

# Epidemiology of HIV and AIDS

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## Description

The human immunodeficiency virus (HIV) attacks the immune system and weakens people's defence mechanism against many infections and some types of cancer. As the infection obliterates and debilitates the capacity of safe cells, tainted people bit by bit become immunodeficient. Safe capacity is ordinarily estimated by CD4 cell tally. The most advanced stage of HIV infection is acquired immunodeficiency syndrome (AIDS), which can take many years to appear if not medicated, depending on the individual. Helps is characterized by the improvement of specific diseases, contaminations or other serious long haul clinical appearances.

## Discussion

### Signs and symptoms

The manifestations of HIV fluctuate contingent upon the phase of contamination. In spite of the fact that individuals living with HIV will in general be generally irresistible in the initial not many months subsequent to being tainted, many are ignorant of their status until the later stages. In the initial not many weeks after introductory disease individuals may encounter no side effects or flu like ailment including fever, migraine, rash or sore throat. As the contamination logically debilitates the invulnerable framework, they can create different signs and indications, for example, swollen lymph hubs, weight reduction, fever, looseness of the bowels and hack. Without therapy, they could likewise create extreme sicknesses, for example, tuberculosis (TB), cryptococcal meningitis, serious bacterial contaminations, and malignant growths, for example, lymphomas and Kaposi's sarcoma.

### Hiv/aids transmission

The assessed 57.9 million individuals who have been contaminated with HIV since the pandemic started have, with a couple of special cases, contracted the infection by one of three methods of transmission: sexual, parenteral and mother-to-kid. HIV-1 is the infection type answerable for the worldwide pandemic. HIV-2 is less effectively sent than HIV-1 and is bound essentially to West Africa.

### Sexual transmission

HIV can be transferred via the exchange of a variety of body fluids from contaminated people, such as blood, breast milk, semen and vaginal secretions. People cannot become infected through normal day-to-day contact such as kissing, hugging, shaking hands, or sharing personal objects, food or water.

### Parenteral transmission of HIV/AIDS

Parenteral transmission of HIV occurs mainly through IDU when needles are shared. It can also occur by the exchange of infected blood, so screening blood and/or reducing the unnecessary use of transfusions are necessary to minimize the transmission by this route. Contaminated needles for injections and needle stick injuries among health professionals are another source of infection. Contaminated blood products and infected organs or semen have also been shown to transmit infection [1,2].

### Mother-to-child transmission of HIV/AIDS

Mother-to-child transmission (MTCT) is believed to be responsible for more than 90% of these infections. Around 66% of MTCT happens in utero and at conveyance and 33% happens during bosom taking care of. Long regimens of ART have been demonstrated to be exceptionally compelling in forestalling MTCT yet more limited, less perplexing and less expensive regimens have additionally been appeared to decrease MTCT significantly in babies who are not bosom taking care of. Actualizing this intercession for a huge scope in non-industrialized nations is convoluted by the absence of safe choices to bosom taking care of, the issue of HIV testing and expenses of the medication, administration conveyance and HIV tests [3,4].

### Treatment

HIV can be smothered by treatment regimens made by a mix out of at least 3 ARV drugs. Current ART doesn't fix HIV contamination yet profoundly stifles viral replication inside an individual's body and permits a person's resistant framework recuperation to fortify and recover the ability to fend off diseases. Since 2016, WHO suggested that all individuals living with HIV be given deep rooted ART, including youngsters, youths and grown-ups, and pregnant and breastfeeding ladies, paying little mind to clinical status or CD4 cell check.

## Conclusion

The development of HIV is through injection drug users, their sexual partners, and offspring accounts for a major proportion of new HIV infections in the United States, and the resultant propagation of the AIDS epidemic. Throughout the United States, the epidemiology of HIV and AIDS differs, depending on geography, inherent differences in the population at risk, and the dispersal of danger behaviors associated with transmission. Injection drug use with infected injecting equipment provides remarkably to the spread of HIV infection and thereby to the AIDS epidemic.

## References

1. Kebede, G., et al. Needle stick and sharps injuries among health care workers in Gondar city, Ethiopia. *Saf Sci.* 50.4 (2012): 1093-1097.
2. Hadadi, A., et al. Occupational exposure to body fluids among healthcare workers: a report from Iran. *Singapore Med J.* 49.6 (2008): 492-496.
3. Perry, J., et al. Percutaneous injury rates. *Adv Expo Prev.* 6.3 (2003): 32-36.
4. Allen, D.M., et al. HIV infection in intravenous drug users entering drug treatment, United States, 1988 to 1989. *American Journal of Public Health* 82.4 (1995): 541-545