	1
1992	609	11.9	1
1993	830	15.8	0
1994	863	16.2	0
1995	691	12.7	0
1996	734	13.3	0
1997	675	12.0	0
1998	703	12.4	2
1999	792	13.8	2
2000	659	11.2	1
2001	681	11.4	2
2002	655	10.8	0
2003	699	11.5	1
2004	660	10.7	2
2005	626	10.0	0
2006	627	9.8	3
2007	758	11.7	2

STATEWIDE TOTAL

CASES	699	11.5	660	10.7	626	10.0	627	9.8	758	11.7
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* Incidence rates not calculated for < 5 cases.

SHIGELLOSIS

Cases, Rate/100,000 Population

Counties	2003		2004		2005		2006		2007	
	Cases	Rate								
Adams	0	0.0	0	0.0	0	0.0	0	0.0	1	*
Asotin	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Benton	3	*	3	*	5	3.2	7	4.4	4	*
Chelan	1	*	0	0.0	4	*	3	*	2	*
Clallam	0	0.0	0	0.0	0	0.0	1	*	1	*
Clark	5	1.3	10	2.6	10	2.6	6	1.5	8	1.9
Columbia	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Cowlitz	1	*	15	15.7	2	*	1	*	0	0.0
Douglas	0	0.0	0	0.0	1	*	0	0.0	0	0.0
Ferry	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Franklin	0	0.0	0	0.0	0	0.0	7	10.9	3	*
Garfield	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Grant	5	6.5	1	*	3	*	2	*	3	*
Grays Harbor	0	0.0	0	0.0	0	0.0	2	*	0	0.0
Island	0	0.0	0	0.0	1	*	1	*	1	*
Jefferson	0	0.0	0	0.0	1	*	0	0.0	1	*
King	95	5.3	56	3.1	72	4.0	52	2.8	52	2.8
Kitsap	2	*	4	*	1	*	2	*	3	*
Kittitas	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Klickitat	0	0.0	1	*	1	*	0	0.0	0	0.0
Lewis	0	0.0	0	0.0	2	*	0	0.0	0	0.0
Lincoln	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Mason	0	0.0	0	0.0	0	0.0	1	*	0	0.0
Okanogan	0	0.0	4	*	1	*	0	0.0	0	0.0
Pacific	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Pend Oreille	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Pierce	21	2.9	12	1.6	12	1.6	6	0.8	14	1.8
San Juan	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Skagit	1	*	5	4.6	10	9.0	5	4.4	2	*
Skamania	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Snohomish	17	2.7	10	1.6	16	2.4	11	1.6	30	4.4
Spokane	10	2.3	1	*	6	1.4	3	*	2	*
Stevens	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Thurston	1	*	1	*	3	*	1	*	1	*
Wahkiakum	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Walla Walla	1	*	0	0.0	0	0.0	0	0.0	0	0.0
Whatcom	6	3.4	3	*	5	2.8	26	14.1	5	2.7
Whitman	1	*	0	0.0	0	0.0	1	*	0	0.0
Yakima	18	8.0	7	3.1	29	12.6	32	13.8	26	11.1

SHIGELLOSIS STATEWIDE BY YEAR			
Cases, Rate/100,000 Pop., Deaths			
Year	Cases	Rate	Deaths
1980	287	6.9	0
1981	426	10.0	1
1982	284	6.7	0
1983	370	8.6	0
1984	224	5.2	0
1985	144	3.3	0
1986	321	7.3	0
1987	318	7.1	0
1988	306	6.7	0
1989	232	5.0	0
1990	278	5.7	0
1991	405	8.1	0
1992	439	8.6	0
1993	797	15.2	0
1994	478	9.0	0
1995	426	7.8	0
1996	333	6.0	1
1997	318	5.7	0
1998	277	4.9	0
1999	172	3.0	0
2000	501	8.5	0
2001	236	3.9	0
2002	230	3.8	0
2003	188	3.1	0
2004	133	2.2	0
2005	185	3.0	0
2006	170	2.7	0
2007	159	2.5	0

STATEWIDE TOTAL

CASES	188	3.1	133	2.2	185	3.0	170	2.7	159	2.5
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* Incidence rates not calculated for < 5 cases.

