# Five Things to Know About HIV Antiretroviral Therapy (ART)

# 1. Antiretroviral therapy (ART) is the daily use of a combination of HIV medicines to treat HIV.

- Reduces the amount of HIV in the body
- Protects the immune system
- Prevents HIV from advancing to AIDS
- Reduces the risk of HIV transmission



people living with HIV in the United States



Source: Centers for Disease Control and Prevention

"People living with HIV (PLWH) who take ART as prescribed, and achieve and maintain an undetectable viral load have **effectively no risk of sexually transmitting the virus**."<sup>i</sup> ART prevents the virus from making copies of itself. Thus, if taken consistently, ART keeps the level of HIV virus in the body **(HIV viral load)** very low or undetectable. Without treatment, HIV will eventually lead to increasing levels of HIV in the body, a loss of CD4 cells, and impaired immunity.

# 2. HIV Treatment has dramatically improved the health and quality of life of people living with HIV.

 The U.S. Department of Health and Human Service (HHS) Panel on Antiretroviral Guidelines for Adults and Adolescents recommended that ART be initiated immediately upon receiving an HIV diagnosis regardless of the CD4 count.<sup>ii</sup>

#### Recent scientific studies demonstrated and confirmed that ART is not only a powerful tool for preserving the health of PLWH, but it also significantly reduces the risk of HIV transmission by suppressing HIV viral load. iii iv v

- ART improves the quality of life and life expectancy of PLWH.
- This shift in strategy highlights the importance of HIV testing as a gateway to medication initiation, viral suppression, and prevention.

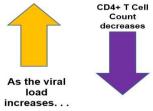
#### 3. Getting the Word Out

"Never has it been more important to understand the benefits of antiretroviral therapy (ART), yet the majority of people living with HIV, medical providers, and those potentially at risk of acquiring HIV, **are not aware** of the extent to which successful treatment prevents HIV transmission."<sup>vi</sup> In September 2017, the Centers for Disease Control and Prevention (CDC) issued a "Dear Colleague" letter to disseminate information about this groundbreaking research. <sup>vii</sup>





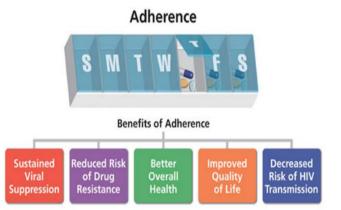
#### Viral Load and CD4 Count





### 4. Medication Adherence is Key to Achieving and Maintaining Viral Suppression

**Medication adherence** is broadly defined as "taking a medication as prescribed, i.e., in the right amount, for the prescribed duration and in the recommended way. Adherence is the result of the active, voluntary collaboration between patient and physician to produce a therapeutic result."<sup>viii</sup> PLWH need to take ART **every day** in order to **achieve** and **maintain** viral suppression, to reduce the risk of drug resistance, to improve their overall health and quality of life, and to prevent HIV transmission.



https://aidsinfo.nih.gov/understanding-hiv-aids/fact-sheets/21/55/following-an-hiv-regimen---steps-to-take-before-and-after-starting-hiv-medicines

However, taking daily medications can be difficult for some people. Almost 50% of all patients prescribed medication are non-adherent. <sup>ix</sup> Research has demonstrated that physician attitudes and communication practices, not just patient behavior, are key drivers of medication adherence. Over the past 40 years, 106 studies have reported positive associations between physician communication and patient adherence.<sup>x</sup> Health care professionals can assist their patients in developing plans to take medication consistently within the context of their lives. See **Box 1**:

#### **Box 1 – Strategies to Promote Medication Adherence**

- 1. Establish a warm and welcoming clinic atmosphere.
- 2. Develop trust and bi-directional communication
- 3. Provide simple explanations and education
  - Do not underestimate the patient's desire for information
  - Explain importance of daily dosing and help to develop schedule tailored to daily routine
  - Reminders and/or devices to minimize forgetting doses (E.g. electronic reminders, daily dose pill boxes)
- 4. Understand the patient's perspective and needs and help them to navigate challenges to adherence
- 5. Assess side effects and how to manage them
- 6. Re-enforce success
- Review and implement one or more of the four evidence-based interventions recommended by CDC to improve medication adherence. For more information about these interventions go to: <u>https://tinyurl.com/p7k4cve</u>.

### 5. A Final Note: Providing Culturally Competent Care

HIV testing, prevention, and treatment needs to be culturally competent, scientifically accurate, accessible, and inclusive for all persons at risk for or living with HIV; regardless of age, socioeconomic status, race, gender, or sexual orientation.



#### Arrange for Technical Assistance and Training at No Cost

The Primary Care Development Corporation (PCDC), High Impact Prevention (HIP) in Health Care program provides free training and technical assistance to health care organizations with the goal of expanding and improving the delivery of HIV prevention services within clinical settings. Based on the needs of a health care organization, PCDC can create a package of capacity building activities (CBA) to best suit your needs. Please visit pcdc.org/hipinhealthcare to request our services or get more information.

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## Citations

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- <sup>v</sup> Cohen, M; et al; (2015) Final results of the HPTN 052 randomized controlled trial: antiretroviral therapy prevents HIV transmission. 8th International AIDS Society Conference on HIV Pathogenesis, Treatment and Prevention, Vancouver, abstract MOAC0101LB, 2015.
- <sup>v</sup> Grulich, Andrew E; et al; (2015) "HIV Transmission in Male Serodiscordant Couples in Australia, Thailand and Brazil" 2015 Conference on Retroviruses and Opportunistic Infections (CROI), Seattle, USA, Abstract Number 1019LB
- vi Prevention Access Campaign Consensus Statement. https://www.preventionaccess.org/consensus
- vii Centers for Disease Control & Prevention, Dear Colleague Letter, September, 2017. https://www.cdc.gov/hiv/library/dcl/dcl/092717.html
- viii Dimatteo, M.R. (2010), Physician communication and Patient Adherence to Treatment: A Meta-analysis, 47(9), 826-834. Medical Care.
- <sup>ix</sup> Brown, M and Bussell, J; <u>Mayo Clin Proc</u>. 2011 Apr; 86(4): 304–314. doi: <u>10.4065/mcp.2010.0575</u>
- \* Ho, P.M. Bryson, ClL. & Rumsfeld, J.s. (2009). Medication adherence: its importance in cardiovascular outcomes. Circulation, 119 (23), 3028-35).





<sup>&</sup>lt;sup>1</sup> Centers for Disease Control & Prevention, Dear Colleague Letter, September, 2017. <u>https://www.cdc.gov/hiv/library/dcl/dcl/092717.html</u>