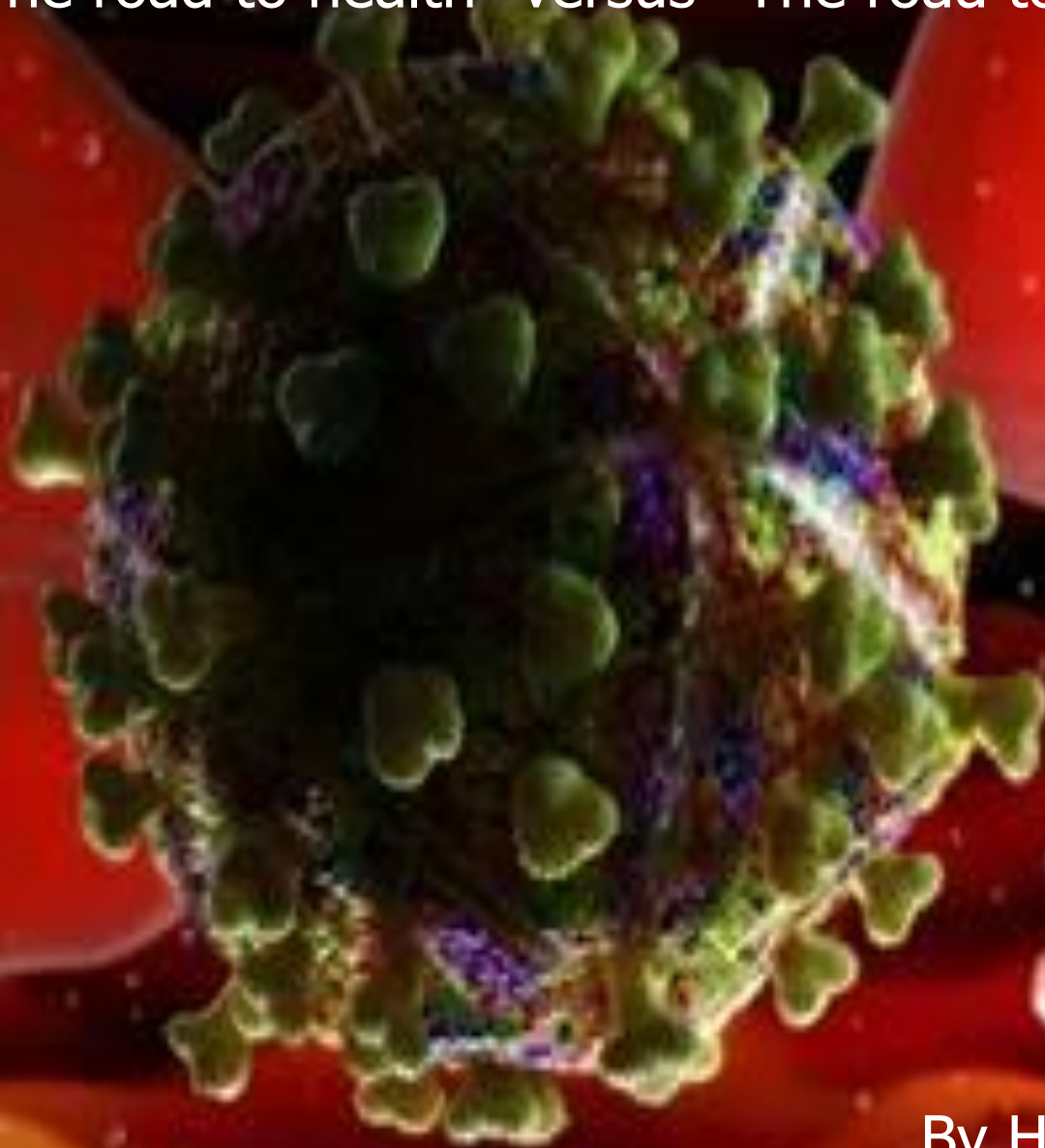


"The road to health" versus "The road to death"

