HIV/AIDS

PUBLIC HEALTH BRIEF

Zachary Macas, Health Policy Analyst





Human immunodeficiency virus (HIV) is an infection that attacks the body's immune system, specifically white blood cells that help the body fight infection ultimately making a person more vulnerable to infections and diseases. In 2022, an estimated 39 million people were living with HIV in the United States.

HIV is spread by contact with certain bodily fluids of a person with HIV, most commonly during unprotected sex, or sharing injection drug equipment such as needles, or from blood transfusions. HIV cannot be spread through normal contact with a person who has the infection such as shaking hands or hugging. It is also not spread through the air.

AIDS 1

Acquired Immunodeficiency Syndrome (AIDS) is the late stage of HIV infection where the body's immune system is badly damaged because of the virus when left untreated. When AIDS occurs, a person will be more likely to develop diseases that would not usually cause illness in a person with a non-compromised immune system, these are called opportunistic infections (OI's) as well as other serious illnesses. The most common OI's include tuberculosis, yeast infections, and pneumonia. In the United States, however, most people do not develop AIDS because taking HIV medications as prescribed stops the progression of the disease.

TREATMENT⁴

Currently, there is no effective cure for HIV. Once a person has it, they have it for life. However, antiretroviral therapy (ART) is available. This medication can reduce the amount of HIV in the blood (called the viral load) to a very low level. A person's viral load can become undetectable to labs at a certain point if medication is taken as prescribed, that person can live a long and healthy life and will not transmit HIV to an HIV-negative partner.

$DATA^{5,6}$

Harford County

HIV Prevalence (2020): 245 in 100,000 people HIV Tests Complete (2022): 405 tests

People age 13+ Living with HIV (2023): 531

Maryland

HIV Prevalence: 655 in 100,000 people

People age 13+ Living with HIV (2023): 33,411

PREVENTION 3

What is PrEP? Preexposure Prophylaxis is an oral drug that can reduce the risk of sexually transmitted HIV infection. PrEP can reduce your risk of getting HIV from sex by about 99%, and from injection drug use by at least 74%. These drugs may be prescribed to you only if you do not already have HIV, so you will need an HIV test prior to taking the medication.

TESTING AND VULNERABLE POPULATIONS²

Understanding your HIV status is crucial in managing and preventing the transmission of the virus. Regardless of your perceived risk factors, testing is very important. Early detection and treatment significantly improve health outcomes. Vulnerable populations include sexually active gay and bisexual men. By race and ethnicity, African Americans and Hispanics are disproportionately affected by HIV than other races in the United States.

The greatest risk behaviors include having vaginal and anal sex, sharing needles or syringes with an HIV-positive person, and injection drug use. Furthermore, the risk of an HIV-positive mother transmitting the virus to their baby is anywhere from 15% to 45%.

RESOURCES 5

The Harford County Health Department (HCHD) offers comprehensive medical case management services for people living with HIV. HCHD partners with Johns Hopkins to provide treatment for HIV, along with offering PrEP in our clinic. Rapid and confirmatory testing is offered as well. Call 410-612-1779 for more information.

Sources:

- 1. Center for Disease Control and Prevention. https://www.cdc.gov/hiv/basics/whatishiv.html
- 2. HIV.gov HIV Basics, https://www.hiv.gov/hiv-basics/
- 3. National Institutes of Health. https://hivinfo.nih.gov/understanding-hiv/fact-sheets/pre-exposure-prophylaxis-prep
- $4. National\ Institutes\ of\ Health.\ https://hivinfo.nih.gov/understanding-hiv/fact-sheets/hiv-treatment-basics$
- 5. Harford County Health Department. https://harfordcountyhealth.com/clinical-services/hiv-aids/
- $6. \ \ County \ Health \ Rankings. \ https://www.county/nealthrankings.org/explore-health-rankings/maryland/harford? year = 2023$