SYPHILIS (PRIMARY AND SECONDARY)

Cases, Rate/100,000 Population

Counties	2003		2004		2005		2006		2007	
	Cases	Rate								
Adams	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Asotin	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Benton	0	0.0	0	0.0	1	*	1	*	1	*
Chelan	0	0.0	0	0.0	0	0.0	0	0.0	1	*
Clallam	0	0.0	1	*	0	0.0	0	0.0	0	0.0
Clark	6	1.6	2	*	5	1.3	2	*	1	*
Columbia	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Cowlitz	0	0.0	0	0.0	1	*	1	*	1	*
Douglas	0	0.0	0	0.0	1	*	0	0.0	0	0.0
Ferry	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Franklin	1	*	0	0.0	1	*	0	0.0	0	0.0
Garfield	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Grant	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Grays Harbor	1	*	0	0.0	0	0.0	0	0.0	1	*
Island	0	0.0	1	*	4	*	1	*	0	0.0
Jefferson	0	0.0	0	0.0	1	*	0	0.0	0	0.0
King	60	3.4	123	6.9	119	6.6	147	8.0	120	6.4
Kitsap	0	0.0	4	*	4	*	4	*	3	*
Kittitas	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Klickitat	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Lewis	1	*	0	0.0	1	*	1	*	0	0.0
Lincoln	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Mason	0	0.0	1	*	0	0.0	0	0.0	0	0.0
Okanogan	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Pacific	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Pend Oreille	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Pierce	2	*	7	0.9	3	*	7	0.9	19	2.4
San Juan	0	0.0	0	0.0	1	*	0	0.0	0	0.0
Skagit	0	0.0	1	*	1	*	0	0.0	0	0.0
Skamania	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Snohomish	8	1.3	8	1.2	3	*	6	0.9	9	1.3
Spokane	1	*	0	0.0	0	0.0	2	*	6	1.3
Stevens	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Thurston	0	0.0	2	*	2	*	4	*	5	2.1
Wahkiakum	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Walla Walla	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Whatcom	0	0.0	0	0.0	1	*	3	*	0	0.0
Whitman	0	0.0	0	0.0	1	*	0	0.0	1	*
Yakima	2	*	0	0.0	2	*	3	*	0	0.0

SYPHILIS PRIMARY AND SECONDARY STATEWIDE BY YEAR			
Cases, Rate/100,000 Pop., Deaths			
Year	Cases	Rate	Deaths
1980	262	6.3	8
1981	167	3.9	2
1982	172	4.0	0
1983	196	4.6	0
1984	158	3.7	2
1985	115	2.6	2
1986	194	4.4	0
1987	176	3.9	0
1988	265	5.8	0
1989	461	9.9	0
1990	354	7.5	0
1991	178	3.6	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	2.9	0
2007	168	2.6	0

STATEWIDE TOTAL

CASES	82	1.3	150	2.4	152	2.4	182	2.9	168	2.6
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* Incidence rates not calculated for < 5 cases.

TETANUS

Cases, Rate/100,000 Pop., Deaths

Year	Cases	Rate	Deaths
1985	0	0.0	0
1986	0	0.0	0
1987	1	0.0	0
1988	1	0.0	0
1989	1	0.0	0
1990	1	0.0	0
1991	1	0.0	0
1992	3	0.1	0
1993	1	0.0	0
1994	1	0.0	0
1995	0	0.0	0
1996	1	0.0	0
1997	1	0.0	0
1998	0	0.0	0
1999	0	0.0	0
2000	1	0.0	0
2001	0	0.0	0
2002	0	0.0	0
2003	0	0.0	0
2004	0	0.0	0
2005	1	0.0	0
2006	0	0.0	0
2007	0	0.0	0

TRICHINOSIS

Cases, Rate/100,000 Pop., Deaths

Year	Cases	Rate	Deaths
1986	0	0.0	0
1987	0	0.0	0
1988	0	0.0	0
1989	2	0.0	0
1990	1	0.0	0
1991	0	0.0	0
1992	1	0.0	0
1993	1	0.0	0
1994	0	0.0	0
1995	0	0.0	0
1996	0	0.0	0
1997	0	0.0	0
1998	0	0.0	0
1999	0	0.0	0
2000	1	0.0	0
2001	0	0.0	0
2002	0	0.0	0
2003	0	0.0	0
2004	0	0.0	0
2005	0	0.0	0
2006	1	0.0	0
2007	0	0.0	0

