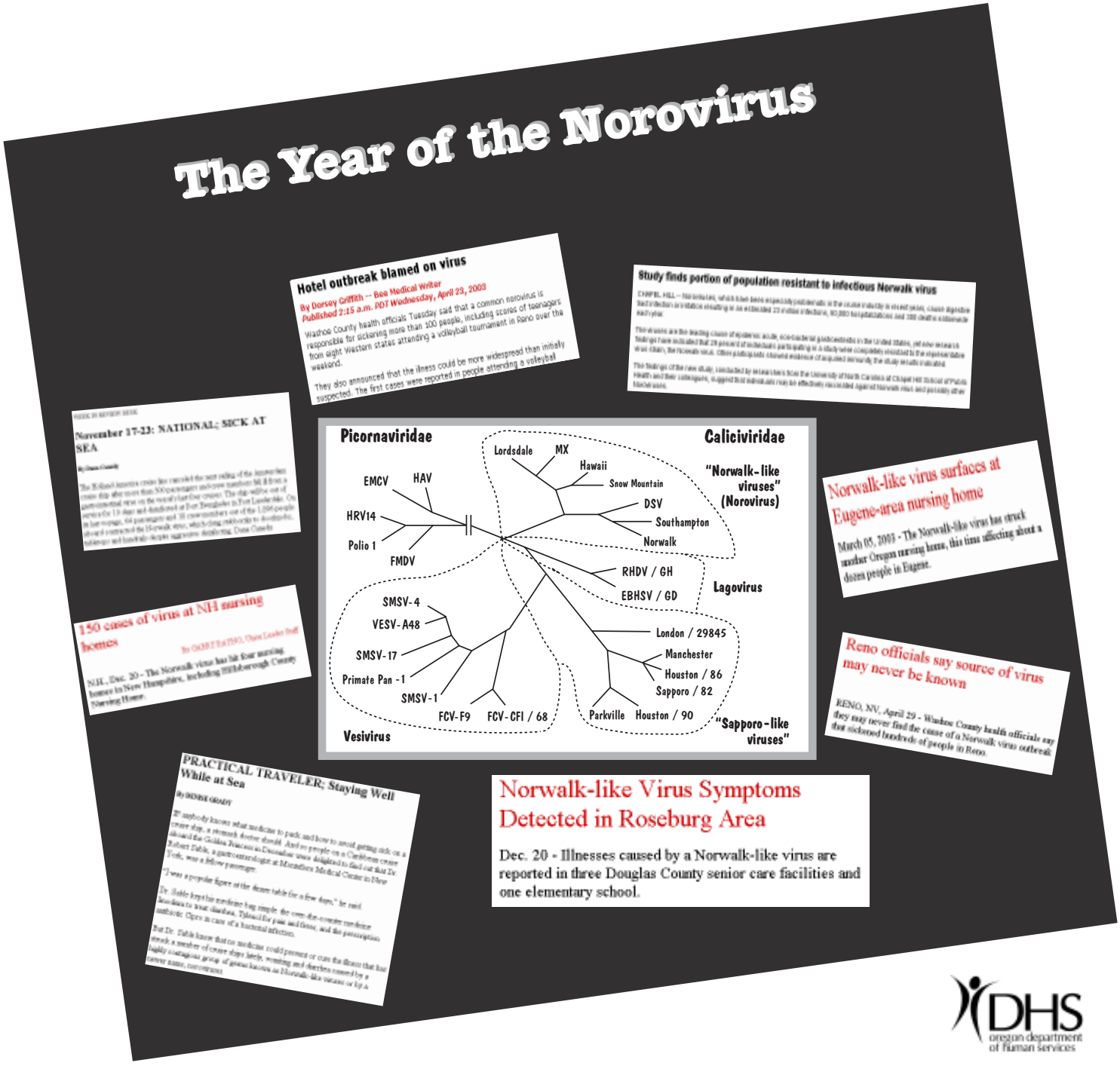
2002 State of Oregon Selected Reportable Communicable Disease Summary



DHS oregon department of human services

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Oregon Health Services

Office of Disease Prevention and Epidemiology

Acute and Communicable Disease Prevention

2002 Selected Reportable Communicable Disease Summary

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About Surveillance Data

Oregon law* specifies diseases of public-health importance that must be reported to local health departments by diagnostic laboratories and health-care professionals. In general, for reported communicable diseases there follows an investigation by local health officials to characterize the illness and collect demographic information about the case, to identify possible sources of the infection, and to take steps necessary to minimize the risk of further transmission. Basic information about each case is forwarded to the Office for Disease Prevention and Epidemiology within the Oregon Department of Human Services. In some cases (e.g., *Salmonella* infection), laboratories are required to forward bacterial isolates to the Oregon State Public Health Laboratory for subtyping. Together, these epidemiologic and laboratory data constitute our communicable disease "surveillance system."

But caveat lector! Disease surveillance data have many limitations.

Firstly, for most diseases, reported cases represent but a fraction of the true number. The most important reason for this is that many patients with mild disease do not present themselves for medical care. But even if they do so, the health-care professional may not order a test to identify the causative microorganism. And the reader may be scandalized to learn that not every reportable disease gets reported as the law requires. Cases are "lost" to surveillance along each step of the path from patient to physician to laboratory to public-health department; in the case of salmonellosis, for example, reported cases have been estimated at 1-5% of the true number.†

Secondly, the cases that do get reported are a skewed sample of the total. More severe illnesses (e.g., meningococcal disease) are more likely to be reported than milder illnesses. Infection with hepatitis A virus is more likely to cause symptoms (and those symptoms are more likely to be severe) in adults than in children. Testing is not random; clinicians are more likely to test stool from children with bloody diarrhea for *E. coli* O157 than they are to test stool from adults with bloody diarrhea. Health-care professionals may be more inclined to report contagious diseases like tuberculosis — where the public-health importance of doing so is obvious — than they are to report non-contagious diseases like Lyme disease. Outbreaks of disease or media coverage about a particular disease can greatly increase testing and reporting rates.

And yet, in a larger sense, surveillance data are valuable in a variety of ways. They help to identify demographic groups at higher risk of illness. They allow analysis of disease trends. They identify outbreaks of disease.

With this in mind, we present this communicable disease summary. For most of the reportable communicable diseases, we include figures showing case counts by year for the past 10 years; aggregate case counts by month to demonstrate any seasonal trends; incidence by age and sex; incidence in Oregon as compared to national incidence over the past 10 years; and incidence by county. Where appropriate, subtyping data are included. At the end of the booklet you will find disease totals by county, a summary table of statewide case counts over the past 20 years, and a brief synopsis of foodborne disease outbreaks reported in the past year.

We hope that, with all their limitations, you will find these data useful. If you have additional questions, please call our epidemiology staff at (503) 731-4024 or e-mail *ohd.acdp@state.or.us*.

Paul R. Cieslak, MD

Manager, Acute and Communicable Disease Prevention

* Oregon Administrative Rules, chapter 333, division 18. Available at http://www.oshd.org/acd/oars/rules/

† Chalker RB, Blaser MJ. A review of human salmonellosis: III. Magnitude of Salmonella infection in the United States. Rev Infect Dis 1988; 10:111-24.

Table of Contents

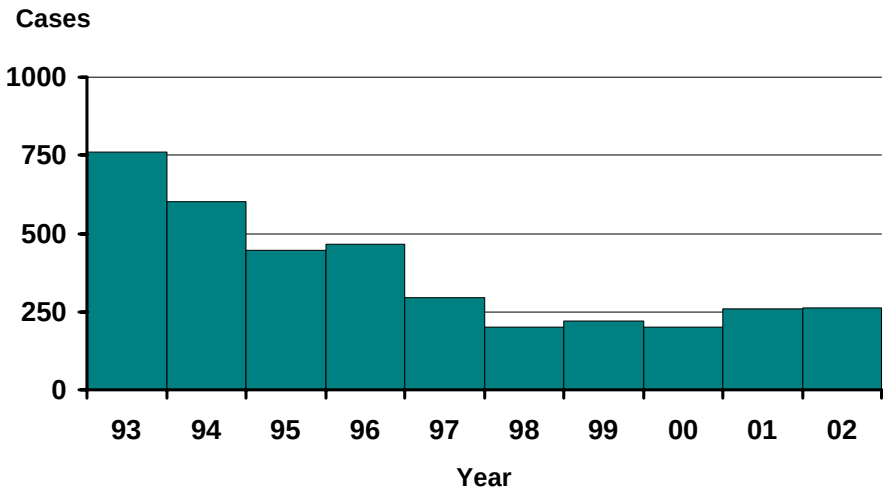
AIDS

HIV/AIDS is a communicable disease spread through unprotected sex and sharing injection drug equipment with an HIV-infected partner, and to a lesser extent, through blood transfusions and breast feeding. It is tracked to assist in designing public health interventions and to promote treatment options for those infected with HIV. AIDS represents a latter stage of HIV infection, indicated by either low CD4 (immune system) cell counts or the manifestation of an opportunistic infection indicative of poor immune system functioning. Although there is no cure for HIV or AIDS, there are effective drug treatments which can prolong and enhance the quality of life.

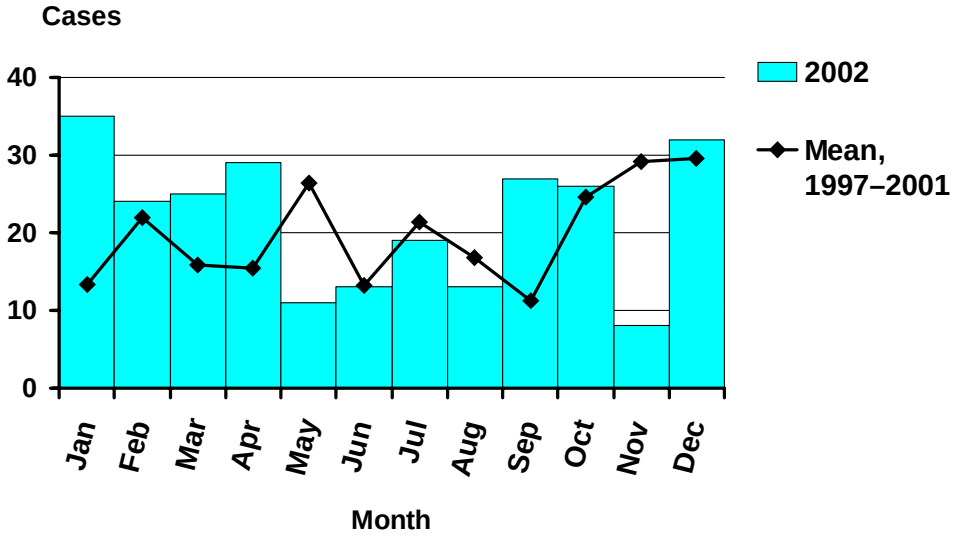
HIV infection can be prevented by abstaining from sex outside of a monogamous relationship with an uninfected partner and from not injecting recreational drugs. Those who are sexually active outside of a mutually monogamous relationship or who inject drugs can protect themselves by using a condom when engaging in sexual activity and by not sharing injection drug equipment. Pregnant women who are infected with HIV can minimize transmission of infection to their fetus by taking zidovudine during pregnancy.

From 1981 through 2002, 5,357 cases of AIDS were reported in Oregon, including 2,997 deaths. Men account for 4,960 cases, with 397 cases in women. Most cases have been white (4,650, 87%) with 279 (5%) African Americans, 328 (6%) Hispanics, 43 (<1%) Asians, and 56 (1%) Native Americans reported. Only 18 cases of pediatric AIDS were reported in Oregon. Of this total, 286 cases of AIDS were reported in 2002. In 2002, there were all 718 cases of HIV reported, including 1 pediatric case.

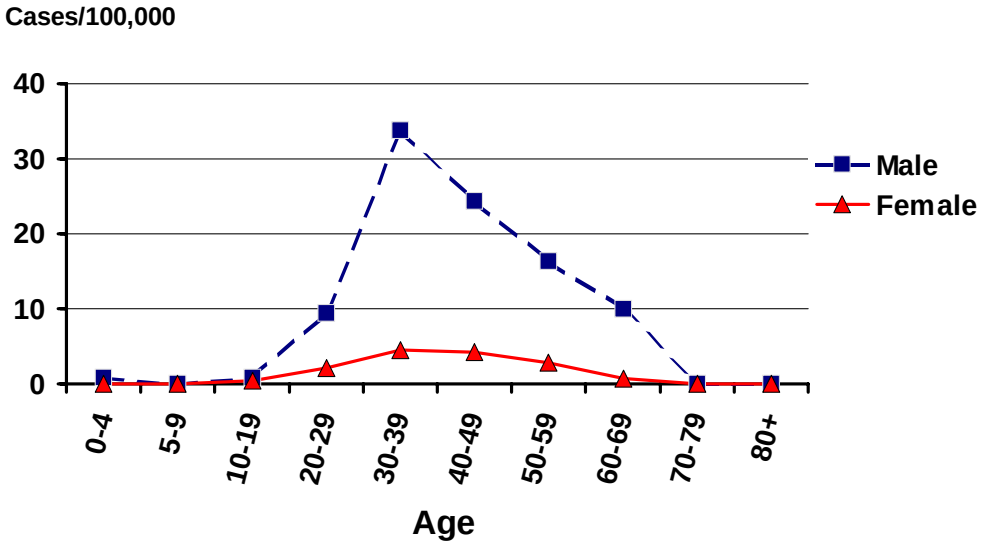
AIDS
by Year
Oregon, 1993–2002



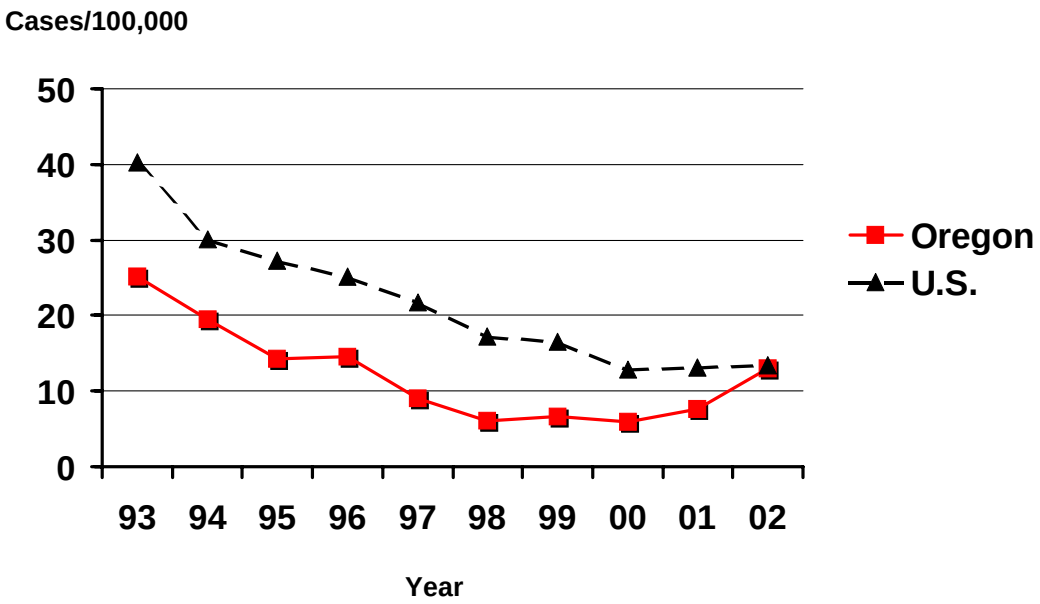
AIDS
by Onset Month
Oregon, 2002



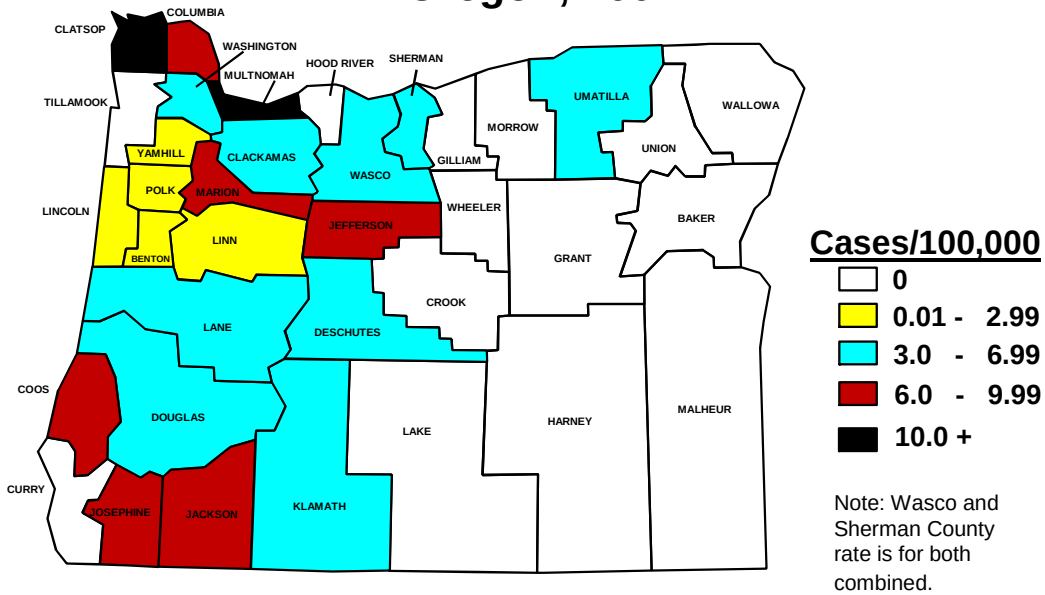
Incidence of AIDS
by Age and Sex
Oregon, 2002



Incidence of AIDS
Oregon vs. Nationwide
1993–2002



Incidence of AIDS
by County
Oregon, 2002

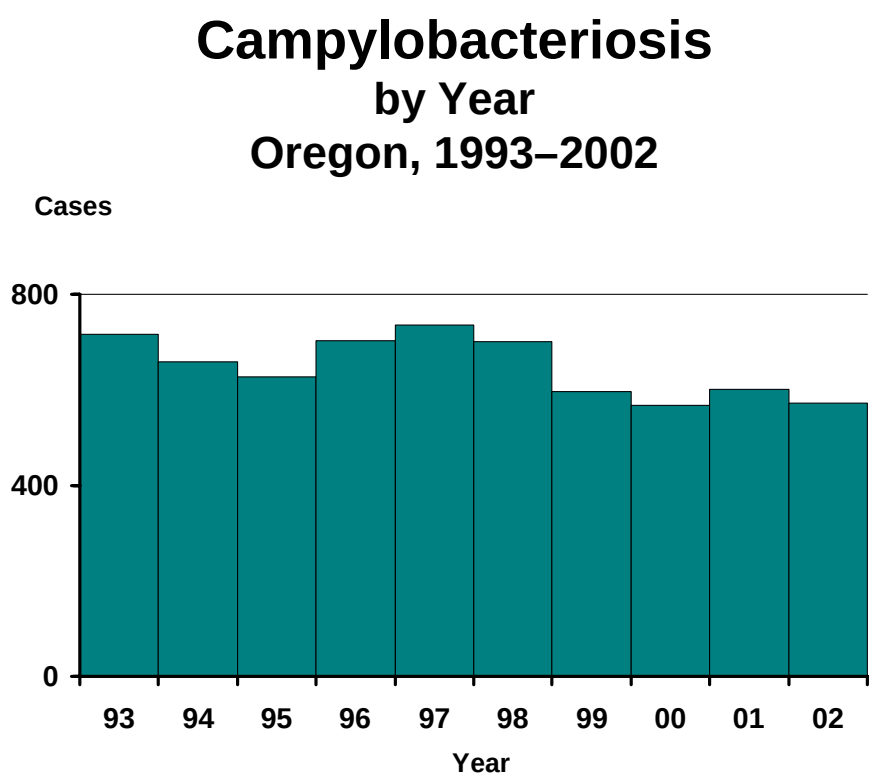


Note: Wasco and Sherman County rate is for both combined.

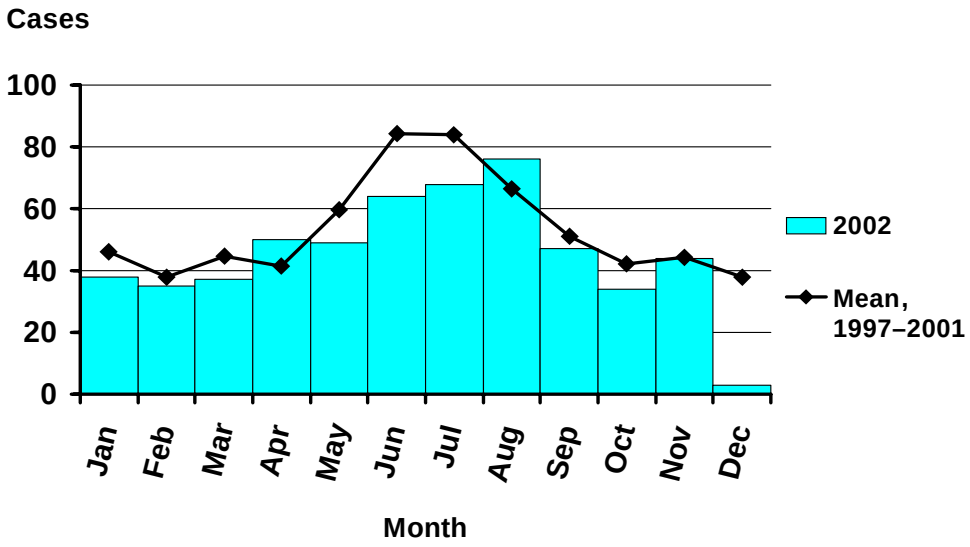
Campylobacteriosis

Campylobacteriosis is caused by a Gram-negative bacterium. It is characterized by acute onset of diarrhea, vomiting, abdominal pain, fever, and malaise. It is of worldwide epidemiologic importance due to the fecal-oral route of infection and the extensive reservoir of the organism in both wild and domestic animals. It is the most common bacterial enteric infection reported.

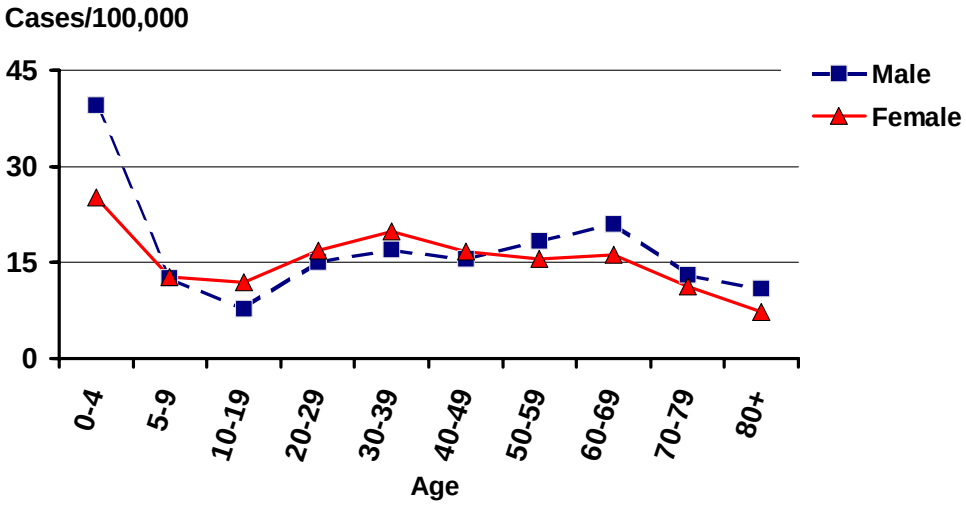
Most outbreaks are associated with undercooked meat, unpasteurized milk or non-chlorinated water. Infections occur year 'round in Oregon, with peak incidence in the summer months. Proper food handling and water treatment, along with good hygienic practices (hand washing!) are the key to prevention.



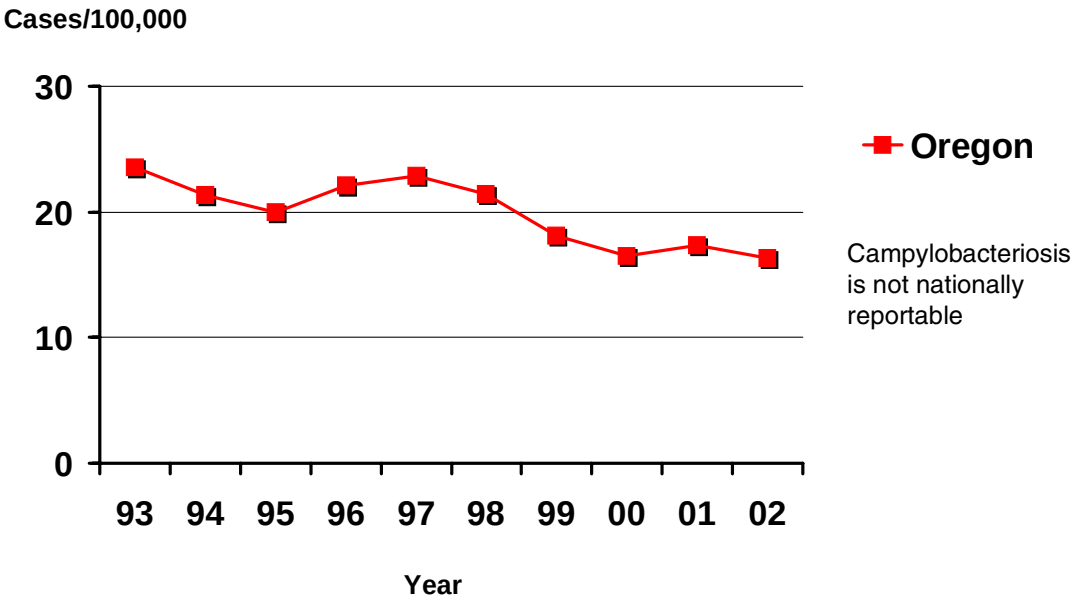
Campylobacteriosis
by Report Month
Oregon, 2002



Incidence of Campylobacteriosis
by Age and Sex
Oregon, 2002

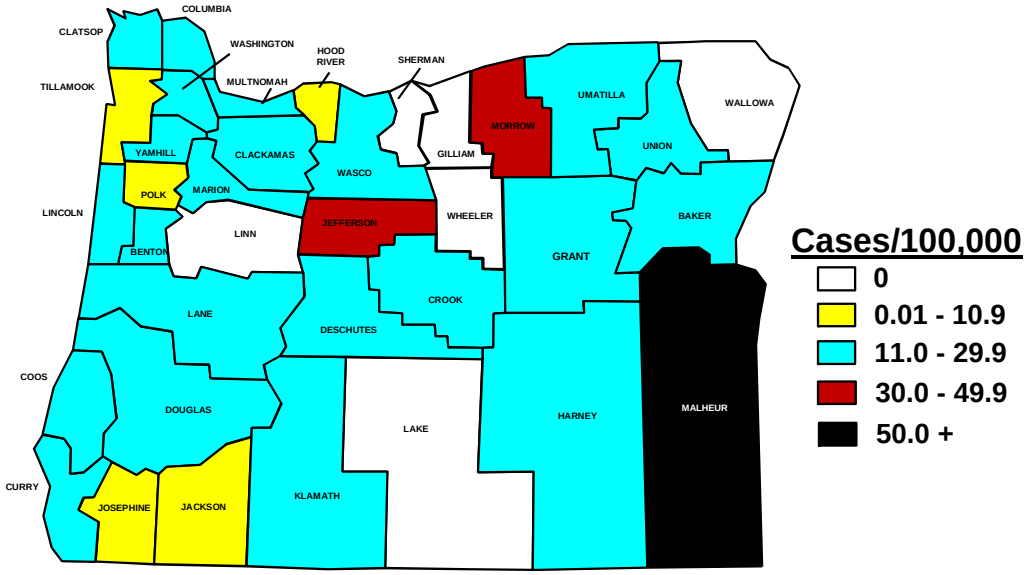


Incidence of Campylobacteriosis
Oregon
1993–2002



Campylobacteriosis is not nationally reportable

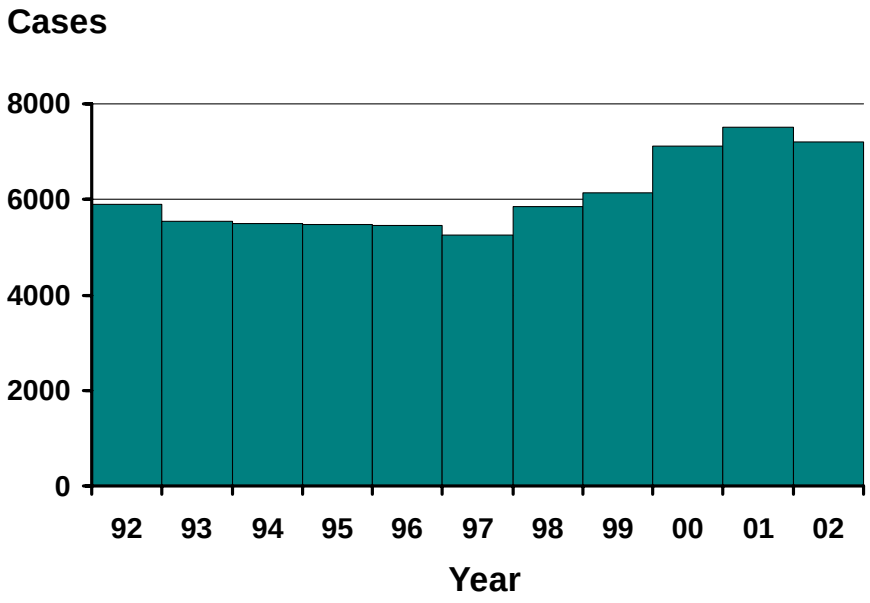
Incidence of Campylobacteriosis
by County
Oregon, 2002



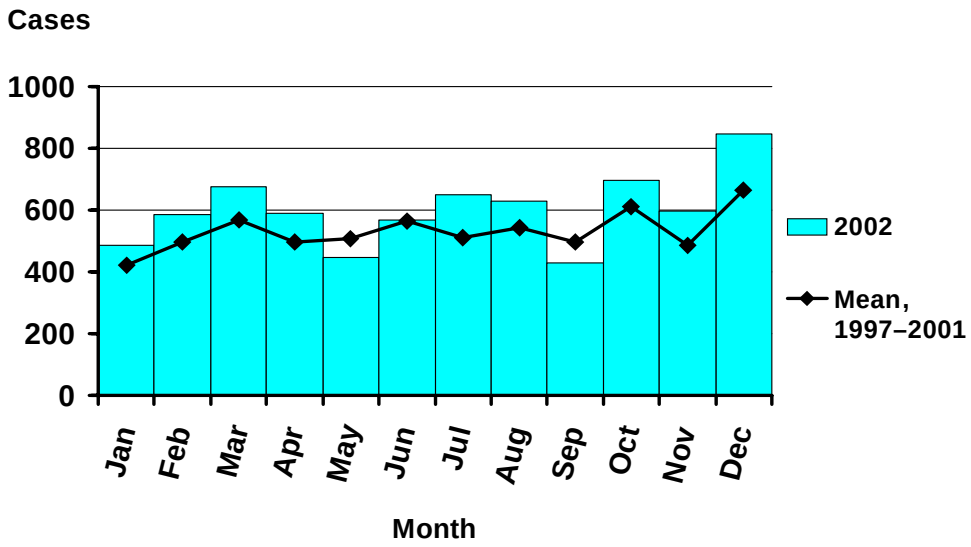
Chlamydiosis

Chlamydiosis is Oregon's most commonly reported infection. The 7,200 cases reported during 2002 are 304 (4.1%) fewer than 2001. As with gonorrhea and syphilis, *Chlamydia* are transmitted by sexual contact. Chlamydiosis is likely to be a silent infection, with neither men or women having symptoms. However, reproductive health complications, especially among women, lead to infertility and an increased risk of tubal pregnancy.

