

Prevention, Where Are We Headed?

Carl W. Dieffenbach, Ph.D.

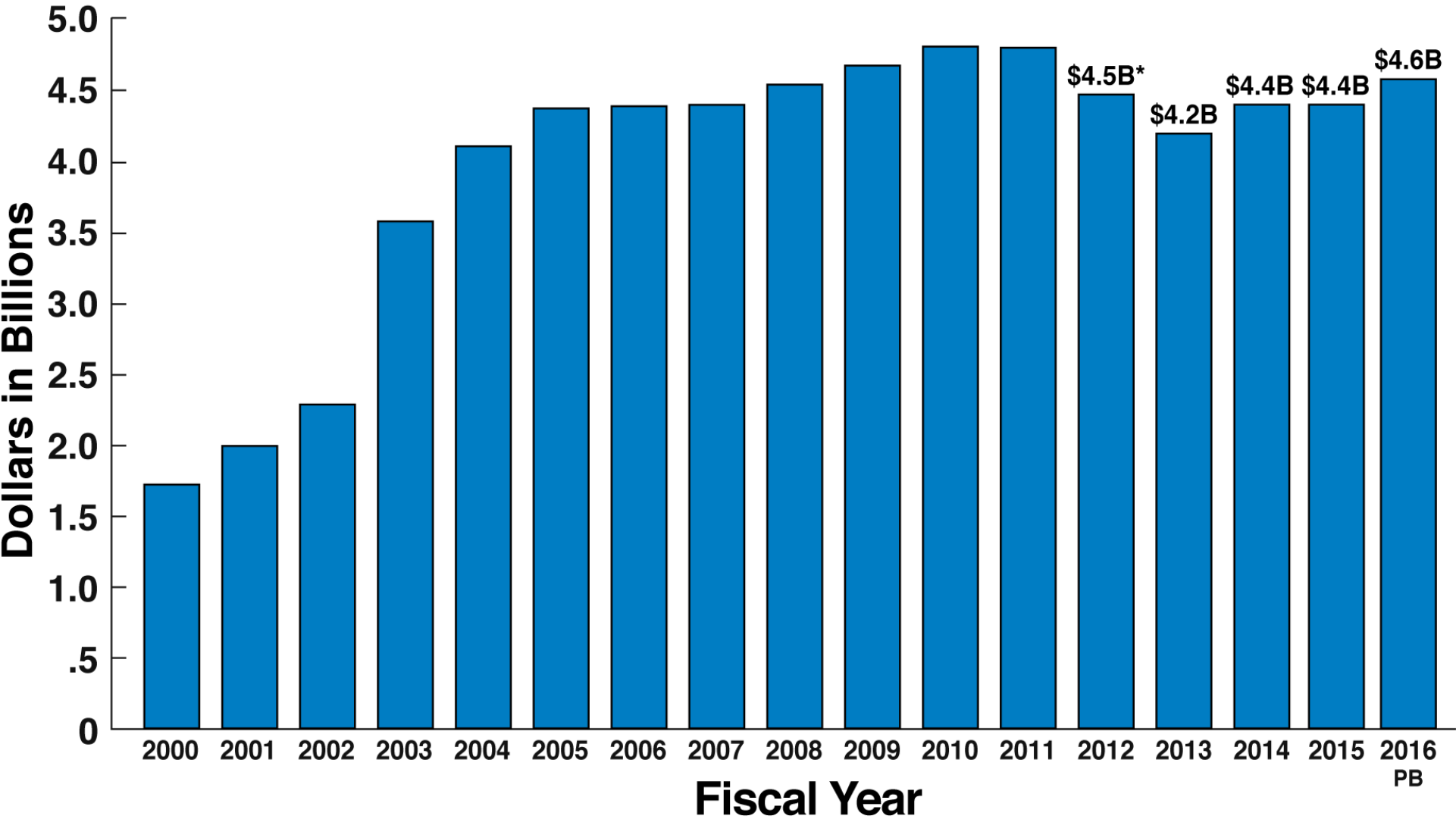
Director

Division of AIDS, NIAID

June 5, 2015



NIAID Funding, FY 2000-2016



*Beginning in FY 2012, budget no longer passes through funds to the Global Fund.