TUBERCULOSIS

Cases, Rate/100,000 Population

Counties	2003		2004		2005		2006		2007	
	Cases	Rate								
Adams	1	*	0	0.0	0	0.0	0	0.0	0	0.0
Asotin	0	0.0	0	0.0	0	0.0	1	*	0	0.0
Benton	2	*	4	*	0	0.0	6	3.7	4	*
Chelan	4	*	0	0.0	1	*	3	*	2	*
Clallam	1	*	0	0.0	0	0.0	1	*	4	*
Clark	10	2.6	8	2.0	9	2.1	8	1.9	7	1.7
Columbia	0	0.0	0	0.0	1	*	0	0.0	0	0.0
Cowlitz	1	*	0	0.0	1	*	2	*	1	*
Douglas	2	*	0	0.0	1	*	0	0.0	0	0.0
Ferry	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Franklin	5	9.3	3	*	2	*	0	0.0	4	*
Garfield	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Grant	3	*	0	0.0	3	*	1	*	1	*
Grays Harbor	1	*	1	*	3	*	2	*	4	*
Island	1	*	5	6.6	1	*	0	0.0	6	7.7
Jefferson	0	0.0	0	0.0	1	*	0	0.0	1	*
King	155	8.7	133	7.4	125	7.0	145	7.9	161	8.6
Kitsap	2	*	2	*	6	2.4	6	2.4	10	4.1
Kittitas	0	0.0	1	*	0	0.0	0	0.0	0	0.0
Klickitat	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Lewis	2	*	1	*	0	0.0	1	*	0	0.0
Lincoln	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Mason	3	*	1	*	0	0.0	2	*	2	*
Okanogan	2	*	0	0.0	0	0.0	0	0.0	1	*
Pacific	0	0.0	0	0.0	0	0.0	0	0.0	3	*
Pend-Oreille	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Pierce	18	2.4	34	4.5	27	3.5	21	2.7	24	3.0
San Juan	0	0.0	1	*	0	0.0	0	0.0	0	0.0
Skagit	2	*	2	*	6	5.4	2	*	0	0.0
Skamania	0	0.0	0	0.0	1	*	0	0.0	0	0.0
Snohomish	12	1.8	15	2.3	24	3.6	26	3.8	24	3.5
Spokane	4	*	7	1.6	13	2.9	10	2.2	5	1.1
Stevens	0	0.0	0	0.0	1	*	0	0.0	1	*
Thurston	5	2.3	7	3.2	6	2.6	5	2.1	6	2.5
Wahkiakum	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Walla Walla	1	*	1	*	2	*	2	*	0	0.0
Whatcom	5	2.8	6	3.3	5	2.7	4	*	7	3.7
Whitman	0	0.0	0	0.0	1	*	0	0.0	1	*
Yakima	8	3.5	12	5.2	14	5.6	14	6.0	12	5.1

TUBERCULOSIS

STATEWIDE BY YEAR

Cases, Rate/100,000 Pop., Deaths			
Year	Cases	Rate	Deaths
1980	424	10.3	13
1981	401	9.4	15
1982	301	7.1	6
1983	239	5.6	10
1984	207	4.8	6
1985	220	5.0	5
1986	218	4.9	3
1987	255	5.7	10
1988	236	5.2	9
1989	248	5.3	4
1990	284	5.8	12
1991	309	6.2	7
1992	306	6.0	7
1993	286	5.5	7
1994	264	4.9	6
1995	278	5.1	2
1996	285	5.2	3
1997	305	5.4	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	244	3.9	9
2005	254	4.0	14
2006	262	4.1	18
2007	291	4.5	12

STATEWIDE TOTAL

CASES	250	4.1	244	3.9	254	4.0	262	4.1	291	4.5
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*Incidence rates not calculated for < 5 cases.