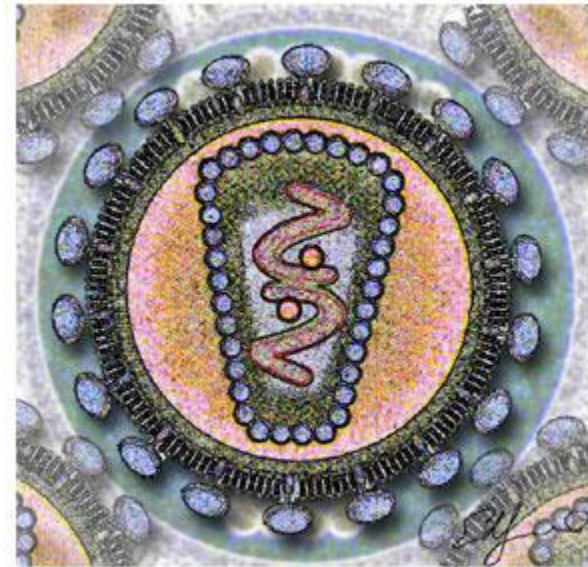
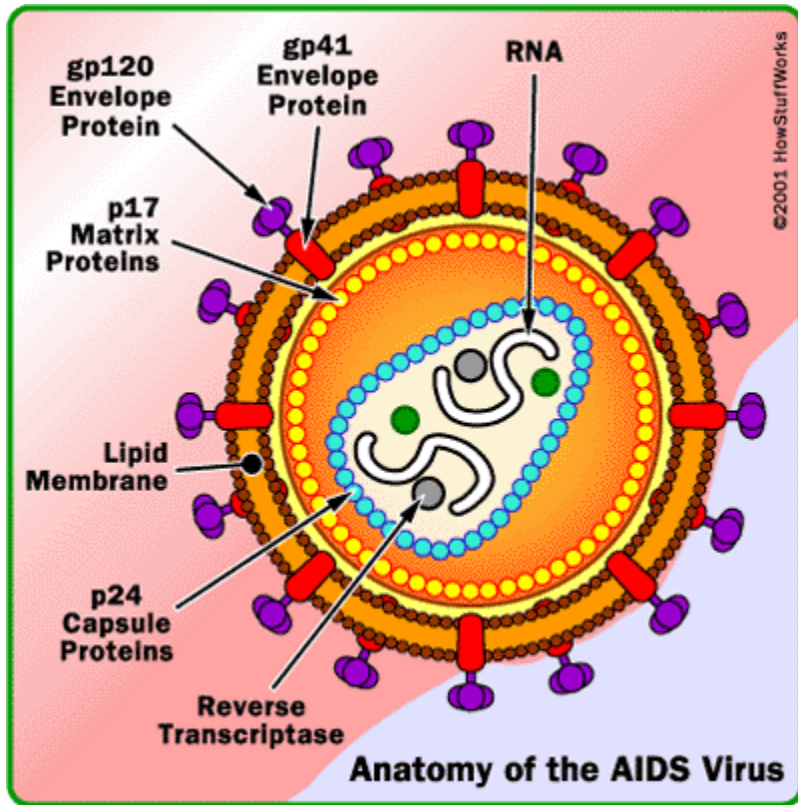


By Hana Taha, PhD

# HIV

- The human immunodeficiency virus (HIV) is a retrovirus that infects cells of the immune system, destroying or impairing their function.
- As the infection progresses, the immune system becomes weaker, and the person becomes more susceptible to infections.

# Human Immune Deficiency Virus



# HIV

- The Human Immunodeficiency Virus (HIV) targets the immune system and weakens people's defense systems against infections and some types of cancer.
- As the virus destroys and impairs the function of immune cells, infected individuals gradually become immunodeficient.
- Immune function is typically measured by CD4 cell count.

# AIDS

- The most advanced stage of HIV infection is Acquired Immunodeficiency Syndrome (AIDS), which can take from 2 to 15 years to develop depending on the individual.
- Antiretroviral drugs can slow down the process even further.
- AIDS has severe clinical manifestations.

# Signs and symptoms

- The symptoms of HIV vary depending on the stage of infection.
- Though people living with HIV tend to be most infectious in the first few months, many are unaware of their status until later stages.
- The first few weeks after initial infection, individuals may experience no symptoms or an influenza-like illness including fever, headache, rash or sore throat.

# Signs and symptoms

- As the infection progressively weakens the immune system, an individual can develop other signs and symptoms, such as swollen lymph nodes, weight loss, fever, diarrhea and cough.
- Without treatment, they could also develop severe illnesses such as tuberculosis, cryptococcal meningitis, and cancers.

# HIV transmission

- HIV can be transmitted via the exchange of a variety of body fluids from infected individuals, such as blood, breast milk, semen and vaginal secretions.
- Individuals cannot become infected through ordinary day-to-day contact such as hugging, shaking hands, or sharing personal objects, food or water.

