

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.
 - <u>Genome sequencing</u> 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 <u>Antiretroviral</u> <u>Therapy (ART)</u>.
- 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

