



Where Health Knows No Borders

HIV

HIV Prevention Program

HIV

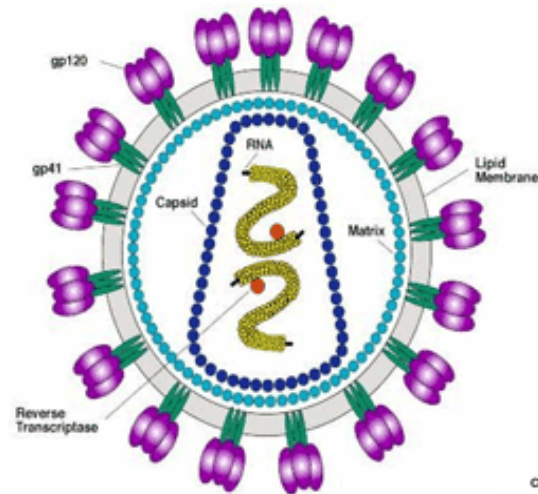
- What is HIV?
- How does HIV affect the body?
- How is HIV Spread?
- HIV Tests
- How can HIV be prevented?
- HIV in El Paso Texas
- Where can I get tested?

What is HIV?

Definition

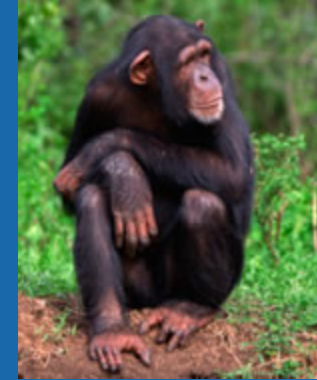
- Human Immunodeficiency Virus
- Lentivirus (genus)
- Retrovirus (family)

Organization of the HIV-1 Virion



Cross section of HIV

What is HIV?



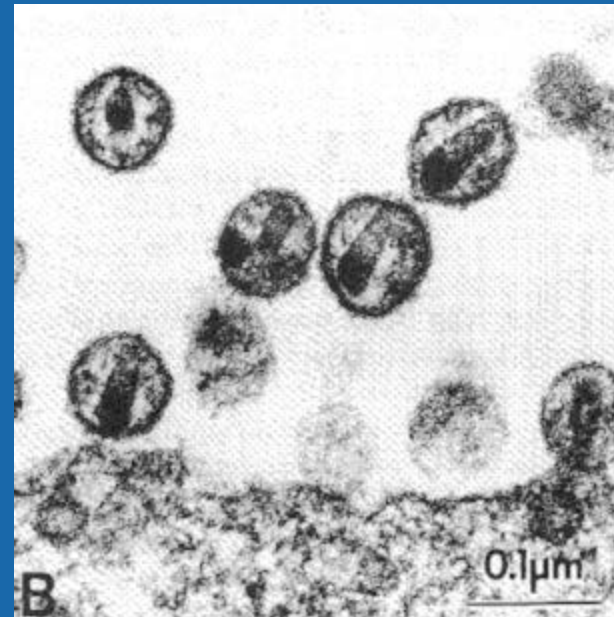
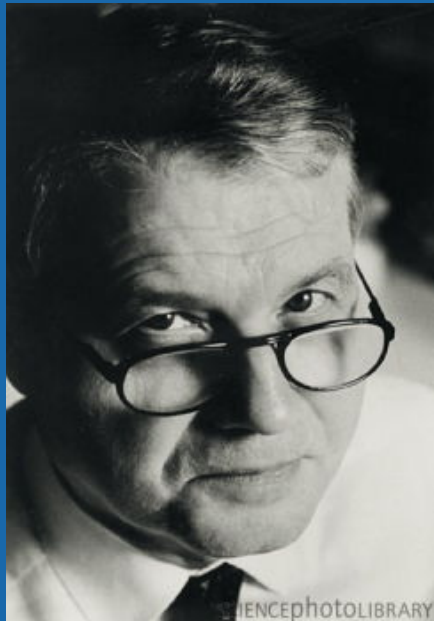
Origin

- Evolved from SIV (Simian Immunodeficiency Virus)
- People hunted simians for food and clothing
- Over long period of time SIV mutated from constant exposure into HIV

What is HIV?