HIV/AIDS Strategic Goals

NIAID: Provide the scientific basis for achieving an “AIDS-free generation” by developing a safe and effective HIV vaccine as well as improved combination prevention strategies, optimization of treatment modalities, and novel therapeutic approaches towards a cure for HIV infection

DAIDS: Develop and support the infrastructure and biomedical research needed to:

1. Halt the spread of HIV through the development of an effective vaccine and biomedical prevention strategies that are safe and desirable
2. Develop novel approaches for the treatment and cure of HIV infection
3. Treat and/or prevent co-infections and co-morbidities of greatest significance
4. Foster partnerships with scientific and community stakeholders to develop and implement effective interventions



NATIONAL HIV/AIDS
STRATEGY FOR THE
UNITED STATES

JULY 2010



- **Reducing HIV incidence**
- **Increasing access to care and optimizing health outcomes**
- **Reducing HIV-related health disparities**



The
New England
Journal of Medicine

Established in 1812 as THE NEW ENGLAND JOURNAL OF MEDICINE AND SURGERY

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Number 6

**Prevention of
HIV-1 Infection
with Early
Antiretroviral
Therapy**

HPTN 052 Study Team

VOL. 334

December 23, 2011

Science

**Breakthrough of
the Year: HIV
Treatment as
Prevention**

J. Cohen



U.S. Department of Health and Human Services

NIH News

National Institutes of Health

National Institute of Allergy and Infectious
Diseases (NIAID)

<http://www.niaid.nih.gov/>

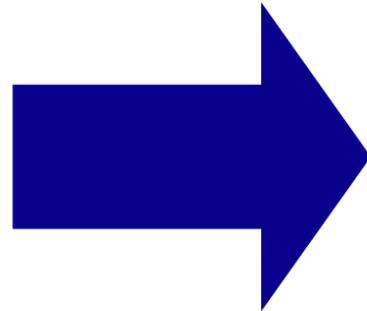
FOR IMMEDIATE RELEASE

Wednesday, May 27, 2015

Starting Antiretroviral Treatment Early Improves Outcomes for HIV-Infected Individuals

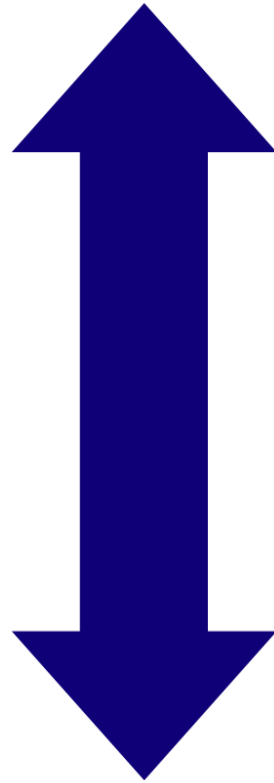
- **4,685 HIV-infected men and women ages 18 and older from 35 different countries were enrolled**
- **Interim analysis found risk of developing serious illness or death was reduced by 53% among those in the early treatment group, compared to those in the deferred group**