TULAREMIA

Cases, Rate/100,000 Pop., Deaths

Year	Cases	Rate	Deaths
1986	1	0.0	0
1987	4	0.1	0
1988	1	0.0	0
1989	2	0.0	0
1990	4	0.1	0
1991	2	0.0	0
1992	2	0.0	0
1993	2	0.0	0
1994	1	0.0	0
1995	4	0.1	0
1996	2	0.0	0
1997	2	0.0	0
1998	8	0.1	0
1999	2	0.0	0
2000	2	0.0	0
2001	5	0.1	0
2002	3	0.1	0
2003	2	0.0	0
2004	4	0.1	0
2005	10	0.2	0
2006	1	0.0	0
2007	1	0.0	0

TYPHOID FEVER

Cases, Rate/100,000 Pop., Deaths

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	0.1	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

TYPHUS

Cases, Rate/100,000 Pop., Deaths

Year	Cases	Rate	Deaths
1986	0	0.0	0
1987	0	0.0	0
1988	0	0.0	0
1989	0	0.0	0
1990	0	0.0	0
1991	1	0.0	0
1992	0	0.0	0
1993	0	0.0	0
1994	1	0.0	0
1995	0	0.0	0
1996	0	0.0	0
1997	0	0.0	0
1998	0	0.0	0
1999	0	0.0	0
2000	0	0.0	0
2001	0	0.0	0
2002	0	0.0	0
2003	0	0.0	0
2004	0	0.0	0
2005	0	0.0	0
2006	0	0.0	0
2007	0	0.0	0

VIBRIOSIS

Cases, Rate/100,000 Pop., Deaths

Year	Cases	Rate	Deaths
1985	4	0.1	0
1986	7	0.1	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	1.3	0
2007	25	0.4	0

YERSINIOSIS

Cases, Rate/100,000 Population

Counties	2003		2004		2005		2006		2007	
	Cases	Rate								
Adams	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Asotin	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Benton	0	0.0	0	0.0	1	*	1	*	2	*
Chelan	0	0.0	1	*	0	0.0	0	0.0	0	0.0
Clallam	1	*	0	0.0	1	*	0	0.0	0	0.0
Clark	0	0.0	1	*	0	0.0	2	*	2	*
Columbia	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Cowlitz	0	0.0	0	0.0	0	0.0	0	0.0	1	*
Douglas	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Ferry	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Franklin	1	*	0	0.0	1	*	0	0.0	0	0.0
Garfield	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Grant	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Grays Harbor	0	0.0	1	*	0	0.0	0	0.0	0	0.0
Island	0	0.0	1	*	0	0.0	0	0.0	0	0.0
Jefferson	0	0.0	0	0.0	1	*	2	*	2	*
King	12	0.7	14	0.8	10	0.6	9	0.5	6	0.3
Kitsap	0	0.0	0	0.0	0	0.0	0	0.0	1	*
Kittitas	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Klickitat	0	0.0	2	*	0	0.0	0	0.0	0	0.0
Lewis	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Lincoln	1	*	0	0.0	0	0.0	0	0.0	0	0.0
Mason	1	*	0	0.0	0	0.0	0	0.0	0	0.0
Okanogan	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Pacific	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Pend Oreille	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Pierce	1	*	3	*	0	0.0	2	*	2	*
San Juan	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Skagit	1	*	1	*	0	0.0	0	0.0	1	*
Skamania	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Snohomish	6	0.9	6	0.9	1	*	3	*	5	0.7
Spokane	0	0.0	1	*	0	0.0	3	*	0	0.0
Stevens	2	*	1	*	0	0.0	0	0.0	0	0.0
Thurston	1	*	0	0.0	1	*	0	0.0	0	0.0
Wahkiakum	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Walla Walla	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Whatcom	0	0.0	1	*	2	*	0	0.0	0	0.0
Whitman	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Yakima	1	*	1	*	1	*	0	0.0	6	2.6

YERSINIOSIS STATEWIDE BY YEAR			
Cases, Rate/100,000 Pop., Deaths			
Year	Cases	Rate	Deaths
1988	15	0.3	0
1989	40	0.9	0
1990	37	0.8	0
1991	28	0.6	0
1992	34	0.7	0
1993	50	1.0	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	0.6	0
2000	33	0.6	0
2001	23	0.4	0
2002	26	0.4	0
2003	28	0.5	0
2004	34	0.6	0
2005	19	0.3	0
2006	22	0.3	0
2007	28	0.4	0

STATEWIDE TOTAL

CASES	28	0.5	34	0.6	19	0.3	22	0.3	28	0.4
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* Incidence rates not calculated for < 5 cases.