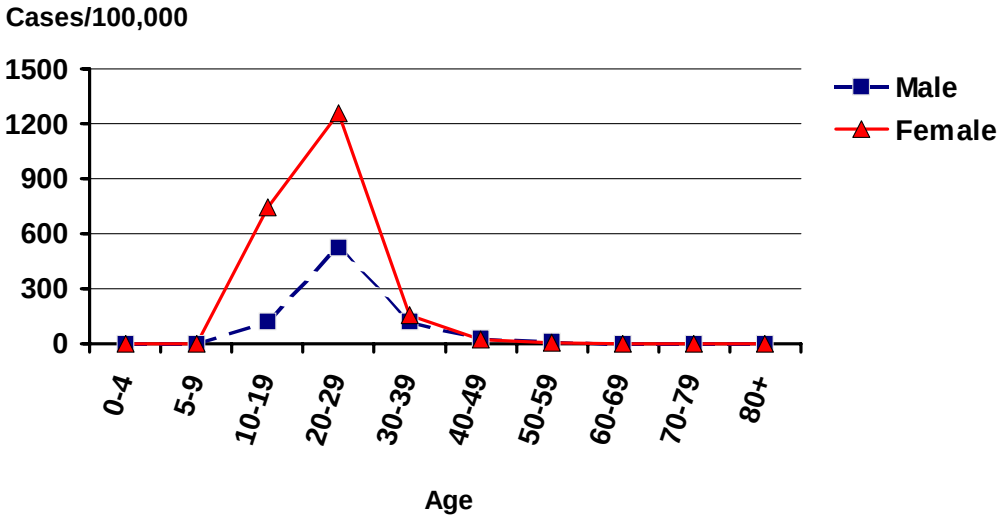
Chlamydiosis
by Year
Oregon, 1993–2002



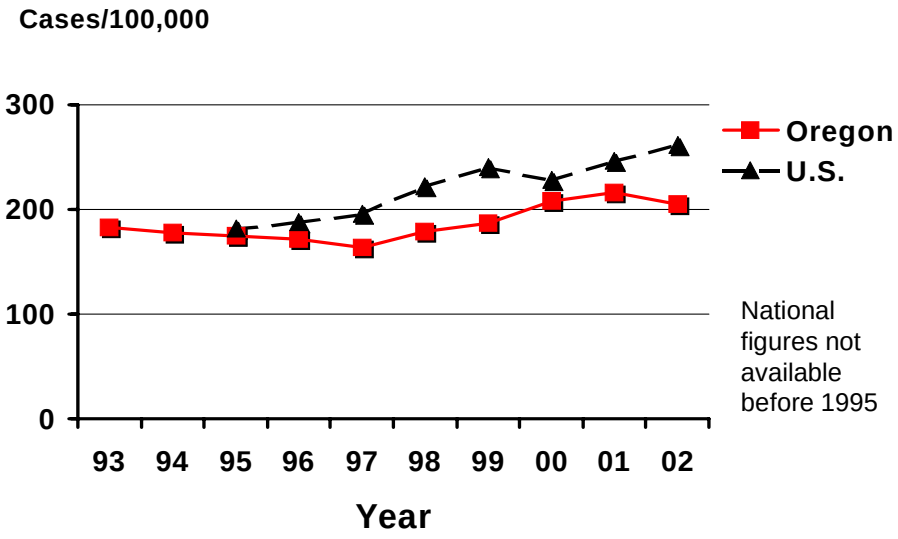
Chlamydiosis
by Report Month
Oregon, 2002



Incidence of Chlamydiosis
by Age and Sex
Oregon, 2002

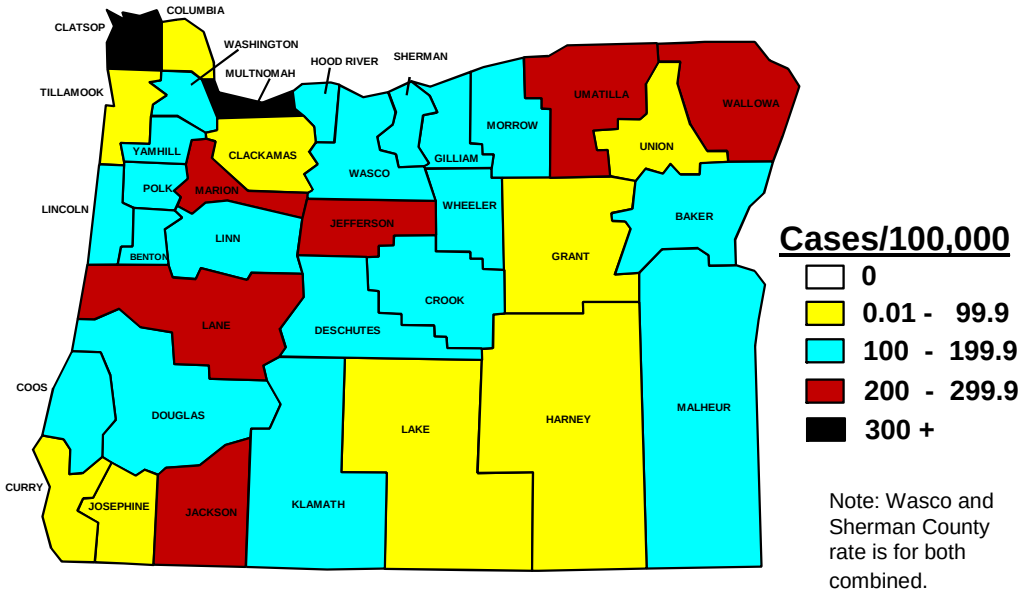


Incidence of Chlamydiosis
Oregon vs. Nationwide
1993–2002



National figures not available before 1995

Incidence of Chlamydiosis
by County
Oregon, 2002

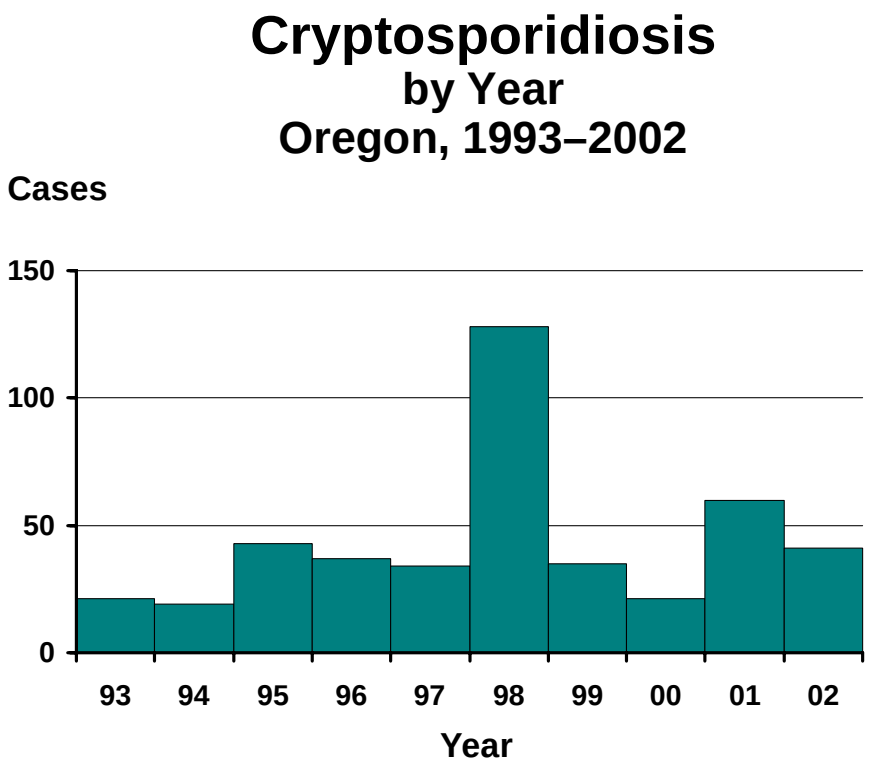


Note: Wasco and Sherman County rate is for both combined.

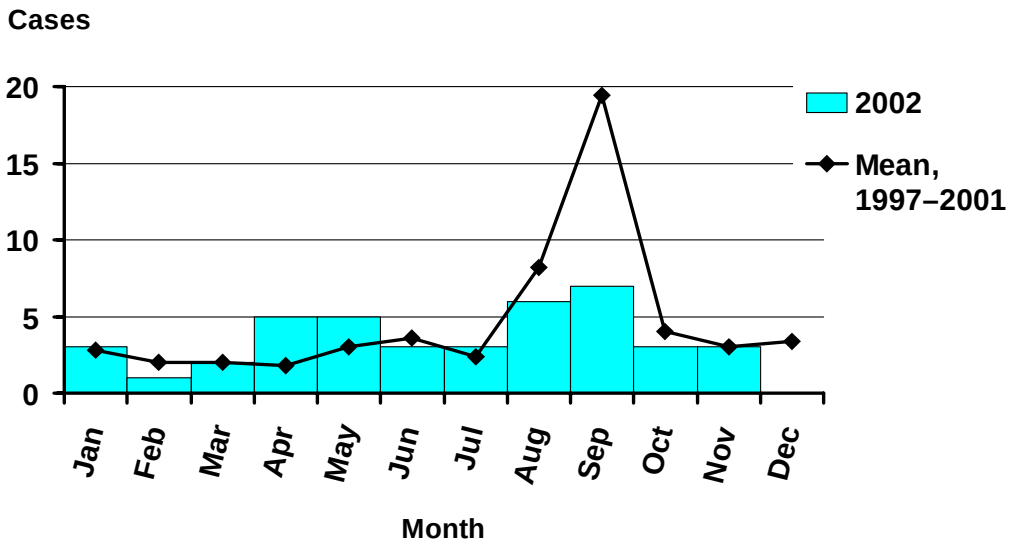
Cryptosporidiosis

Cryptosporidiosis is a relatively common parasitic infection that sometimes causes symptoms of watery diarrhea and abdominal cramps. Diagnosed infections typically last 1–2 weeks in immunocompetent persons, but may be unusually protracted. Infections can be difficult to control among the immunocompromised, notably AIDS patients. Repeated studies suggest that the prevalence of cryptosporidiosis among young children, particular those in large child-care facilities, is surprisingly high.

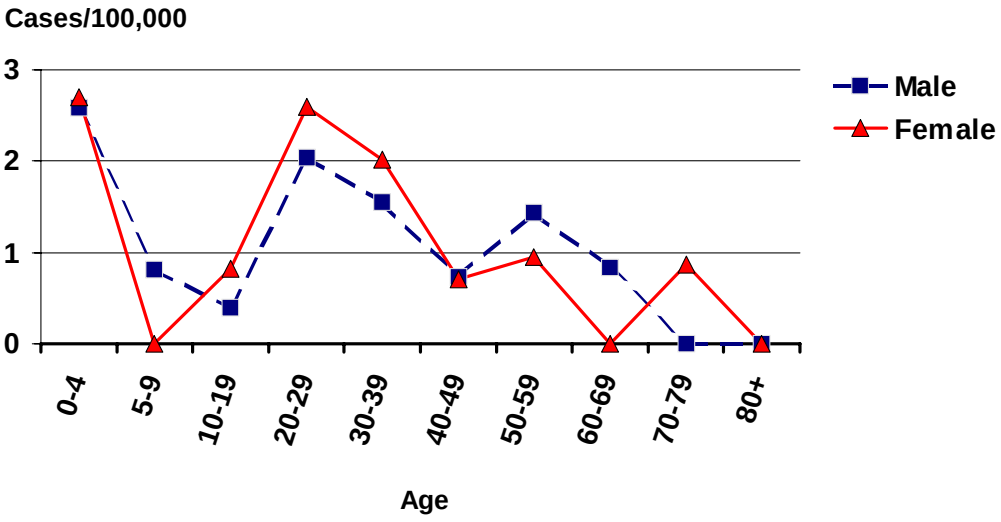
Given the number of asymptomatic and undiagnosed infections, surveillance data can be difficult to interpret, although they have been used to identify a number of outbreaks over the years, most commonly child-care or water-associated (both drinking and recreational). Nothing much exciting happened with crypto in 2002. Theoretical concerns about the possibility of crypto transmission in unfiltered drinking water are leading a number of communities, including Portland, to consider very expensive changes to routine treatment methods.



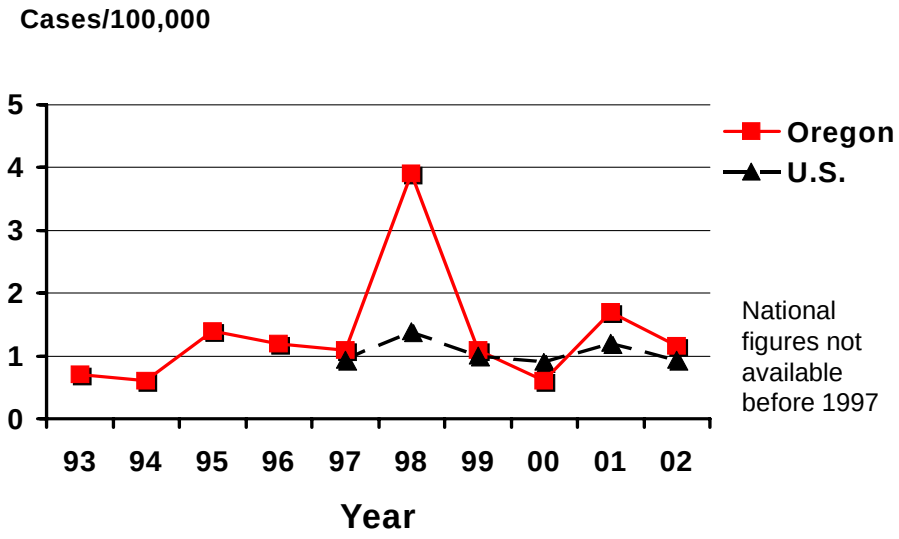
Cryptosporidiosis
by Onset Month
Oregon, 2002



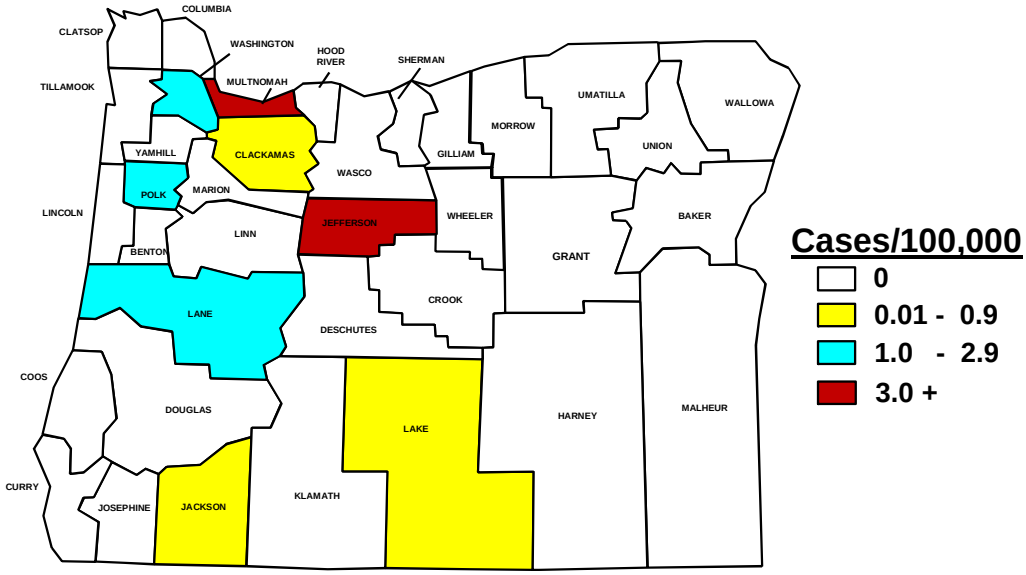
Incidence of Cryptosporidiosis
by Age and Sex
Oregon, 2002



Incidence of Cryptosporidiosis
Oregon vs. Nationwide
1993–2002



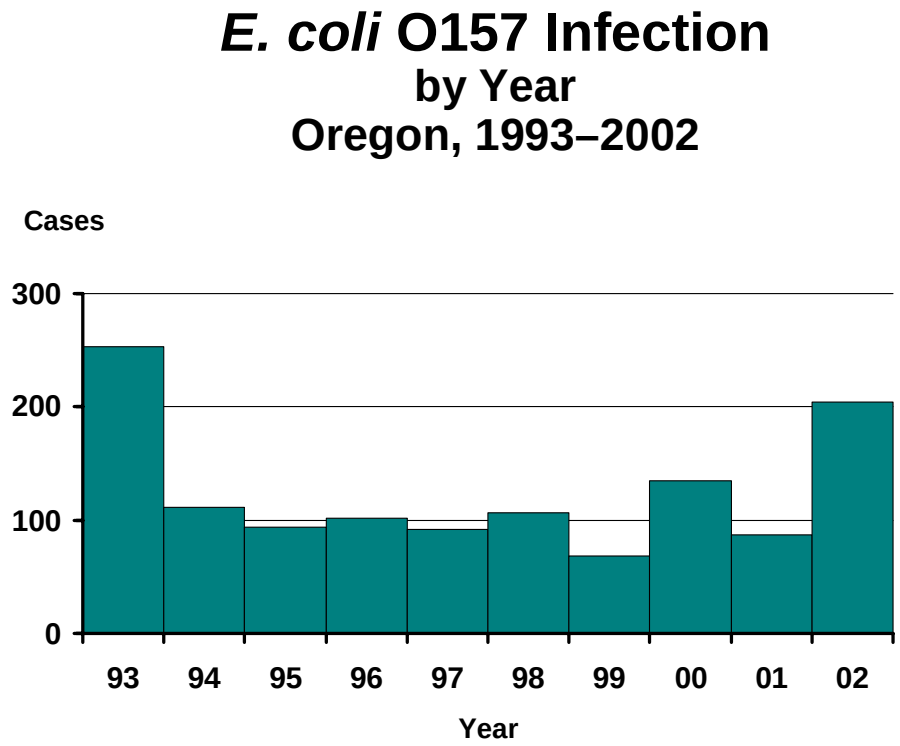
Incidence of Cryptosporidiosis
by County
Oregon, 2002



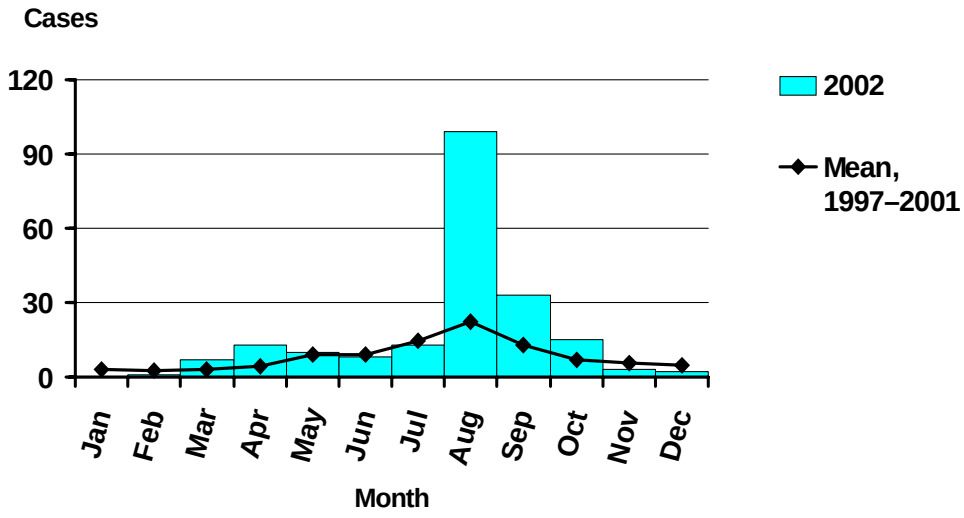
Escherichia coli O157 infections

Over the past 20 years, O157 has emerged from obscurity to become rightly or wrongly perhaps the most dreaded of the common causes of infectious diarrhea. Oregon has been the setting for many O157 outbreaks, and investigations of those outbreaks combined with the analysis of other surveillance information has contributed greatly to our understanding of this pathogen. Spread by the fecal-oral route, O157 has a number of animal reservoirs, the most important of which are ruminants: including cattle, goats, sheep, deer, and elk. Transmission often occurs from consumption of contaminated food or water, as well as direct person-to-person spread.

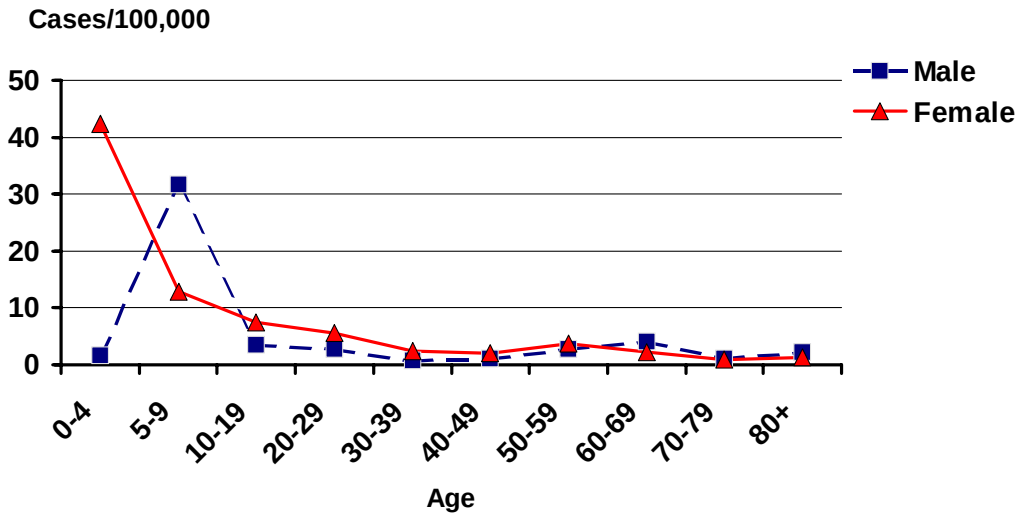
In 2002 we investigated the largest known O157 outbreak in Oregon history. Over 80 cases were associated with visiting the building housing sheep, goat and other small animal exhibits at the Lane County fair. The exact mode of transmission was never determined, although it was learned that at some point the pathogen became airborne in quantities sufficient to be recovered under the pavilion's roof weeks after the fair. Organizers have beefed up handwashing facilities at fairgrounds around Oregon this year, and are hoping for the best. More research is necessary to determine if airborne spread is a significant risk to humans. Despite efforts nationally to reduce the levels of meat contamination, the rate of sporadic (i.e., not outbreak-related) cases has been essentially unchanged over the past decade. Person-to-person transmission remains an important source.



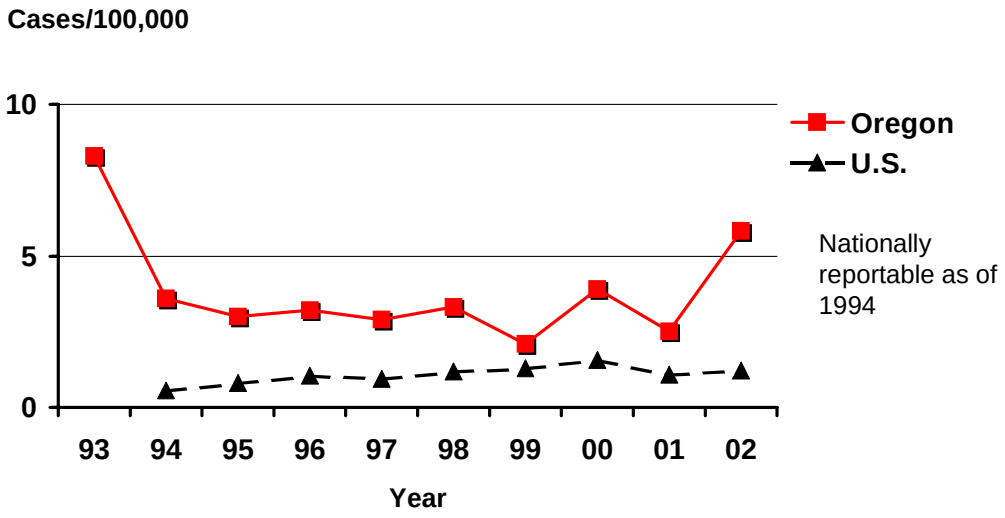
E. coli O157 Infection
by Onset Month
Oregon, 2002



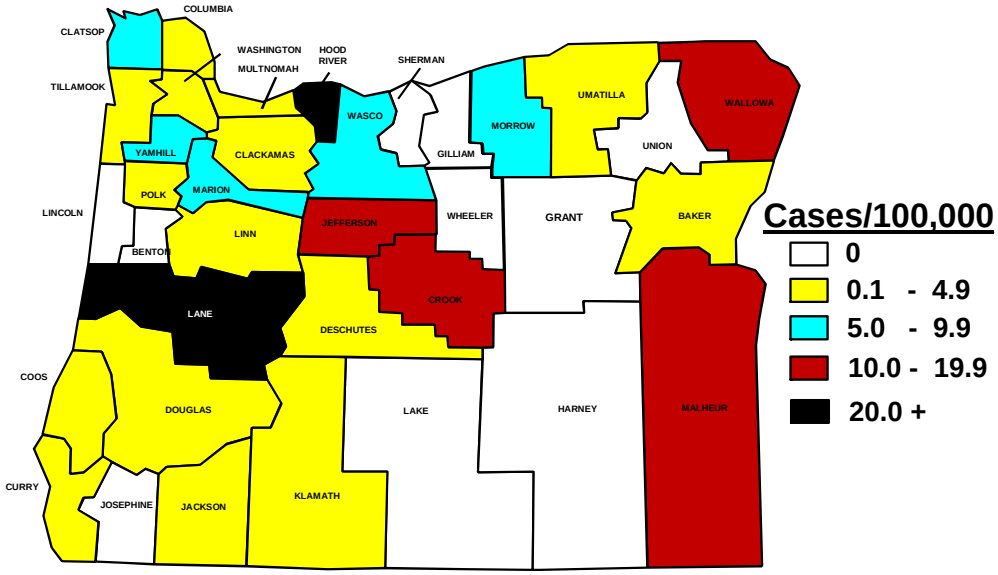
Incidence of *E. coli* O157 Infection
by Age and Sex
Oregon, 2002



Incidence of *E. coli* O157 Infection
Oregon vs. Nationwide
1993–2002



Incidence of *E. coli* O157 Infection
by County
Oregon, 2002



Giardiasis

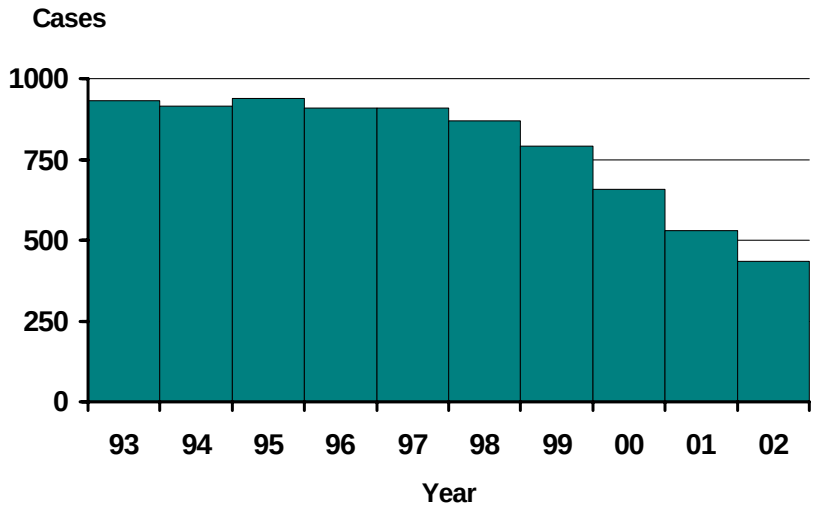
Giardia intestinalis, the flagellated protozoan also known as *G. lamblia* or *G. duodenalis,* is the most commonly identified parasitic pathogen in the US. Surveillance is essential to recognition of disease clusters, frequently associated with day-care facilities and community water systems.

