

## Chapter 24

# Sexually Transmitted Infections and HIV/AIDS

1. Sexually Transmitted Infections
2. Preventing and Treating STIs
3. HIV/AIDS
4. Preventing and Treating HIV/AIDS

#OnedayIwokeup #Doppitup

## Lesson 1 — Sexually Transmitted Infections

**Sexually transmitted infections (STIs)** — also called STDs — are infections passed through sexual contact. Many are **asymptomatic** — infected people show no symptoms, unknowingly transmitting infections. Young people ages 15–24 account for roughly **half of all new STI cases** each year.

<b>HPV</b>	Most common STI; most clear on their own. High-risk strains cause cervical and other cancers. No cure — prevent with Gardasil 9 vaccine.
<b>Chlamydia</b>	Most reported bacterial STI; mostly asymptomatic; curable with antibiotics; untreated causes infertility
<b>Gonorrhea</b>	Second most common bacterial STI. Drug resistance is now a MAJOR CRISIS — dual antibiotic therapy now required; two new drugs approved in 2024.
<b>Syphilis</b>	Progresses through stages; congenital syphilis at crisis levels — up nearly 700% over the past decade. Penicillin still cures it.

**Genital Herpes**

HSV-2; 1 in 6 Americans ages 14–49. No cure; antivirals reduce outbreaks. Can spread even with no visible symptoms.

**Lesson 2 — Preventing and Treating STIs**

**Abstinence** is the only 100% effective method. For those who are sexually active: fewer partners, barrier methods (condoms), regular testing, vaccination (HPV and hepatitis B), and avoiding alcohol/drug use that impairs judgment.

**Gardasil 9** covers 9 HPV strains (up from 4 in the original vaccine). Recommended for all people ages 9–26, with catch-up dosing to 45.

**Lesson 3 — HIV/AIDS**

HIV targets CD4+ T cells, progressively destroying the immune system. Without treatment, HIV leads to AIDS. With modern ART, people with HIV can live near-normal lifespans. About **1.2 million Americans** live with HIV; ~32,000 new infections annually (down from peak of 130,000).

**Lesson 4 — Preventing and Treating HIV/AIDS**

**U=U (Undetectable = Untransmittable)** — People with HIV who take ART and maintain an undetectable viral load CANNOT sexually transmit HIV to partners. This is established scientific consensus.

**PrEP (Pre-Exposure Prophylaxis)** — not in the original textbook — reduces HIV transmission risk from sex by ~99% when taken as prescribed. Injectable PrEP (shot every 2 months) is now available.

## Chapter Vocabulary

### Lesson 1

<b>Sexually transmitted infections (STIs)</b>	Infections passed from person to person through sexual contact; also called STDs
<b>Asymptomatic</b>	Showing no symptoms despite being infected; makes STIs especially dangerous

### Lesson 2

<b>HPV vaccine (Gardasil 9)</b>	A vaccine that prevents infection by 9 types of HPV, protecting against cervical cancer and other HPV-related cancers
<b>PrEP (pre-exposure prophylaxis)</b>	Prescription medication taken by HIV-negative people to prevent HIV infection

### Lesson 3

<b>Human immunodeficiency virus (HIV)</b>	A virus that attacks and destroys CD4+ T cells, progressively weakening the immune system
<b>Acquired immunodeficiency syndrome (AIDS)</b>	The final stage of HIV infection; diagnosed when CD4+ count drops below 200

### Lesson 4

<b>Antiretroviral therapy (ART)</b>	The combination of medications that suppress HIV replication, allowing people with HIV to maintain immune health
<b>U=U (Undetectable = Untransmittable)</b>	People with HIV who maintain an undetectable viral load through ART cannot sexually transmit the virus