APPENDIX II

Special Topics

Local Health Jurisdiction Contributors are acknowledged for special topics.

RABIES IN AN IMPORTED PUPPY

J. Baldwin, L. McKenzie, T. Locke, S. Lindquist, R. Gulati

In March 2007, the Alaska Department of Health and Social Services Virology Laboratory confirmed rabies in a stray unvaccinated puppy imported from India. During the 10 days prior, the puppy had flown from India to Seattle, was kept in Jefferson County for approximately one week, then flown to Juneau, Alaska. While still in Washington, the puppy was noted to have clinical signs compatible with rabies. The day after arriving in Alaska, the puppy's condition deteriorated rapidly and it died. Analysis of the virus indicated it was a canine rabies virus variant typically found in northern India. Over 20 persons were evaluated for exposure to the rabid puppy, and 8 (5 in Washington and 3 in Alaska) received rabies post-exposure prophylaxis (PEP).

Rules regarding international and interstate transfer of animals should be followed, particularly when the animals are moving from areas with endemic diseases such as rabies. Translocation of animals within the United States or from other countries can result in animal rabies in a species not typically infected in Washington. Consider the possibility of an imported animal when evaluating a patient for rabies post-exposure prophylaxis.

VARICELLA (CHICKENPOX) DEATH

E. Gonzales, C. Wigren

In November 2007, a death due to varicella disease (chickenpox) in a young adult was reported. Risk of severe complications and death is higher in older adolescents and adults. Usual complications of varicella include pneumonia and encephalitis. However in this individual, pre-existing health issues and treatment with immunosuppressive medications contributed to an unusual presentation that included an apparent bacterial superinfection accompanied by high fever requiring hospitalization. Symptoms appeared to have resolved and the individual was discharged, but expired unexpectedly at home 3 days after discharge and was found to have had disseminated varicella disease involving multiple organs. Transmission of varicella from this person to a susceptible individual that had been eligible for vaccination was documented.

WEST NILE VIRUS INFECTION FROM ORGAN TRANSPLANTATION

S. Paciotti, M. Skjei, E. Gonzales, A. Blanchard

In October 2007, West Nile virus (WNV) infection was confirmed in 2 Washington residents who received organs (kidney and lungs) from a single donor. Both Washington patients were asymptomatic, but a recipient in another state developed neuroinvasive WNV disease. An investigation was conducted to ensure that additional tissues from the donor were not transplanted. In the United States, potential donors are tested for WNV infection before organ transplantation. This donor was tested; however the results were negative. Acquiring WNV from organ transplantation remains very rare in the United States.

CAMPYLOBACTERIOSIS OUTBREAK, WHATCOM COUNTY

J. Leinbach, J. Hensley, S. Burns

In December, 2007, the Whatcom County Health Department (WCHD) was notified of unpasteurized milk from a local dairy that tested positive for *Campylobacter jejuni* at the Washington State Department of Agriculture laboratory. The manufacturer was voluntarily recalling a single lot number. WCHD notified stores selling the raw milk as well as conducting a web search for other potential points of sale. A customer of one store who had consumed the product was hospitalized. Three of 6 recent campylobacteriosis cases had consumed implicated raw milk and one had consumed only cheese from the same dairy. Milk taken from the dairy had a campylobacter strain indistinguishable from 4 of the cases

Sale of raw milk remains legal in Washington State only for licensed producers and processors. All retail raw milk products must have a warning label that the product may contain harmful bacteria. Raw milk sold commercially must meet Grade A requirements.

CRYPTOSPORIDIOSIS OUTBREAK, WHATCOM COUNTY

S. Burns, L. Flores, J. Leinbach, J. Hensley

A cryptosporidiosis outbreak associated with a water recreation facility occurred in Whatcom County in September, 2007. A culture positive, immunocompromised child was the first case reported to the Whatcom County Health Department (WCHD). An additional report of an ill child diagnosed with cryptosporidiosis came in to WCHD the following day. Both cases reported use of the same water recreation facility.