Despite the fact that the majority of infections are asymptomatic, giardiasis is associated with a variety of gastrointestinal complaints, including chronic diarrhea, steatorrhea, abdominal cramps, bloating, frequent loose and pale, greasy stools, fatigue and weight loss. Children in day care and their close contacts are at greatest disease risk, as are backpackers and campers (by drinking unfiltered, untreated water), persons drinking from shallow wells, travelers to disease-endemic areas, and men who have sex with men. *Giardia* cysts can be excreted in the stool intermittently for weeks or months, resulting in a protracted period of communicability. Transmission occurs when cysts (as few as 10) are ingested through person-to-person or animal-to-person contact, or by ingestion of fecally contaminated water or food.

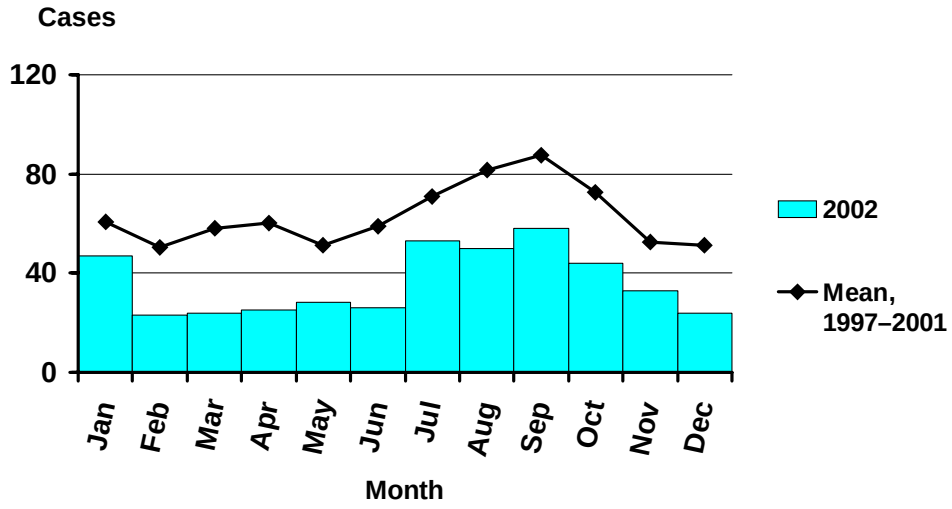
Despite a decade of decline in reported disease, Oregon's rate remains above the national, with 12 cases per 100,000 population, 52% in males, and the majority of cases sporadic. Children <5 years old had the highest incidence with 36 cases/100,000, followed by adults 34–49 years with 15 cases/ 100,000.

Prevention depends upon good personal hygiene (hand washing!), and avoiding consumption of fecally-contaminated water. Travel warnings on water quality should be heeded.

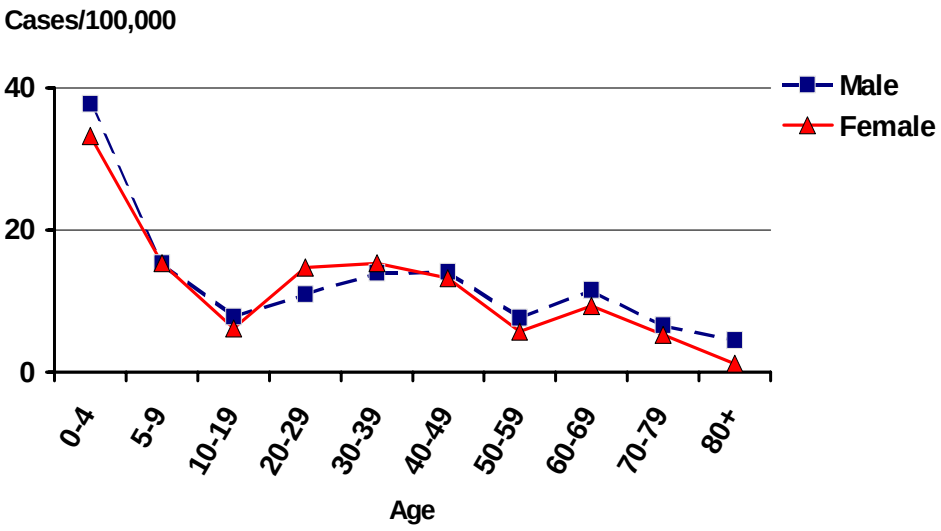
Giardiasis
by Year
Oregon, 1993–2002



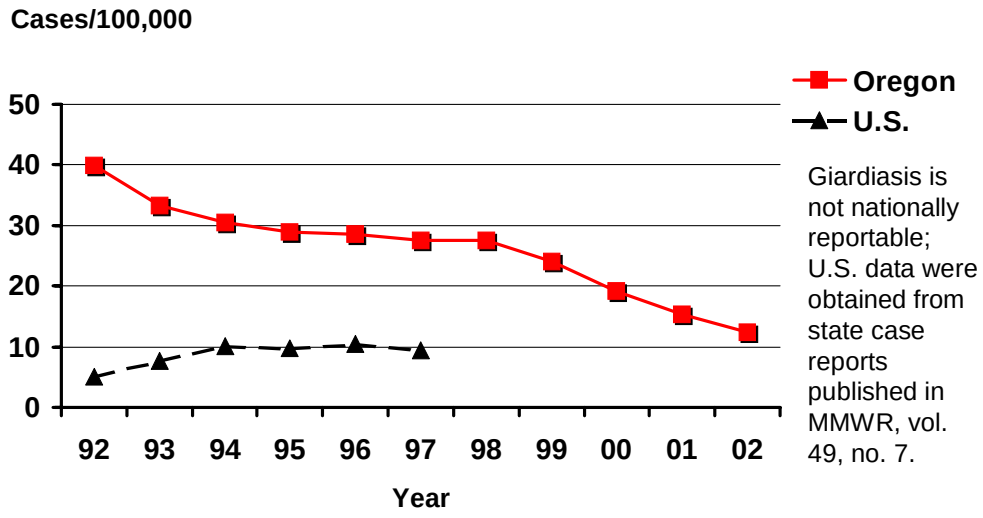
Giardiasis
by Report Month
Oregon, 2002



Incidence of Giardiasis
by Age and Sex
Oregon, 2002

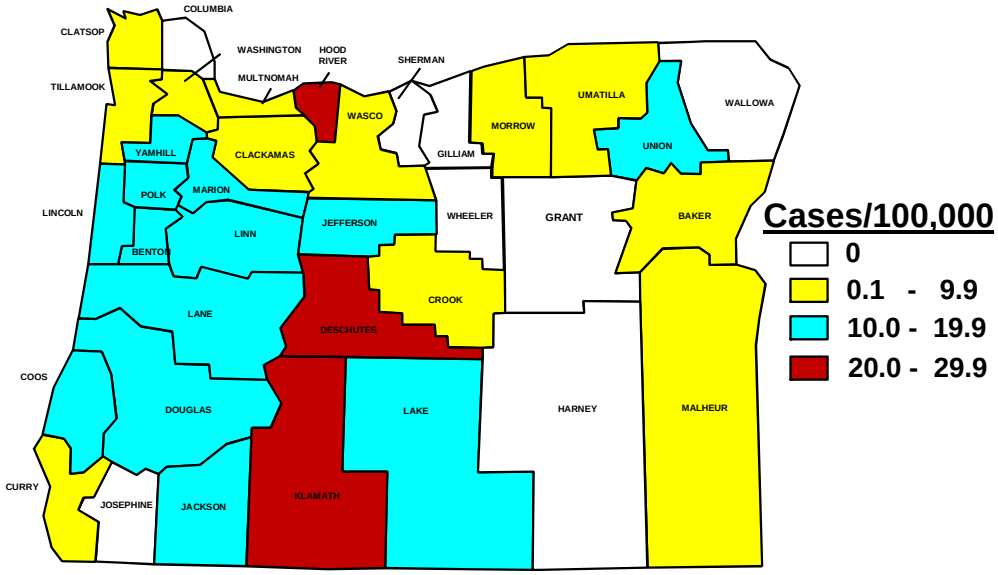


Incidence of Giardiasis
Oregon vs. Nationwide
1993–2002



Giardiasis is not nationally reportable; U.S. data were obtained from state case reports published in MMWR, vol. 49, no. 7.

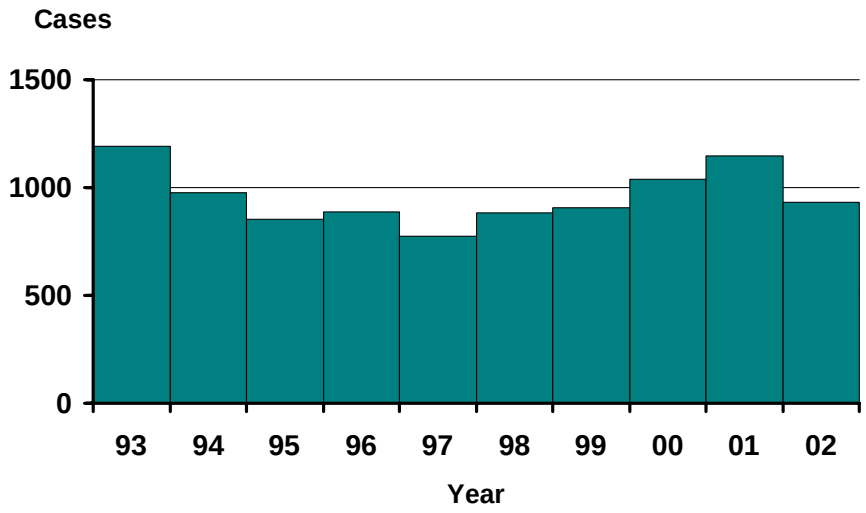
Incidence of Giardiasis
by County
Oregon, 2002



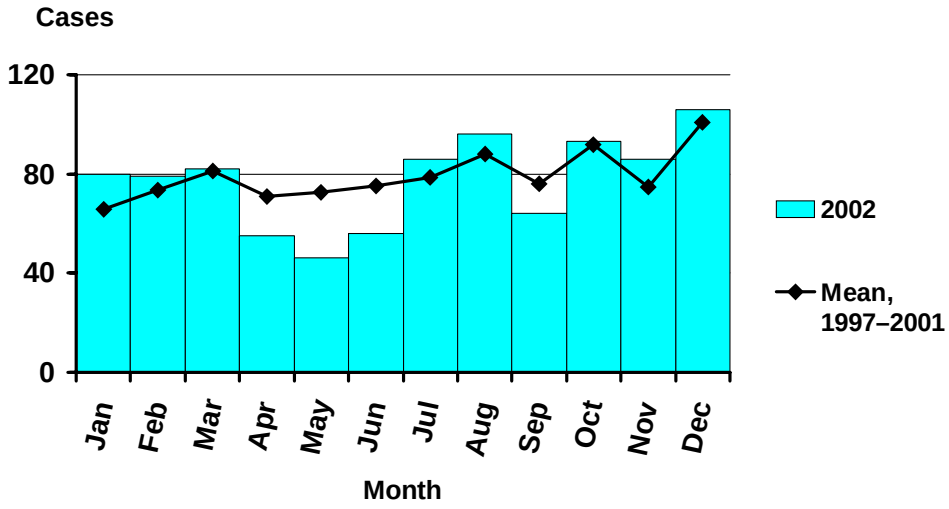
Gonorrhea

*G*onorrhea is easily transmitted from person to person through vaginal, rectal and oral sexual contact. The 929 gonorrhea cases reported in 2002 represent a decrease of 19% from the 1,145 cases reported in 2001. If untreated, gonorrhea infections cause a variety of health problems for men, women, and infants. The major complication of gonorrhea is associated with infertility and tubal pregnancies among women. Reported cases of gonorrhea among men who have sex with men increased During 2002. Recent sex partners should be evaluated and treated for gonorrhea.

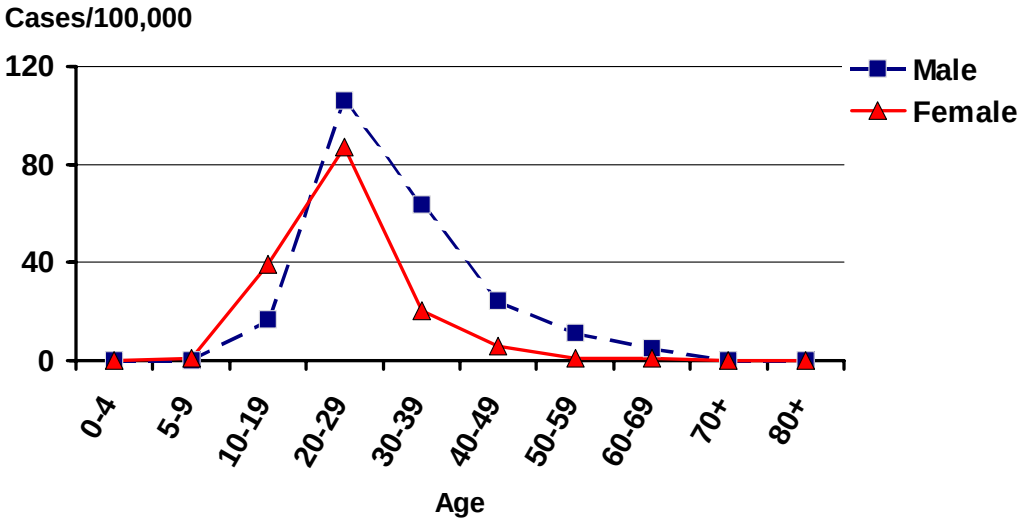
Gonorrhea
by Year
Oregon, 1993–2002



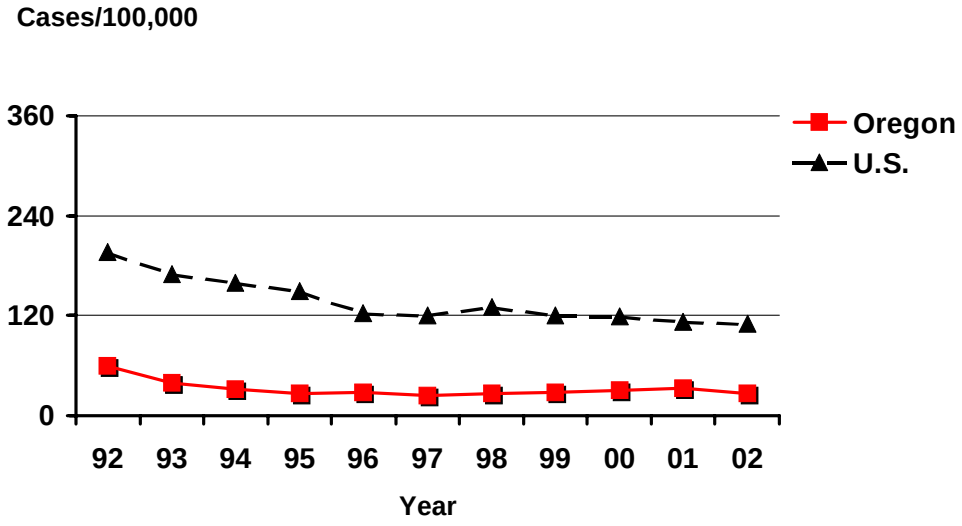
Gonorrhea
by Report Month
Oregon, 2002



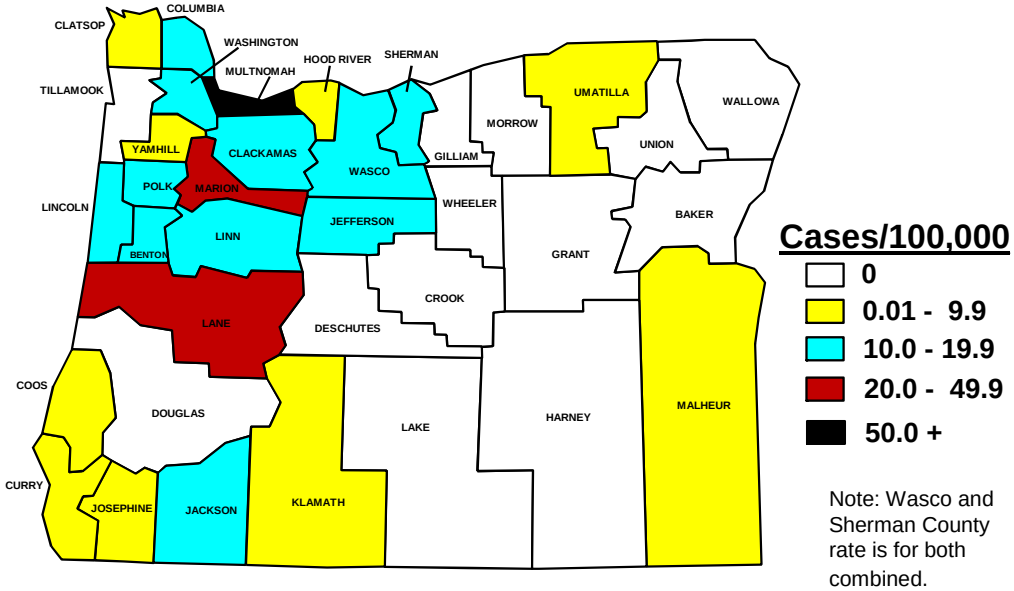
Incidence of Gonorrhea
by Age and Sex
Oregon, 2002



Incidence of Gonorrhea
Oregon vs. Nationwide
1993–2002



Incidence of Gonorrhea
by County
Oregon, 2002

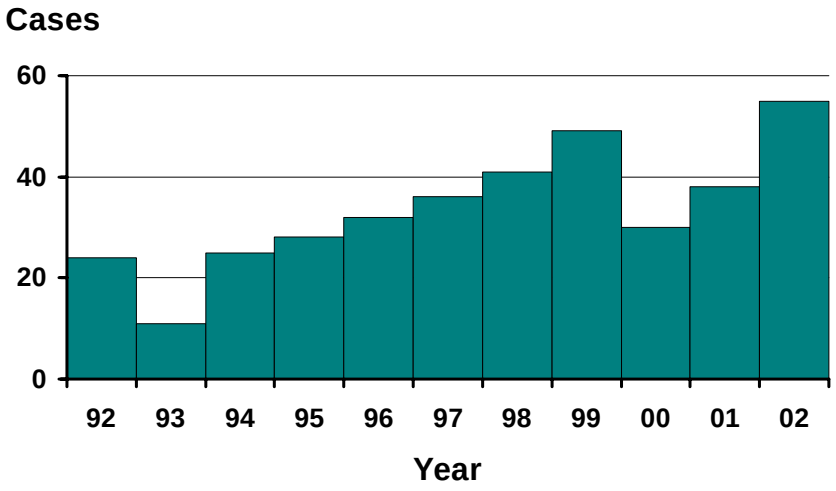


Note: Wasco and Sherman County rate is for both combined.

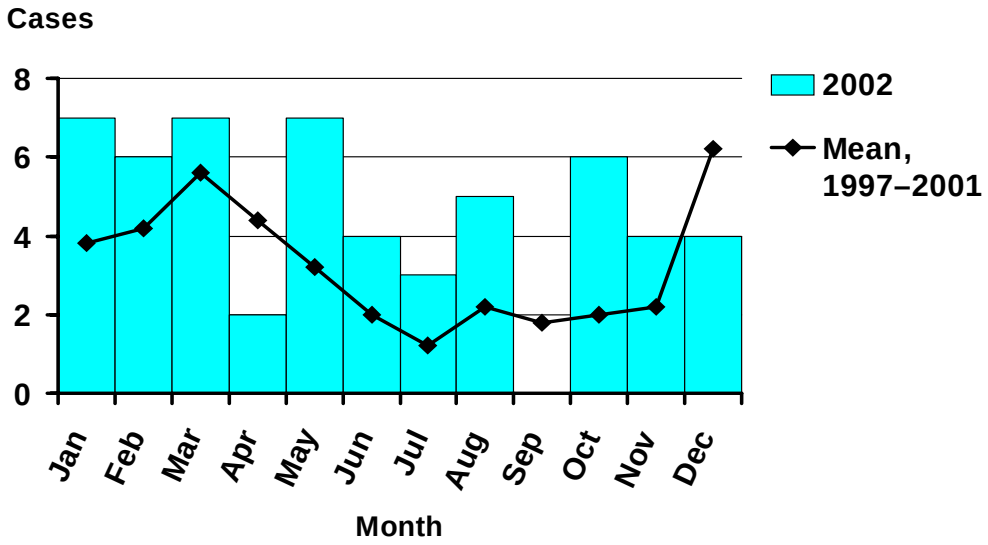
H. influenzae

Until the advent of an effective vaccine against serotype b organisms, it was the leading cause of meningitis in children under 5 years of age in Oregon and elsewhere. Today it is well down the listing, with *S. pneumoniae* now in the lead. In Oregon, serotype b organisms have not been cultured in association with invasive infection of normally sterile body fluids in children since 1999. Appropriate utilization of conjugate vaccine will help to ensure that this trend continues well into the future.

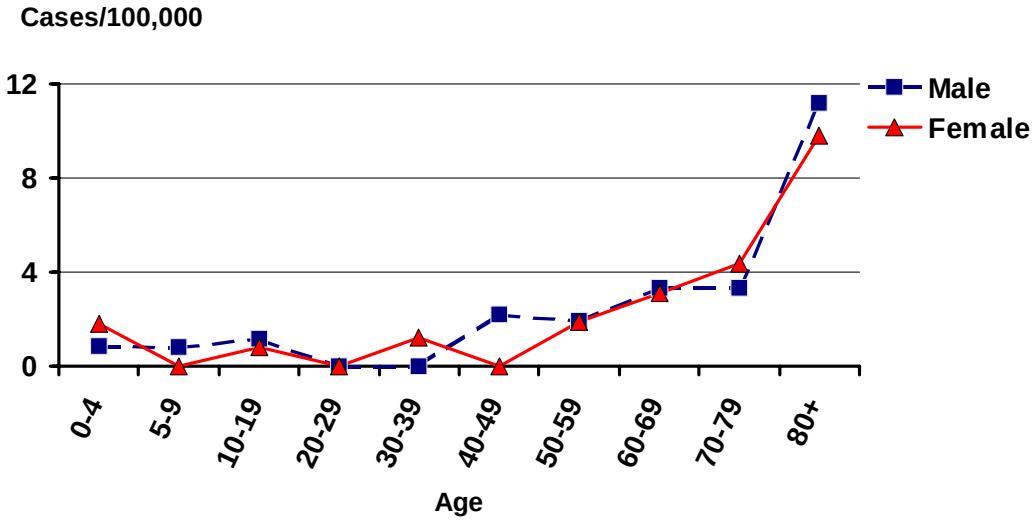
Haemophilus influenzae Invasive Disease
by Year
Oregon, 1993–2002



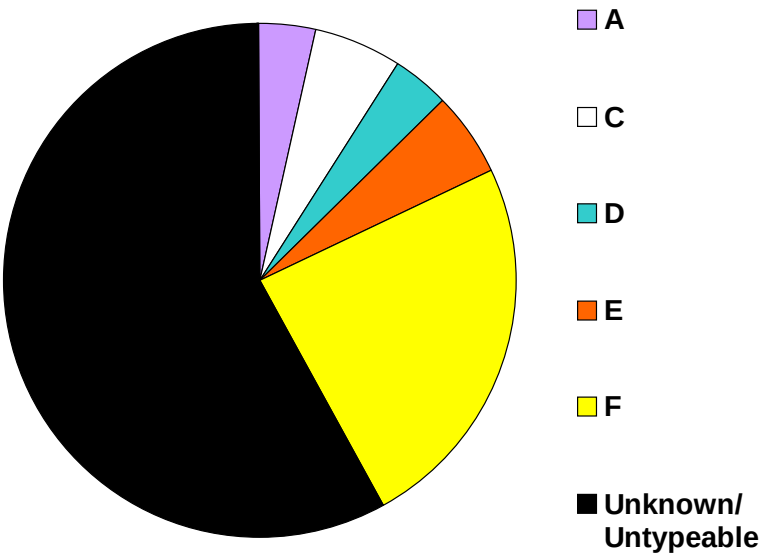
Haemophilus influenzae Invasive Disease
by Onset Month
Oregon, 2002



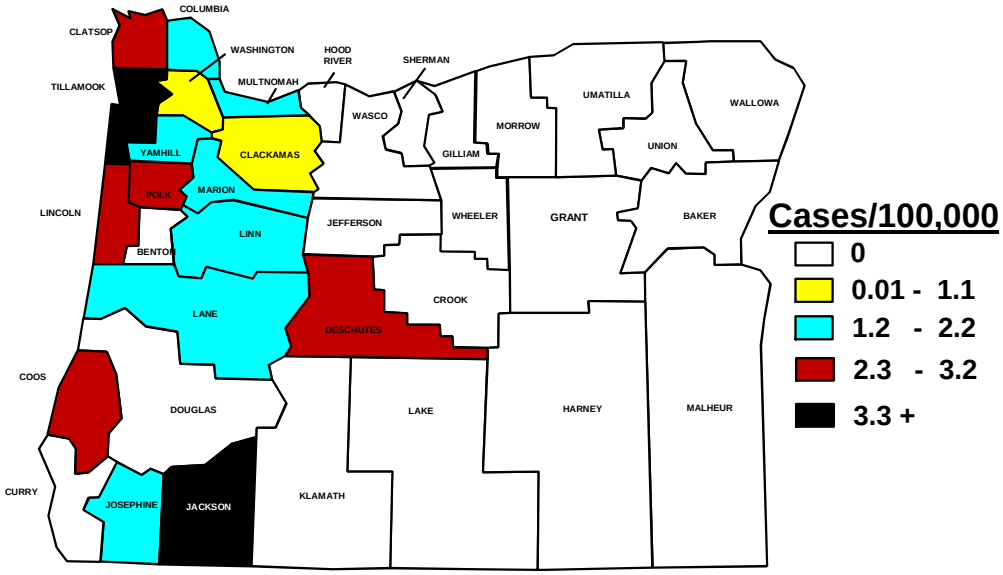
Incidence of *H. influenzae* Invasive Disease
All Serotypes
by Age and Sex
Oregon, 2002



H. Influenzae
by Serotype
Oregon, 2002



Incidence of *H. influenzae* Invasive Disease
by County
Oregon, 2002

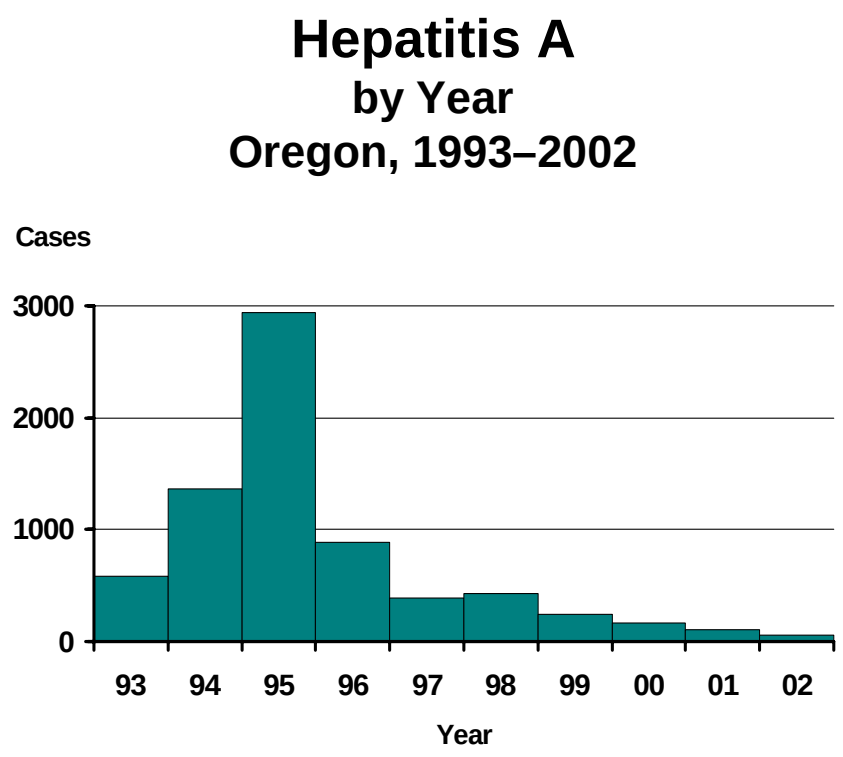


Hepatitis A

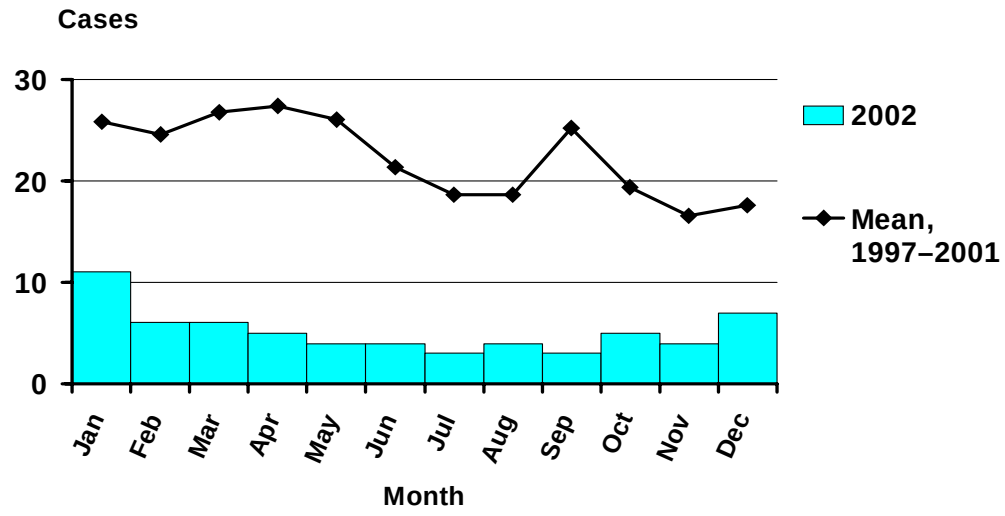
Hepatitis A is a liver disease caused by the hepatitis A virus. Hepatitis A can affect anyone. In Oregon, hepatitis A can occur in situations ranging from isolated cases of disease to widespread outbreaks.

