

# **AIDS Eradication**

### Why in News?

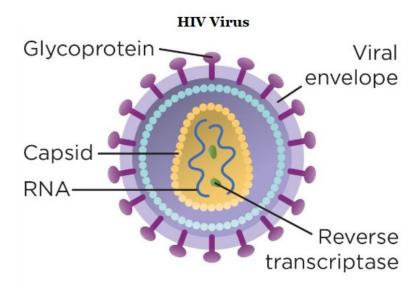
New HIV cases down in India by 44% since 2010.

#### What is AIDS?

• Acquired immunodeficiency syndrome (AIDS) - It is a chronic condition caused by the human immunodeficiency virus (HIV) and the final and most serious stage of an HIV infection.

First cases of HIV AIDS were detected in the 1980s.

• HIV Virus - It is a lentivirus, which is a sub-classification of the *retrovirus*.



• It attacks the body's immune system, particularly white blood cells called CD4 cells.

CD4 cells also known as CD4 T lymphocytes or "helper T cells" help fight infection by triggering immune system to destroy viruses, bacteria, and other germs.

- **Transmission** Sexual contact, transfer of bodily fluids such as through infected needles, blood transfusions and from mother to child at birth.
- **High Risk Populations** Persons who inject drugs have a 35 times greater risk of acquiring HIV than adults who do not.

- Men who have sex with men (MSM) have a 28 times greater risk of acquiring HIV than other adult men (aged 15-49).
- Transwomen have a higher risk (14 times) than adult women (aged 15-49).
- Female sex workers are at 30 times greater risk adult women (aged 15-49).
- **Prevention of transmission** AIDS transmission can be prevented by use of condoms during sex, using sterilised needles and not reusing needles and testing bloods before transfer.
- **HIV Treatments** There is no Vaccine for AIDS and no direct drug to cure AIDS but can be treated to control the associated illness.
- **Pre-exposure prophylaxis (PrEP)** It is a pill that has 2 anti-HIV medicines taken daily to prevent HIV for HIV-negative people.
  - PrEP Drugs Truvada, Descovy, and Apretude
- It is taken before you think you might be exposed to HIV.
- **PEP** This medicine prevents HIV after potential exposure.
- It is taken within 72 hours after exposure to HIV (e.g. after rape) for 28 days to prevent HIV.
- **Antiretroviral Therapy (ART)** It is a 3-medicine treatment for HIV-positive people that reduces the levels of HIV in a person's body.
- ART helps the body stay strong and helps it fight off infections and other illnesses.

The first antiretroviral drug, AZT (zidovudine), was approved by the US Food and Drug Administration (US FDA) in March 1987.

- **Protease inhibitors** It is a new class of antiretroviral drugs introduced in 1995 and they prevent a virus from making more copies of itself.
- **Therapy** HAART Therapy (Highly Active Antiretroviral Therapy), and 'cocktail therapy' combining three or more anti-retroviral drugs, became available starting in 1996.
- Recent developments in Treatment
  - New PrEP Drugs Lenacapavir and Descovy <u>F/TAF</u>
  - $\circ~$  Stem Cell Treatment Recently a HIV patient got cured of AIDS following a stem cell transplant.

#### What is the AIDS situation at Global and India level?

- **Global Status** As of 2022, **39 million** people globally were living with HIV.
  - **New infection 1.3 million** (Decreased by 39%)
- India Status The number of People Living with HIV (PLHIV) in India is estimated at around 24 lakhs.
  - **Share of India in Global level** 6.3% (around 10% two decades ago).
  - **New infections** Around 66,400(Decreased by 44%).
  - Adult HIV prevalence 0.2 per cent
- **High prevalent region** The north-east region States have the highest adult HIV prevalence (2.70% in Mizoram, 1.36% in Nagaland and 1.05% in Manipur).
- It is followed by southern States (0.67% in Andhra Pradesh, 0.47% in Telangana and 0.46% in Karnataka).

- **India's Progress** As of the end of 2023
  - 82% knew their HIV status
  - ∘ 72% were on ART
  - 68% were virally suppressed.
- **Decline in Mortality** AIDS-related deaths have been reduced by 69% since the peak in 2004.

