

Comprehensive HIV Summary

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1. What is HIV?

Human Immunodeficiency Virus (HIV): Attacks the immune system, specifically CD4 cells (T-cells), weakening the body's ability to fight infections.

AIDS (Acquired Immunodeficiency Syndrome): The final stage of untreated HIV, marked by severe immune damage and opportunistic infections.

2. Transmission

How it spreads:

- Unprotected sex (vaginal, anal, oral)
- Sharing needles/syringes
- Mother-to-child (pregnancy, birth, breastfeeding)
- Blood transfusions/organ transplants (rare in screened systems)

How it DOESN'T spread:

- Casual contact (hugging, kissing, sharing food)
- Mosquito bites

3. Symptoms

Early (Acute HIV):

Fever, fatigue, swollen lymph nodes, rash (2–4 weeks post-exposure).

Chronic HIV:

Asymptomatic for years, but the virus damages the immune system.

AIDS:

Rapid weight loss, recurring infections (e.g., TB, pneumonia), cancers (e.g., Kaposi's sarcoma).

4. Testing & Diagnosis

Tests:

- Rapid antibody tests (finger prick/oral fluid)
- PCR/RNA tests (detect virus early, 10–14 days post-exposure)
- CD4 count/viral load tests (monitor progression)

Window period: 10–90 days (depends on test type).

5. Treatment (ART)

Antiretroviral Therapy (ART): Daily medications suppress HIV, allowing near-normal life expectancy.

- **Key drugs:** Integrase inhibitors, protease inhibitors, NRTIs, NNRTIs
- **U=U:** Undetectable viral load = Untransmittable (cannot spread HIV sexually)

PEP (Post-Exposure Prophylaxis):

Emergency meds within 72 hours of exposure.

PrEP (Pre-Exposure Prophylaxis):

Daily pill (e.g., Truvada) to prevent HIV in high-risk groups.

6. Prevention

- Use condoms/dental dams
- Never share needles
- Regular testing (especially for high-risk groups)
- Circumcision (reduces heterosexual male risk by ~60%)
- Mother-to-child prevention: ART during pregnancy

7. Living with HIV

- **Adherence:** Taking ART consistently is critical
- **Stigma:** Fight misinformation; HIV is not a moral failing
- **Support:** Join patient advocacy groups

8. Myths vs. Facts

Myth: HIV only affects gay men.

Fact: Anyone can contract HIV (all genders, sexualities).

Myth: HIV is a death sentence.

Fact: With ART, people live long, healthy lives.

9. Global Impact

- ~39 million people live with HIV (2023 data)
- Sub-Saharan Africa is most affected
- Progress: New cases down 38% since 2010 due to education/treatment

10. Support & Contacts

Global Organizations

UNAIDS: www.unaids.org

WHO HIV Department: www.who.int/hiv

United States

CDC HIV Hotline: 1-800-CDC-INFO (1-800-232-4636)

The Well Project (Women & HIV): www.thewellproject.org

HIV.gov: www.hiv.gov

Emergency Resources

PEP Locator: [Find PEP Providers](#)

Mental Health Support: National Suicide Prevention Lifeline (988 in US)

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