Good personal hygiene and proper sanitation can help prevent hepatitis A. Vaccines are also available for long-term prevention of hepatitis A virus infection in persons 2 years of age and older. Immune globulin is available for short-term prevention of hepatitis A virus infection in individuals of all ages.

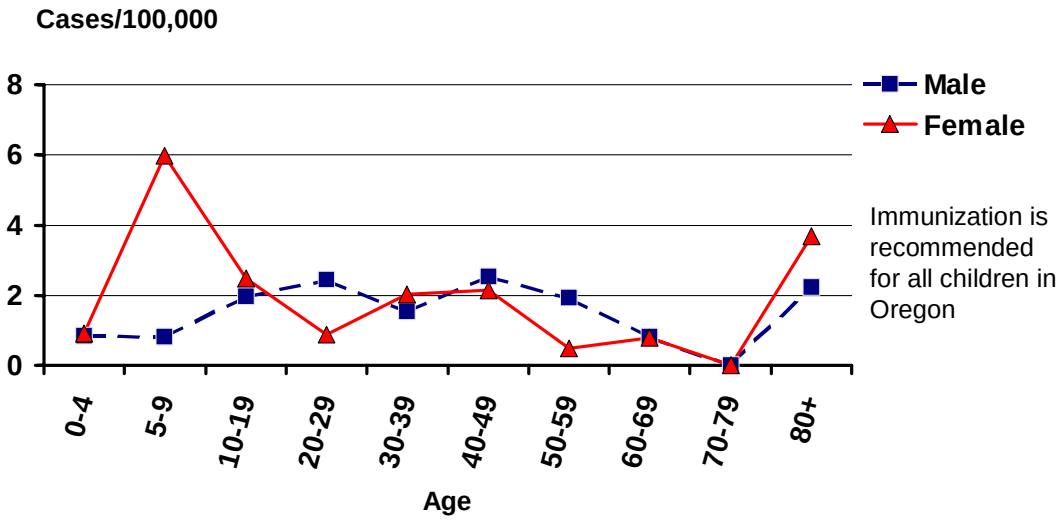
Although the number of cases among Oregonians is at a record low, most cases currently reported are acquired by venturing outside of Oregon to areas having poor practices relating to personal hygiene and environmental sanitation. Such persons placing themselves at elevated risk should seriously consider getting a hepatitis A vaccination at least two months prior to departure.



Hepatitis A
by Onset Month
Oregon, 2002

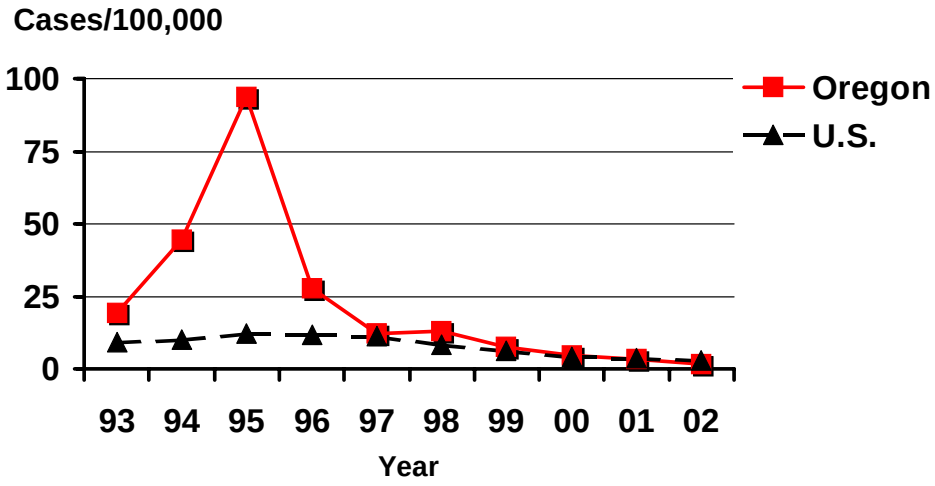


Incidence of Hepatitis A
by Age and Sex
Oregon, 2002

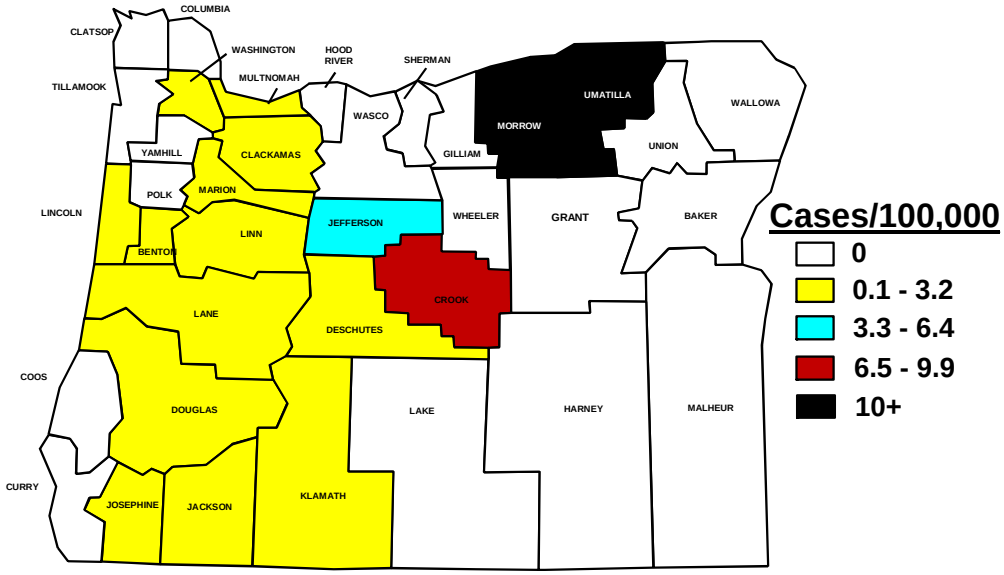


Immunization is recommended for all children in Oregon

Incidence of Hepatitis A
Oregon vs. Nationwide
1993–2002



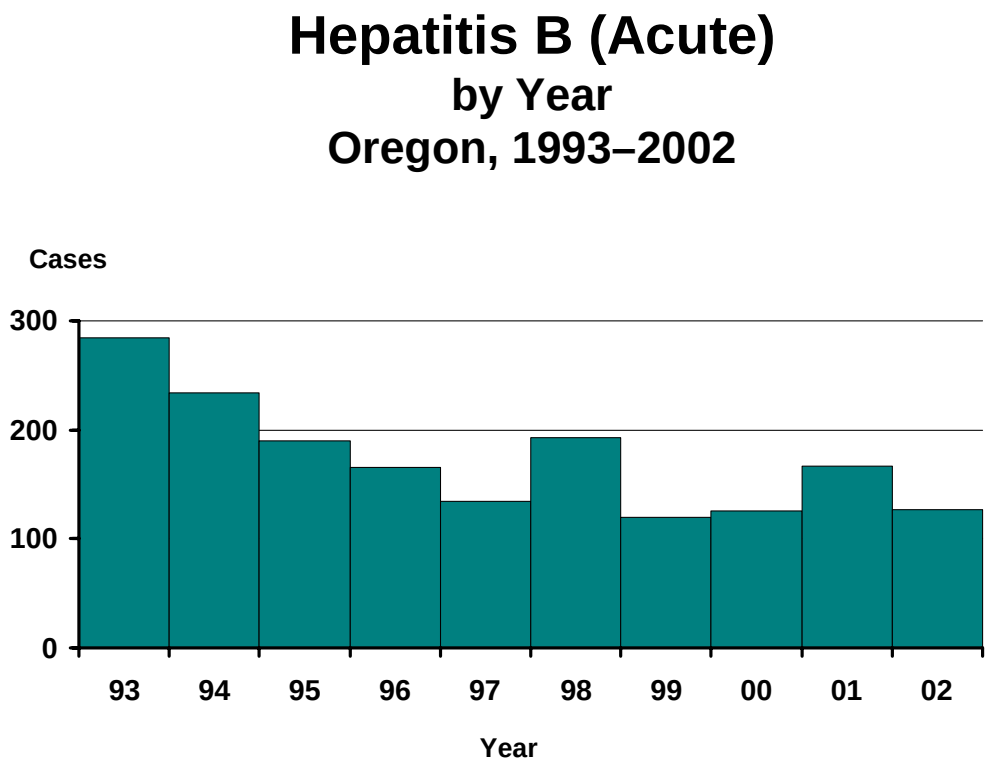
Incidence of Hepatitis A
by County
Oregon, 2002



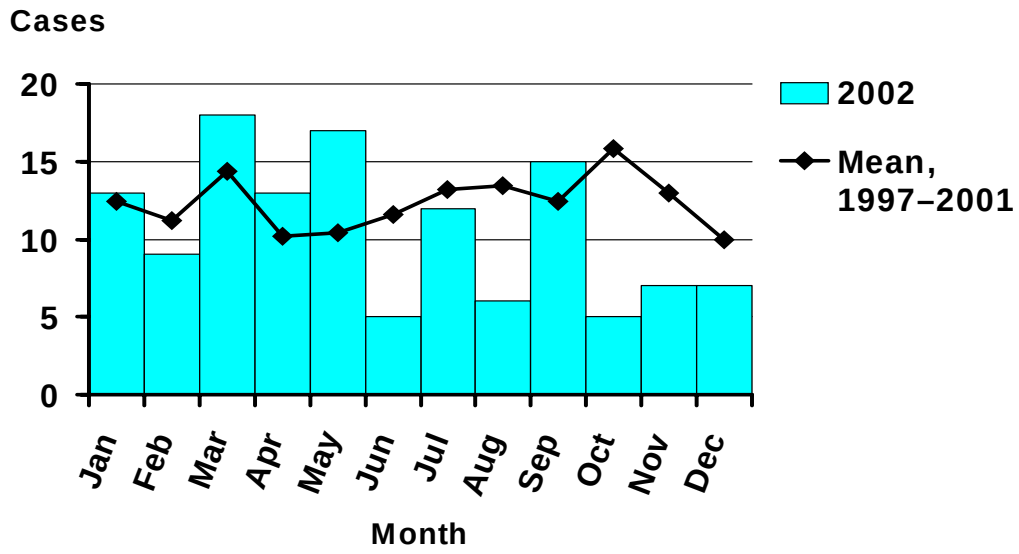
Acute Hepatitis B

Hepatitis B is a vaccine-preventable viral disease of the liver that occurs when the virus of an infected person passes (through blood, semen, or saliva) into the blood stream of a non-immune person. Percutaneous or permucosal exposures take place when hypodermic needles are shared, when blood splashes into an eye, during sex, by biting, when improperly sterilized injection devices are used for tatooing, body piercing, and acupuncture, and when the baby of a hepatitis B carrier is being born. Acute hepatitis B virus infection (diagnosed by the sero-presence of the IgM antibody to the hepatitis B surface antigen [IgM anti-HbsAg]) usually, but not always, causes jaundice. Some infections are mild, even asymptomatic, and may go undetected.

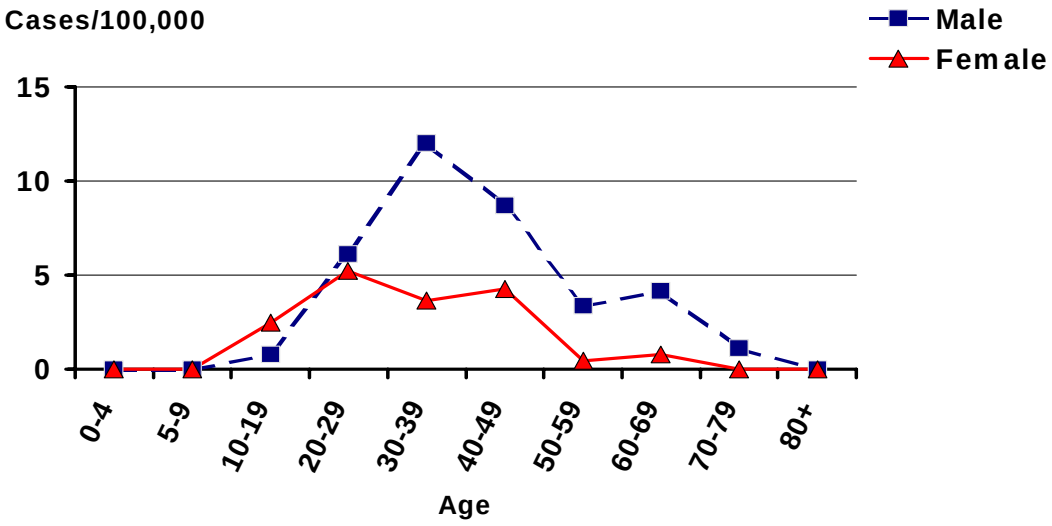
Acute hepatitis B in Oregon declined from 1993 through 1996 — the very end of a decade-long, 72% decline that started here after the hepatitis B vaccine was liscensed in 1982 (hepatitis B declined 76% in the US as a whole over the same period of time). The number of cases leveled off in 1997, to about 125 cases per year, except for case-count spikes in 1998 and 2001. An excess number of cases in Lane County (Eugene) accounted for more than half of the case-count spike in 1998 — most of the extra cases were IV drug users. In 2001, four counties (Jackson, Lane, Marion, and Multnomah) accounted for the case-count spike and, again, most of the extra cases were IV drug users. Other interesting details in the figures include high incidence among 30–39 year-old men and the fact that Oregon incidence rate of acute hepatitis B is higher than the incidence rate in the US as a whole (the reasons for this are unclear).



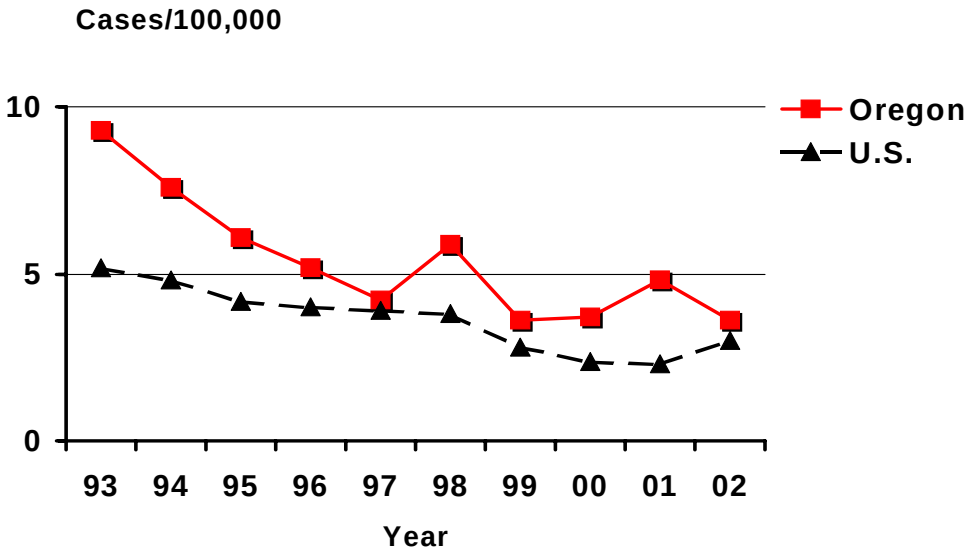
Hepatitis B (Acute)
by Onset Month
Oregon, 2002



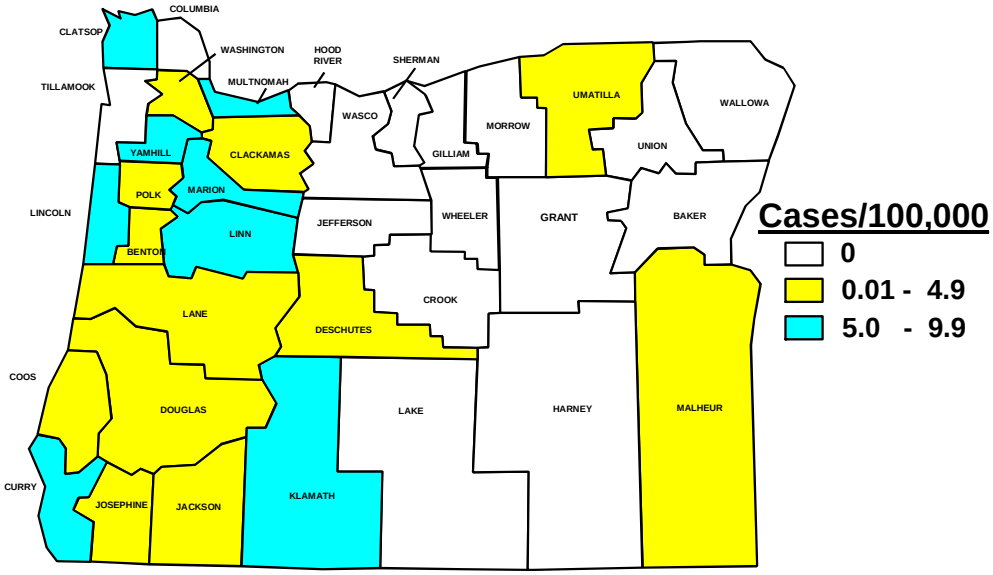
Incidence of Hepatitis B (Acute)
by Age and Sex
Oregon, 2002



Incidence of Hepatitis B (Acute)
Oregon vs. Nationwide
1993–2002



Incidence of Hepatitis B (Acute)
by County
Oregon, 2002

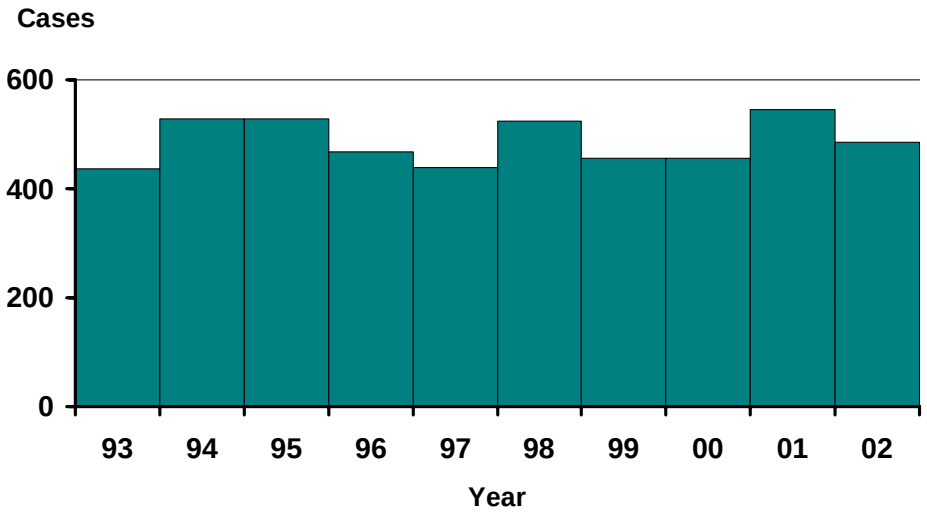


Chronic Hepatitis B

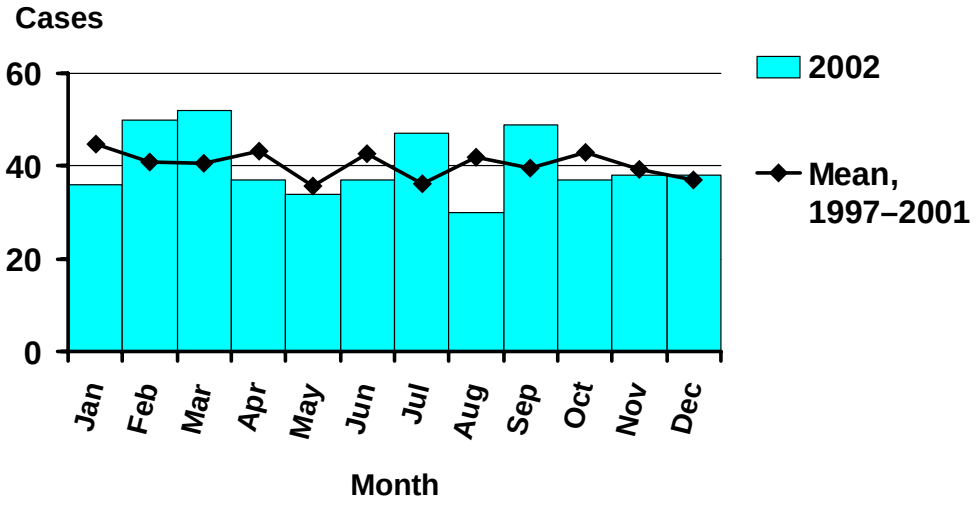
Persons with chronic hepatitis B are known as "chronic carriers" — a state of infection which exists when hepatitis B surface antigen (HBsAg) persists in the blood for more than six months. The likelihood of becoming a chronic carrier is affected by the age at infection. Fewer than 6% of acutely infected adults in the US become carriers, compared to some 25% (with HBeAg-negative moms) to 90% (with HBeAg-positive moms) of children infected in early childhood or during birth. Perinatal infection can be prevented by prompt administration of hepatitis B immune globulin and initiation of the three-dose hepatitis B vaccination series. This perinatal intervention is widely practiced in the US — all states have federal funding for perinatal hepatitis B prevention programs — but not in other parts of the world, particularly Asia and sub-Saharan Africa, where the prevalence of chronic hepatitis B is higher to begin with. In Oregon, 50% of chronic carriers were born in hepatitis-B-endemic countries. Chronic carriers are at greater risk of developing life-threatening diseases (e.g., chronic active hepatitis, cirrhosis, and/or liver cancer) decades later. Carriers will sustain transmission of hepatitis B in the US until vaccine-induced immunity is nearly universal.

The number of chronic carriers reported each year in Oregon is four times the number of acute cases. Keep in mind that these are newly-reported carriers, not people who have newly become carriers. Newly-reported carriers are older than acute cases. Chronic carriers are not reportable in many of the US states, so a table comparing Oregon to the rest of the US is not given.

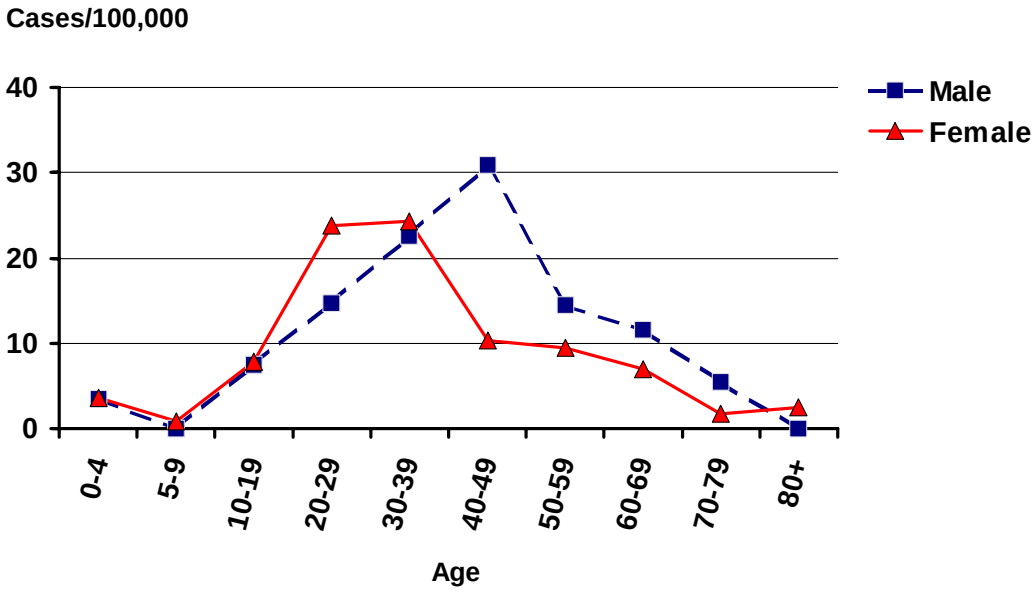
Hepatitis B (Chronic)
by Year
Oregon, 1993–2002



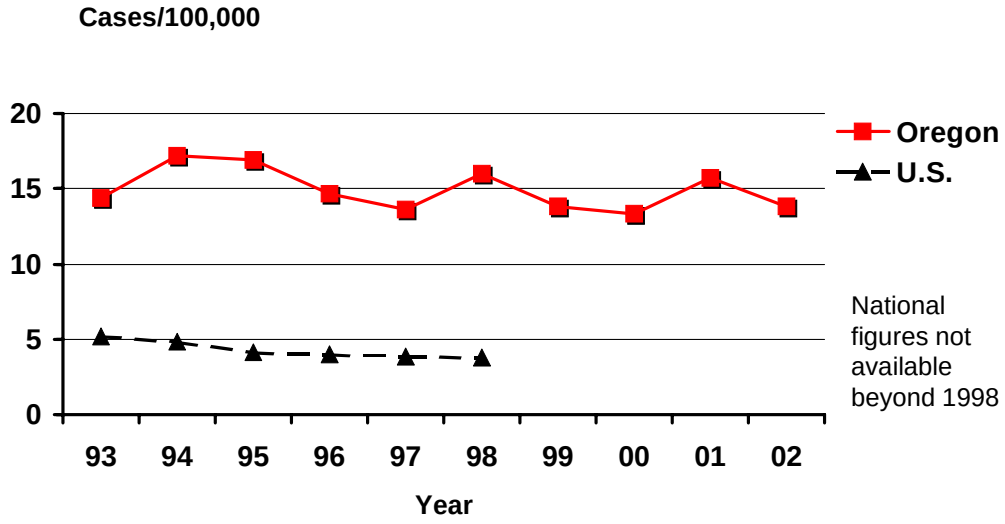
Hepatitis B (Chronic)
by Onset Month
Oregon, 2002



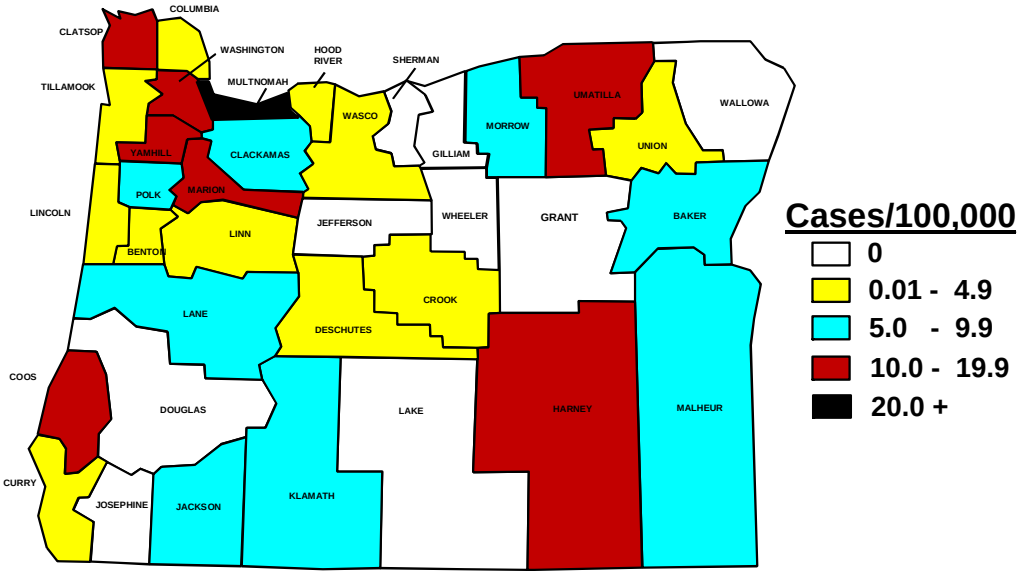
Incidence of Hepatitis B (Chronic)
by Age and Sex
Oregon, 2002



