



Webcast 1.1

PrEP for HIV Prevention: An Introduction

PRESENTED BY:

MARK THRUN, MD

ASSOCIATE PROFESSOR, UNIVERSITY OF COLORADO, DIVISION OF INFECTIOUS DISEASES

DIRECTOR, HIV/STD PREVENTION AND CONTROL, DENVER PUBLIC HEALTH

DIRECTOR, DENVER PREVENTION TRAINING CENTER

Overview

- What is PrEP?
- HIV Epidemiology: Who might benefit from PrEP?
- The Science Behind PrEP
- Local Health Departments and PrEP

PrEP: What are we talking about?

- A new HIV prevention option that utilizes antiretroviral HIV medications to prevent HIV infection **before** exposure to HIV
- Involves taking daily oral tenofovir disoproxil fumarate plus emtricitabine (TDF/FTC)
 - Combination pill (brand name Truvada)
 - Approved by the U.S. Food and Drug Administration for use as HIV treatment in 2004
 - Approved for use as PrEP in July 2012

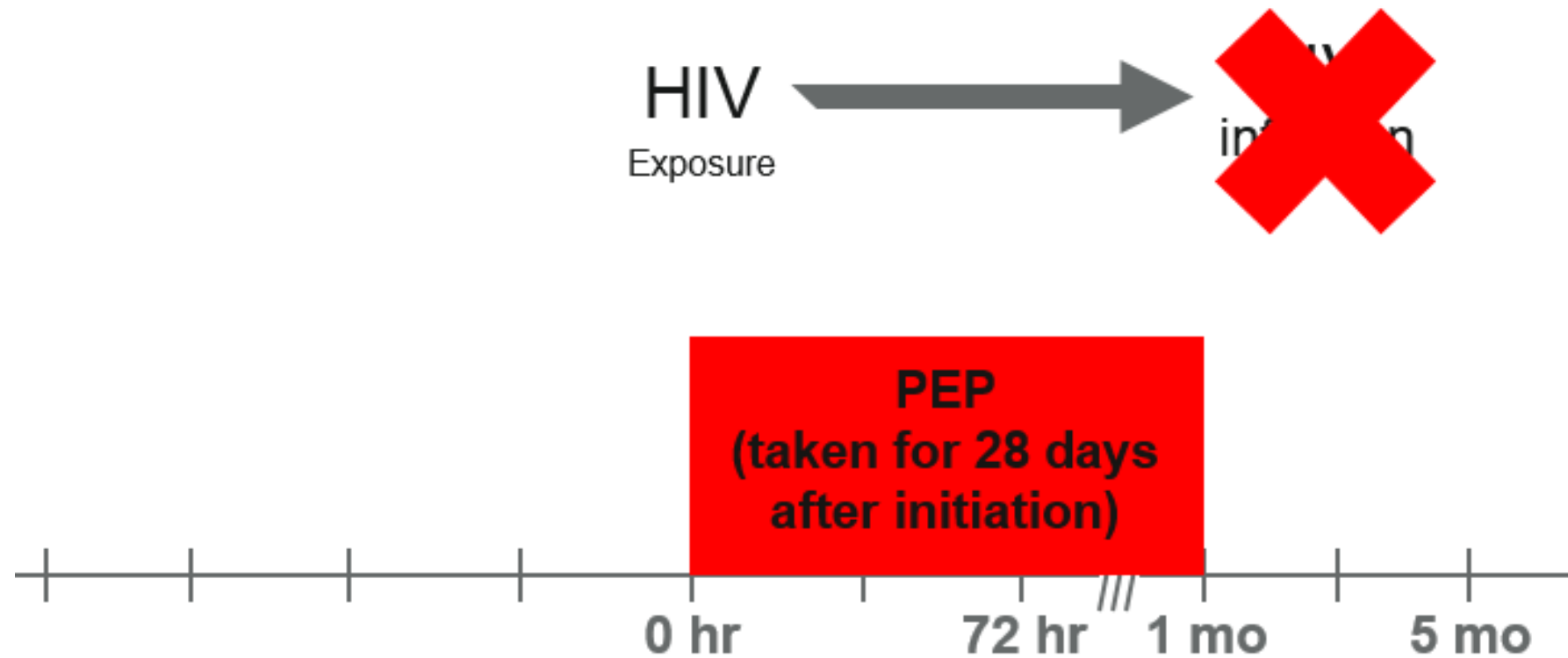
PrEP: What are we talking about?

