

# COST OF AVERTING HIV INFECTIONS IN AFRICA

## VOLUNTARY HIV COUNSELING AND TESTING FOR COUPLES (CVCT)

VS.

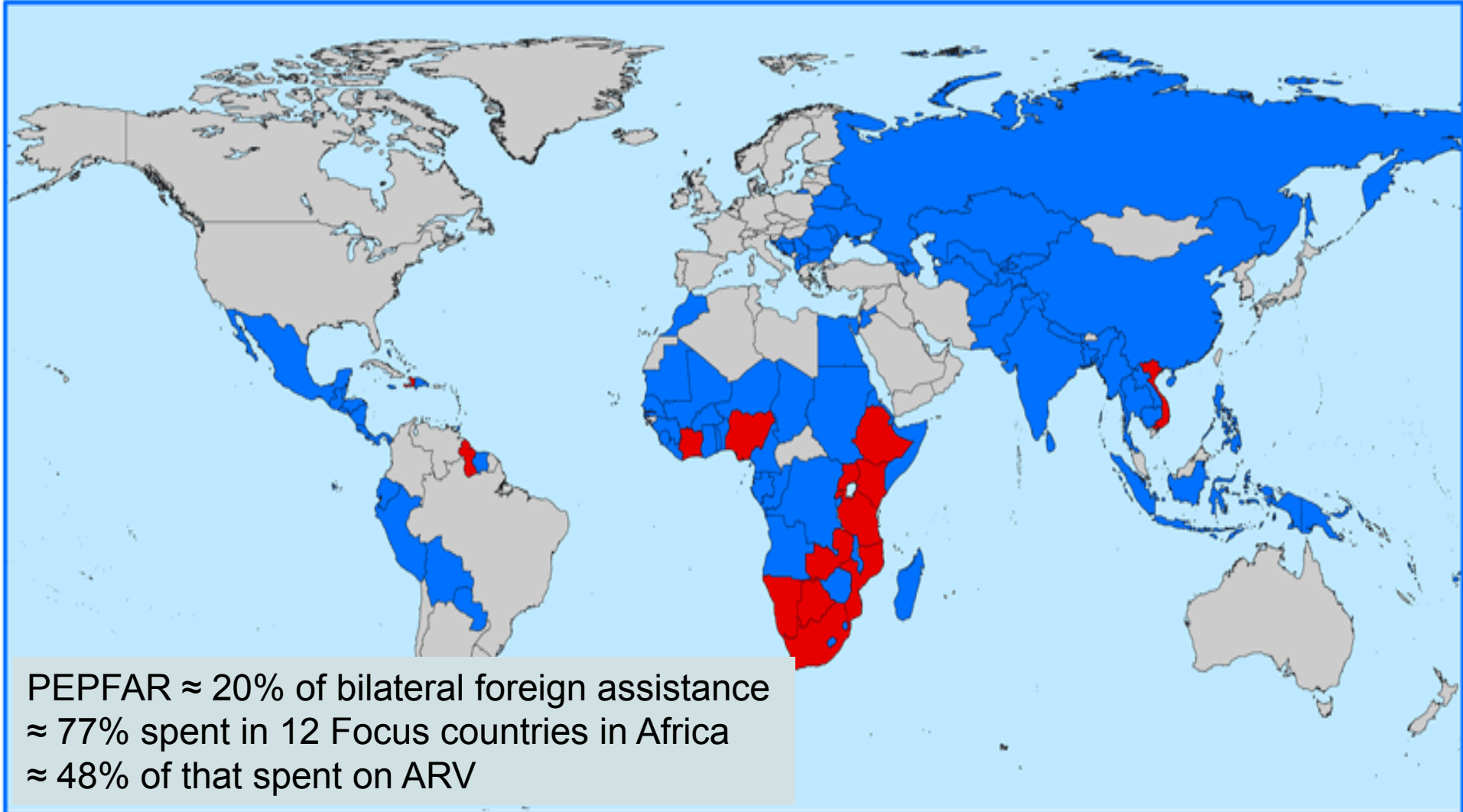
## ARV-AS-PREVENTION (‘TEST-AND-TREAT’ (TNT))



Susan Allen MD MPH  
Professor, Pathology &  
Laboratory Medicine and Global Health  
Center for Global Development