Incidence of Hepatitis B (Chronic)
Oregon vs. Nationwide
1993–2002



Incidence of Hepatitis B (Chronic)
by County
Oregon, 2002



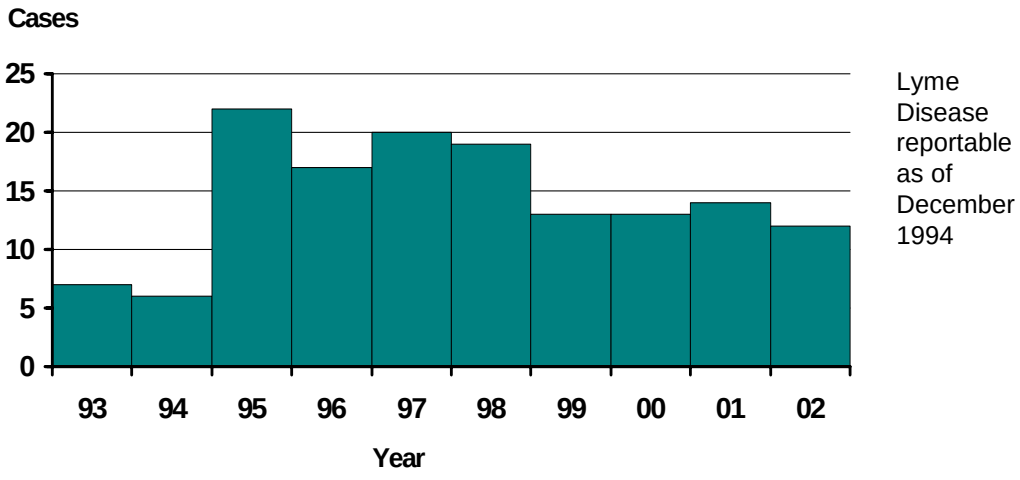
Lyme Disease

Lyme Disease is a tickborne, spirochetal, zoonotic disease characterized by a distinctive skin lesion, systemic symptoms and neurologic, rheumatologic and cardiac involvement occurring in varying combinations over a period of months to years. The first manifestation in about 60% of patients appears as a red macule or papule that expands slowly in an annular manner, sometimes with multiple similar lesions. This distinctive skin lesion is called erythema migrans (EM). Incubation period for EM ranges from 3 to 32 days after tick exposure; however, the early stages of the illness may be asymptomatic, and the patient may present with later manifestations

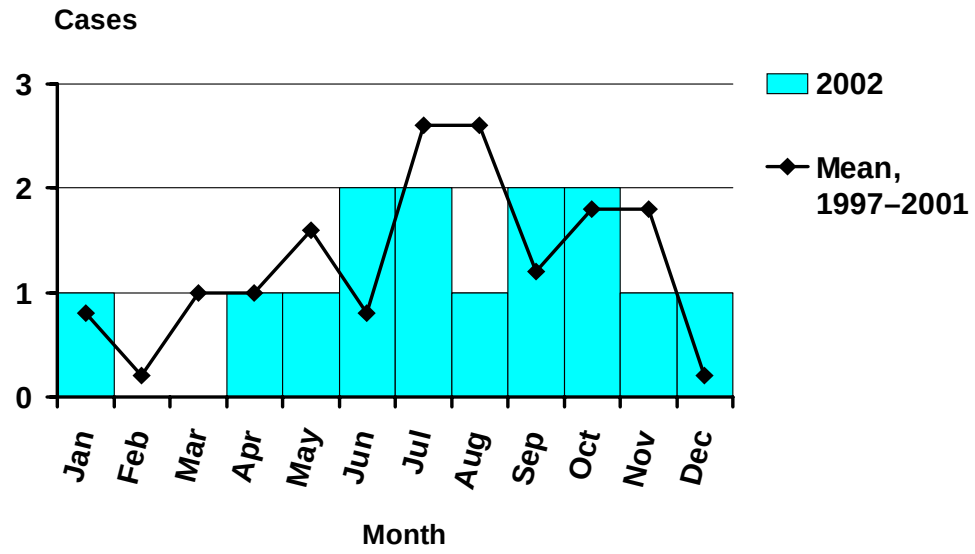
Diagnosis is currently based on clinical findings supported by serologic data, ELISA and Western blot confirmation. In the USA, endemic foci exist along the Atlantic coast concentrated from Massachusetts to Maryland, in the upper Midwest in an expanding focus currently concentrated in Wisconsin and Minnesota, and in the West in California, Oregon and Washington. Currently, increasing recognition of the disease is redefining endemic areas; cases have been reported from 47 states, and from Ontario and British Columbia, Canada. Elsewhere, related borrelioses have been found in Europe, the former Soviet Union, China and Japan.

In 1997–1998, a tick identification and *Borrelia* isolation study was conducted by the CDC and the Oregon Department of Human Services. Findings included *Ixodes pacificus* and its reservoir, the deer mouse. Isolation of the organism was successful as 3.5% of collected ticks tested positive for the spirochete.

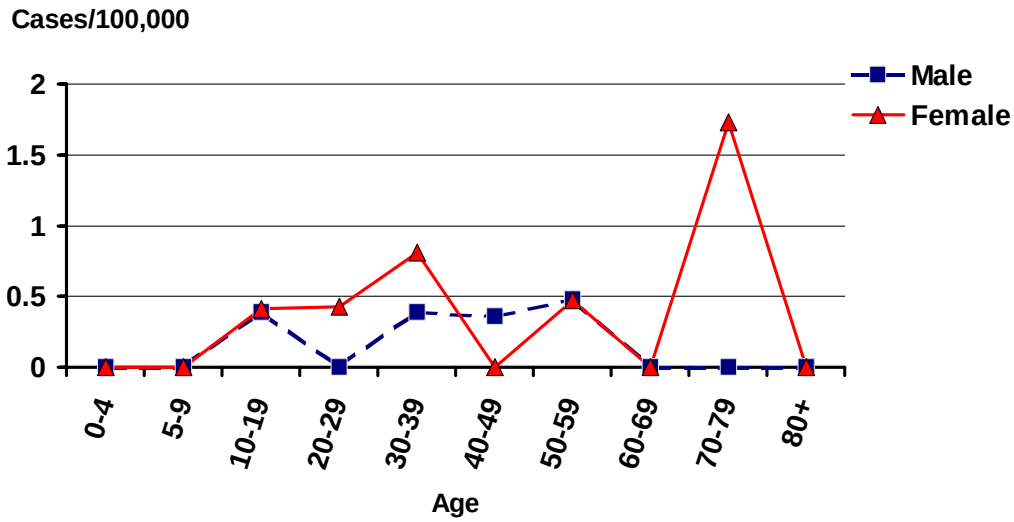
Lyme Disease
by Year
Oregon, 1993–2002



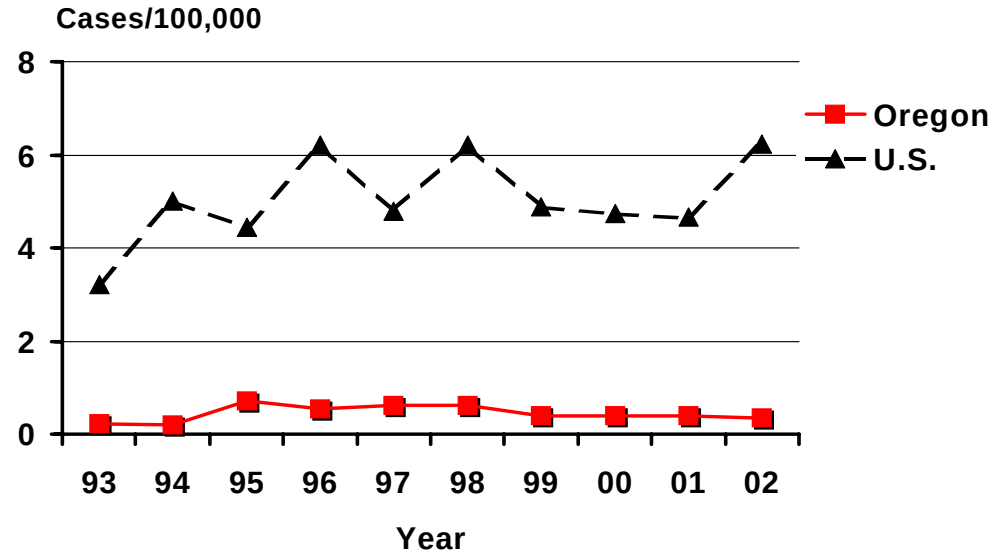
Lyme Disease
by Onset Month
Oregon, 2002



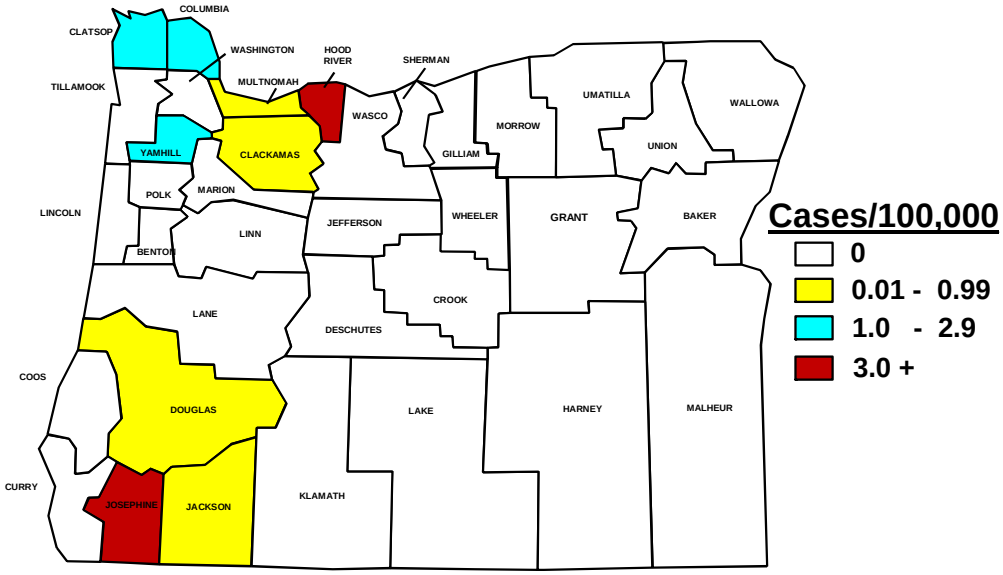
Incidence of Lyme Disease
by Age and Sex
Oregon, 2002



Incidence of Lyme Disease
Oregon vs. Nationwide
1993–2002



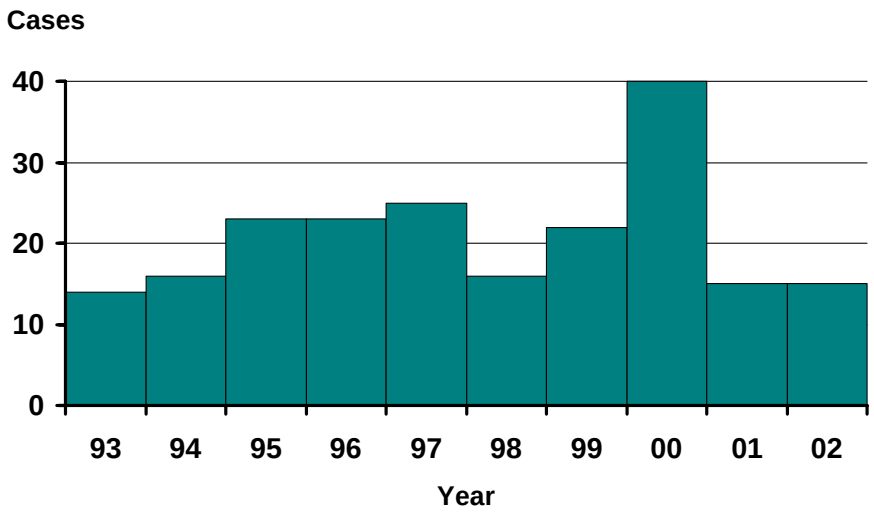
Incidence of Lyme Disease
by County
Oregon, 2002



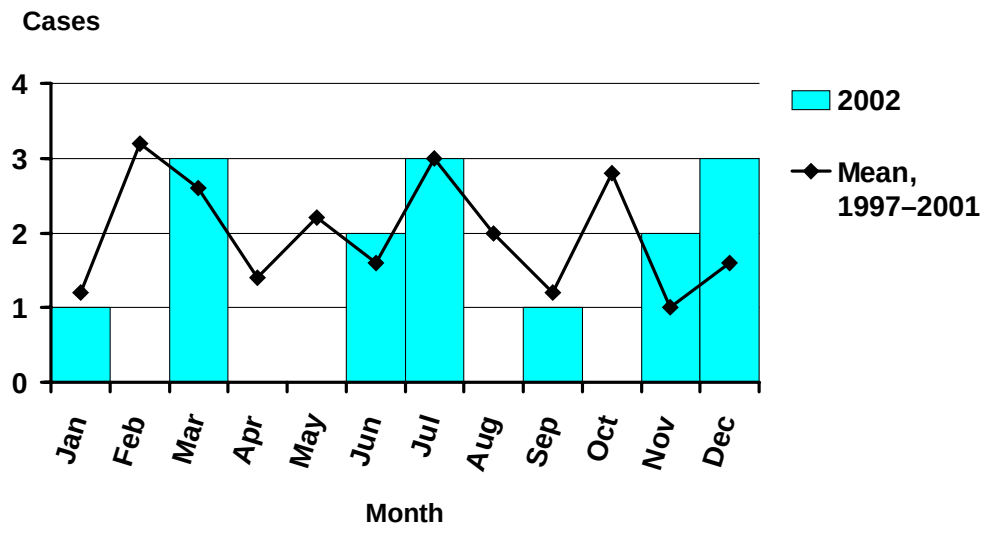
Malaria

Worldwide, malaria is one of the most devastating of the communicable diseases, causing at least 1,000,000 deaths annually, not to mention an enormous burden of disability and medical costs. While transmission has not been documented in Oregon for decades, malaria remains the most commonly reported vector-borne disease in our state — all cases resulting from exposures outside the United States. Competent anopheline mosquitoes are resident in Oregon, so limited local transmission remains a theoretical possibility. Rates in Oregon are similar to the national average. Surveillance data are contributed to the national database, which is used to tailor recommendations for prophylaxis and treatment.

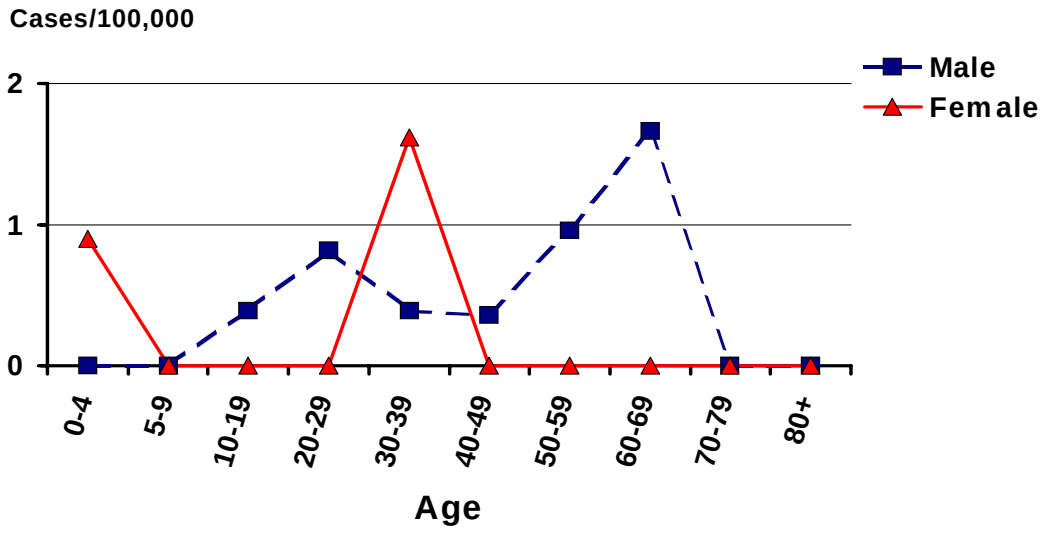
Malaria
by Year
Oregon, 1993–2002



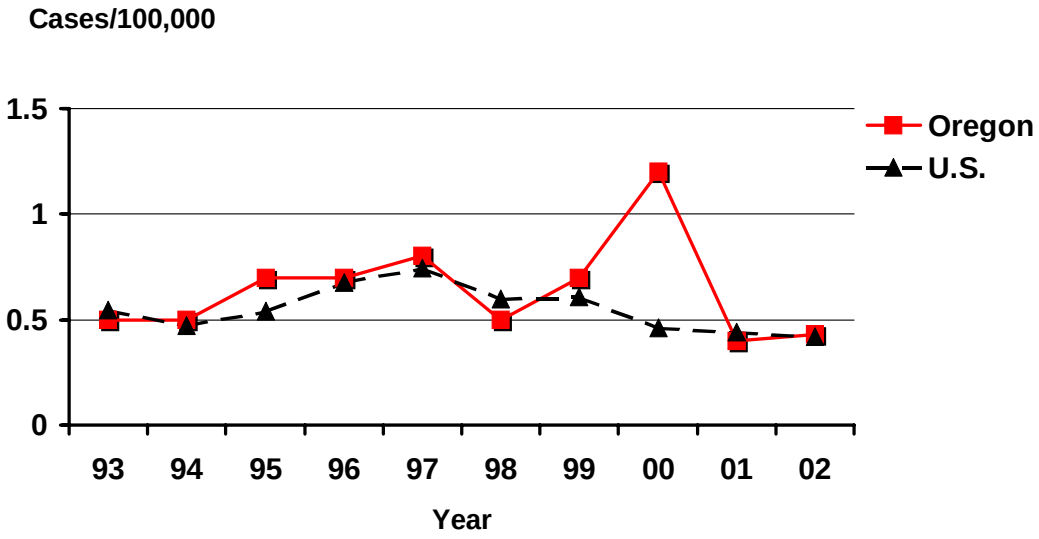
Malaria
by Onset Month
Oregon, 2002



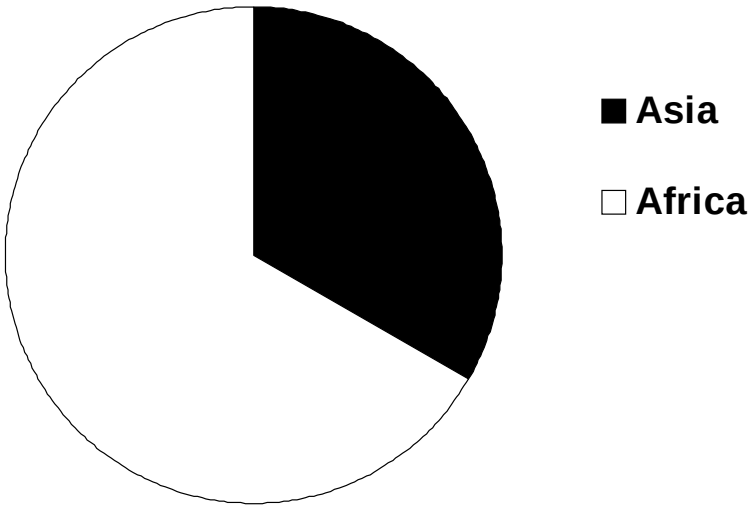
Incidence of Malaria
by Age and Sex
Oregon, 2002



Incidence of Malaria
Oregon vs. Nationwide
1993–2002



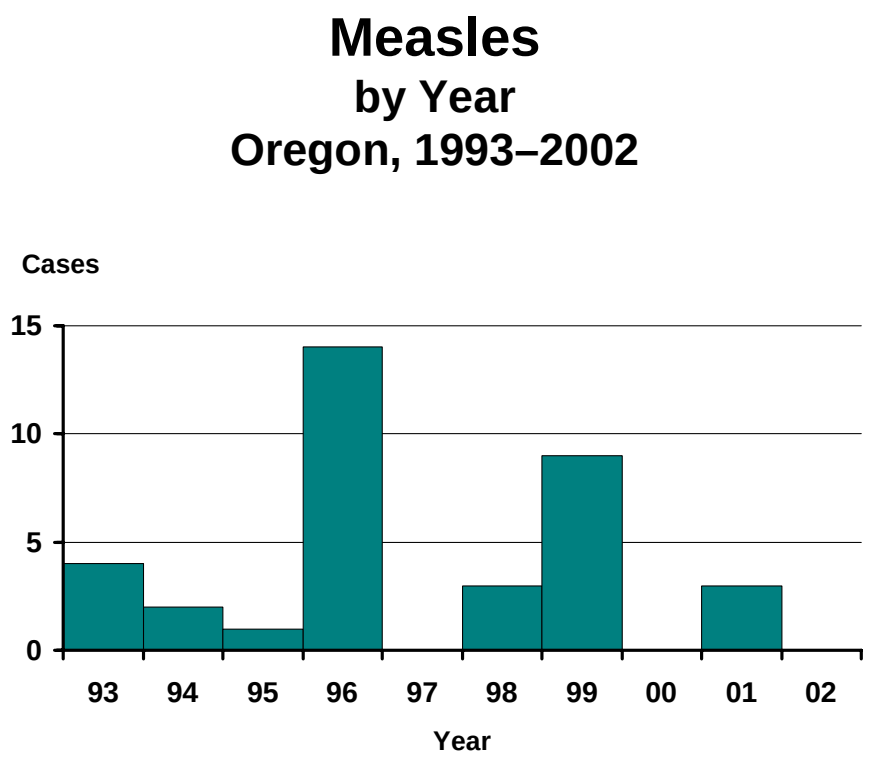
Malaria
by Region of Acquisition
Oregon, 2002



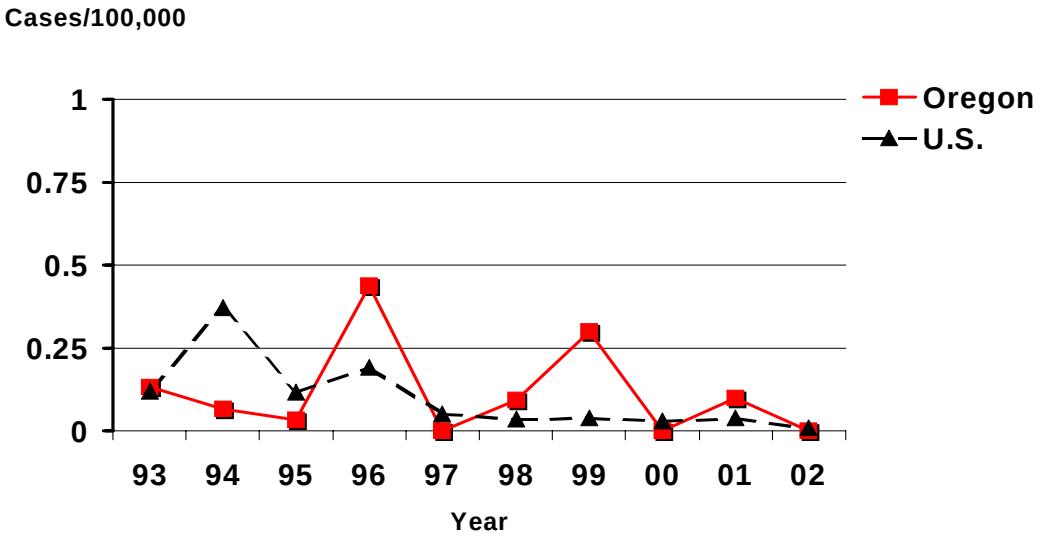
Measles

Measles is an acute, highly communicable viral illness, known for its red, blotchy rash that starts on the face and then becomes generalized. The rash is preceded by a febrile prodrome that includes cough, coryza, and conjunctivitis, and sometimes photophobia and Koplik spots. Diagnosis is confirmed by the presence of IgM antibodies in sera (in a patient who has not recently been immunized).

Measles is no longer endemic in the United States; cases are occasionally imported. There were no cases of measles last year in Oregon, and the risk of exposure to measles in Oregon remains low.



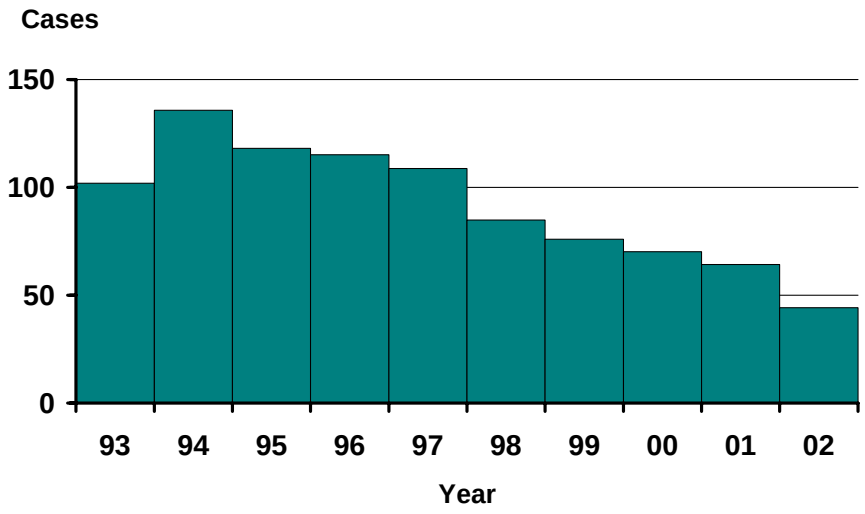
Incidence of Measles
Oregon vs. Nationwide
1993–2002



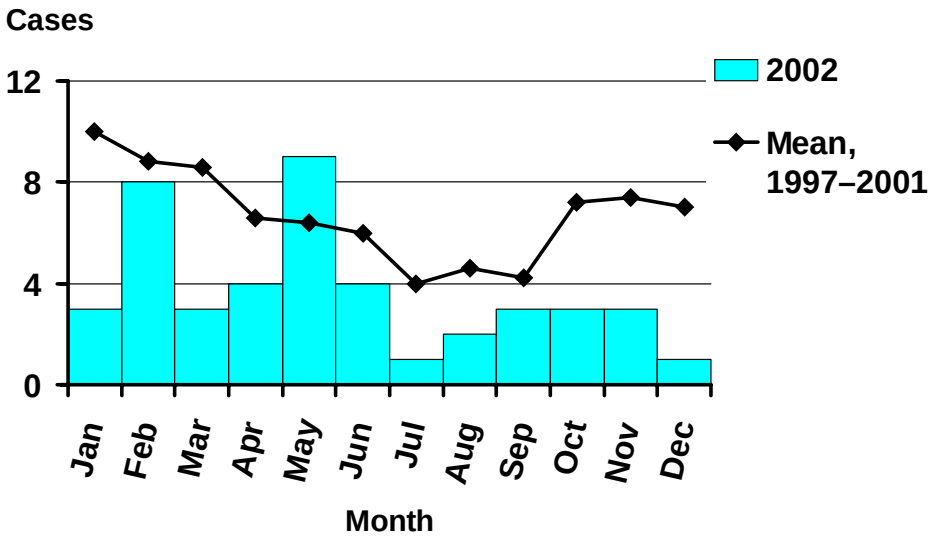
Meningococcal Disease

Reported cases of invasive meningococcal infections, including sepsis and meningitis, have declined from hyperendemic levels seen in 1993–1995 to those observed prior to the advent of the ET5 strain of serogroup B. Respiratory secretions and droplets continue to be shared among Oregonians and predispose to occurrence of secondary cases. Serogroup B organisms comprise about half of all isolates.