- Both a *biomedical* and a *behavioral* intervention:
 - Adherence is key to efficacy
 - Risk-reduction counseling is integral to PrEP
- When taken as directed, PrEP is greater than 90% effective at preventing HIV
- Protects against HIV, but not STIs or pregnancy

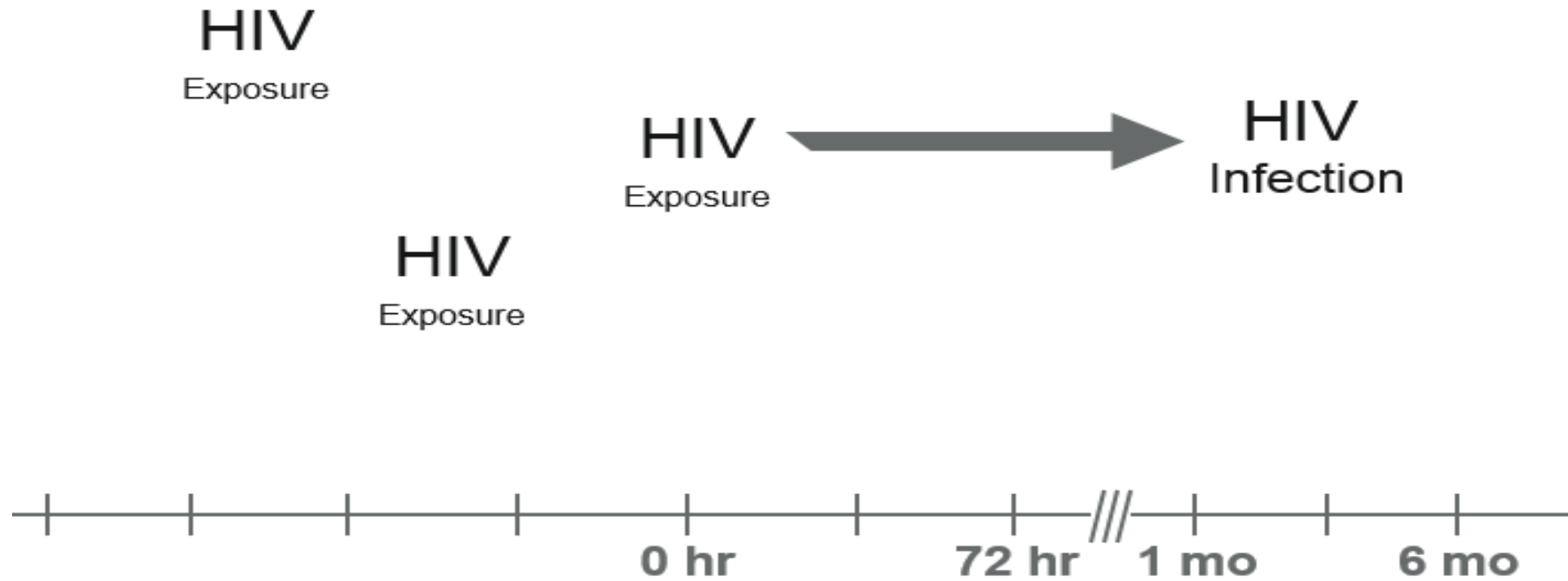
PEP: Isolated HIV Exposure



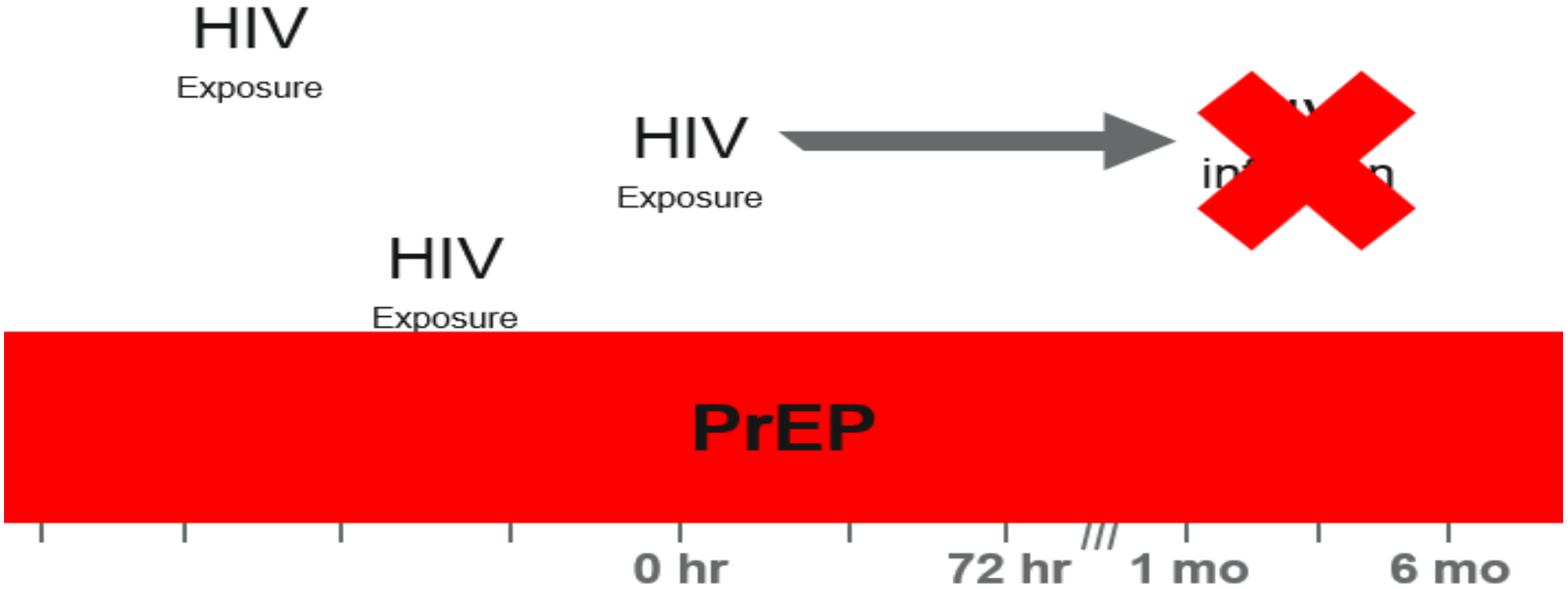
PEP: Prevents Infection After Isolated Exposure



