

HIV & Corrections

Understanding the Basics of HIV



About this module

This module was developed in 2020 by the North Carolina HIV Training & Education Center (NCHTEC), a partner in the Southeast AIDS Education & Training Center (SE AETC) network.

These resources are intended to complement training materials created for *Enhancing Linkages to HIV Primary Care and Services in Jail Settings*, a HRSA Special Projects of National Significance (SPNS) initiative that ran from 2007-2012. For more information about that initiative, visit: <https://nextlevel.targethiv.org/deii/jails>



DISSEMINATION OF
EVIDENCE-
INFORMED
INTERVENTIONS



Authors



Christopher B. Hurt, MD

Associate Professor of Medicine
Director, North Carolina HIV Training & Education Center

Institute for Global Health & Infectious Diseases
University of North Carolina at Chapel Hill
School of Medicine



Divya Ahuja, MD

Associate Professor of Medicine
Director, South Carolina HIV/HCV Clinical Training Center

Division of Infectious Diseases
University of South Carolina
School of Medicine

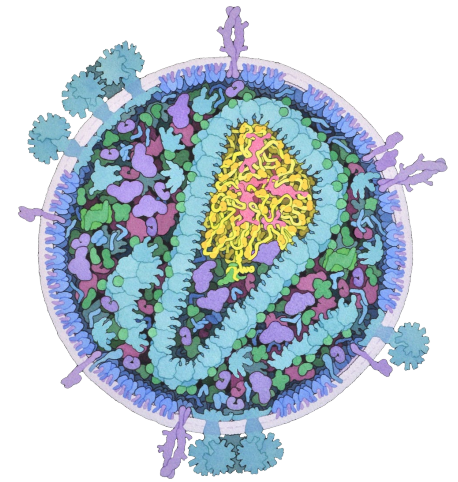


Learning objectives

- Define some of the key terms related to the care of people with human immunodeficiency virus (HIV).
- Explain how HIV is transmitted from person to person.
- Describe why certain types of sexual activity place someone at greater risk for acquiring HIV.
- List some ways in which HIV transmission can be prevented.



Defining key terms



Human immunodeficiency virus (HIV)
Retrovirus that attacks the immune system

CD4 T lymphocyte (AKA “T helper” cell)

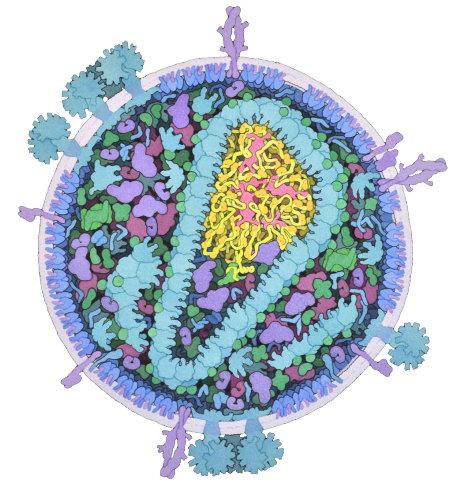
- Orchestrates the immune system’s function
- HIV hijacks CD4 cells and then kills them off
- A normal CD4 count is around 1000 (range, 500-1500)

Acquired immune deficiency syndrome (AIDS)

- Clinical term describing when CD4 counts fall to 200 or less
- If CD4 counts rise over 200, a patient no longer has AIDS
- Not all people living with HIV have AIDS



Defining key terms (2)



Viral load

The number of copies of HIV genetic material (HIV RNA) in a volume of blood

Antiretroviral (ARV)

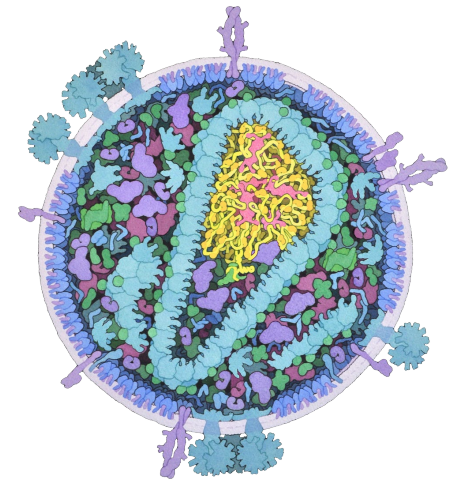
- A medication used to treat HIV
- Combinations of ARVs are called antiretroviral therapy (ART)

Adherence

- How consistently someone takes their meds
- Replaces the term “compliance”



Defining key terms (3)



Undetectable

- When the viral load (HIV RNA) is so low that blood tests can't detect it
- Occurs when a patient has good adherence to their ARVs
- Being undetectable is not the same as being cured

Person with HIV

- Replaces "HIV+" or "HIV-infected"
- Sometimes written as "person living with HIV" (PLwHIV)



How is HIV transmitted?