**Treatment
versus
Prevention**



**Treatment
is
Prevention**

Biomedical Interventions

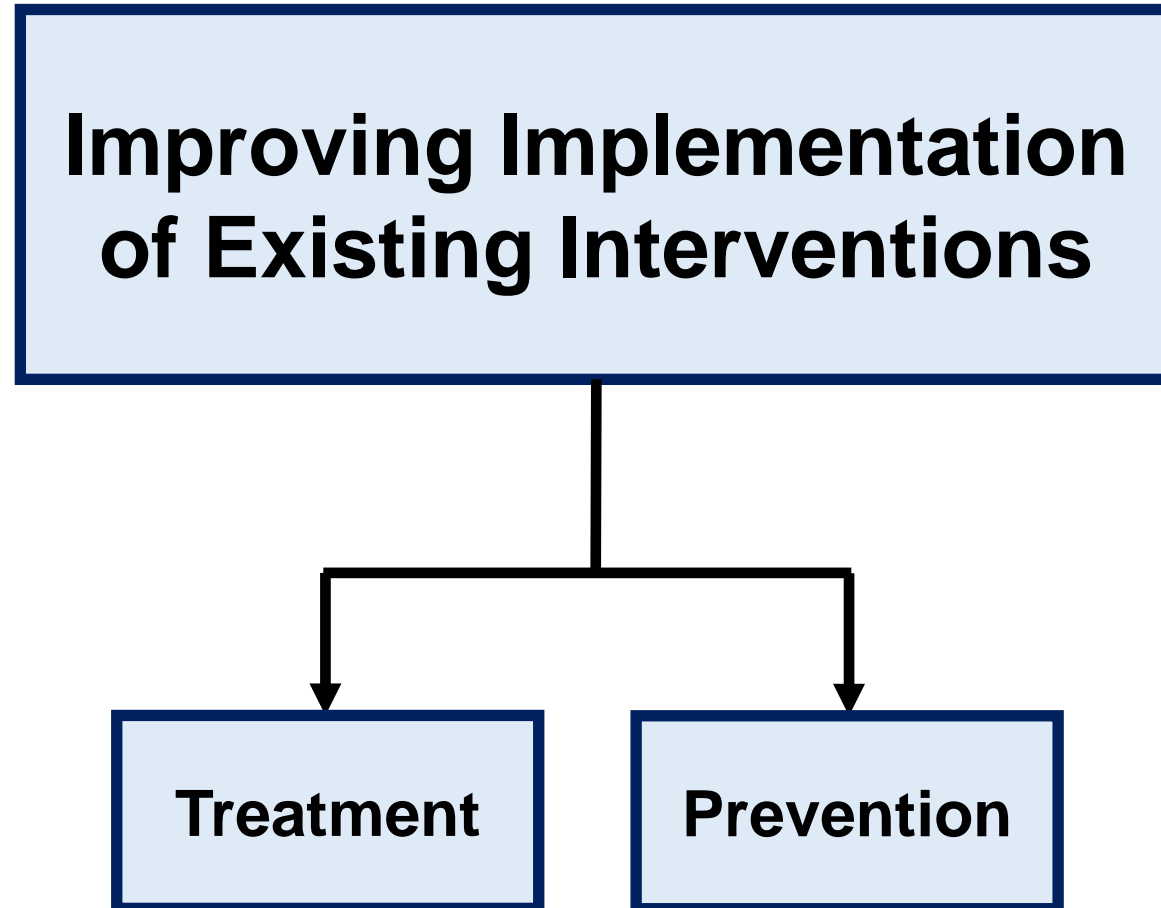


Behavior and Adherence

Optimistic, Long-Range Vision

- **An HIV vaccine is within our grasp**
- **Microbicides and pre-exposure prophylaxis (PrEP) will find a niche with sustained release formulations**
- **Roles of broadly neutralizing antibodies in prevention and therapy will be evaluated**
- **The therapeutic armamentarium will continue to improve with the development of formulations requiring only 4-12 doses per year**
- **PrEP will also evolve to 4-12 doses a year**
- **These tools will help control the HIV pandemic**

The Science of HIV/AIDS: Much to Do



Examples of Partnerships for Implementation

- **International – PEPFAR**
 - Cluster randomized studies of ART
 - Evaluation of ways to implement proven prevention methods
 - Capacity building
- **Domestic – Collaborations between Academic Institutions, Departments of Health and CDC**
 - City focus
 - Improving the continuum of care
 - CDC’s Enhanced Comprehensive HIV Prevention Planning (ECHPP) Project



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