HIV/AIDS

PREVENTION

H Human

I Immunodeficiency

V Virus

A Acquired

I Immuno

D Deficiency

S Syndrome

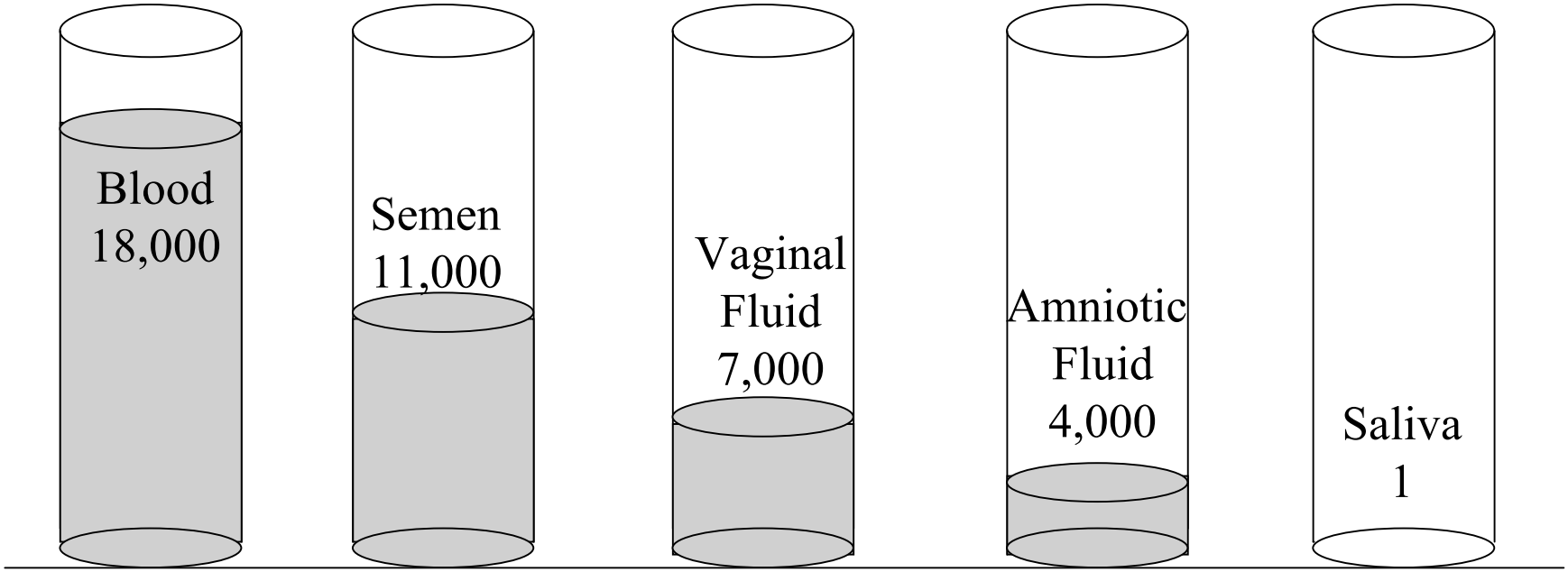
HIV Transmission

- HIV enters the bloodstream through:
  - Open Cuts
  - Breaks in the skin
  - Mucous membranes
  - Direct injection

HIV Transmission

- Common fluids that are a means of transmission:
  - Blood
  - Semen
  - Vaginal Secretions
  - Breast Milk