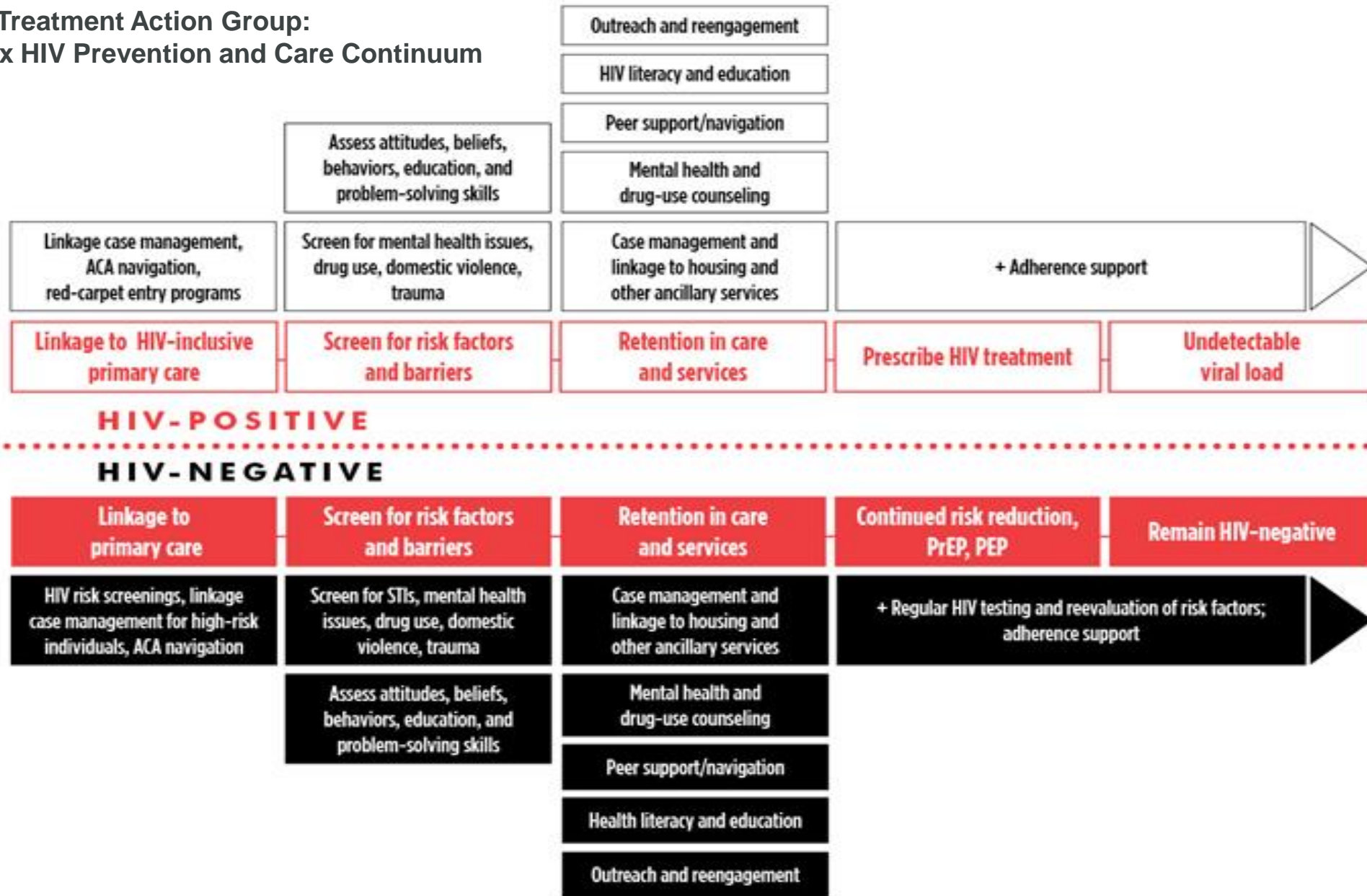
PrEP: Multiple Exposures



PrEP: Prevents Infection Before Exposure



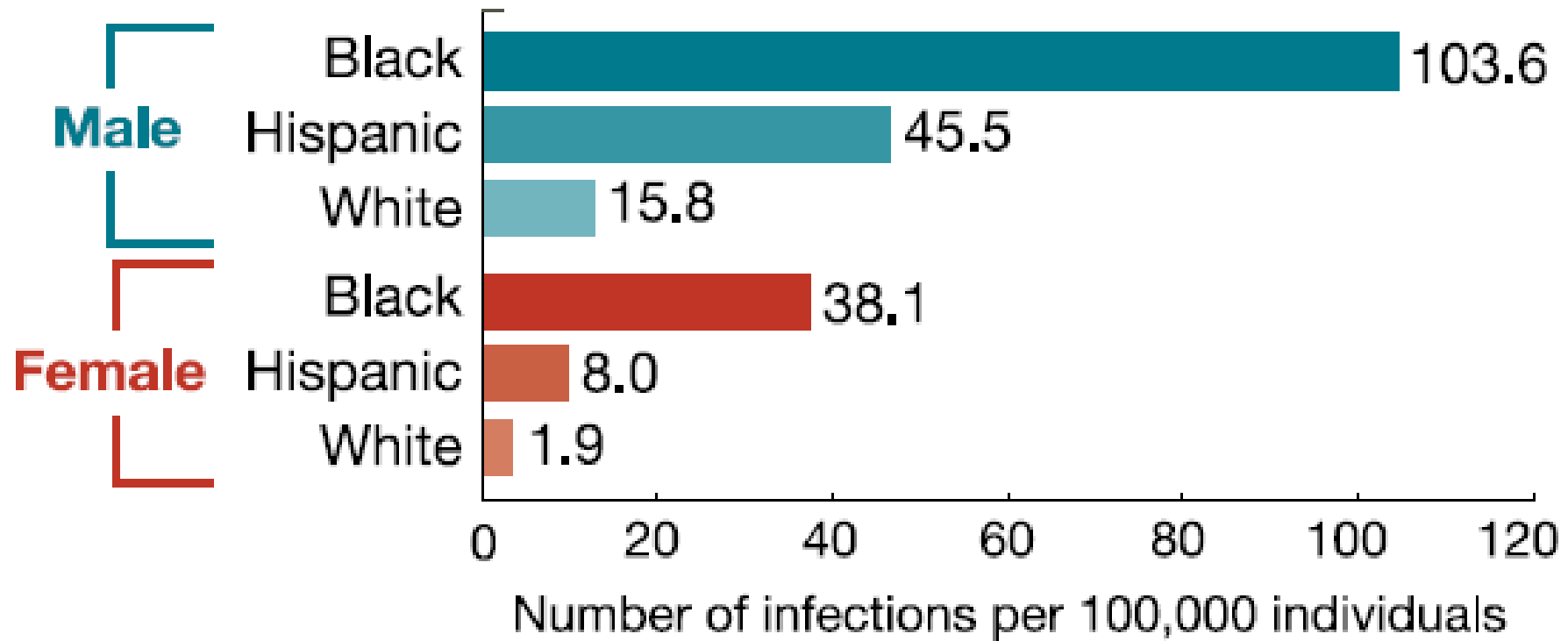
Treatment Action Group:
