

WHAT IS HIV

The HIV human immunodeficiency virus is a virus that attacks cells that help the body fight infection, making a person more vulnerable to other infections and diseases.

It is spread by contact with certain bodily fluids of a person with HIV, most commonly during sex with a condom or sex without a condom HIV can lead to the disease AIDS (acquired immunodeficiency syndrome).

The human body can't get rid of HIV and no effective HIV cure exists. So, once you have HIV, you have it for life.

In addition, there are effective methods to prevent getting HIV through sex or drug use, including pre-exposure prophylaxis (PrEP) and post-exposure prophylaxis (PEP).

The human immunodeficiency viruses (HIV) are two species of Lentivirus (a subgroup of retrovirus) that infect humans.

Over time, they cause acquired immunodeficiency syndrome (AIDS), a condition in which progressive failure of the immune system allows life-threatening opportunistic infections and cancers to thrive.

The average survival time after infection with HIV is estimated to be 9 to 11 years.

In most cases, HIV is a sexually transmitted infection and occurs by contact with or transfer of blood, pre-ejaculate, semen, and vaginal fluids.

Non-sexual transmission can occur from an infected mother to her infant during pregnancy, during childbirth by exposure to her blood or vaginal fluid, and through breast milk.

Within these bodily fluids, HIV is present as both free virus particles and virus within infected the vital immune cells in the human immune system, such as helper T cells (specifically CD4+ T cells), macrophages, and dendritic cells.

HIV infection leads to low levels of CD4+ T cells through a number of mechanisms, including pyroptosis of abortively infected T cells, apoptosis of uninfected bystander cells, direct viral killing of infected cells, and killing of infected CD4+ T cells by CD8+ cytotoxic lymphocytes that recognize infected cells. When CD4+ T cell numbers decline below a critical level, cell-mediated immunity is lost, and the body becomes progressively more susceptible to opportunistic infections, leading to the development of AIDS.