## How India has achieved this progress?

- **Prevention and Control** National AIDS Control Programme (NACP) was launched in 1992 for prevention and control of HIV/AIDS in India and implemented by National AIDS Control Organisation.
- 5<sup>th</sup> phase of the National AIDS and STD Control Programme (2021-2026) seeks to reduce
  - Annual new HIV infections by 80%
  - AIDS-related mortalities by 80%
  - Eliminate vertical transmission of HIV and syphilis—by 2025.
- Diagnosis Comprehensive HIV and syphilis testing to all pregnant women
- More than 30 million free HIV tests being conducted annually.
- More than 1.7 million people are receiving free antiretroviral therapy (ART) through public healthcare systems
- Treatment Free Antiretroviral Therapy (ART) was launched for Persons living with HIV (PLHIV) on April 1, 2004.
- 1,264 Link ART centres make free ART drugs available to approximately 1.8 million PLHIV on treatment.
- Due to the introduction of the ART programme and other measures, in 2023, the prevalence of HIV in 15-49 age group came down to 0.20.
- **Comorbidities management** Efforts to tackle tuberculosis, viral hepatitis, and non-communicable diseases, is helping address co-morbidities faced by people living with HIV.
- **Awareness Creation** Youth-targeted initiatives like Red Ribbon Clubs in educational institutions.
- Mass-awareness activities such as the annual RED RUN Marathon.
- Indian Health Service observes *National HIV Testing Day on June 27*, to highlight the importance of testing for and detecting HIV infection.
- **De stigmatization** HIV and AIDS (Prevention and Control) Act 2017 provides for ombudsmen to handle grievances and promote HIV prevention policies.
- **Universal Coverage** National Strategic Plan on HIV/AIDS and Sexually Transmitted Infection (STI) is a seven-year programme (2017-24) to attain universal coverage of HIV prevention, treatment.

### What are the global initiatives against AIDS?

- **UNAIDS** Joint United Nations Programme on HIV/AIDS was created in 1996 cosponsored by eleven United Nations agencies.
- UN General Assembly's Millennium Summit 2000 World leaders issued a declaration to stop and reverse the spread of HIV.

- In 2015, countries achieved the targets envisaged under Millenium Development Goal 6A — to halt and reverse the spread of HIV/AIDS.
- $\circ$  Target 6B of MDG -It sought to achieve universal access to treatment for HIV/AIDS for all those who need it by 2010.
- Global Fund to Fight AIDS, Tuberculosis and Malaria It promotes universal access to HIV prevention, treatment and care in 2002.
- WHO 2024 AIDS Clinical Module The module integrates clinical service delivery guidance for all 3 WHO recommended PrEP products that is oral PrEP, the dipivefrine vaginal ring and long acting injectable cabotegravir.
- **Stigma Index** The People living with HIV Stigma Index is a tool designed to gather evidence about how discrimination and stigma affects the lives of those living with HIV.
- It was developed by the Global Network of People Living with HIV (GNP+), ICW, UNAIDS and International Planned Parenthood Foundation (IPPF).
- **SDG Target** United Nations' Sustainable Development Goal 3 aims at ending HIV/AIDS as a public health threat by 2030.
- Let Communities Lead In 2023, UNAIDS released this report, highlighting community participation in efforts to end the AIDS epidemic.
- UNAIDS 10-10-10 target Pathways to Achieving the Global 10-10-10 HIV Targets was released by UNDP
  - $\circ$  Less than 10% of countries would have punitive legal and policy environments that deny or limit access to services.
  - $\circ$  Less than 10% of people living with HIV and key populations would experience stigma and discrimination
  - Less than 10% of women, girls people living with HIV, and key populations would experience gender inequality and violence

### • 95-95-95 Target by 2025

- 95% of all people living with HIV know their HIV status.
- $\circ$  95% of all people diagnosed with HIV infection receive sustained antiretroviral therapy (ART).
- $\circ$  95% of all people receiving antiretroviral therapy achieve viral suppression by 2025.
- **UNAIDS** New Sustainability approach In 2024, UNAIDS proposed a new approach to ensure a sustained HIV response beyond 2030.
- **SCALE Initiative** -It is a UNDP-led partnership to accelerate the removal of structural barriers to HIV services and drive progress on the historic 10-10-10 HIV targets through population-led efforts.
- It is currently funding 45 key population-led organizations across 21 countries for a total of more than US\$1.5 million.
- AIDS Conference 25th International AIDS Conference is held in 2024 in Munich bringing together scientists, policy makers, healthcare professionals, people living with HIV, funders, media and communities.

# What are the challenges in AIDS control?

• Lack of awareness - More than 40% of people living with HIV still do not know they are infected.

- **Difficult medication** Daily PrEP regimen is challenging to maintain due to social and structural reasons.
- **Costly Treatments** Costs, of the antiretroviral therapies remained prohibitively high about \$10,000 a year.
- **Stigma** Self stigmatization and social stigmatization prevents the participation of PLHIV from getting treatment.
- **Exclusion** Feelings of shame and guilt were often based upon experiences of social exclusion.
- **Drug resistance** At least 5% of people on ART were resistant to at least 1 antiretroviral drug.
- **Drug shortage** Some people living with HIV have had their regimen changed due to the unavailability of certain ARVs.

### What lies ahead?

- Use Stigma Index to understand the level of stigmatization prevalent in the society and take appropriate measures to address it.
- Provide psychological counselling and therapy, and psychiatric intervention to support persons living with HIV.
- Create treatment programmes to reach people who may be reluctant to come forward.
- Make community leadership central to the formulation, budgeting, implementation, monitoring and evaluation of all plans, policies and programmes that will affect communities.
- Fully and sustainably fund communities' leadership roles so that programmes can be scaled up, and the people implementing them can be properly supported and remunerated.

### References

- 1. The Hindu | New HIV cases down in India
- 2. The Hindu | HIV/AIDS: Key interventions and progress

