



New Subtype of HIV Discovered

Why in News

Recently, the researchers have discovered a **new subtype of the Human Immunodeficiency Virus (HIV)** called **HIV-1 Group M, subtype L**. It is the **first time a subtype of HIV** has been found in almost two decades.

- There are **two types of HIV**: HIV-1 and HIV-2. HIV-1 is considered the predominant type, representing the vast majority of infections worldwide, while HIV-2 is far less common and primarily concentrated in the west and central African regions.

Key Points

- Researchers used a tailored method of the next-generation **genome sequencing** technology to identify the new subtype.
 - **Genome sequencing** is the process of determining the complete DNA sequence of an organism's genome. It figures out the **order of DNA nucleotides, or bases, in a genome**, i.e, the order of Adenine, Cytosine, Guanines, and Thymine that make up an organism's DNA.
 - The technology is helping scientists to stay one step ahead of mutating viruses and avoid a new pandemic.
- **Group M viruses** are responsible for the **global pandemic**- which can be traced back to the Democratic Republic of Congo in Sub-Saharan Africa.

Human Immunodeficiency Virus- Acquired Immunodeficiency Syndrome

- HIV is a type of **retrovirus**. The combination of drugs used to treat it is called **Antiretroviral Therapy (ART)**.
- HIV attacks **CD4-a type of White Blood Cell (T-cells)** in the body's immune system.
- It is transmitted from person to person **through bodily fluids**, including **blood, semen, vaginal secretions, anal fluids, and breast milk**.
- **Statistics in India**: The total number of people living with HIV was estimated at 21.40 lakh in 2017. India witnessed over 87,000 new cases in 2017 and saw a decline of 85% compared to 1995.
- **World AIDS Day** is observed on **1st December**.

Source: IE