WCHD and facility staff together alerted patrons of the facility. A letter was sent describing the outbreak, symptoms of cryptosporidiosis, prevention measures, and directions about reporting illness. A total of 12 individuals with cryptosporidiosis symptoms reported use of the facility during the outbreak period; 3 laboratory confirmed. At first only 1 location at the facility was implicated. As additional reports of cryptosporidiosis became available, additional pools and spas at the facility were implicated.

Inspections of the facility found poor record keeping, poor communication among staff, and low sanitizer residuals during the period of the outbreak. None of 3 accidental fecal releases in the facility during the season had been reported to WCHD. Facility staff was advised to follow CDC guidelines for superchlorinating pools or spas after a loose stool accidental fecal release. On reinspection, the facility had adequate chemical levels and proper filtration. When reopened, the facility posted warning signs advising bathers not to swim within 2 weeks of their last loose stool if they had diarrhea. No further cryptosporidiosis cases associated with this facility were reported.

In retrospect, the entire facility should have been closed and treated according to CDC guidelines. The facility staff needed greater education about how to appropriately respond to accidental fecal releases. Improved communication was also needed within the facility and with the local health jurisdiction. Fully knowledgeable staff directly involved with day-to-day maintenance can limit an outbreak, if not prevent one entirely.

SHIGELLOSIS IN A DAYCARE CENTER, SNOHOMISH COUNTY

H. Bruce, N. DeFrank, J. Zahalka, K. Barclay, A. Blanchard, L. Carpenter

The Snohomish Health District (SHD) Communicable Disease Program was notified of 2 shigellosis cases in October. Interviews determined that the cases were a staff member and attendee in the same daycare center. The Child Care Health Program was informed and an investigation of the daycare center was initiated. Of 40 individuals interviewed there were 10 confirmed shigellosis cases (7 daycare center attendees, 1 daycare staff member and 2 attendee parents). Onset dates of confirmed cases ranged from September 24th through October 9th, 2007.

A letter was distributed to all daycare center staff and attendee parents. Due to the amount of diarrheal illness and poor hygiene practices found during the center investigation, it was decided that all attendees and staff of the center with diarrheal illness should be excluded until stool culture negative and asymptomatic for 24 hours. All confirmed cases of shigellosis required 2 negative stool cultures before they could return to the center. Active surveillance for diarrheal illness continued at the center for 2 incubation periods from last exposure.

Controlling transmission required prompt investigation of shigellosis cases, inspection of the daycare center, strict exclusion criteria, continued active surveillance, and working with the daycare center staff to improve hygiene practices.

INFLUENZA SURVEILLANCE, 2007-2008

The Washington State Department of Health (DOH), in collaboration with local health jurisdictions and the U.S. Centers for Disease Control and Prevention (CDC), conducts routine influenza surveillance each year from October to May. Activities in the state include sentinel laboratory reporting, monitoring of school absenteeism, sentinel long-term care facility surveillance, reporting by health care providers enrolled in CDC's Sentinel Provider Surveillance Network, reporting to CDC's pediatric influenza death surveillance, and participation by 3 cities in a national mortality reporting system. In addition, sentinel laboratories subtype influenza isolates to identify circulating influenza strains.

Sentinel Laboratories – Sentinel influenza surveillance laboratories reported 975 isolates from 19 counties of which 611 (63%) were type A and 364 (37%) were type B. Of the 611 influenza A isolates, 16% were H1N1; 7% were H3N2; and 76% were not subtyped. Ages of patients were 7% under one year of age, 10% 1-4 years, 12% 5-9 years, 12% 10-19 years, 16% 20-29 years; 12% 30-39 years; 11% 40-49 years; 6% 50-59 years; and 11% 60 years or older. Age was not reported for 14 cases.

Sentinel Long-Term Care Facilities – The 19 participating long-term care or assisted living facilities reported 22 outbreaks. There were 6 due to influenza A, not subtyped; 3 influenza A, H3N2-like; 8 influenza B, not subtyped; 4 influenza B, Yamagata; and 1 influenza B, Shanghai.

Sentinel Physicians – Sporadic cases of influenza A began in October, 2007. Reports of laboratory confirmed cases peaked in the first week of February. Reported influenza activity began to decrease in mid-March, with sporadic reports through the end of May.