HIV in Body Fluids

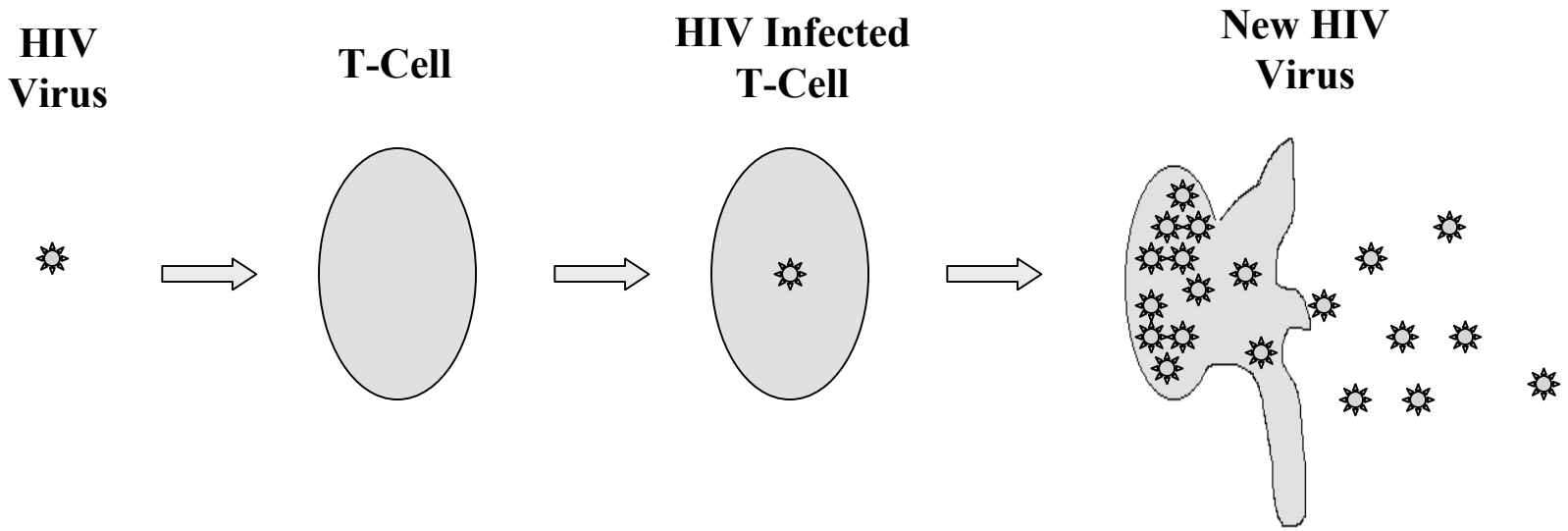


Average number of HIV particles in 1 ml of these body fluids

Routes of Transmission of HIV

Sexual Contact:	Male-to-male
	Male-to-female or vice versa
	Female-to-female
Blood Exposure:	Injecting drug use/needle sharing
	Occupational exposure
	Transfusion of blood products
Perinatal:	Transmission from mom to baby
	Breastfeeding

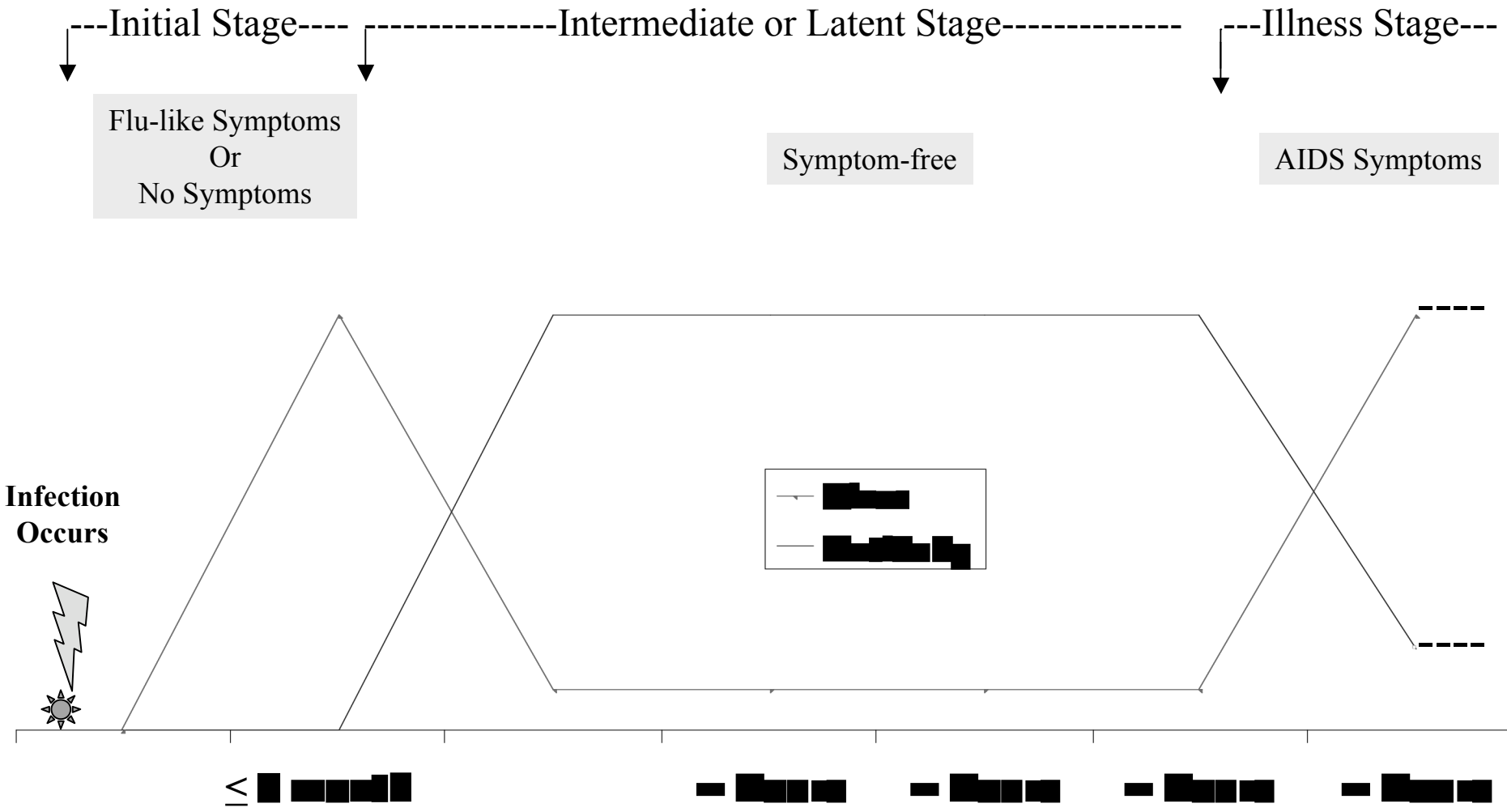
HIV-Infected T-Cell



Window Period

- This is the period of time after becoming infected when an HIV test is negative
- 90 percent of cases test positive within three months of exposure
- 10 percent of cases test positive within three to six months of exposure