# HIV transmission

HIV is transmitted through unprotected sexual intercourse, transfusion of contaminated blood, sharing of contaminated needles, and between a mother and her infant during pregnancy, childbirth and breastfeeding.

# Risk factors

- Behaviors and conditions that put individuals at greater risk of contracting HIV include:
- Having unprotected sex
- Having another sexually transmitted infection such as syphilis, herpes, chlamydia, gonorrhea, and bacterial vaginosis
- Sharing contaminated needles, syringes and other

# Risk factors

- Injecting equipment and drug solutions when injecting drugs
- Receiving unsafe injections, blood transfusions, medical procedures that involve unsterile cutting or piercing; and
- Experiencing accidental needle stick injuries, including among health workers.

# Global HIV/AIDS statistics in 2022

- 85.6 million people have become infected with HIV since the start of the epidemic.
- 40.4 million people have died from AIDS-related illnesses since the start of the epidemic.

# Global HIV/AIDS statistics in 2022

- 39.0 million people globally were living with HIV
- 37.5 million (15 years or older).
- 1.5 million children (0–14 years).
- 53% of all people living with HIV were women and girls.

# Global HIV/AIDS statistics in 2022

- 1.3 million people became newly infected with HIV
- 630 000 people died from AIDS-related illnesses
- AIDS-related mortality has declined by 55% among women and girls and by 47% among men and boys since 2010.
- 29.8 million people were accessing antiretroviral therapy

# The Sustainable Development Goals (SDGs).

- Adopted in 2015, the SDGs aim to end the AIDS epidemic by 2030 under SDG Goal 3, which is to “ensure healthy lives and promote well-being for all at all ages.”
- The SDGs are the successor to the Millennium Development Goals (MDGs), which included an HIV target under MDG 6: to halt and begin to reverse the spread of HIV/AIDS by 2015 and to achieve universal access to treatment for HIV/AIDS by 2010.

# 95-95-95 targets by 2025

UNAIDs released in 2020 ambitious targets to be achieved by 2025.

- ***The first 95% of people living with HIV knowing their HIV status***

In 2022, nearly four out of five people living with HIV (86%) knew their status.

- ***The second 95% of people who know their HIV-positive status are on treatment***

Among people who knew their status in 2022, approximately (89%) were accessing treatment.

- ***The third 95% of people on treatment with suppressed viral loads***

Among people accessing treatment in 2022, 93% were virally suppressed.

# Diagnosis

- Serological tests, such as Rapid diagnostic test RDTs or enzyme immunoassays (EIAs), detect the presence or absence of antibodies to HIV antigen.
- It is important to note that serological tests detect antibodies produced by an individual as part of their immune system to fight off foreign pathogens, rather than direct detection of HIV itself.

# Diagnosis

- Most individuals develop antibodies to HIV-1/2 within 28 days and therefore antibodies may not be detectable early after infection, the so-called window period.
- This early period of infection represents the time of greatest infectivity; however, HIV transmission can occur during all stages of the infection.

# HIV testing services

- HIV testing should be voluntary and the right to decline testing should be recognized.
- Mandatory or coerced testing by a health-care provider, authority or by a partner or family member is not acceptable as it undermines good public health practice and infringes on human rights.
- All HIV testing services must include the 5 C's recommended by WHO: informed **Consent**, **Confidentiality**, **Counselling**, **Correct test results and Connection** (linkage to care, treatment and other services).

# Self-testing

- HIV self-testing is a process whereby a person who wants to know his or her HIV status collects a specimen, performs a test and interprets the test results in private.
- HIV self-testing does not provide a definitive diagnosis; instead, it is an initial test which requires further testing by a health worker.

# Prevention

- 1. Male and female condom use**
- 2. Testing and counseling for HIV, TB and STDs.**

It is strongly advised that HIV testing services integrate screening for TB and STDs. All individuals diagnosed with HIV who has active TB should urgently use ART.
- 3. Voluntary medical male circumcision**

# Prevention

**4. Pre-exposure prophylaxis (PrEP) for HIV**

**5. Post-exposure prophylaxis for HIV (PEP)**

**6. Elimination of mother-to-child transmission of HIV (EMTCT)**

**7. Harm reduction for injecting drug users**

- Using sterile syringes
- HIV testing and counseling
- HIV treatment and care
- Access to condoms
- Management of STIs, tuberculosis and viral hepatitis.

**ALICIA KEYS  
WANTS TO  
CHANGE THE  
WAY YOU THINK  
ABOUT HIV.**