A Double-Helix HIV Prevention and Care Continuum



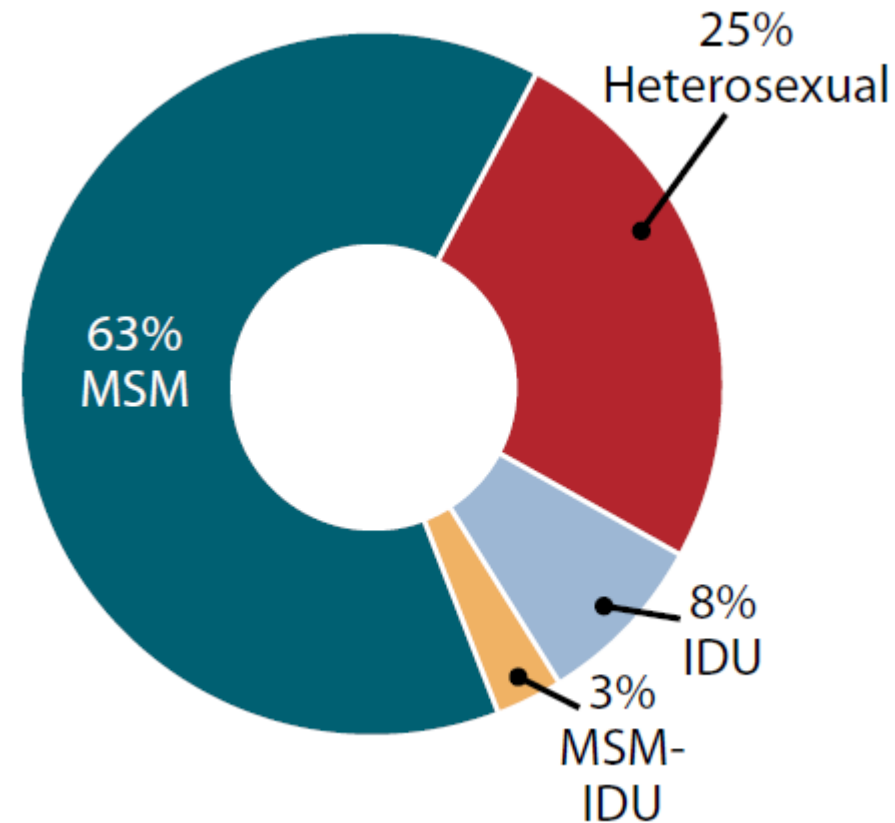
HIV Epidemiology

- Who is at risk for HIV in the United States?
- Who might benefit from PrEP?

