



Self-Testing of HIV

[Source: IE](#)

Why in News?

A study by the **Indian Council of Medical Research-National Institute of Translational Virology** and AIDS Research (ICMR-NITVAR) and Mizoram University has highlighted the success of **Human Immunodeficiency Virus (HIV) self-testing in Mizoram**.

What are the Key Findings of the Study?

- **HIV Self-Testing:** The study examined HIV self-testing implementation in Mizoram, which has India's highest HIV prevalence (2.73%), **13 times the national average**.
 - The epidemic in the state is largely **driven by injecting drug use and commercial sex work**.
 - **Lack of early testing and stigma** prevents many from accessing timely treatment.
 - HIV self-testing allows individuals to collect their own blood or saliva samples and interpret the results using a test kit.
- **Stigma-Free & Private:** The study found self-testing to be a **convenient, confidential, and more effective way** for high-risk groups to know their HIV status than traditional campaigns, with potential for replication in other states.

Note: The [World Health Organization \(WHO\)](#) endorsed self-testing in 2016, and **41 countries** have since adopted it. India has **not yet introduced formal guidelines** for HIV self-testing.

What are the Key Facts About Human Immunodeficiency Virus?

- **About:** HIV is a virus that attacks the immune system by targeting **CD4 cells** (white blood cells). If untreated, it can lead to [AIDS \(Acquired Immunodeficiency Syndrome\)](#) and making the body prone to infections and cancers.
- **Transmission:** HIV spreads through **direct contact of infected bodily fluids** like blood, semen, breast milk, vaginal fluids, and via unprotected sex, tattooing, and shared needles **but not through casual contact**.
- **Symptoms:** **Early stage** (fever, rash), **Later stage** (swollen lymph nodes, weight loss, diarrhea), and **Severe stage** (tuberculosis, meningitis, cancers (e.g. lymphoma)).
- **Risk Factors:** Multiple sexual partners or having sexually transmitted infections (STIs), Unsafe blood transfusions.
- **Diagnosis:** **Rapid diagnostic tests** for same-day results, **Self-testing kits**, and Confirmatory **virological tests**.
- **Prevention:** Regular **HIV testing, STI screening**, safe blood transfusions, and using sterilized needles for tattoos are essential for prevention.
- **Treatment:** No cure for HIV, [Antiretroviral Therapy \(ART\)](#) helps control the virus. ART must be

taken daily for life to maintain health.

- **Advanced HIV Disease (AHD):** WHO defines AHD as CD4 <200 cells/mm³. People with AHD are at high risk of death, even after starting ART.
- **Global Response: End HIV epidemic by 2030** (UN Sustainable Development Goal 3.3).
- **India's Progress: India HIV Estimations 2023** reports 2.5 million people living with HIV, with **0.2% adult prevalence**. New infections dropped **44% since 2010**, surpassing the global **39% decline**.
 - The [National AIDS Control Programme \(NACP\)](#), launched in 1992, remains key in India's fight against HIV/AIDS.

UPSC Civil Services Examination Previous Year Question (PYQ)

Q. Which of the following diseases can be transmitted from one person to another through tattooing? (2013)

1. Chikungunya
2. Hepatitis B
3. HIV-AIDS

Select the correct answer using the codes given below:

- (a) 1 only
- (b) 2 and 3 only
- (c) 1 and 3 only
- (d) 1, 2 and 3

Ans: (b)

Q. Which one of the following statements is not correct? (2019)

- (a) Hepatitis B virus is transmitted much like HIV.
- (b) Hepatitis B unlike Hepatitis C, does not have a vaccine.
- (c) Globally, the number of people infected with Hepatitis B and C viruses are several times more than those infected with HIV.
- (d) Some of those infected with Hepatitis B and C viruses do not show the symptoms for many years.

Ans: (b)

Q. With regard to the transmission of the Human Immunodeficiency Virus, which one of the following statements is not correct? (2010)

- (a) The chances of transmission from female to male are twice as likely as from male to female
- (b) The chances of transmission are more if a person suffers from other sexually transmitted infections
- (c) An infected mother can transmit the infection to her baby during pregnancy, at childbirth and by breast feeding
- (d) The risk of contracting infection from transfusion of infected blood is much higher than an exposure to contaminated needle

Ans: (a)

Q. Consider the following statements: (2010)

1. Hepatitis B is several times more infectious than HIV/AIDS
2. Hepatitis B can cause liver cancer

Which of the statements given above is/are correct?

- (a) 1 only
- (b) 2 only
- (c) Both 1 and 2
- (d) Neither 1 nor 2

Ans: (c)

PDF Reference URL: <https://www.drishtias.com/printpdf/self-testing-of-hiv>

