

AIDS and HIV infection

Human immunodeficiency virus (HIV) is spread by having sex, sharing injection drug equipment, or receiving a transfusion or transplant from an infected person. It can be spread from mother to fetus, to infant at the time of delivery, or by breastfeeding. Rarely, HIV spreads by inadvertent exposure to bodily fluids of an infected person such as a contaminated needle stick in a health care worker. The acquired immunodeficiency syndrome (AIDS) represents the late stage of HIV infection with immune system impairment, marked by low CD4-positive lymphocyte counts and opportunistic or atypical infections. There is no cure for HIV infection, but treatment can prolong life and reduce transmission.

HIV infection can be avoided by abstaining from sex outside of a monogamous relationship with an uninfected partner and by not injecting recreational drugs. Using a condom during intercourse and not sharing injection drug equipment also reduce risk of acquiring HIV. A pregnant woman who is infected with HIV can minimize transmission of infection to her fetus by taking medication during pregnancy and refraining from breastfeeding. Caesarean section may also prevent transmission when the mother's infection is not well controlled.

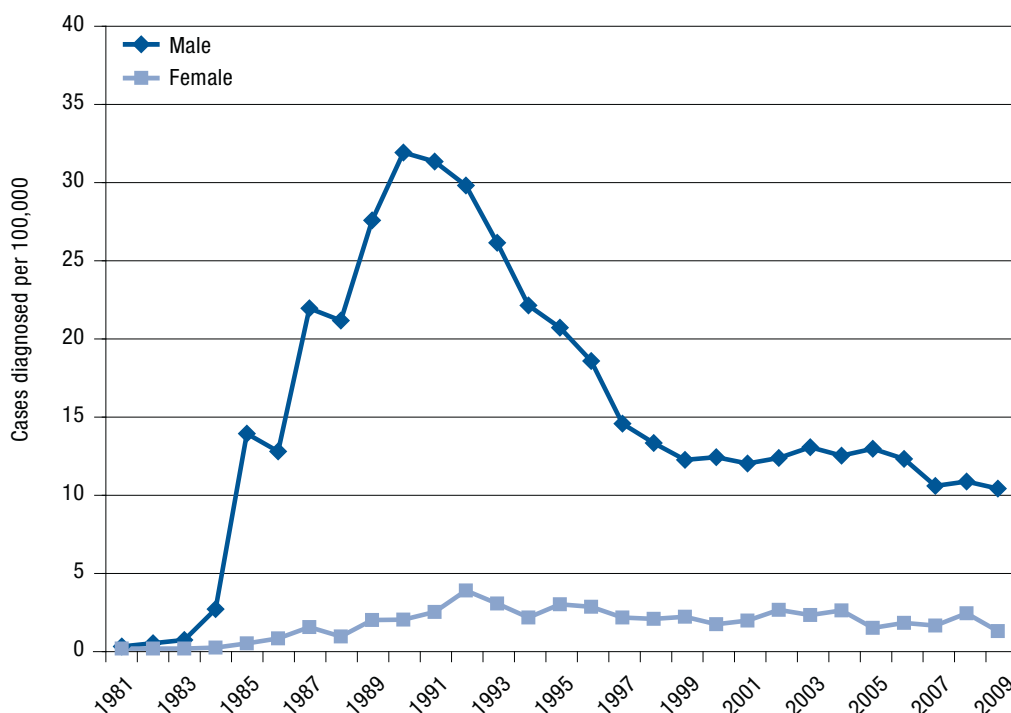
As of July 2010, 8,467 cases of HIV infection (including cases that had, and cases that had not yet progressed to AIDS) had been diagnosed among Oregon residents between

1981 and 2009 and reported to the Oregon HIV/STD/TB Program; 3,466 of these case-patients had died, leaving 5,001 living with HIV infection. Approximately 64% of these infections had progressed to AIDS by the end of 2009. In addition, approximately 1,329 people are estimated to be infected, but not yet diagnosed; about 2,100 people with HIV infection who resided in another state at the time of their diagnosis had moved to Oregon by the end of 2009.