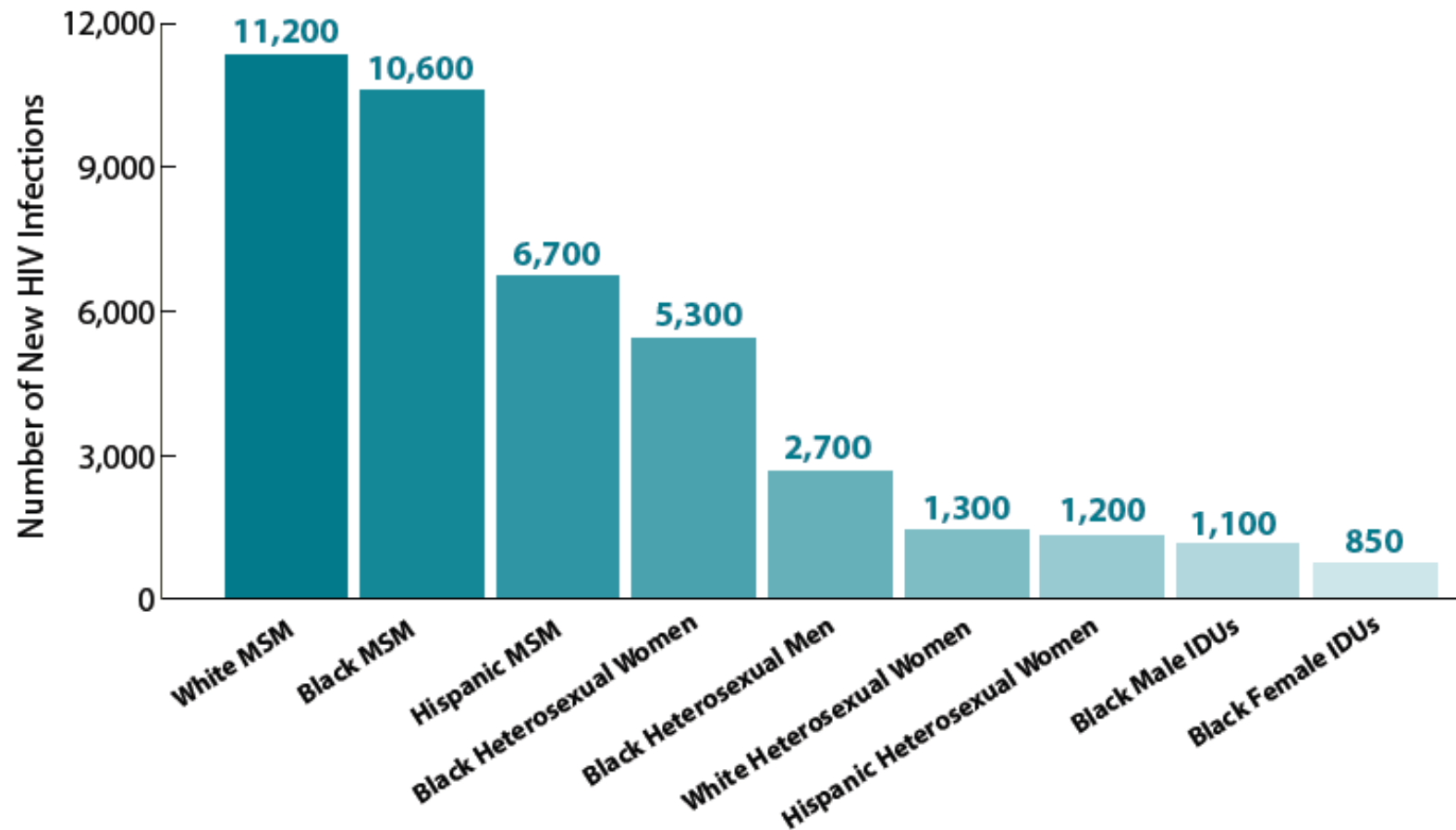
Estimated Rate of New HIV Infections, 2010