Brief history

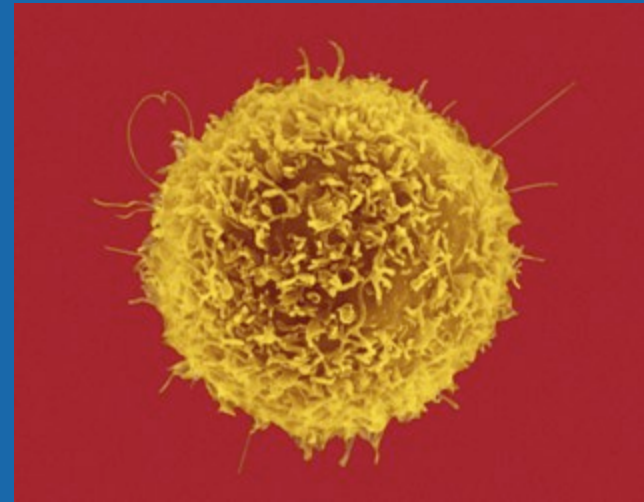
- 1981 – First AIDS documented case in US
- 1983 – Luc Montagnier isolated HIV



How does HIV affect the body?

Target

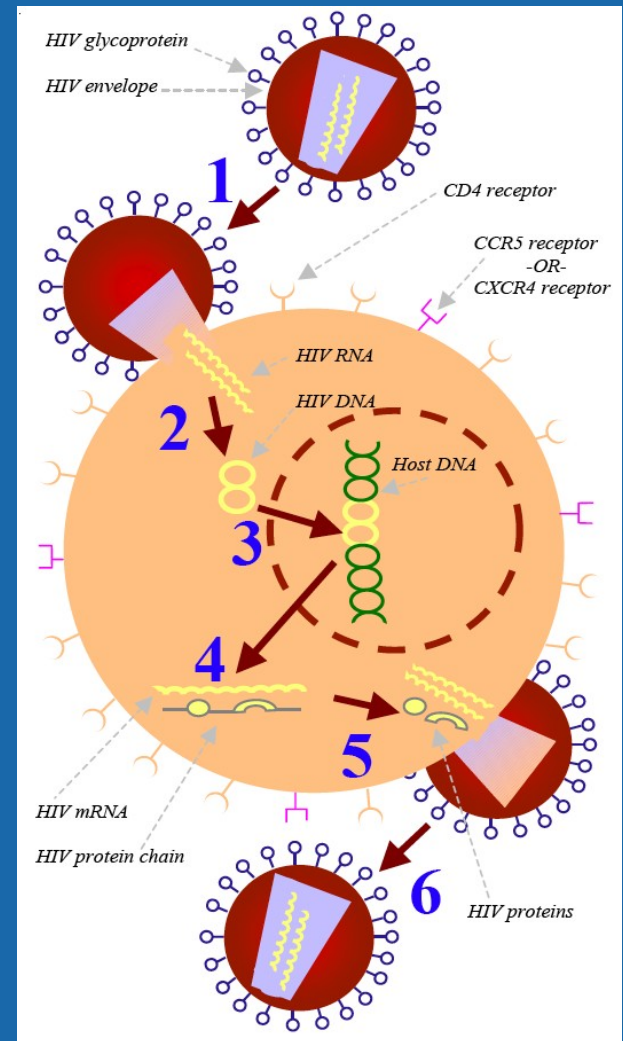
- Human immune system –
CD4+ T-cells



How does HIV affect the body?

Process

1. HIV attaches to host cell
2. HIV replicates using the host cell DNA
3. The new HIV organism kills the host cell and infects other cells.