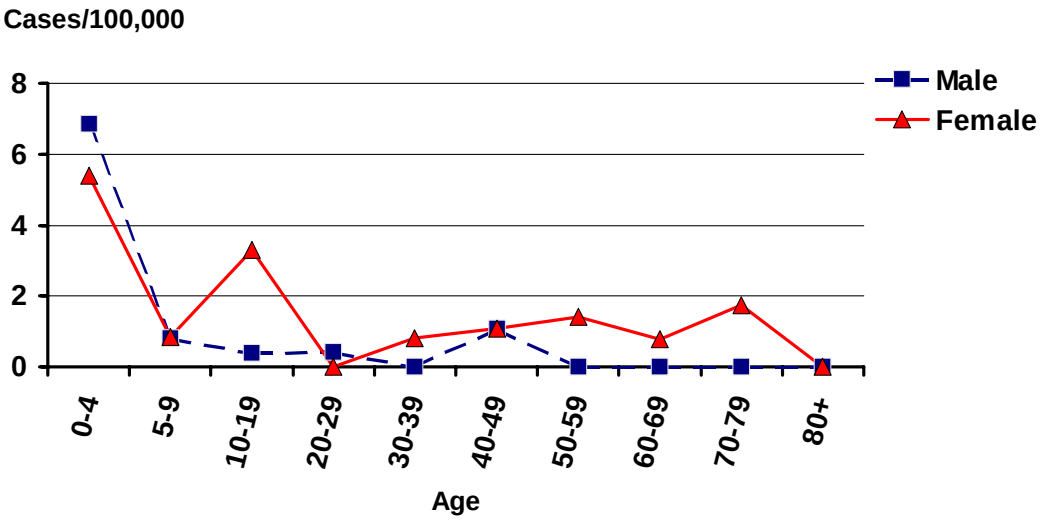
Meningococcal Disease
by Year
Oregon, 1993–2002



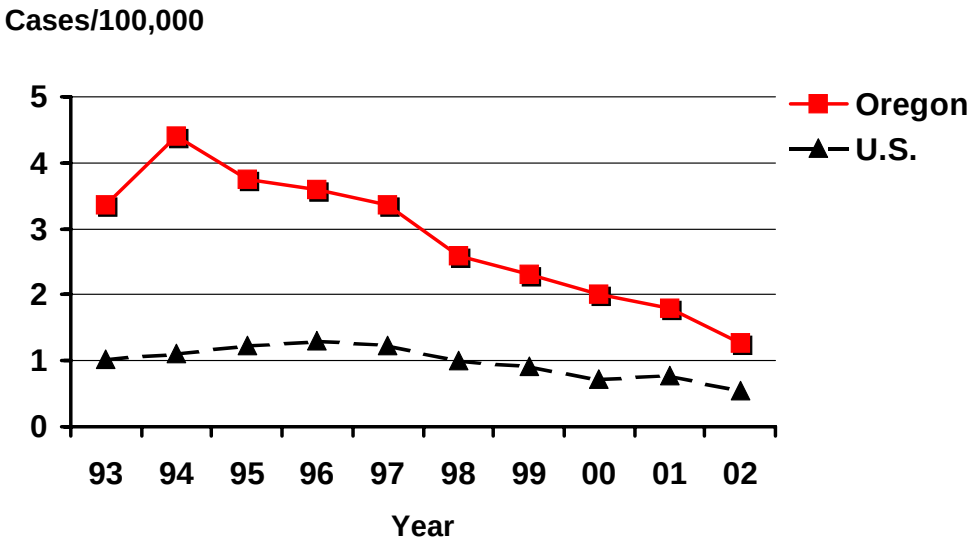
Meningococcal Disease
by Onset Month
Oregon, 2002



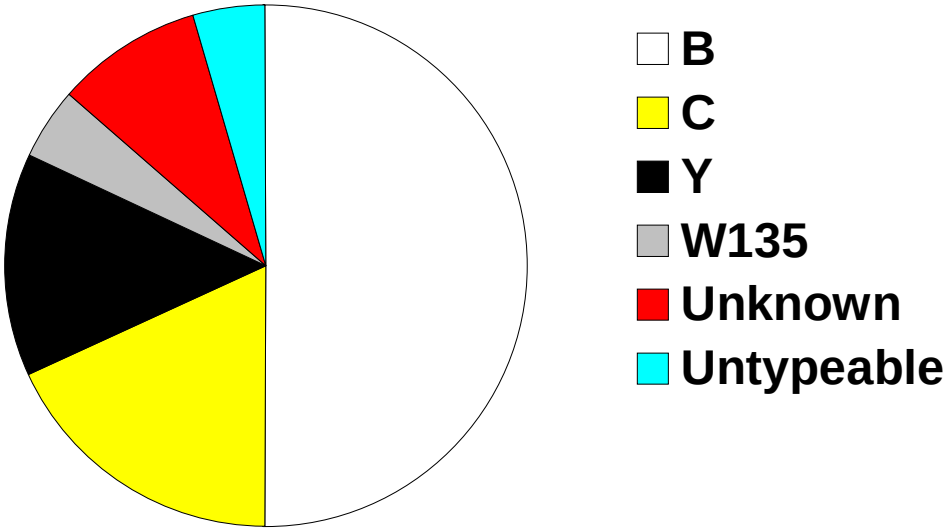
Incidence of Meningococcal Disease
by Age and Sex
Oregon, 2002



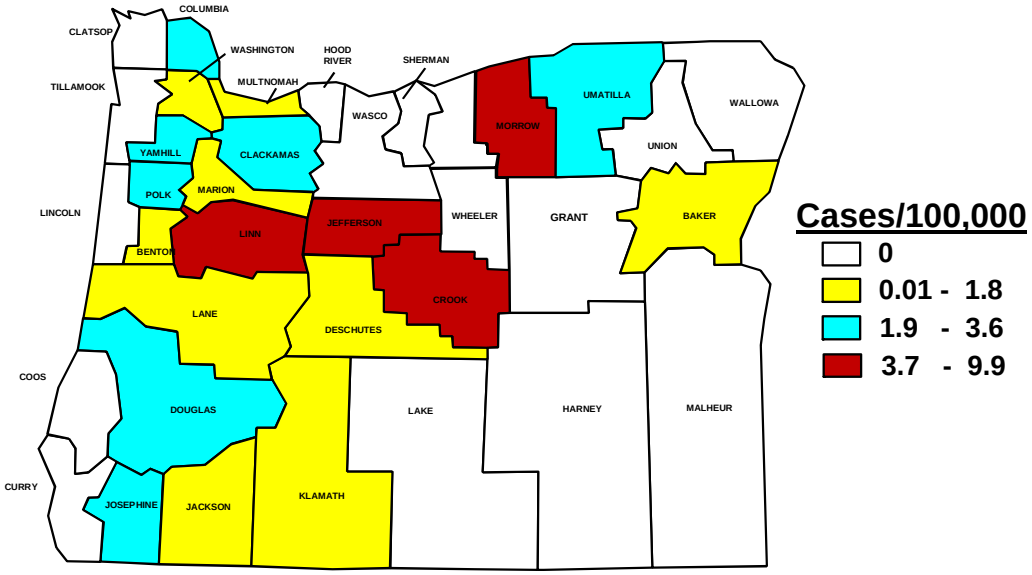
Incidence of Meningococcal Disease
Oregon vs. Nationwide
1993–2002



Meningococcal Disease
by Serogroup
Oregon, 2002

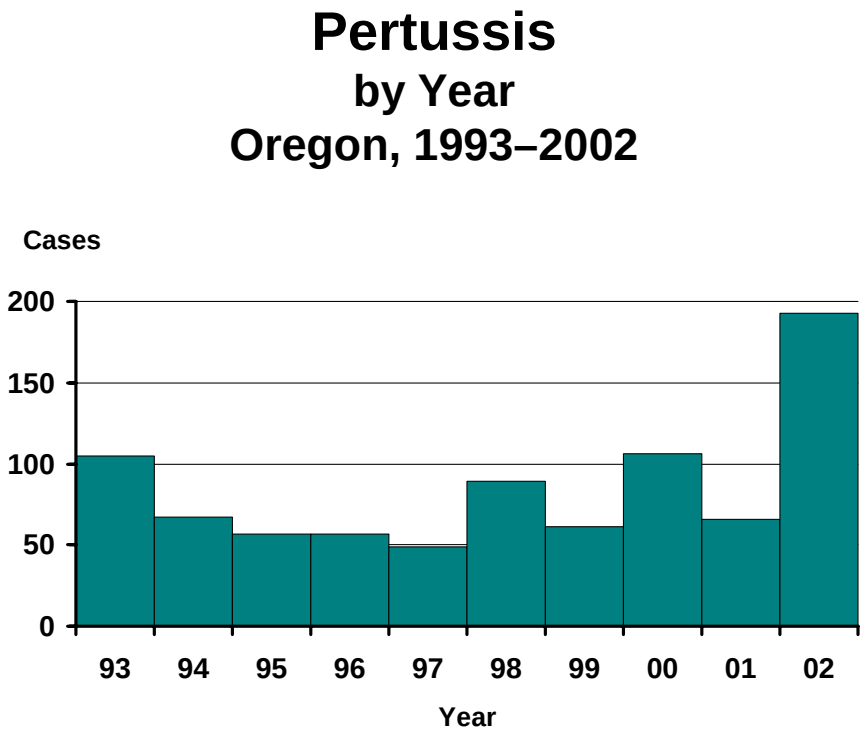


Incidence of Meningococcal Disease
by County
Oregon, 2002

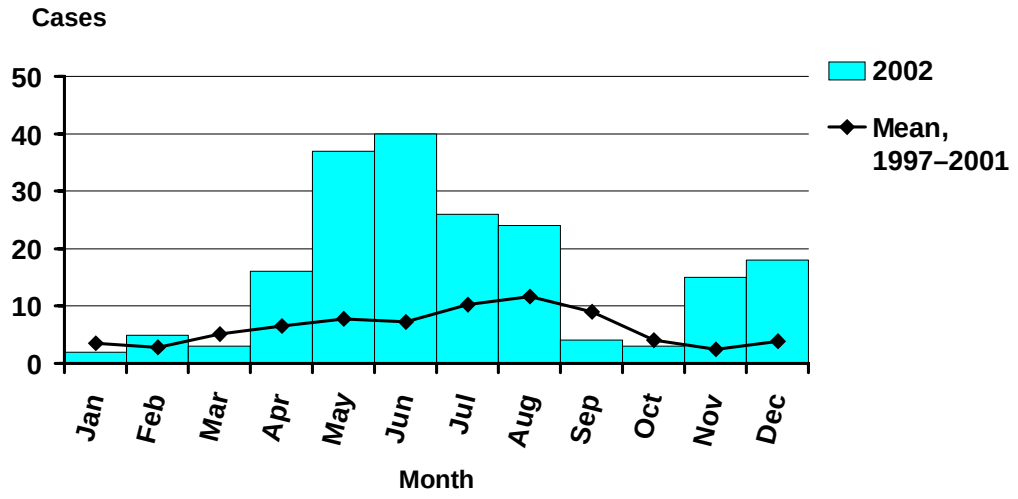


Pertussis

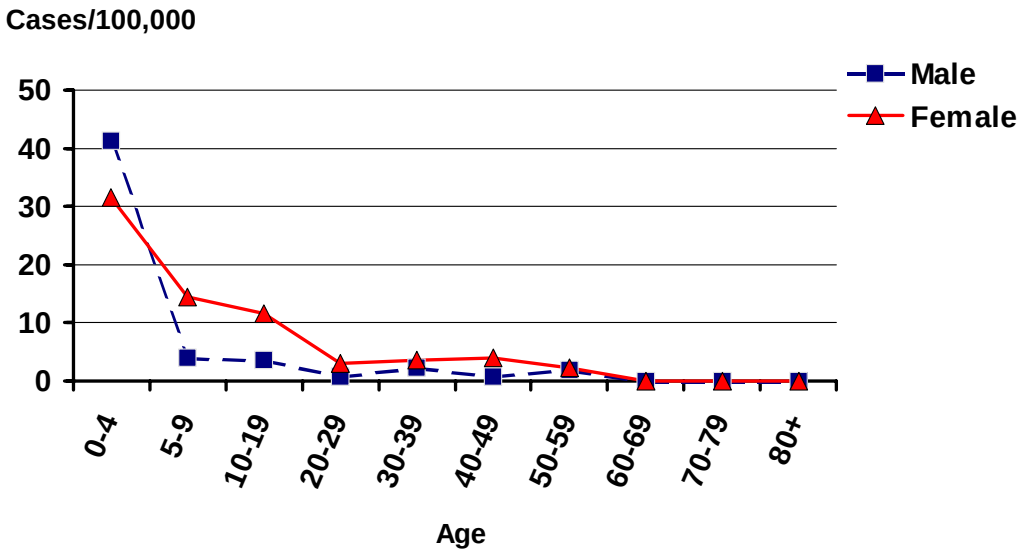
Pertussis is a highly contagious respiratory disease that is transmitted from person to person through direct contact with respiratory secretions (droplet transmission). Despite increasing immunization rates in Oregon children, pertussis holds the dubious distinction of being the only vaccine-preventable disease increasing in incidence. In 2002, Oregon experienced a 25-year high in the number of cases reported. While pertussis is often a mild but lingering illness in adults, it poses significant risk for hospitalization and death of infants (>6months). In late 2002, Oregon changed its case definition of confirmed pertussis case to include PCR-positive results in a person with a clinical diagnosis of the disease.



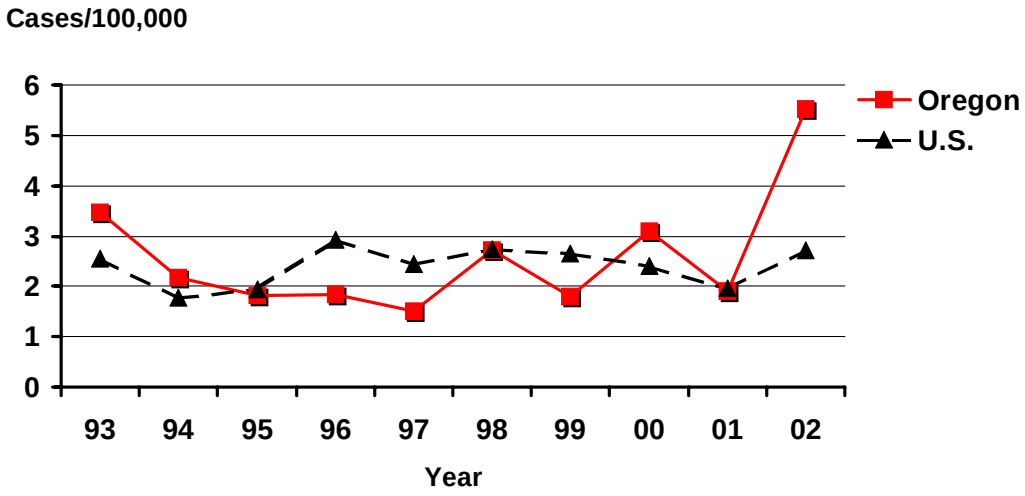
Pertussis
by Onset Month
Oregon, 2002



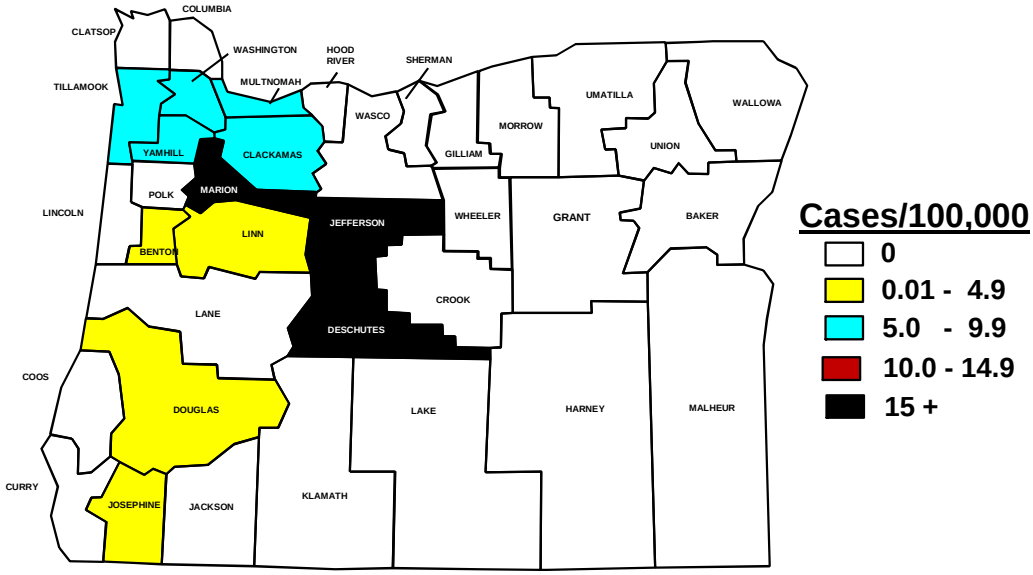
Incidence of Pertussis
by Age and Sex
Oregon, 2002



Incidence of Pertussis
Oregon vs. Nationwide
1993–2002



Incidence of Pertussis
by County
Oregon, 2002

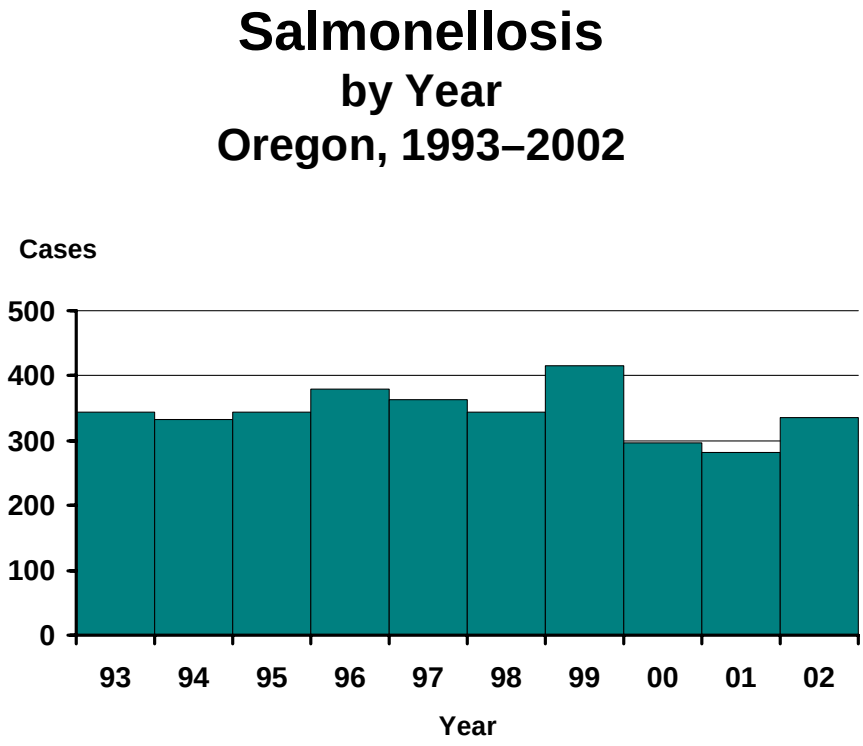


Salmonellosis

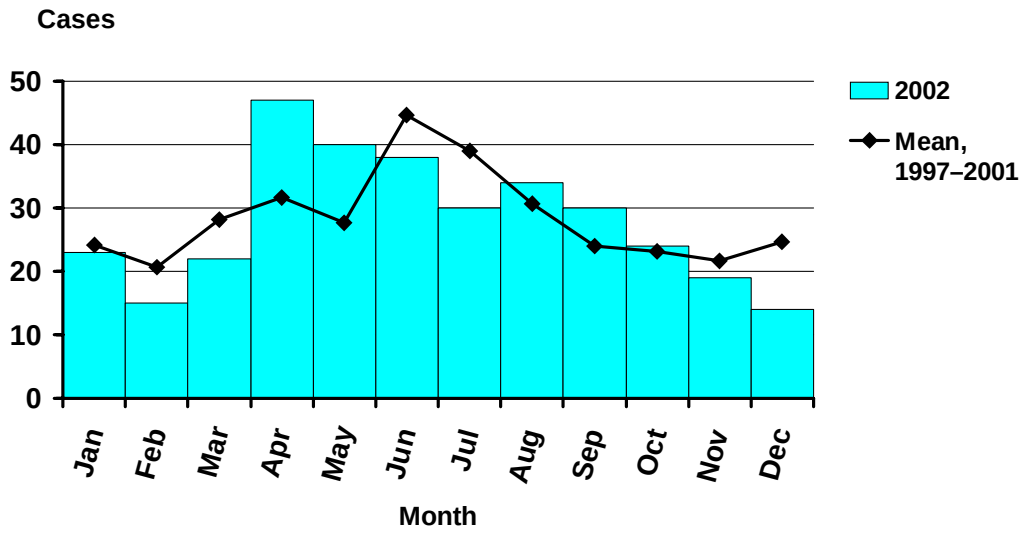
Salmonella is bacterial disease commonly manifested by an acute and sudden onset of headache, abdominal pain, diarrhea and nausea within 12 hours to 5 days after infection. In cases of enterocolitis, fecal excretion usually persists for several days or weeks beyond the acute phase of illness; administration of antibiotics may not decrease the duration of excretion of organisms.

The majority of human infections are through the ingestion of fecally contaminated food or water, or, less often, during food handling by an ill person or a carrier. Undercooked and raw products such as egg, milk meat and poultry have been implicated as a common source of human salmonellosis. A wide range of domestic and wild animals are carriers of *Salmonella,* including poultry, swine, cattle, rodents and pets such as iguanas, tortoises, turtles, terrapins, chicks, dogs and cats. Though rare, person-to-person spread can occur in humans — via patients, convalescent carriers and, especially, mild and unrecognized cases. The incidence rate of infection is highest in infants and young children. *Salmonell*a gastroenteritis may occur in small outbreaks in the general population.

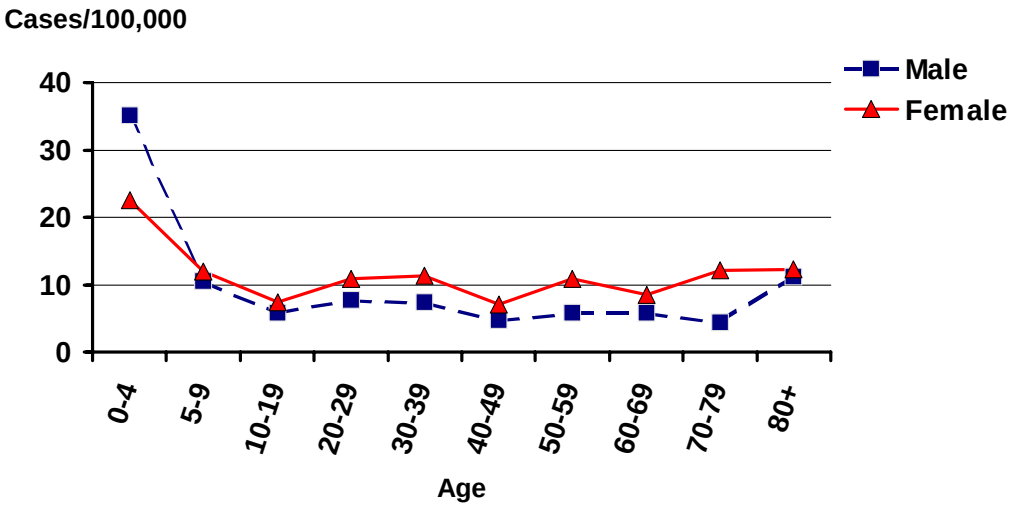
Of approximately 2,500 known serotypes, only about 200 are detected in the US in any given year. In Oregon, *S. Typhimurium* and *S. Enteritidis* are the two most commonly reported.



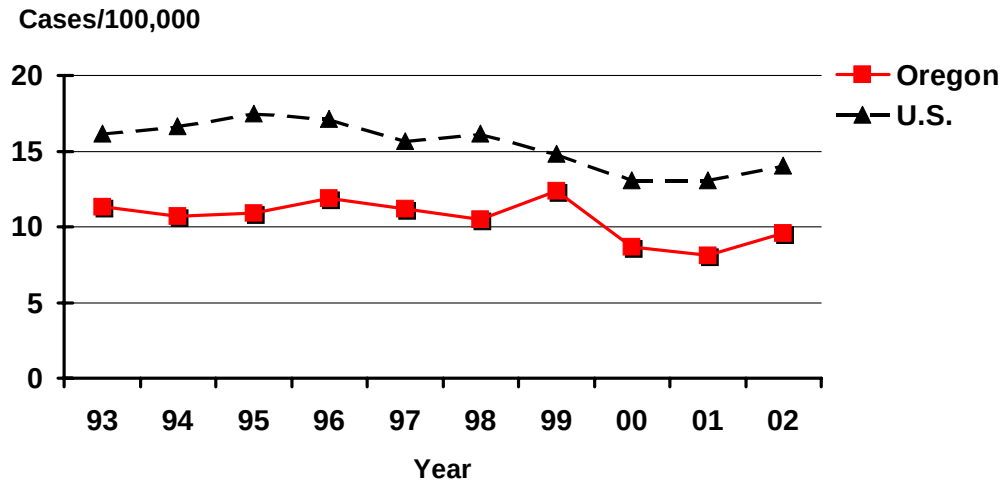
Salmonellosis
by Onset Month
Oregon, 2002



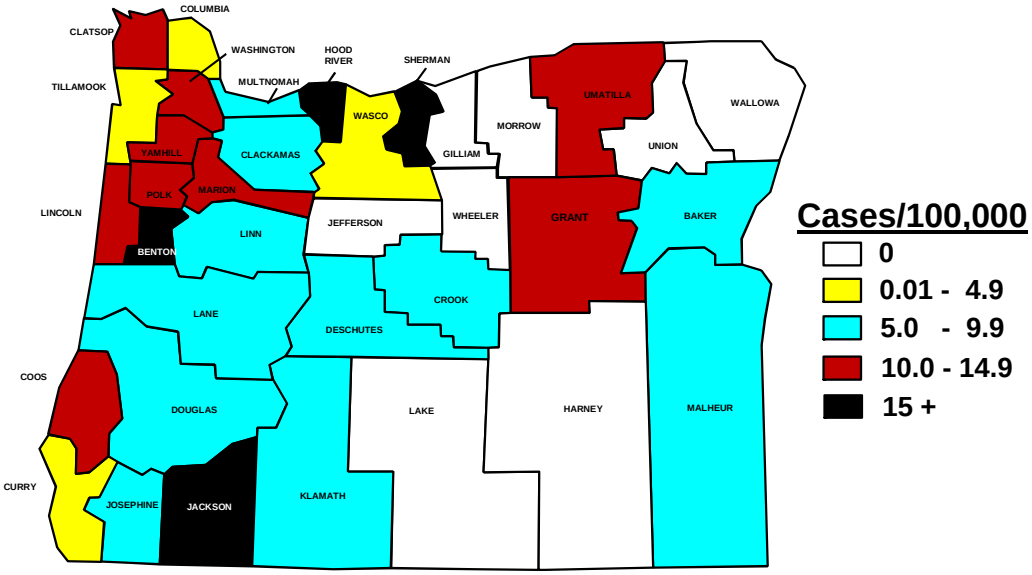
Incidence of Salmonellosis
by Age and Sex
Oregon, 2002



Incidence of Salmonellosis
Oregon vs. Nationwide
1993–2002



Incidence of Salmonellosis
by County
Oregon, 2002



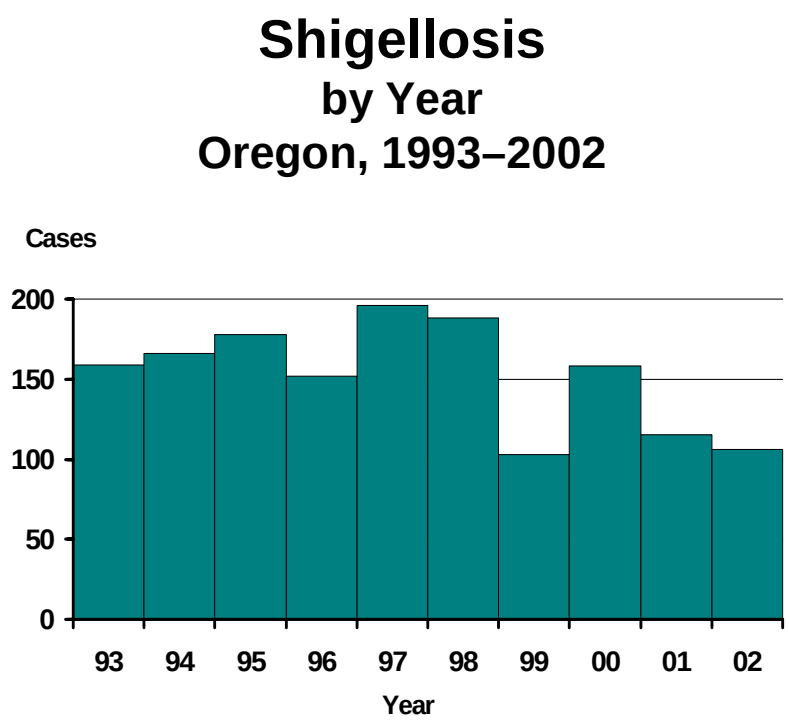
Salmonella by Serotype
Oregon, 2002

SEROTYPE	No.	%	SEROTYPE	No.	%
Agona	4	1.2	Livingstone	1	0.3
Albany	1	0.3	Manhattan	1	0.3
Anatum	2	0.6	Montevideo	17	5.1
Apapa	1	0.3	Muenchen	10	3.0
Braenderup	4	1.2	Newport	31	9.2
Brandenburg	1	0.3	Oranienburg	12	3.6
Bredeney	1	0.3	Panama	3	0.9
Carmel	1	0.3	Paratyphi A	1	0.3
Clackamas	4	1.2	Paratyphi B, var. Java	8	2.4
Colindale	1	0.3	Poona	7	2.1
Dublin	1	0.3	Potsdam	2	0.6
Enteriditis sp.	48	14.3	Reading	3	0.9
Hadar	9	2.7	Saintpaul	18	5.4
Hartford	1	0.3	Sandiego	1	0.3
Heidelberg	27	8.0	Schwartzengrund	1	0.3
Hvittingfoss	2	0.6	Senftenberg	3	0.9
I B	1	0.3	Stanley	4	1.2
I B::d:(-)	1	0.3	Telelkebir	1	0.3
I E1:e,h:-	1	0.3	Tennessee	1	0.3
I rough: NM	1	0.3	Thompson	1	0.3
Indiana	2	0.6	Typhimurium	67	19.9
Infantis	1	0.3	Virchow	1	0.3
Javiana	3	0.9	Worthington	1	0.3

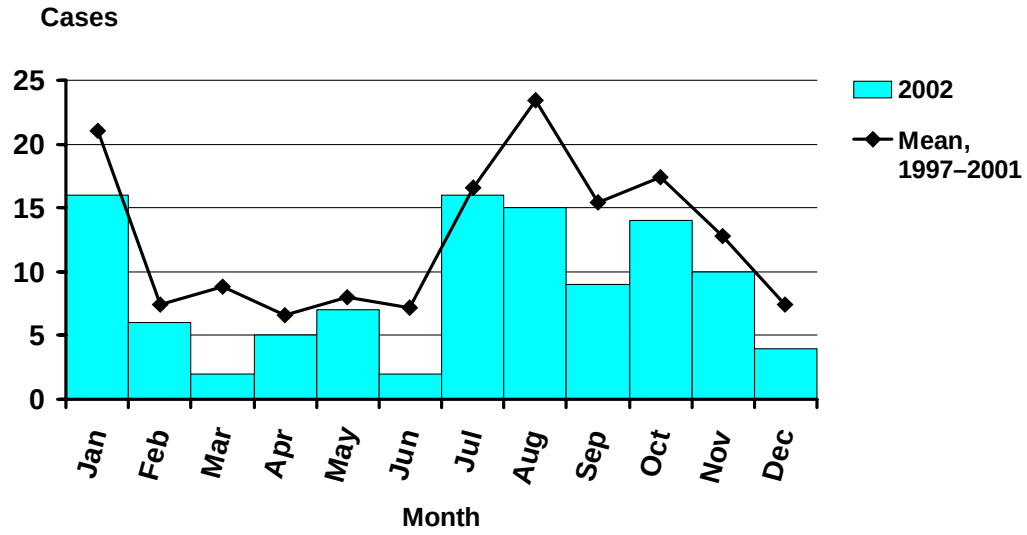
Shigellosis

Shigellosis is an acute bacterial infection characterized by (sometimes bloody) diarrhea, vomiting, and abdominal cramps. Humans are the only known reservoir. It is transmitted from person to person, and just a few organisms can cause illness. It is important to track the incidence of this disease to limit its transmission and prevent further spread. The rate is higher among children 1–4 years of age. The incidence of shigellosis usually increases in late summer and fall. Outbreaks in day care centers are common, mainly due to poor hygienic practices of small children. Hand washing is the most important means of prevention.

