



DATE: 3 MAY 2026

1 Dust Storms (Source: The Hindu)

Dust storms are meteorological events where extremely high winds lift up dust and soil from the ground, and transport them over long distances. These kinds of dust storms are quite common in arid and semi-arid regions.

Causes

- **Natural Causes:** Droughts, arid conditions, low vegetation, and strong pressure gradients.
- **Human-Induced Factors:** Overgrazing, deforestation, unsustainable farming, and land degradation.

Mechanisms For Formation

- **Saltation:** The process by which wind lifts particles, which then fall back to the ground, loosening smaller dust particles.
- **Suspension:** Extremely fine particles are lifted high into the atmosphere and can travel thousands of kilometers.

Geographical Distribution

- **Global:** The Sahara Desert (source of "Harmattan"), the Gobi Desert, and the Middle Eastern deserts.
- **India:** Primarily the Thar Desert region (Rajasthan, Haryana, Punjab). In North India, these are locally known as Andhi or Loo (when accompanied by extreme heat).



Charalalana Margga

ENLITE IAS
ENLIGHTENING MINDS, LIGHTENING JOURNEYS

DATE: 3 MAY 2026

Impact

- **Environment:** Reduce albedo
- **Health:** Increases respiratory issues (Asthma, Bronchitis) and spreads particulate matter.
- **Economy**
 - Causes soil erosion and crop damage.
 - Disrupts aviation, road transport, and solar power generation (by coating panels).

Management and Mitigation

- **Green Belts:** Planting shelterbelts and windbreaks to reduce wind velocity.
- **Soil Moisture Management:** Using drip irrigation and mulching to keep soil intact.
- **Early Warning Systems:** Using satellite data (like INSAT-3DR) for real-time tracking and alerts.



- **Global Initiatives:** The United Nations Convention to Combat Desertification (UNCCD) works specifically on Sand and Dust Storms (SDS) as part of land degradation neutrality.

2 Antiretroviral Therapy (ART) (Source: The Hindu)

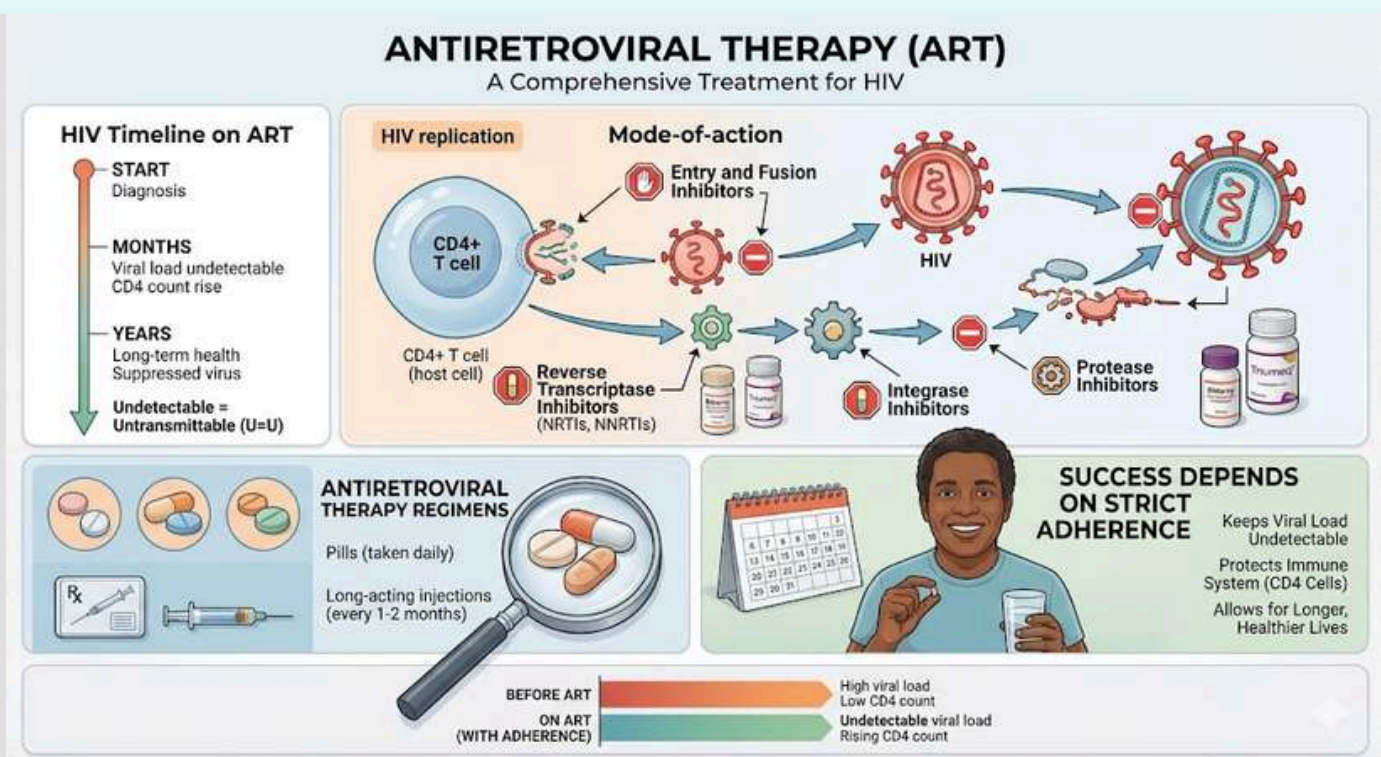
ART is the treatment of people infected with human immunodeficiency virus (HIV) using anti-HIV drugs.

Objectives

- Suppress HIV replication so that the virus remains at very low or “undetectable” levels in the blood.
- Prevent opportunistic infections, reduce AIDS-related morbidity and mortality, and lower the risk of transmission to others

Key Points

- ART typically involves taking a combination of different HIV medicines (usually 2 to 4 drugs) to increase effectiveness (often called Highly Active Antiretroviral Therapy (HAART)).
- In India, ART drugs are managed by the National AIDS Control Organisation (NACO), ensuring procurement, distribution, and regulation.





DATE: 3 MAY 2026

3 North Atlantic Treaty Organization (NATO) (Source: The Indian Express)

NATO is a military alliance established by the North Atlantic Treaty (also called the Washington Treaty) of April 1949, and it has 32 member countries.

- It was set up to provide collective security against the Soviet Union.
- Headquarters is located in Brussels, Belgium.
- NATO's essential and enduring purpose is to safeguard the freedom and security of all its members by political and military means and collective defence under Article 5 of the treaty.
- Founding members are Belgium, Canada, Denmark, France, Iceland, Italy, Luxembourg, the Netherlands, Norway, Portugal, the United Kingdom, and the United States.
- Countries recently joined NATO, are Finland (31st member in 2023), Sweden (32nd member in 2024).