The virus can pass from person to person only if



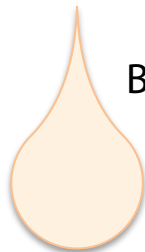
Blood



Semen



Vaginal fluid



Breast milk

containing HIV comes into direct contact with

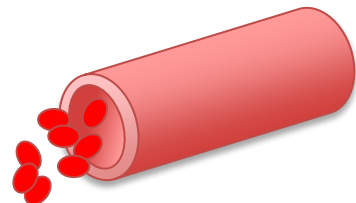
a mucosal surface
(any wet lining of the body)



non-intact skin



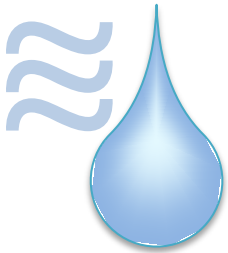
your bloodstream
(injuries, shared needles)





How is HIV not transmitted?

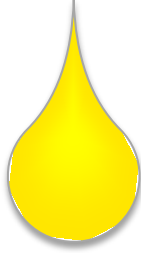
The virus is NOT transmitted through



Air or water



Sweat, saliva, tears



Urine

animals



insect or tick bites



shared utensils



shared toilets





How is HIV not transmitted? (2)

The virus is NOT transmitted through



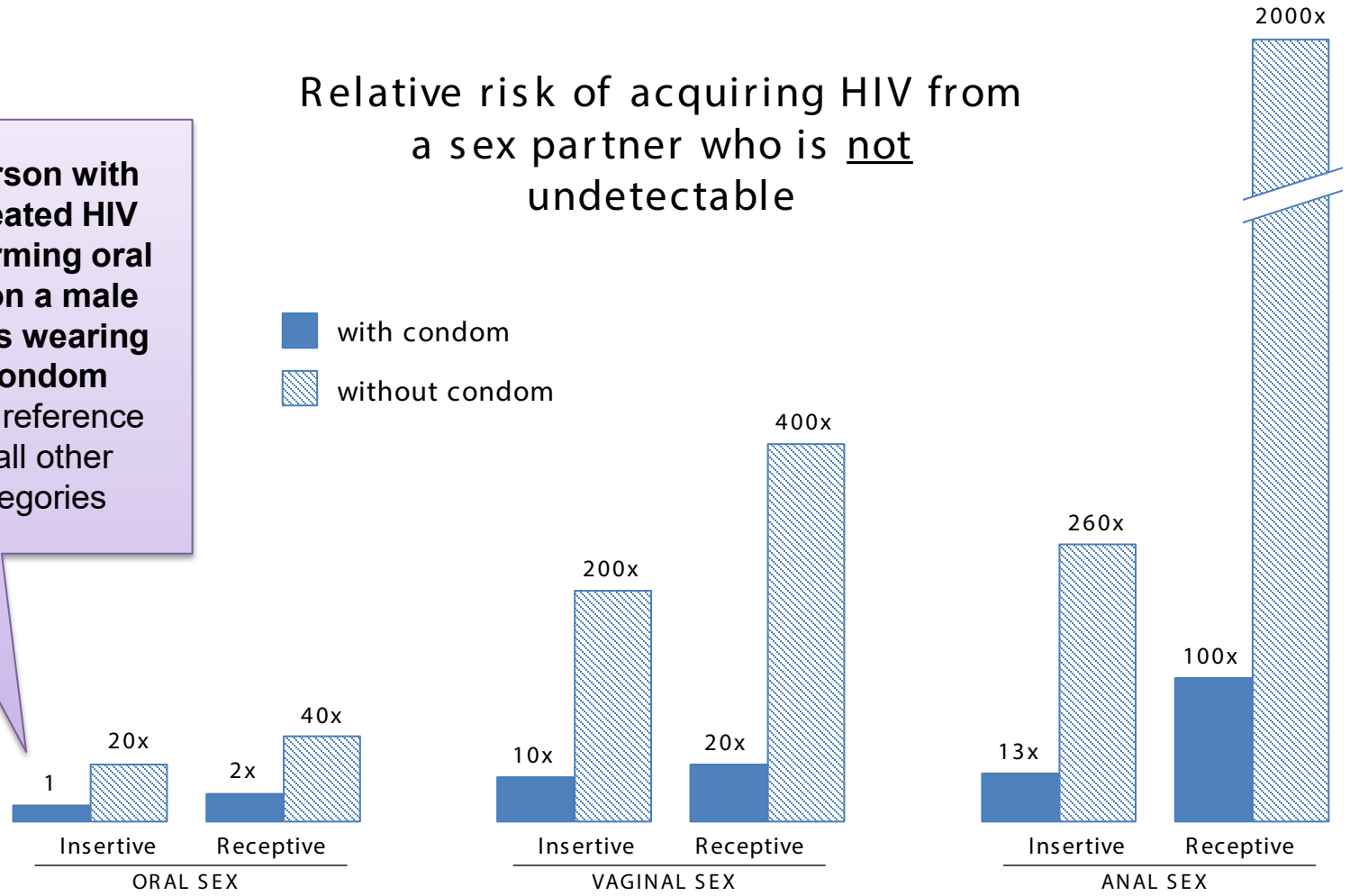
condomless sex with people with HIV IF they take antiretroviral medications consistently AND their viral load is “undetectable”



Which behaviors place someone at risk?