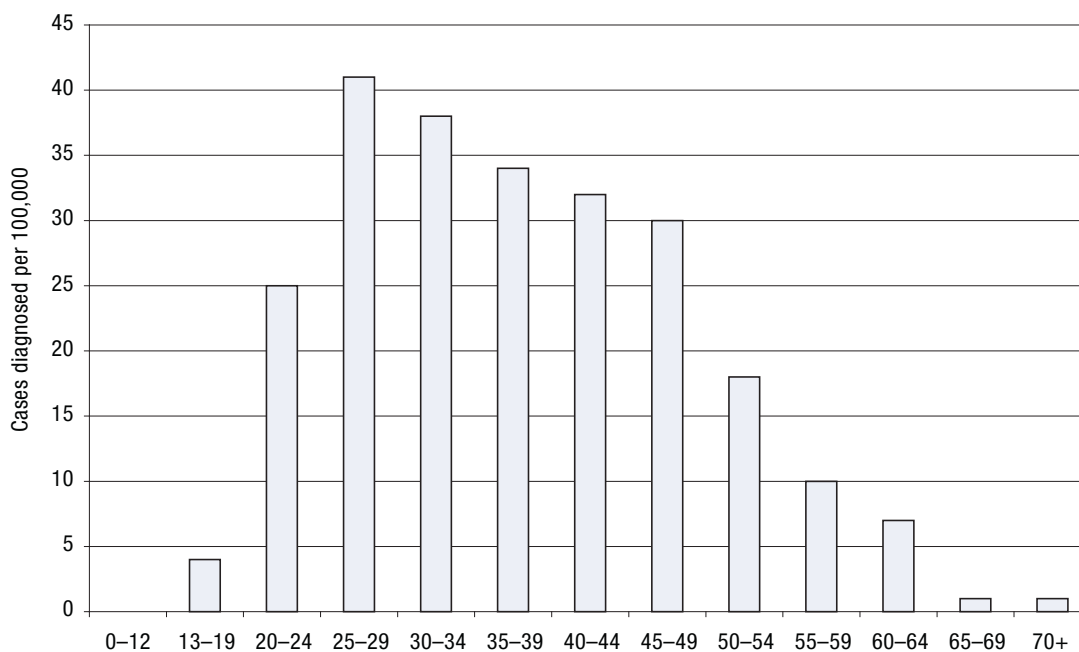
Men accounted for 87% of prevalent cases. Whites accounted for 78%, blacks and/or African Americans, 7%, and Hispanics, 11%. Among men, the five year average annual incidence of new HIV diagnoses was 11.4 cases per 100,000 whites, 29.6 cases per 100,000 blacks and/or African Americans and 18.1 per 100,000 among Hispanics. Among females, these rates were 1.2, 13.5, and 3.1 respectively.

During 2005–2009, 69% of infected men in Oregon acquired their infection by sex with other men, while 9% of men with HIV acknowledged both sex with other men and previous injection drug use, obscuring their most likely transmission mode. Injection drug use was the most likely transmission mode for 6% of males and heterosexual transmission the most likely mode for 3%. Among women with HIV infection, heterosexual transmission was believed to be the most likely mode for 61% and injection drug use for 22%.

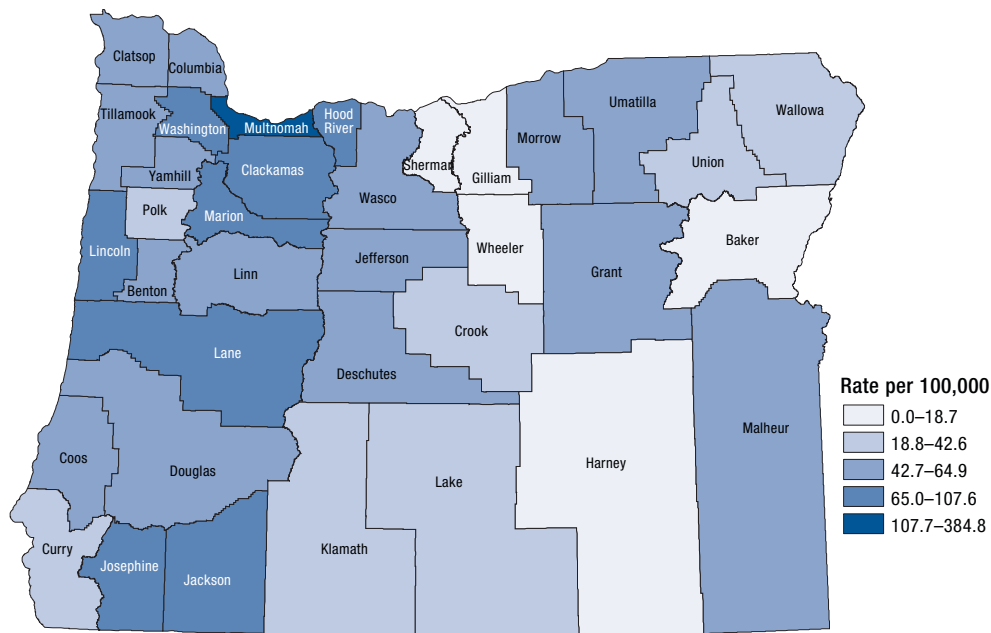
HIV infection diagnoses in Oregon by sex and year of diagnosis, 1981–2009



New cases of HIV infection by age at diagnosis, Oregon, 2009



Persons living with HIV or AIDS by county of residence, Oregon, 2009



Campylobacteriosis

Campylobacteriosis is caused by a Gram-negative bacterium. It is characterized by acute onset of diarrhea, vomiting, abdominal pain, fever and malaise. Campylobacteriosis is the most common bacterial enteric infection reported. 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.

Children aged 0-4 years have the highest rates of illness. Infections occur year-round in Oregon, with peak incidence in the summer months. Campylobacteriosis is not nationally

reportable. Rates are highest in Malheur and Harney counties.

Most illnesses are sporadic, but outbreaks may be associated with undercooked meat (often chicken), unpasteurized milk, direct contact with animals or non-chlorinated water. Since 1998, eight outbreaks of campylobacteriosis have been investigated: three foodborne, two waterborne, two from animal contact, and one of unknown etiology. Proper food handling and water treatment, along with good hygienic practices (hand washing!) are the keys to prevention.