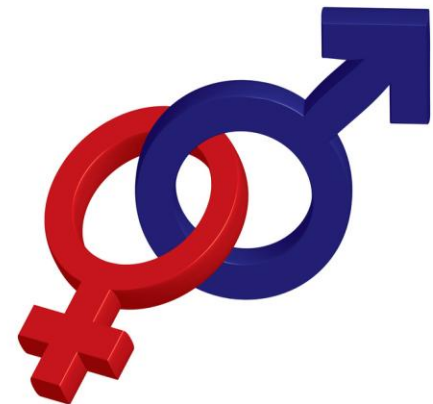
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# PEPFAR FOCUS COUNTRIES



# Why compare TNT and CVCT?

- Reduced HIV transmission in HIV discordant couples after Couples Voluntary HIV Counseling and Testing (CVCT)
- Recent evidence of reduced 'contagion' in ARV users in HIV discordant couples
- Impact and cost data available for both interventions in the same cohorts



# Couples Voluntary HIV Counseling and testing (CVCT)



Transmission reduced by two-thirds (from 12-20% to 3-7% in discordant couples)



Treat HIV+ partners in discordant couples with ARV (TNT)



Reduce rate from 3-7% to <1%

# Rationale for testing couples

- Risk reduction plan based on combination of results
  - Monogamy/faithfulness
  - Condoms within marriage
  - Condoms with other partners
  - Effective contraception
- When both partners know both results
  - They know what they need to do
  - They are motivated to do it



# Debunking myths about couples' testing

1. Most transmissions don't happen in cohabiting couples
2. Behaviors don't change after HIV testing
3. Testing partners separately works as well as testing them together
4. It's not feasible: men and women won't come together for testing
5. It's too expensive



# Myth 1: Transmission in cohabiting couples is not a major part of the HIV epidemic

- In most focus countries, 75% of men and women aged 20-49 cohabit with a partner
  - South Africa and Rwanda are exceptions
- Most sexual exposures are with spouses
- <5% of reported exposures are with other partners
- Sequencing confirms that 78% of new infections in discordant couples are acquired from spouses





## Myths 2 and 3

2. Behaviors don't change after HIV testing
  - Consistent risk reduction in jointly tested couples
3. Testing men and women separately works as well as testing the couple together
  - Disclosure is not assured if tested separately
  - Counselor facilitates making a plan, condom skills for both partners
  - CVCT more effective and more efficient than testing married people as individuals



# Myth 4: CVCT is not feasible because men and women won't come together for testing

- Obstacles to joint testing include
  - Lack of trained counselors
  - Logistical hurdles: time, transport, childcare, competing demands
  - Stigma
  - Fear of partner's reaction
  - Lack of knowledge of discordancy
- If these are addressed, couples will seek CVCT



# Myth 5: CVCT is too expensive/difficult

- Three phases in CVCT implementation
  - Phase 1: training, advocacy, active promotion of CVCT; test 10% of target couples (\$100/couple including incentives for promoters/clients)
  - Phase 2: continued promotions; test another 10% (\$50/couple including incentives)
  - Phase 3: social norms established, low level promotions, CVCT integrated into routine care (\$25/couple)



# Example of Kigali, Rwanda



- Research center provides CVCT from 1988-1994 and post-genocide from 1997-2002
- NIMH RO1 66767 “Sustainable couples’ testing”
  - Between 2003-2007:
    - 91,000 written invitations distributed
    - 36,931 tested  $\approx$  15% of the capital city’s cohabiting couples
  - Social norms established

# Conference on Couples' VCT & HIV Vaccines

Kigali, Rwanda

19-21 November 2003



TRAC

PSF

IAVI



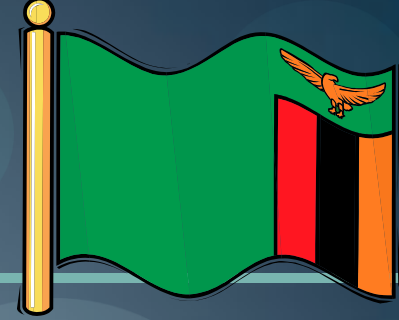
STRONG POLITICAL SUPPORT FROM THE GOVERNMENT OF RWANDA

## Kigali, Rwanda, continued



- 2006-2008: routine testing for partners of pregnant women, proportion increased from 40% in 2006 to 80% in 2008,  
--however--
- women and men were tested separately
- 2009: CDC awarded grant for nationwide training in joint testing and counseling

# Lusaka, Zambia: a work-in-progress



- Research-sponsored couples' testing from 1994-2002
- 2003-2007: NIMH RO1 66767 "Sustainable couples' testing"
  - 144,309 invitations distributed
  - 13,056 couples tested
- Lusaka is a large city - only 4% of cohabiting couples were reached