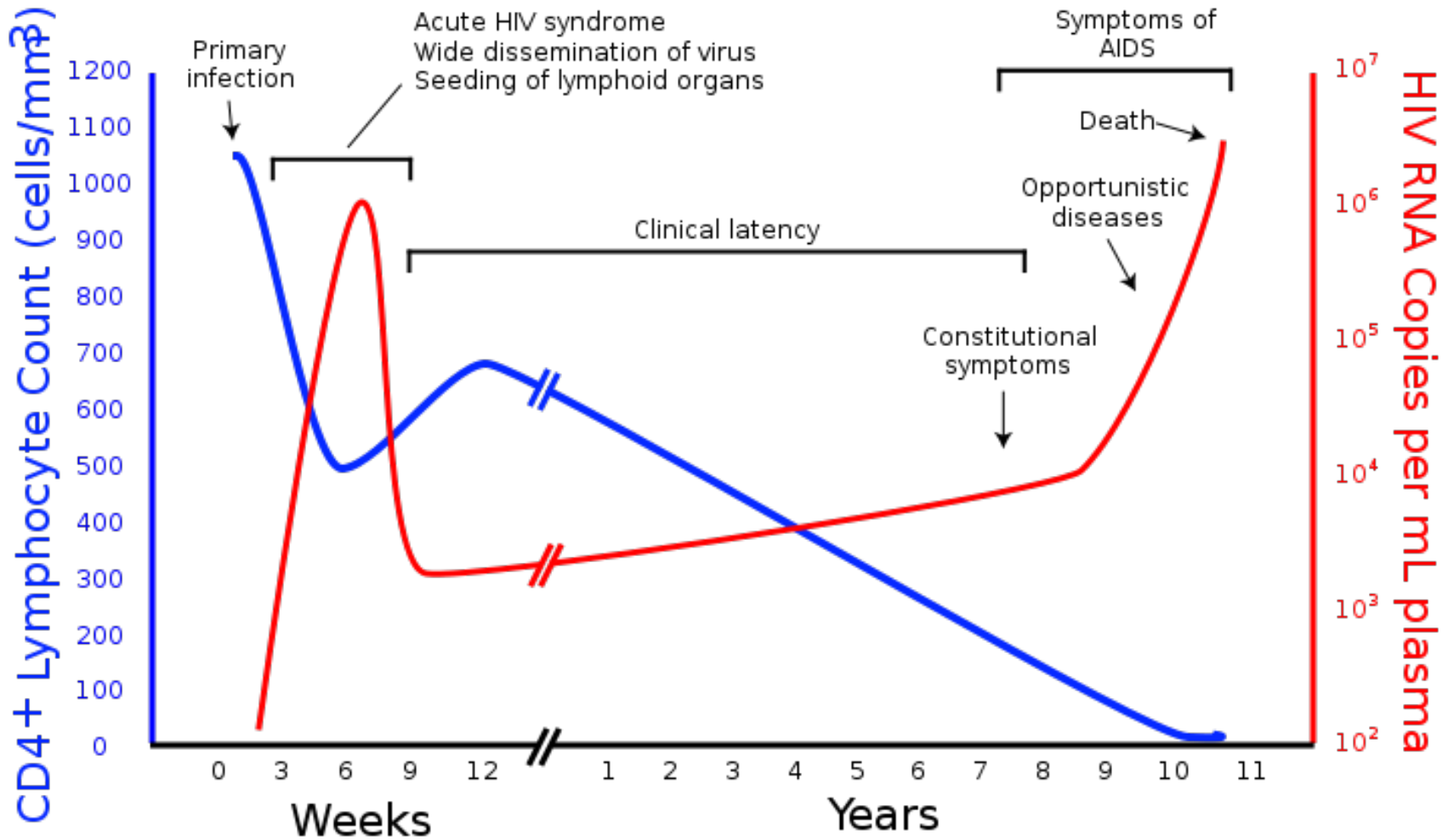


How does HIV affect the body?