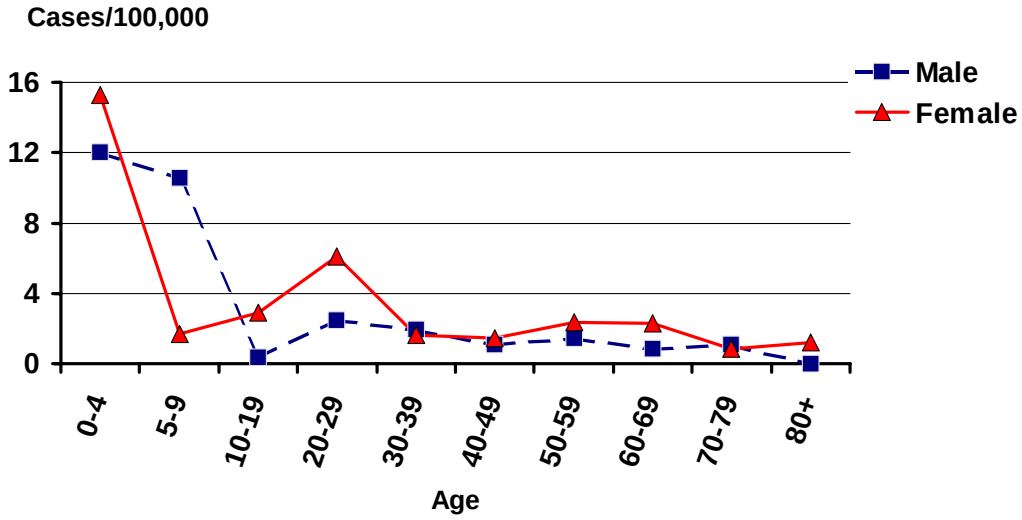
The incidence of shigellosis has been decreasing in recent years, with the exception of the year 2000, when a multi-state outbreak associated with 5-layer party dip occurred. In 2002, over half of the cases were due to *S. sonnei*, and about a quarter were due to *S. flexneri*. Treatment reduces duration of illness, but the organism has become resistant to many antibiotics used for empiric therapy. Testing for antibiotic susceptibility is important for treatment.



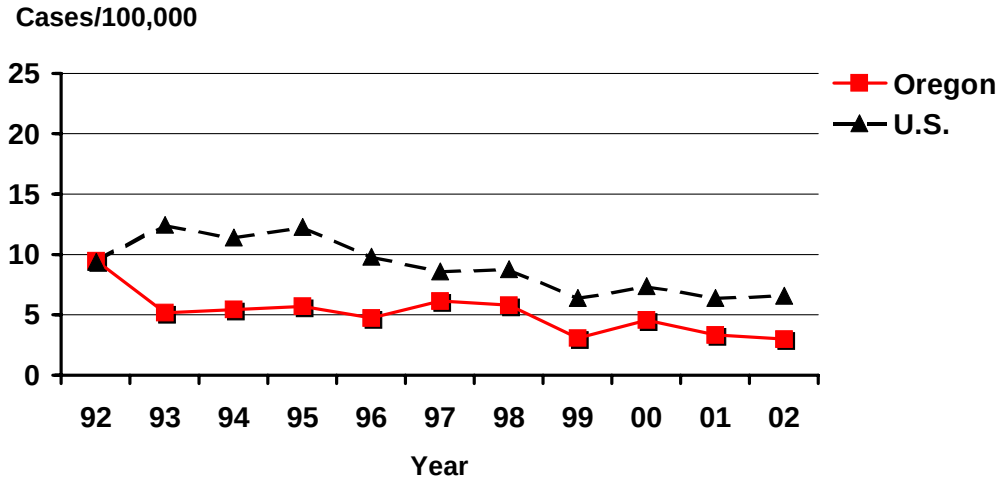
Shigellosis
by Onset Month
Oregon, 2002



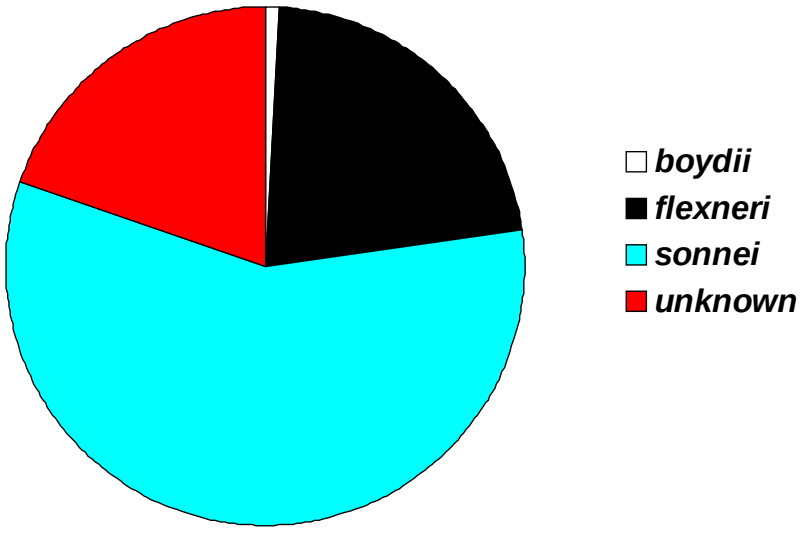
Incidence of Shigellosis
by Age and Sex
Oregon, 2002



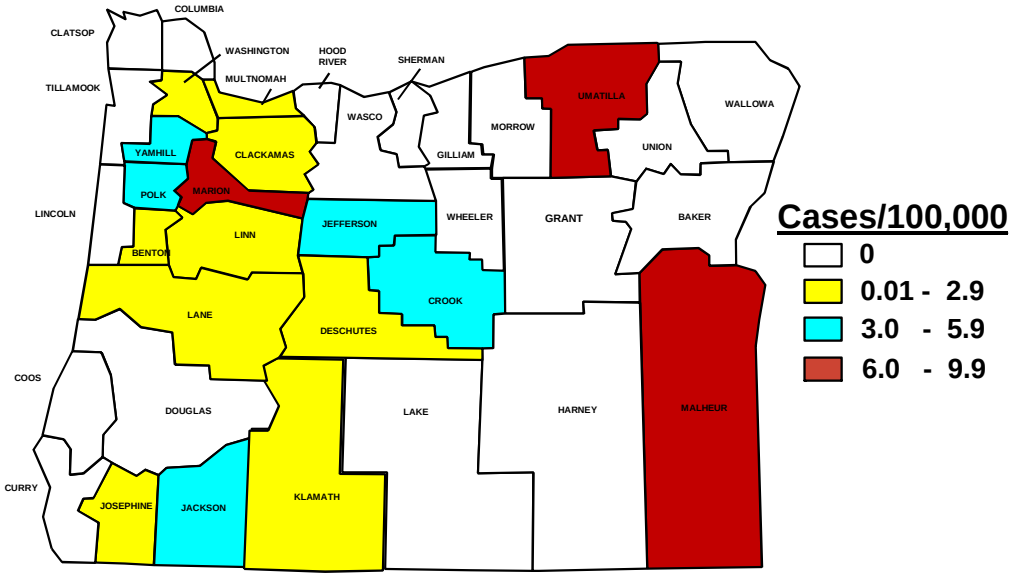
Incidence of Shigellosis
Oregon vs. Nationwide
1993–2002



Shigellosis
by Species
Oregon, 2002



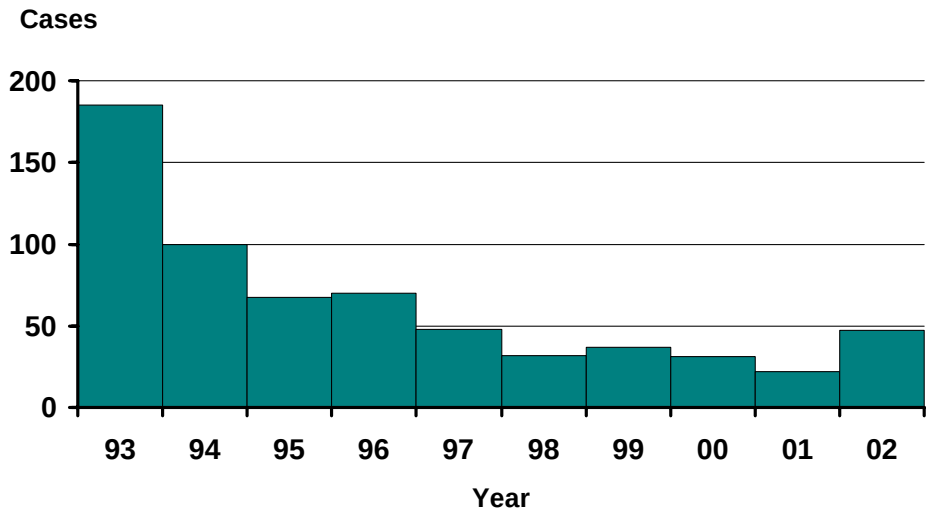
Incidence of Shigellosis
by County
Oregon, 2002



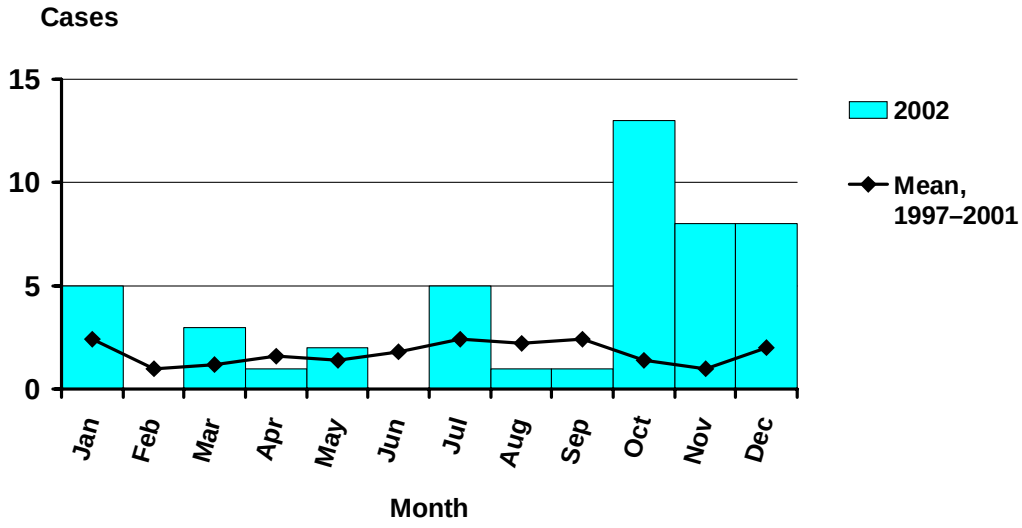
Early Syphilis

Early syphilis cases are an aggregate of primary, secondary and early latent cases under one year duration. Early syphilis cases represent recent transmission via sexual contact, vaginal, rectal or oral sex. The 47 early syphilis cases reported in 2002 are over double the cases reported in 2001 (22) and the greatest number reported since 1993. It is important to identify and treat persons with early syphilis to prevent late complications, such as brain and heart damage, and to prevent congenital infections. People with primary and secondary syphilis more easily acquire and transmit HIV. An effective way to limit the spread of syphilis is to evaluate and treat recent sex partners of people with early syphilis. The majority of the early syphilis cases reported during 2002 were among men who have sex with men and communities of color.

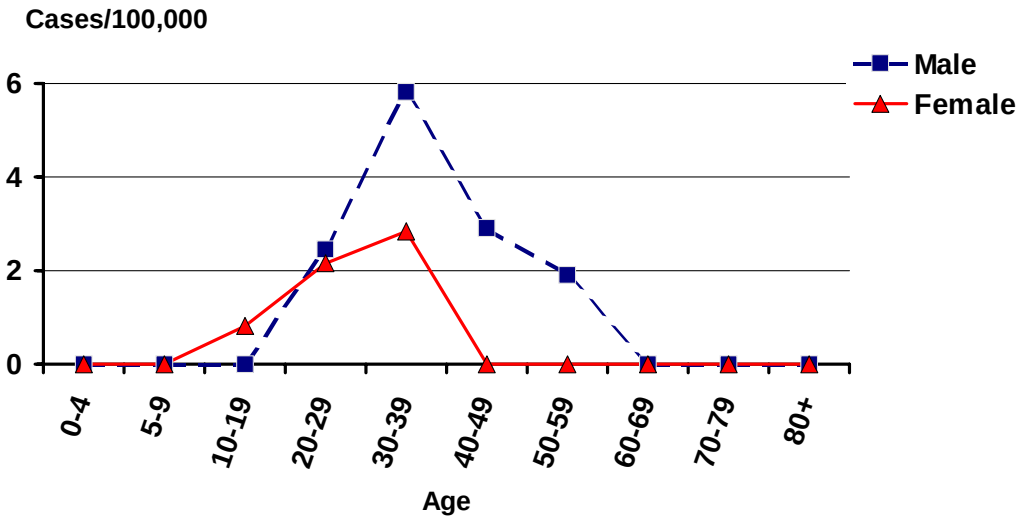
Early Syphilis
by Year
Oregon, 1993–2002



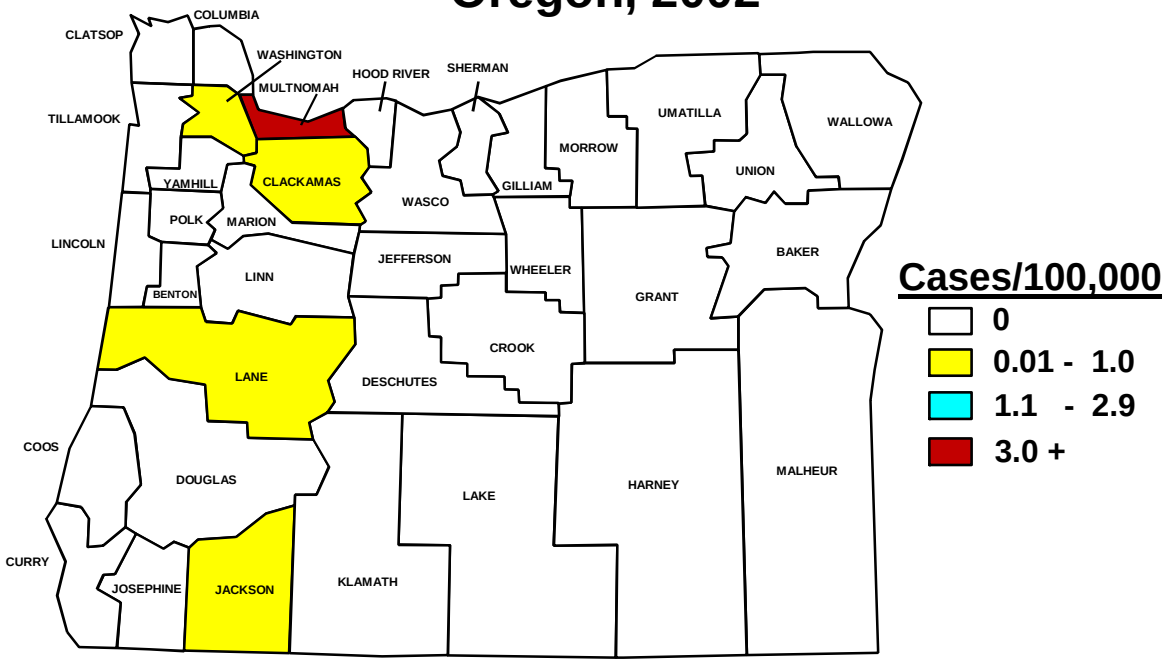
Early Syphilis
by Report Month
Oregon, 2002



Incidence of Early Syphilis
by Age and Sex
Oregon, 2002



Incidence of Early Syphilis
by County
Oregon, 2002



Tuberculosis

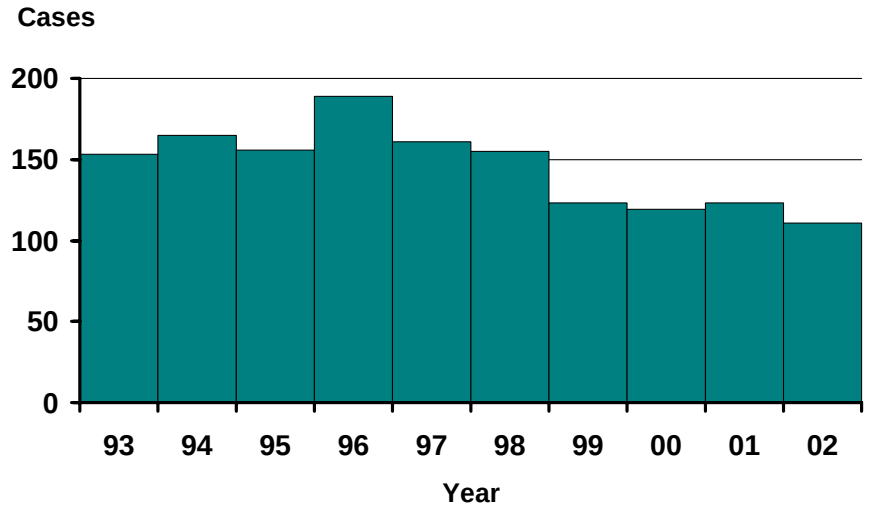
Tuberculosis (TB) is a communicable disease caused by *Mycobacterium tuberculosis*. The most common site for active TB disease is the lung; however, TB can occur in any organ in the body. TB is spread when a person develops active pulmonary or laryngeal TB, coughs the bacteria into the air, and another person inhales them into their lungs.

TB is preventable, treatable, and curable. TB can be prevented by diagnosing and treating persons with active TB disease; and by identifying and treating persons with "latent" TB infection, who, if untreated, are likely to develop active TB disease. Reporting of TB ensures that cases are treated and contacts are identified and offered preventive antibiotics.

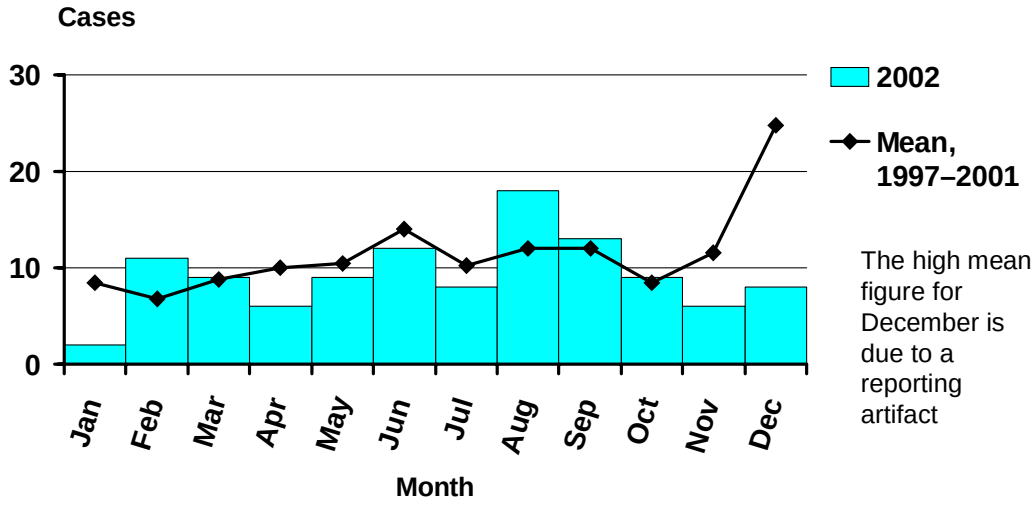
A total of 111 cases of active TB disease were verified in Oregon in 2002, for a rate of 3.5 cases per 100,000 residents. Ten percent of Oregon patients' mycobacterial isolates were resistant to isoniazid (INH); therefore, we recommend that initial treatment for active TB in Oregon include four drugs: INH, rifampin, pyrazinamide, and ethambutol pending susceptibility testing.

The Oregon TB rate of 3.5/100,000 meets the Healthy People 2000 Goal of ≤3.5/100,000; however, reduced morbidity leads to decreased awareness and delays in diagnosis and treatment.

Tuberculosis
by Year
Oregon, 1993–2002

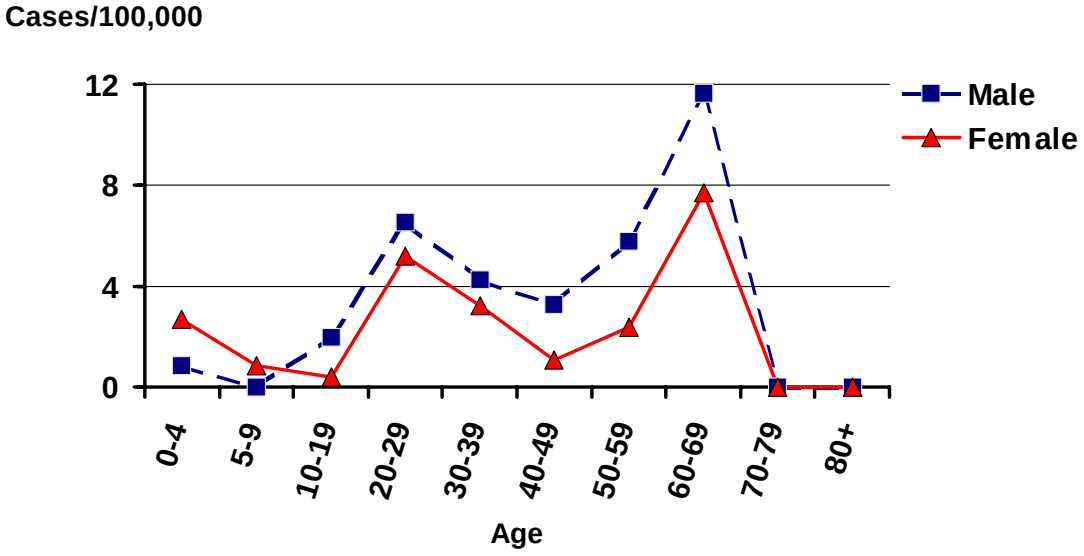


Tuberculosis
by Onset Month
Oregon, 2002

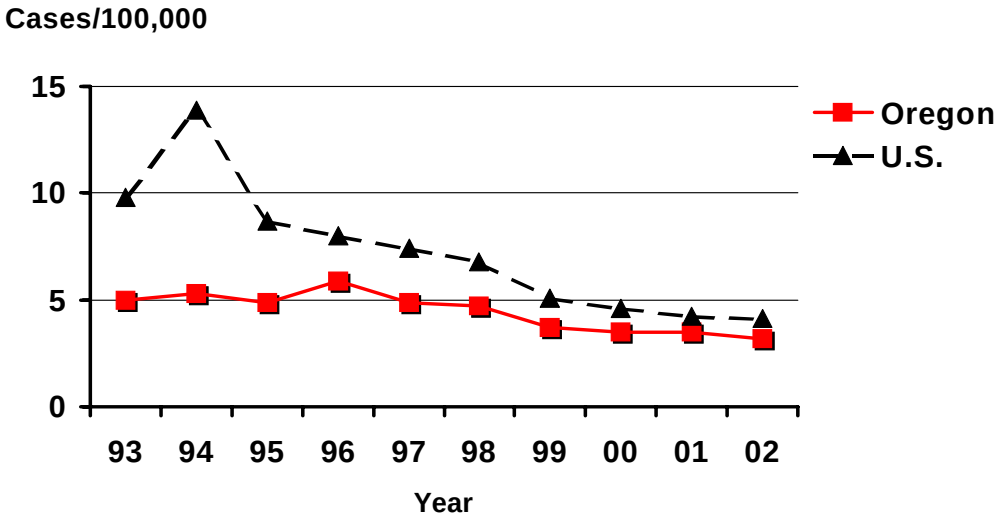


The high mean figure for December is due to a reporting artifact

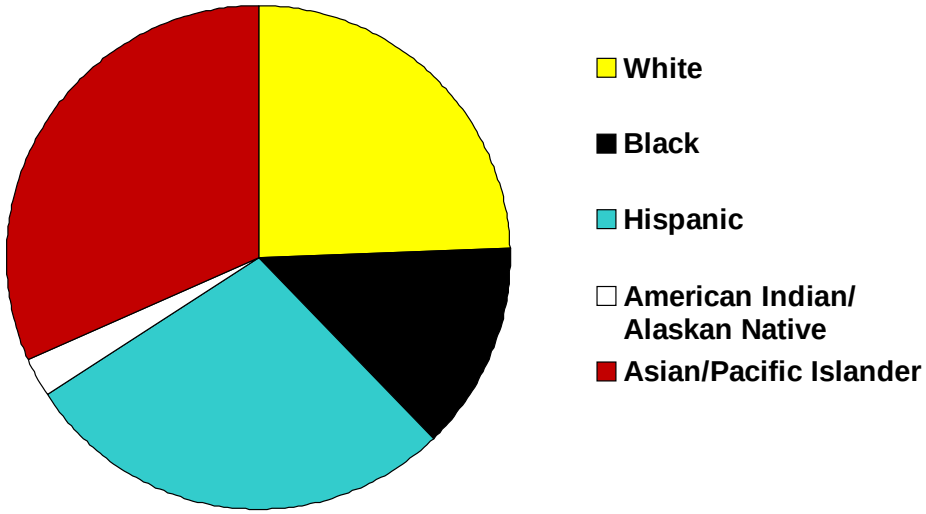
Incidence of Tuberculosis
by Age and Sex
Oregon, 2002



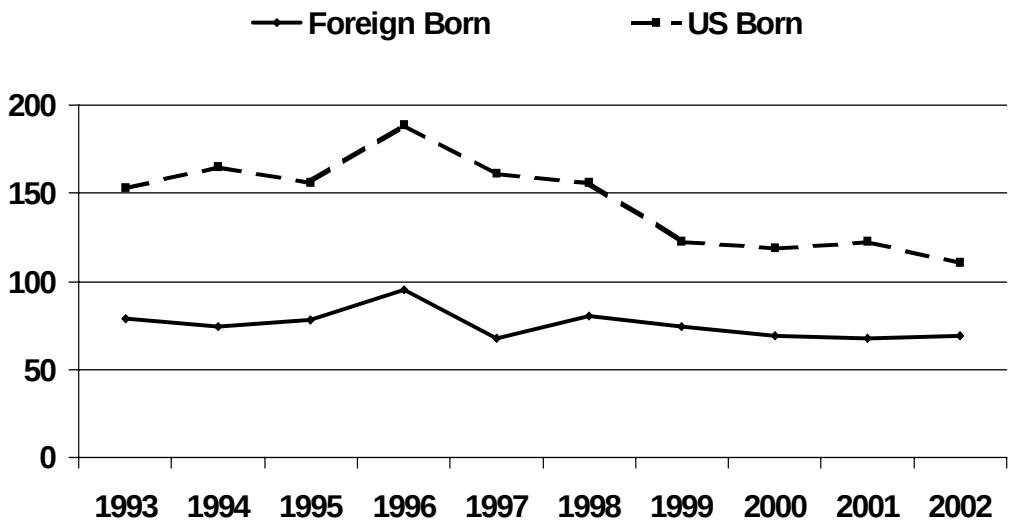
Incidence of Tuberculosis
Oregon vs. Nationwide
1993–2002



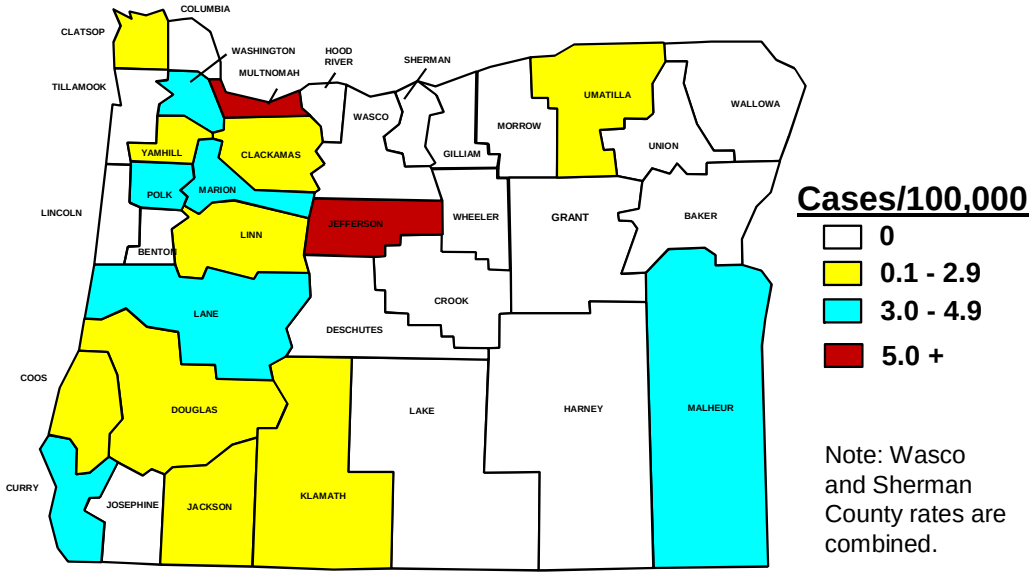
Tuberculosis
by Race/Ethnicity
Oregon, 2002



Tuberculosis
by Country of Origin
Oregon, 1993–2002



Incidence of Tuberculosis
by County
Oregon, 2002



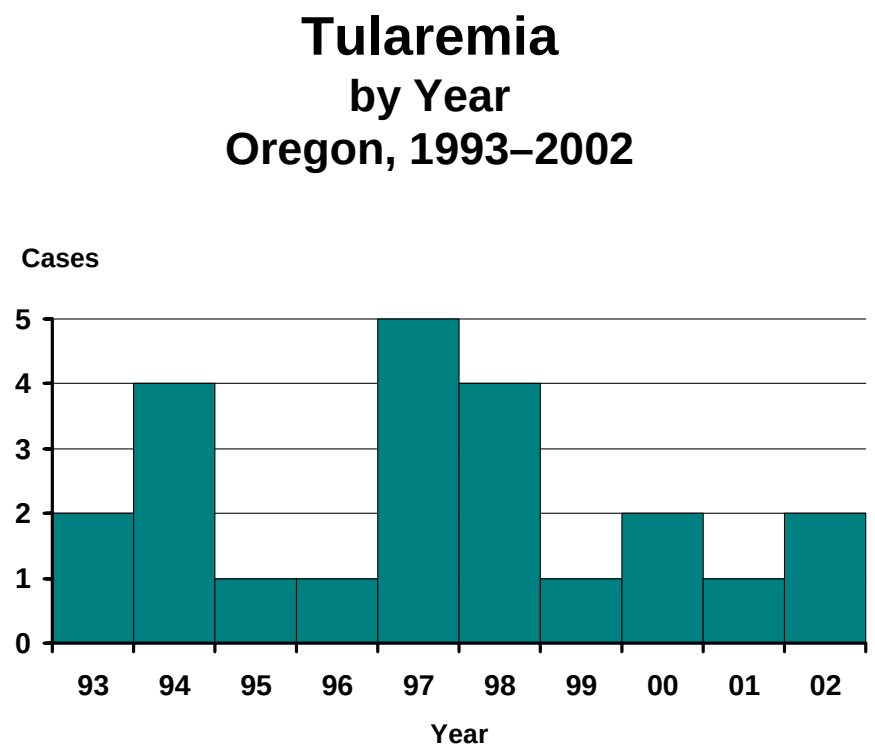
Note: Wasco and Sherman County rates are combined.