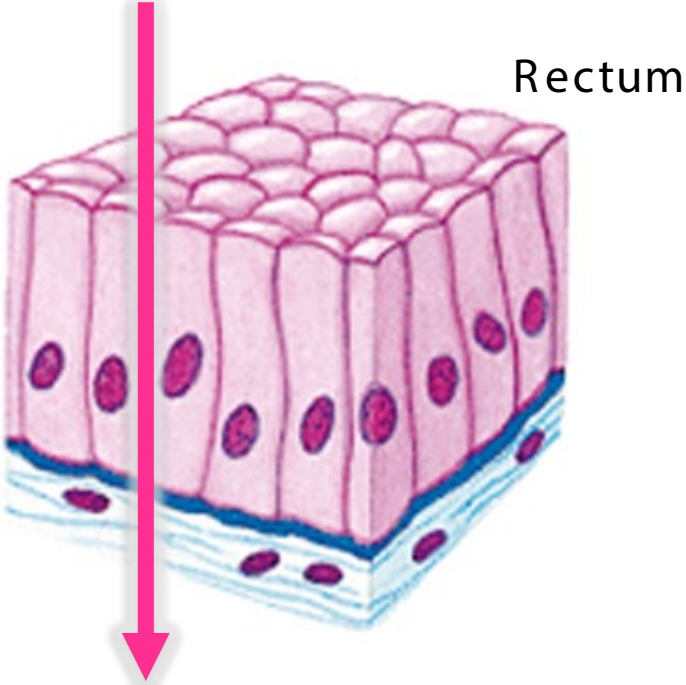
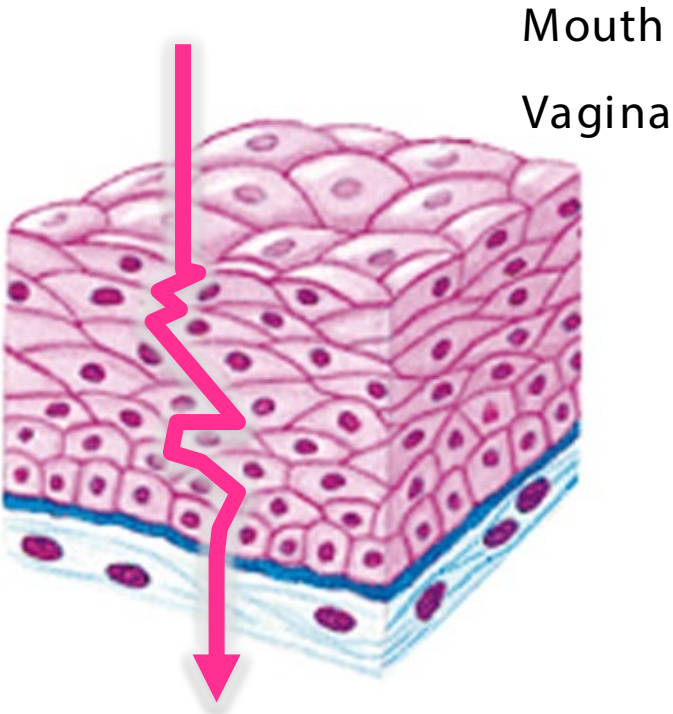
A person with untreated HIV performing oral sex on a male who is wearing a condom is the reference for all other categories

Relative risk of acquiring HIV from a sex partner who is not undetectable





Why does anal sex pose a greater risk?





How is HIV transmission prevented?

If you're HIV-uninfected...

- Abstain from sex
- Use condoms consistently
- Never share needles or “works”
- Talk with all sex and drug-using partners about their HIV status
- Use pre-exposure prophylaxis (PrEP) exactly as directed
- Use post-exposure prophylaxis (PEP) in emergencies
- Get tested for HIV & STIs regularly

If you're living with HIV...

- Abstain from sex
- Use condoms consistently
- Never share needles or “works”
- Talk with all sex and drug-using partners about your HIV status
- Take antiretroviral medications consistently
- Get tested for STIs regularly



What can I do if I've been exposed?

If you've had a meaningful HIV exposure...



You have
72
hours
to start 3-
drug,
emergency
anti-HIV
treatment
(post-exposure
prophylaxis, PEP)