Estimated New HIV Infections, 2010, by Transmission Category

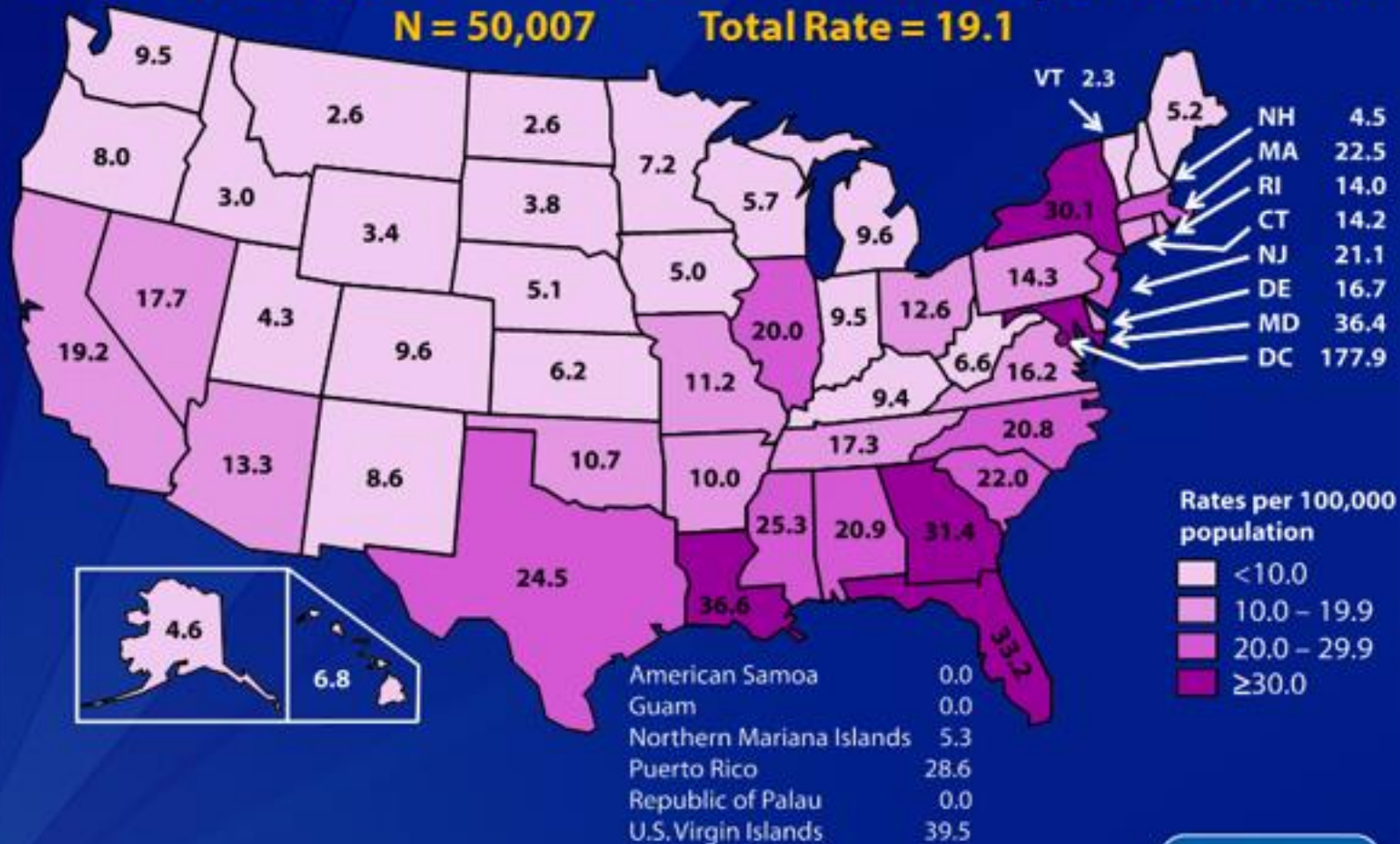


Estimated New HIV Infections, 2010, for the Most-affected Sub-populations



Rates of Diagnoses of HIV Infection among Adults and Adolescents, 2011—United States and 6 Dependent Areas

N = 50,007 Total Rate = 19.1



Note. Data include persons with a diagnosis of HIV infection regardless of stage of disease at diagnosis. All displayed data have been statistically adjusted to account for reporting delays, but not for incomplete reporting.