HIV Infection and Antibody Response



Importance of Early Testing and Diagnosis

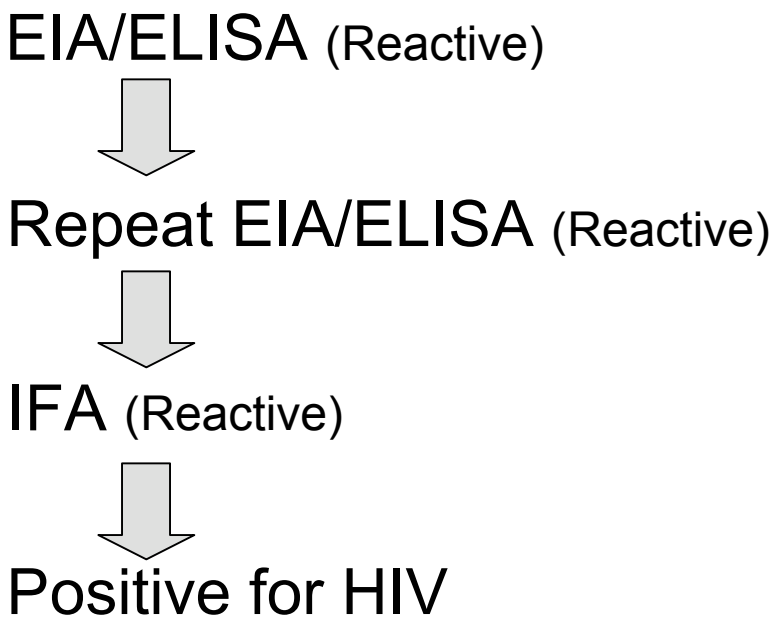
- Allows for early treatment to maintain and stabilize the immune system response
- Decreases risk of HIV transmission from mother to newborn baby
- Allows for risk reduction education to reduce or eliminate high-risk behavior

HIV Testing

- Requires a blood or oral fluid sample
- HIV test detects the body's antibody response to HIV infection
- The test does NOT detect the HIV virus

HIV Testing

- Those recently exposed should be retested at least six months after their last exposure
- Screening test (EIA/ELISA) vs. confirmatory test (IFA)



HIV  AIDS

- Once a person is infected they are always infected
- Medications are available to prolong life but they do not cure the disease
- Those who are infected are capable of infecting others without having symptoms or knowing of the infection

HIV Risk Reduction

- Avoid unprotected sexual contact
- Use barriers such as condoms
- Limit multiple partners by maintaining a long-term relationship with one person
- Talk to your partner about being tested before you begin a sexual relationship

HIV Risk Reduction

- Avoid drug and alcohol use to maintain good judgment
- Don’t share needles used by others for:
  - Drugs
  - Tattoos
  - Body piercing
- Avoid exposure to blood products

Condoms

Using condoms is not 100 percent effective in preventing transmission of sexually transmitted infections including HIV

Condoms = Safer sex

Condoms ≠ Safe sex

Condom Use

- Should be used consistently and correctly
- Should be either latex or polyurethane
- Should be discussed with your partner before the sexual act begins
- Should be the responsibility of both partners for the protection of both partners
- Male and female condoms are available

People Infected with HIV

- Can look healthy
- Can be unaware of their infection
- Can live long productive lives when their HIV infection is managed
- Can infect people when they engage in high-risk behavior

HIV Exposure and Infection

- Some people have had multiple exposures without becoming infected

- Some people have been exposed one time and become infected

"When you have sex with someone, you are having sex with everyone they have had sex with for the last ten years."

Former Surgeon General
C. Everett Koop

HIV and Sexually Transmitted Diseases

HIV and Sexually Transmitted Diseases

STDs increase infectivity of HIV

- A person co-infected with an STD and HIV may be more likely to transmit HIV due to an increase in HIV viral shedding

- More white blood cells, some carrying HIV, may be present in the mucosa of the genital area due to a sexually transmitted infection

HIV and Sexually Transmitted Diseases

- STDs increase the susceptibility to HIV
  - Ulcerative and inflammatory STDs compromise the mucosal or cutaneous surfaces of the genital tract that normally act as a barrier against HIV
  - Ulcerative STDs include: syphilis, chancroid, and genital herpes
  - Inflammatory STDs include: chlamydia, gonorrhea, and trichomoniasis