Tularemia

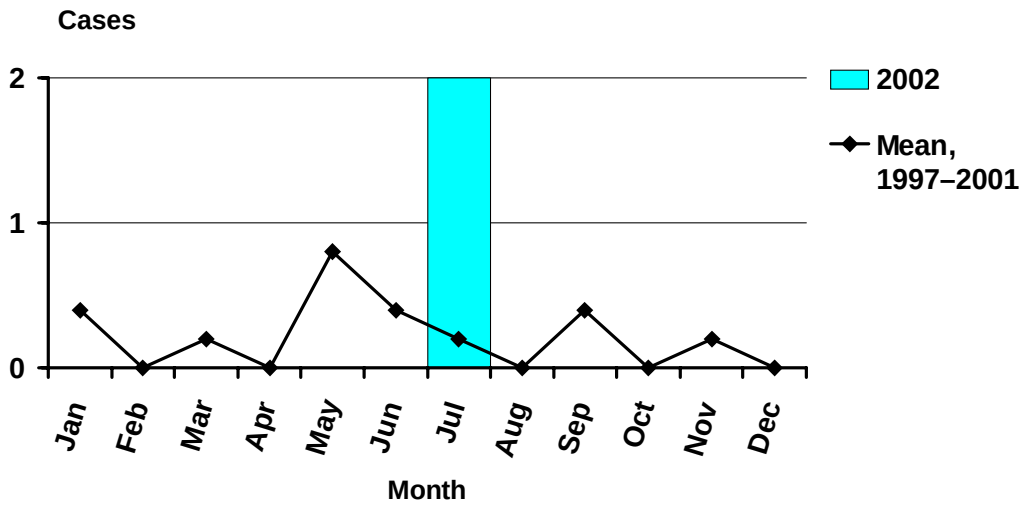
Tularemia, also known as rabbit or deer-fly fever, has recently gained notoriety as a possible "category A" agent of bioterrorism. Tularemia is caused by *Francisella tularensis,* a hardy organism found in rodents, rabbits, and squirrels; in ticks, flies, and mosquitoes; and in contaminated soil, water, and animal carcasses. Biovar type A is the most common type in North America and is highly virulent; as few as 10–50 organisms can cause disease.

General symptoms of tularemia include fever, malaise, myalgias, headache, chills, rigors, and sore throat. Tularemia has six clinical forms, depending on portal of entry. Ulceroglandular tularemia is the most common form of the disease, accounting for 75–85% of naturally-occurring cases. Other clinical forms of the disease include: pneumonic (pulmonary symptoms); typhoidal (GI symptoms and sepsis); glandular (regional adenopathy without skin lesion), oculoglandular (painful purulent conjunctivitis with adenopathy), and oropharyngeal (pharyngitis with adenopathy).

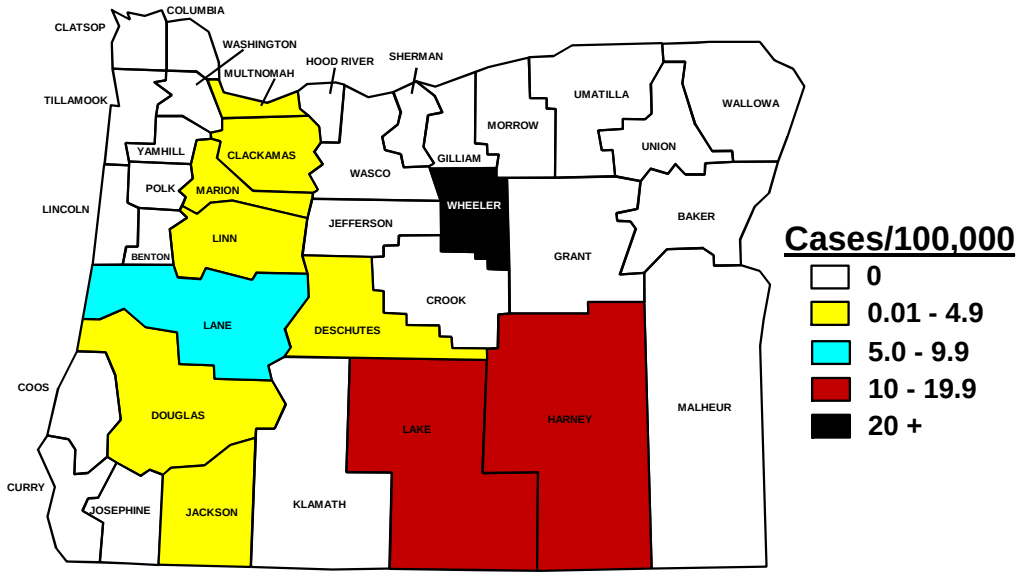
Tularemia occurs throughout the US. People become infected primarily through handling contaminated animals; the bite of infective deer flies, mosquitoes, or ticks; direct contact or ingestion of contaminated food, water, soil; or through inhalation of infective aerosols. From 1993–2002, 23 cases of tularemia were reported in Oregon (range, 1–5 per year). Cases occurred in residents of 12 counties, and were evenly spread across age groups.



Tularemia
by Onset Month
Oregon, 2002



Incidence of Tularemia
by County
Oregon, 1993–2002

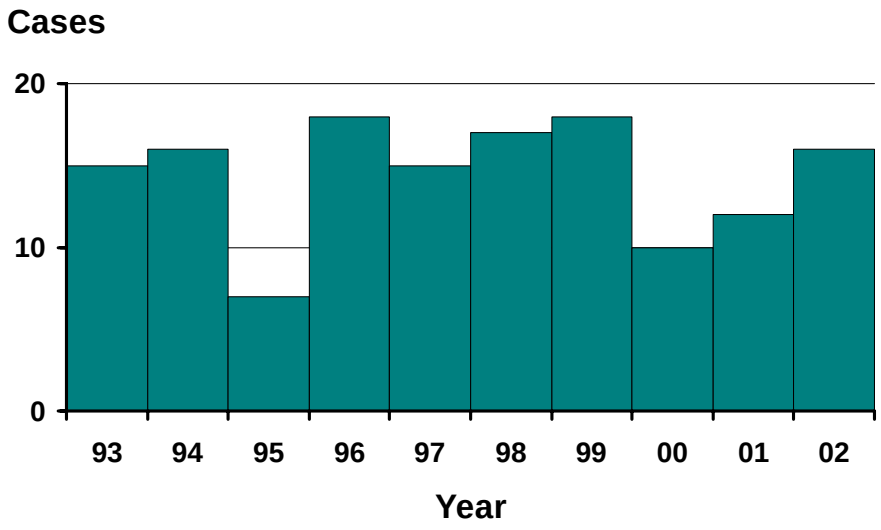


Yersiniosis

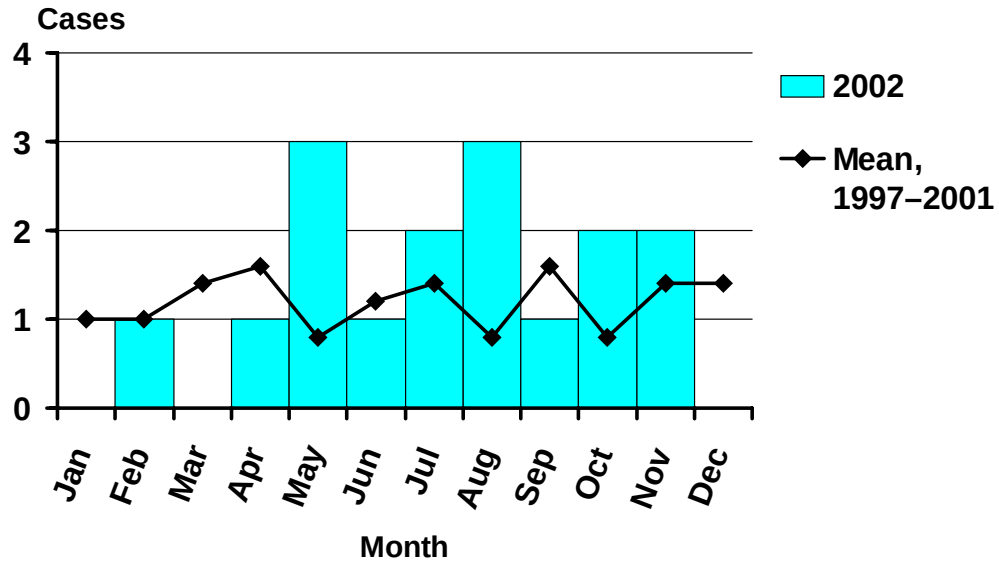
Yersiniosis is a bacterial infection characterized by (sometimes bloody) diarrhea, vomiting, and abdominal pain. The main reservoir for *Yersinia* is the pig. Transmission occurs via the fecal-oral route through contaminated food and water, and infected people or animals. Preventive measures include cooking food thoroughly, avoiding cross-contamination with raw food of animal origin, and washing hands after handling food.

The incidence of yersiniosis in Oregon has been fairly stable over the years. The rate is slightly higher in 2002 compared to the previous two years. Yersiniosis occurs throughout the year with no seasonality. By far the most common species is *Y. enterocolitica*.

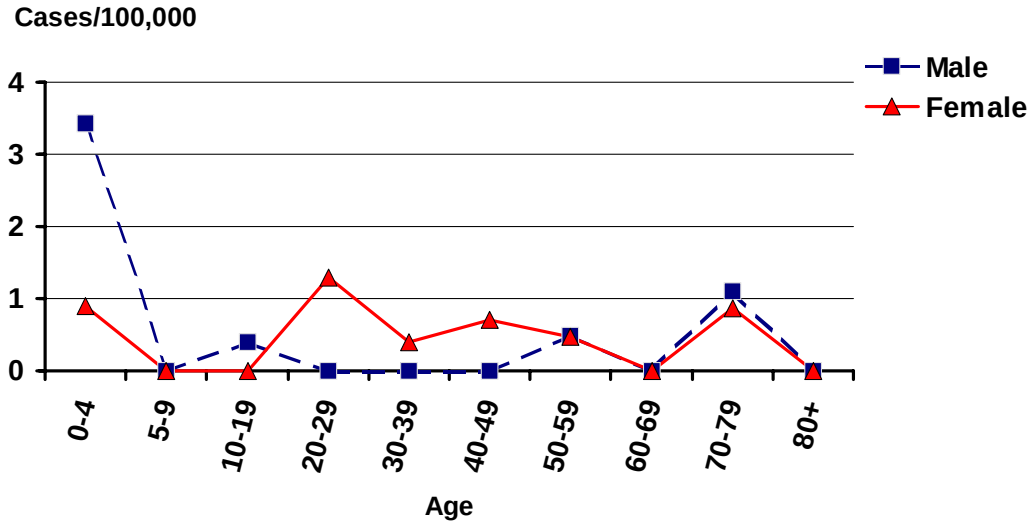
Yersiniosis
by Year
Oregon, 1993–2002



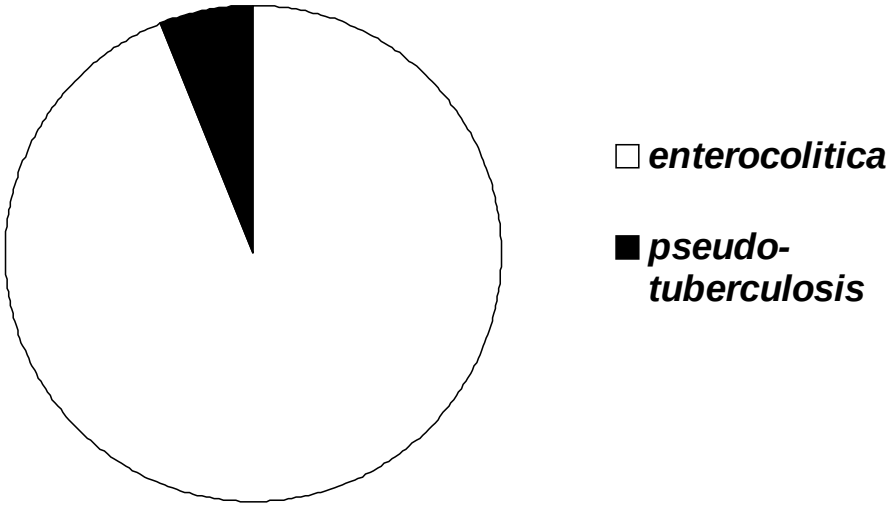
Yersiniosis
by Onset Month
Oregon, 2002



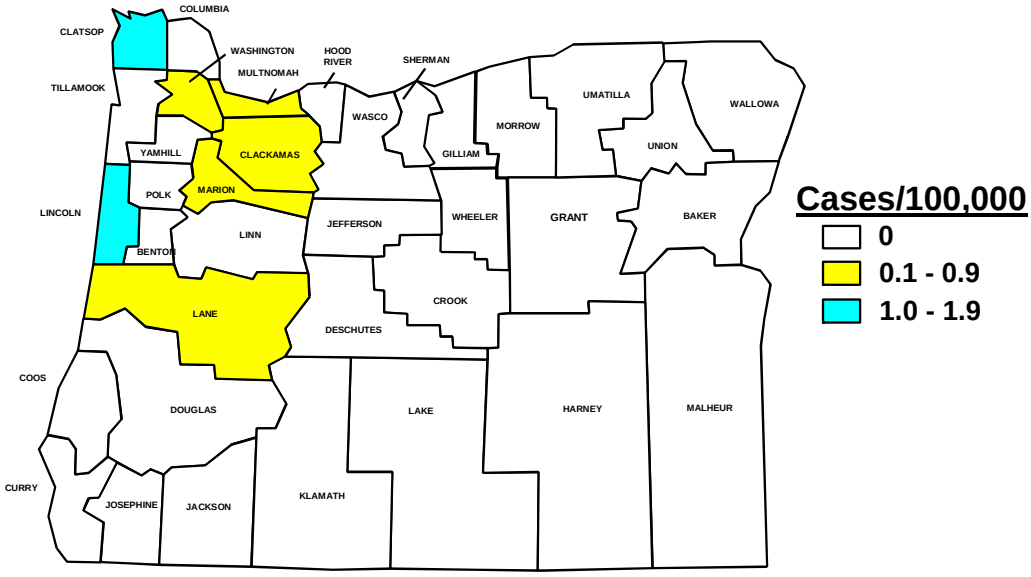
Incidence of Yersiniosis
by Age and Sex
Oregon, 2002



Yersiniosis
by Species
Oregon, 2002



Incidence of Yersiniosis
by County
Oregon, 2002



Selected Cases of Notifiable Diseases by Year of Report
Oregon, 1983–2002

	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002
AIDS	3	17	34	69	175	177	221	328	271	293	766	599	446	469	293	201	221	202	259	262
Campylobacteriosis	984	1131	1246	1344	1039	970	999	958	941	885	720	655	644	683	755	707	593	568	600	572
Chlamydiosis						7135	6734	7387	7327	5885	5539	5494	5468	5442	5254	5857	6163	7110	7504	7200
***E. coli* O157 Infection**								53	108	149	244	105	90	100	87	107	69	135	87	204
Giardiasis	833	1057	1223	1157	1171	1194	1078	1348	1294	1247	1011	930	915	937	910	903	810	656	536	435
Gonorrhea	6645	6651	6370	5471	4043	3221	3025	2549	2172	1768	1192	977	854	886	773	880	906	1039	1145	929
***H. influenzae* Infection**	100	101	99	70	86	85	67	68	26	27	11	26	28	33	38	42	45	30	38	55
Hepatitis A	783	1007	1850	1899	1328	1483	2366	829	449	550	581	1326	2968	955	417	437	253	165	110	62
Hepatitis B	269	377	504	644	660	611	563	420	308	303	290	236	199	183	164	201	117	622	710	60
Hepatitis C; NANB	118	154	162	87	104	105	83	59	132	85	72	56	58	48	19	21	23	1	15	14
Listeria						6	11	5	3	6	10	11	13	15	11	18	17	6	12	9
Malaria	11	16	18	19	6	19	21	20	12	19	14	17	21	25	24	17	22	40	15	15
Measles	10	0	5	12	132	7	82	212	93	3	4	2	1	14	0	0	11	0	33	0
Meningococcal Disease	60	50	39	38	37	47	59	73	61	72	109	143	117	125	122	91	76	70	64	44
Pertussis	10	31	54	16	83	55	18	123	68	47	105	106	67	64	48	89	61	106	66	193
Rubella	14	2	2	4	2	0	3	77	5	2	0	4	0	1	0	0	0	0	0	0
Salmonellosis	411	1036	266	235	305	404	322	359	368	486	349	314	343	387	371	330	428	297	281	336
Shigellosis	119	237	121	127	114	112	121	178	712	292	169	166	169	164	190	196	95	158	115	106
Early Syphilis	246	217	179	202	503	515	424	261	277	218	185	100	67	70	48	32	37	31	22	47
Tuberculosis	182	156	144	136	159	161	151	148	144	146	153	165	156	190	161	155	123	119	123	111
Tularemia	3	3	1	0	5	2	5	2	2	0	3	4	1	1	5	4	1	2	1	2
Typhoid fever	4	2	5	0	3	8	6	5	6	2	4	5	4	4	3	1	5	4	8	2
Yersiniosis	8	11	7	16	12	16	20	18	17	9	16	15	8	18	16	15	19	10	12	16
TOTAL	**10906**	**12357**	**12405**	**11627**	**10028**	**16413**	**16467**	**15619**	**14884**	**12577**	**11631**	**11555**	**12704**	**10886**	**9757**	**10334**	**10129**	**11412**	**11689**	**10674**

Blank cells = not reportable. Cases as of April 10, 2002.

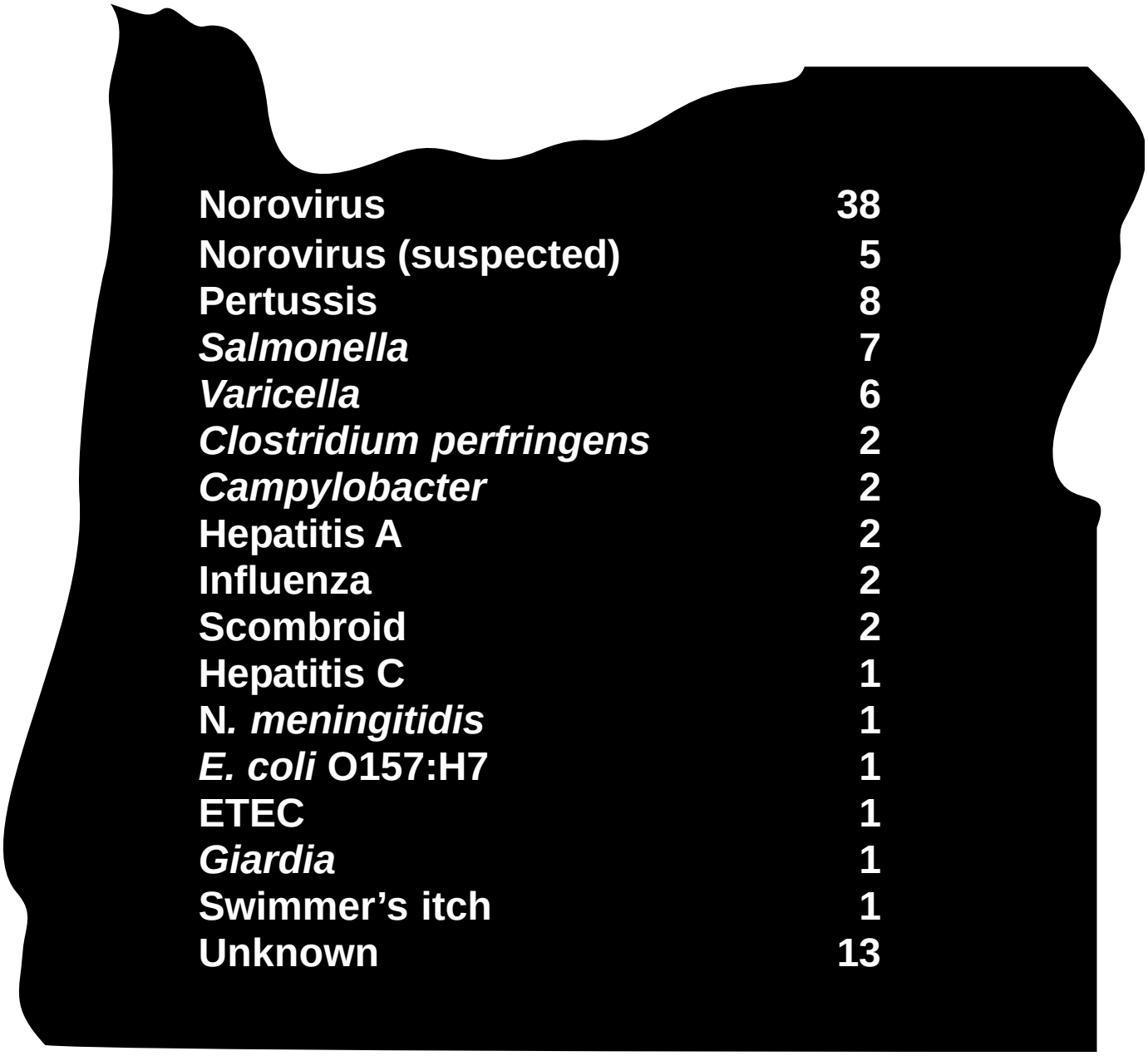
Selected Cases of Notifiable Diseases by County, Oregon, 2002

	Baker	Benton	Clackamas	Clatsop	Columbia	Coos	Crook	Curry	Deschutes	Douglas	Gilliam	Grant	Harney	Hood River	Jackson	Jefferson	Josephine	Klamath	Lake	Lane	Lincoln	Linn	Malheur	Marion	Morrow	Multnomah	Polk	Tillamook	Umatilla	Union	Wallowa	Wasco/Sherman	Washington	Wheeler	Yamhill	Grand Total
AIDS		2	11	4	3	6			5	4					13	1	5	2		22	1	1		26		127	2		3			1	21		2	**262**
Campylobacteriosis	4	15	51	4	5	11	4	4	27	12		2	2	1	18	6	4	14		71	7	22	19	44	5	104	5	2	9	6		5	73		16	**572**
Chlamydiosis	10	106	287	111	43	116	23	10	197	148	1	1	3	21	398	53	69	96	3	802	74	189	42	816	12	2302	65	11	166	20	1	47	765	2	190	**7200**
Cryptosporidiosis			2												1		1			5						23	1						8			**41**
***E. coli* O157 infection**	1		12	3	2	3	3	1	6	3				6		2	2	3		93		3	6	23	1	7	2	1	1		1	2	12		5	**204**
Giardiasis	1	8	29	1	4	7	1	2	29	17				6	21	3	10	18	1	52	7	11	1	48	1	91	7	2	5	3		2	38		9	**435**
Gonorrhea		8	45	2	6	4		1	6					2	19	2	3	2		85	8	14	1	67		558	7		2			3	77		7	**929**
***Haemophilus influenzae* infection**		1	4	1	1	2			3						7		1			5	1	2		4	15		2	1				3		2	**55**
Hepatitis A		2	4	1			2		1	2					5	1	2	1		6	1	2		3	3	9			11				6			**62**
Hepatitis B (acute)		3	5	3		1		2	1	5					5		1	4		5	3	6	1	25		41	2		1				7		6	**127**
Hepatitis B (chronic)	1	2	26	6	2	7	1	1	6				1	1	16			5		24	1	3	3	43	1	229	6	1	11	1		1	76		10	**485**
Hepatitis C; NANB	1			1	1				3						1								1	1		3				1			1			**14**
Hepatitis, unspecified																										1										**1**
HUS			1											1						11		1		3		1				1			1			**20**
HIV		1	33	3	5	3		1	16	5		1		1	29		4	2	1	45	8	13	1	48		428	5	1	4	3		2	48		5	**716**
Legionellosis			1																							3							5			**9**
Leptospirosis								1																1												**2**
Listeriosis								1						1						1		1		3									2			**9**
Lyme disease			1	1	1					1				1	1		4									1								1	**12**
Malaria																				4	1			1		6							2		1	**15**
Meningococcal Disease		1	4	1	1		1		1	2					3	1	2	1		4		6		1	1	6	2		2				2		2	**44**
Pertussis		2	11						21	1						7	1			52		3		44		26			1			2	19		3	**193**
Psittacosis																										1										**1**
Rabies, animal		1							1	2					1			1		2		3	2										1			**14**
Relapsing Fever																																	1			**1**
Salmonellosis	1	12	23	4	2	7	2	1	11	7		1		4	35		7	5		32	5	6	3	30		58	7	1	8			2	51		11	**336**
Shigellosis		2	4				1	1		3					8	1	1	1		5			2	24		23	3		6				14		5	**104**
Early Syphilis			3												1					1						38							4			**47**
Tuberculosis			8	1		1		1		2					3	1		1		15		2	1	12		43	2		1				16		1	**111**
Typhoid fever																										3			2							**5**
***Vibrio cholerae* (non-O1)**																			1							1										**2**
Vibrio parahaemolyticus			1						1								1			2		2				1									1	**9**
Yersiniosis			5	1											1					3	1			1		2							2			**16**
TOTAL	**19**	**166**	**571**	**148**	**76**	**168**	**38**	**27**	**335**	**214**	**1**	**5**	**6**	**45**	**586**	**78**	**118**	**156**	**6**	**1347**	**118**	**290**	**83**	**1268**	**39**	**4136**	**118**	**20**	**233**	**35**	**2**	**67**	**1255**	**2**	**277**	**12053**

Reported Disease Outbreaks
Oregon, 2002

Outbreaks: 93

Causal agents:



Norovirus	38
Norovirus (suspected)	5
Pertussis	8
Salmonella	7
Varicella	6
Clostridium perfringens	2
Campylobacter	2
Hepatitis A	2
Influenza	2
Scombroid	2
Hepatitis C	1
N. *meningitidis*	1
E. coli O157:H7	1
ETEC	1
Giardia	1
Swimmer's itch	1
Unknown	13