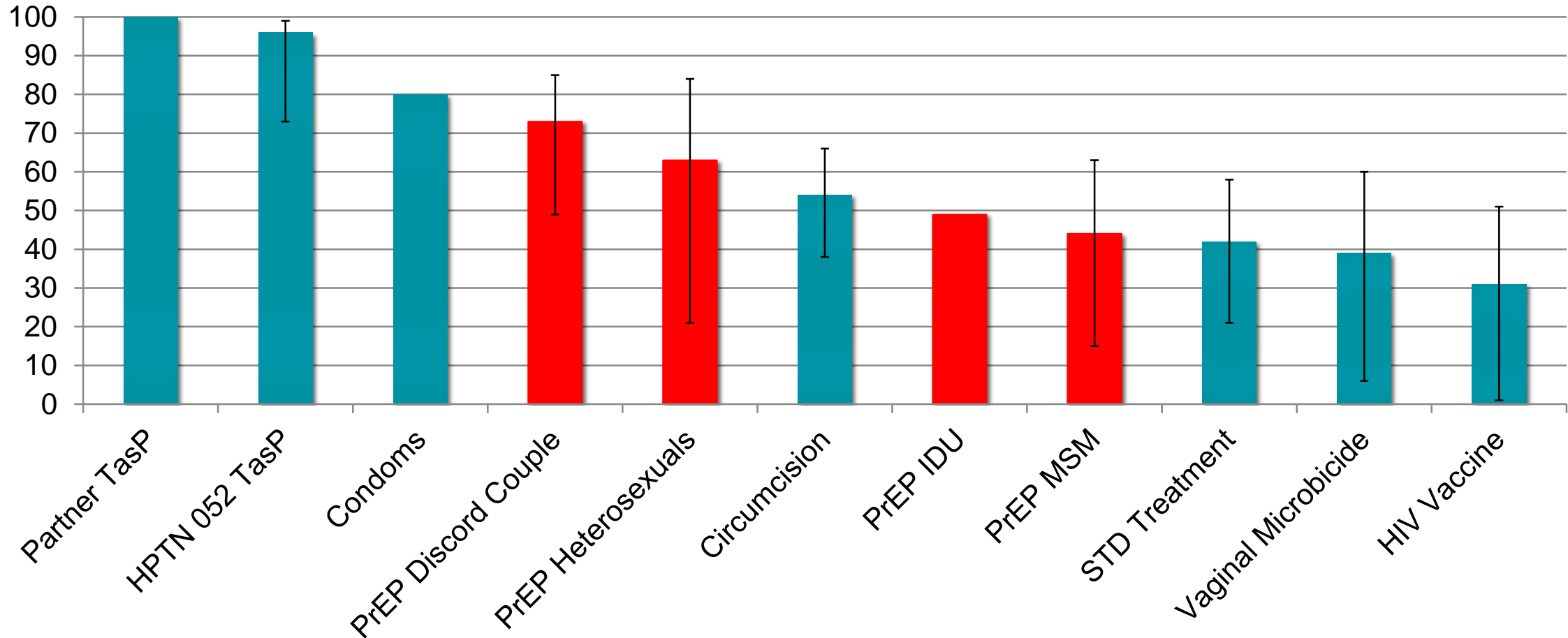


The Science Behind PrEP

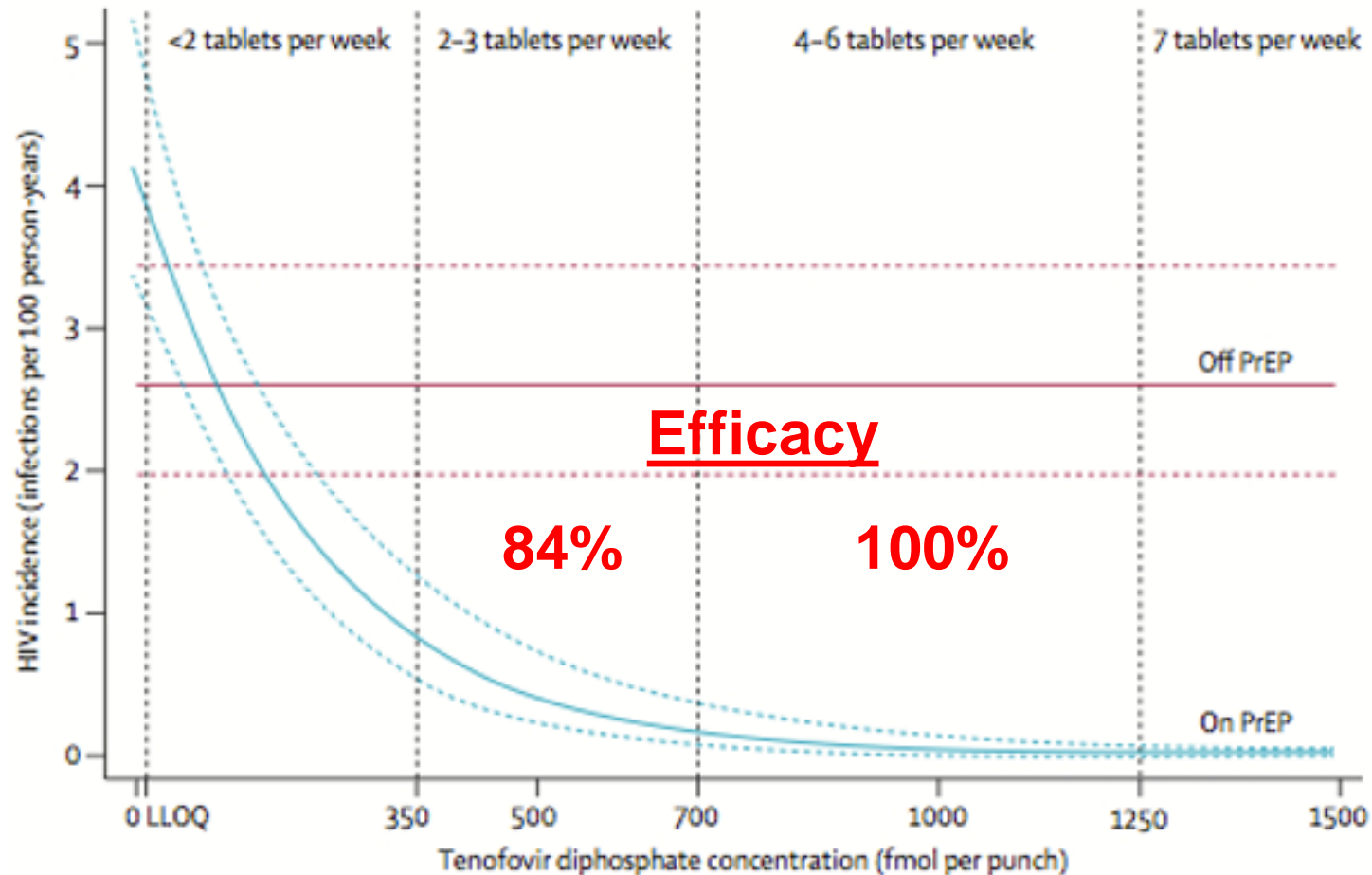
Evolution of HIV Therapies Related to HIV Prevention