- Up to 10 years to develop symptoms
 - First symptoms usually show up 2-4 weeks after exposure. But most people do not have these first flu-like symptom.
- Progresses to AIDS
 - AIDS: Acquired immunodeficiency syndrome
 - T-cell count $< 200/\mu\text{L}$
 - Body becomes vulnerable to opportunistic infections



How does HIV affect the body?



How does HIV affect the body?

Opportunistic infections

- People with healthy immune system can fight them off; becomes harder with HIV
 - Tuberculosis - Bacterial Infection
 - Kaposi's Sarcoma - Cancer
 - Herpes Zoster - Viral Infection
 - Thrush (Candidiasis) - Fungal Infection
 - Pneumocystis Pneumonia - Fungal Infection

How is HIV spread?

Body fluids that can spread HIV

- Blood
- Semen (& Pre-seminal Fluid)
- Vaginal fluid
- Breast milk

How is HIV spread?

You can get HIV from an HIV+ person through:

- Unprotected sex
 - Anal, vaginal, oral
- Sharing of intravenous drugs equipment (i.e. needles)
- Mother to child
 - Pregnancy, birth, breastfeeding
- Blood transfusion

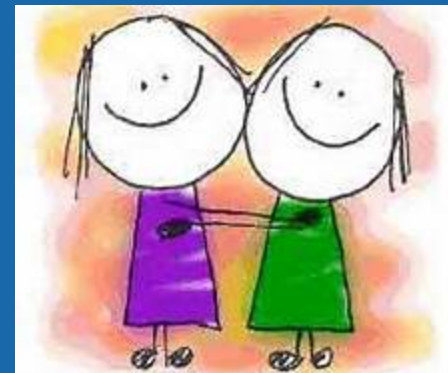
How is HIV spread?

Risk behaviors

- Multiple sex partners
- Presence of other STDs increase risk
- Piercings, tattoos
- Alcohol/drugs
- Unprotected anal/vaginal sex

How is HIV NOT spread?

- HIV must get directly into your bloodstream to get infected
- HIV is **NOT** transmitted through casual contact (Kissing, holding hands, sharing utensils etc.)



HIV tests

- Antibody tests
 - Rapid, ELISA, Western Blot
 - Window period (3 months)
- Antigen tests
 - Multi Spot test used
- RNA tests
 - Reduces window period to 12 days
 - Expensive



How can HIV be prevented?

- No vaccine exists
- Treatment increases life quality, but does not cure HIV
- Treatment for pregnant HIV+ women reduces risk of child becoming infected



How can HIV be prevented?

- Abstinence: Only 100% method
- Get tested
- Limit number of sex partners
- Always use a condom
- Don't inject drugs
- Always use clean needles for drugs (legal / illegal) and tattoos.
- Avoid any other risky behavior



HIV in El Paso, Texas

HIV and AIDS infections by transmission category in El Paso County, Texas, 2014

People Living With HIV/AIDS PLWHA 2014	El Paso County
Male-to-male sexual contact	1399
Intravenous drug use	158
Male-to-male sexual contact and intravenous drug use	95
Heterosexual contact	353
Perinatal	15
Other	10
Total	2030

PLWHA 2014	El Paso County
Male	1763
Female	267
Total	2030

PLWHA 2013-Age	El Paso County
0-14	7
15-24	95
25-34	341
35-44	442
45+	1145
Total	2030

Texas Department of State Health Services (2014). Texas HIV Surveillance Report: 2014 Annual Report. Retrieved from <http://www.dshs.state.tx.us/hivstd/reports/>

Where can I get tested?

HIV Prevention Program



Phone: (915)212-6665

Tuesday, Wednesday & Friday

8:00 - 11:30 and 1:00 - 4:30

222 S. Campbell

Rm 105

El Paso, Texas 79901

*Ages 13 and up



Questions?