Pediatric Influenza Deaths – There were 2 pediatric influenza deaths during the 2007-2008 influenza season in Washington. One was a ten year old child who died from edema and cardiogenic shock due to influenza A infection. The other was a five year old child with influenza B infection.

122 Cities Mortality Reporting System – Three Washington cities participate in the national 122 Cities Mortality Reporting System, which covers about one quarter of all deaths in the United States. The vital statistics offices in Seattle, Spokane, and Tacoma submit weekly reports with the total number of death certificates filed and the number of deaths attributable to pneumonia and influenza (P&I) listed. Nationally, percentage of deaths due to P&I peaked at 9.1% during the week ending March 15, 2008. In Washington, the percentage of deaths attributable to P&I during the 2007-2008 influenza season peaked at 11.7% in Seattle during the week ending April 19, 2008; at 17.2% in Spokane during the week ending May 3, 2008, and at 6.5% in Tacoma during the weeks ending December 8, 2007 and April 19, 2008.

Influenza Trivalent Vaccine 2008-2009 – The 3 components for the 2008-2009 vaccine will be new: A, Brisbane/59/2007-like (H1N1); A, Brisbane/10/2007-like (H3N2); and B, Florida/4/2006-like.

APPENDIX III

State Demographics

Washington State Population Estimates, 1985-2007*
Washington State Office of Financial Management

Year	Estimate
1985	4,384,100
1986	4,419,700
1987	4,481,100
1988	4,565,000
1989	4,660,700
1990	4,866,663
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	5,894,143
2001	5,974,900
2002	6,041,700
2003	6,098,300
2004	6,167,800
2005	6,256,400
2006	6,375,600
2007	6,488,000

* April 1, 2007 estimate

Washington State Population Estimates By County, 2007*
 Washington State Office of Financial Management

County	Estimate
Adams	17,600
Asotin	21,300
Benton	162,900
Chelan	71,200
Clallam	68,500
Clark	415,000
Columbia	4,100
Cowlitz	97,800
Douglas	36,300
Ferry	7,550
Franklin	67,400
Garfield	2,350
Grant	82,500
Grays Harbor	70,800
Island	78,400
Jefferson	28,600
King	1,861,300
Kitsap	244,800
Kittitas	38,300
Klickitat	19,900
Lewis	74,100
Lincoln	10,300
Mason	54,600
Okanogan	39,800
Pacific	21,600
Pend Oreille	12,600
Pierce	790,500
San Juan	15,900
Skagit	115,300
Skamania	10,700
Snohomish	686,300
Spokane	451,200
Stevens	43,000
Thurston	238,000
Wahkiakum	4,000
Walla Walla	58,300
Whatcom	188,300
Whitman	42,700
Yakima	234,200
Washington State	6,488,000

* April 1, 2007 estimate

Washington State Population By Age and Sex, 2007^{*†}
 Washington State Office of Financial Management

Age (years)	Male	Female	TOTAL
0-4	215,087	205,297	420,384
5-9	217,233	206,928	424,161
10-14	224,177	213,017	437,194
15-19	240,243	227,994	468,237
20-24	241,225	228,858	470,083
25-29	231,007	219,661	450,668
30-34	213,294	203,307	416,601
35-39	238,529	227,387	465,916
40-44	238,555	233,979	472,534
45-49	252,188	251,427	503,615
50-54	237,184	241,348	478,532
55-59	205,788	211,311	417,099
60-64	155,972	161,672	317,644
65-69	106,820	113,098	219,918
70-74	77,112	88,261	165,373
75-79	60,229	76,963	137,192
80-84	42,545	66,195	108,740
85+	37,008	77,101	114,109
TOTAL	3,234,196	3,253,804	6,488,000

*April 1, 2007 estimate

†An estimate of April 1 population was obtained from the Office of Financial Management website (<http://www.ofm.wa.gov/pop/coagemf/default.asp>) in July 2008. These population estimates are updated on a periodic basis and, therefore, may not reflect what is printed in this report. Please note that when smaller age brackets were needed for analysis purposes, data from the 2007 population forecast were used (<http://www.ofm.wa.gov/pop/stfc/stfc2007/stfc2007.pdf>).