- Highly active antiretroviral therapy (HAART)
- Prevention of mother-to-child transmission (PMTCT)
- Post-exposure prophylaxis (PEP)
- Treatment as prevention (TasP)
- Pre-exposure prophylaxis (PrEP)

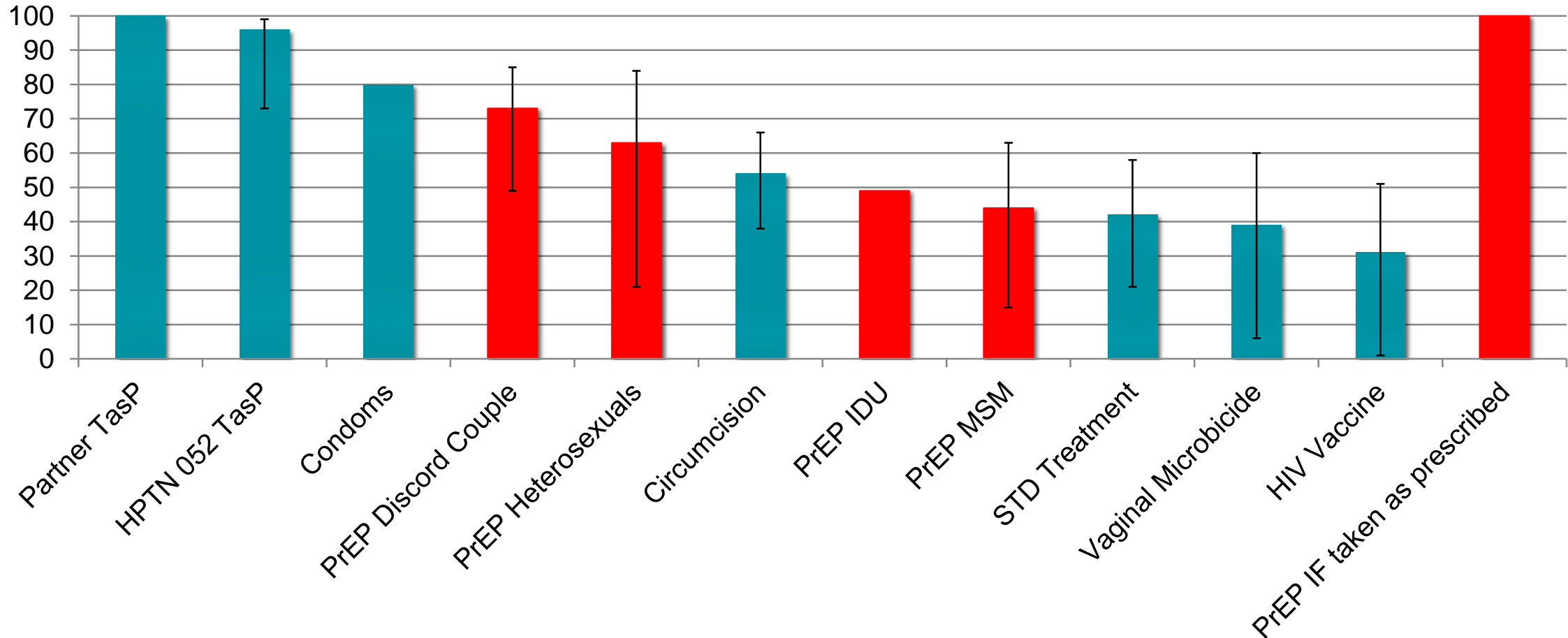
Prevention Science Overview: Biomedical Intervention Efficacy



Increased Adherence Associated with Increased Efficacy



Prevention Science Overview: Biomedical Intervention Efficacy



Local Health Departments and PrEP

What can local health departments do?

- Develop community profiles for HIV prevention planning
- Create resource inventories
- Educate at-risk community members, healthcare providers, and other HIV prevention partners
- Conduct risk assessments and make referrals for PrEP
- Support PrEP delivery (e.g. HIV and STI screening, adherence and behavioral risk counseling support)
- Deliver PrEP via health department clinics
- Evaluate and monitor HIV incidence and key PrEP performance measures

NACCHO's Educational Series on PrEP and Local Health Departments

Module 1

PrEP for HIV Prevention: An Introduction

Beyond the Basics: The Science of PrEP

US Public Health Service Clinical Practice Guidelines for PrEP

Module 2

Who Might Benefit from PrEP: Population-level Risk Assessments

Who Might Benefit from PrEP: Individual-level Risk Assessments

Module 3

Increasing PrEP Awareness and Knowledge in Your Jurisdiction

Incorporating PrEP into Comprehensive HIV Prevention Programs