

**Topic: AIDS**  
**Class: B.Sc Part –III (Hons.)**  
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**Group – A**

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# What is HIV?

- HIV is a virus that damages the immune system.
- The immune system helps the body fight off infections.
- Untreated HIV infects and kills CD4 cells,
- which are a type of immune cell called T cells.
- Over time, as HIV kills more CD4 cells, the body is more likely to get various types of infections and cancers.

- HIV is transmitted through bodily fluids that include:
  - blood
  - semen
  - vaginal and rectal fluids
  - breast milk
- The virus doesn't spread in air or water, or through casual contact.

- HIV is a lifelong condition and currently there is no cure.
- However, with medical care, including treatment called antiretroviral therapy,
- it's possible to manage HIV and live with the virus for many years.
- Without treatment, a person with HIV is likely to develop a serious condition called AIDS.

- At that point, the immune system is too weak to fight off other diseases and infections.
- Untreated, life expectancy with AIDS is about three years Trusted source.
- With antiretroviral therapy,
- HIV can be well-controlled and life expectancy can be nearly the same as someone who has not contracted HIV.

## What is AIDS?

- AIDS is a disease that can develop in people with HIV.
- It's the most advanced stage of HIV.
- But just because a person has HIV doesn't mean they'll develop AIDS.
- HIV kills CD4 cells.
- Healthy adults generally have a CD4 count of 500 to 1500 per cubic millimeter.
- A person with HIV whose CD4 count falls below 200 per cubic millimeter will be diagnosed with AIDS.

- A person can also be diagnosed with AIDS
- if they have HIV and develop an opportunistic infection or cancer that's rare in people who don't have HIV.
- An opportunistic infection, such as pneumonia, is one that takes advantage of a unique situation, such as HIV.
- Untreated, HIV can progress to AIDS within a decade.
- There's no cure for AIDS, and without treatment, life expectancy after diagnosis is about three years Trusted source.
- This may be shorter if the person develops a severe opportunistic illness.

- If AIDS does develop, it means that the immune system is severely compromised.
- It's weakened to the point where it can no longer fight off most diseases and infections.
- That makes the person vulnerable to a wide range of illnesses, including:
  - pneumonia
  - Tuberculosis
  - Oral thrush a fungal infection in the mouth or throat



- cytomegalovirus (CMV), a type of herpes virus
- cryptococcal meningitis, a fungal infection in the brain
- toxoplasmosis, a brain infection caused by a parasite
- cryptosporidiosis, an infection caused by an intestinal parasite
- cancer, including Kaposi's sarcoma (KS) and lymphoma
- The shortened life expectancy linked with untreated AIDS isn't a direct result of the syndrome itself.
- Rather, it's a result of the diseases and complications that arise from having an immune system weakened by AIDS.