# PEOPLES VCT CONFERENCE

23<sup>rd</sup> July 2003  
SAKA ZAMBIA



STRONG POLITICAL SUPPORT FROM THE GOVERNMENT OF ZAMBIA

## Lusaka, Zambia, cont

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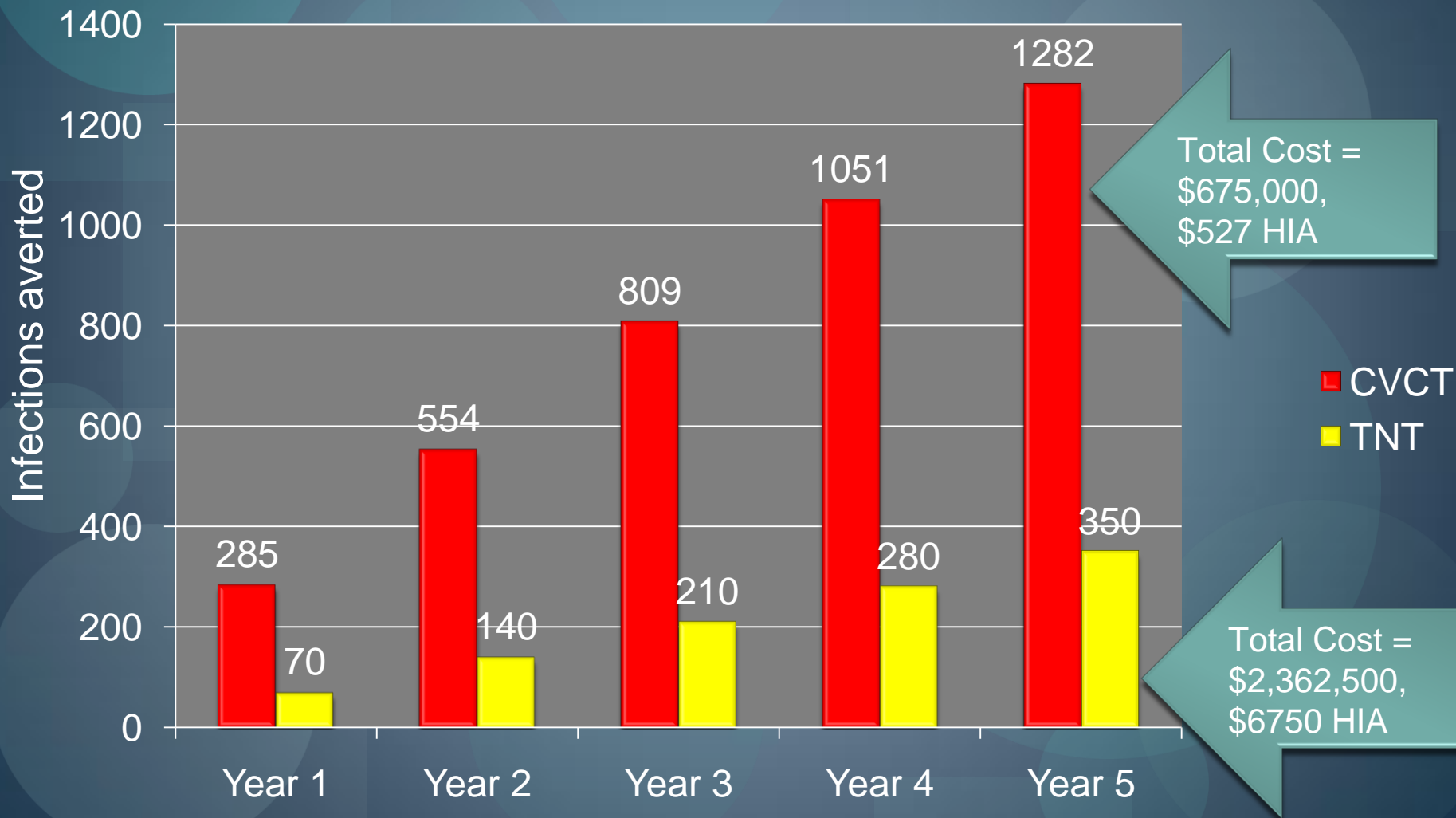
- 2008: transition to government health centers funded by US CDC
- Weekend services now test 5000 couples/year @ \$66/couple
- This is <2% of cohabiting couples/year
- Still between Phase 1 and 2, unable to establish social norms



## Lusaka, Zambia, 2010

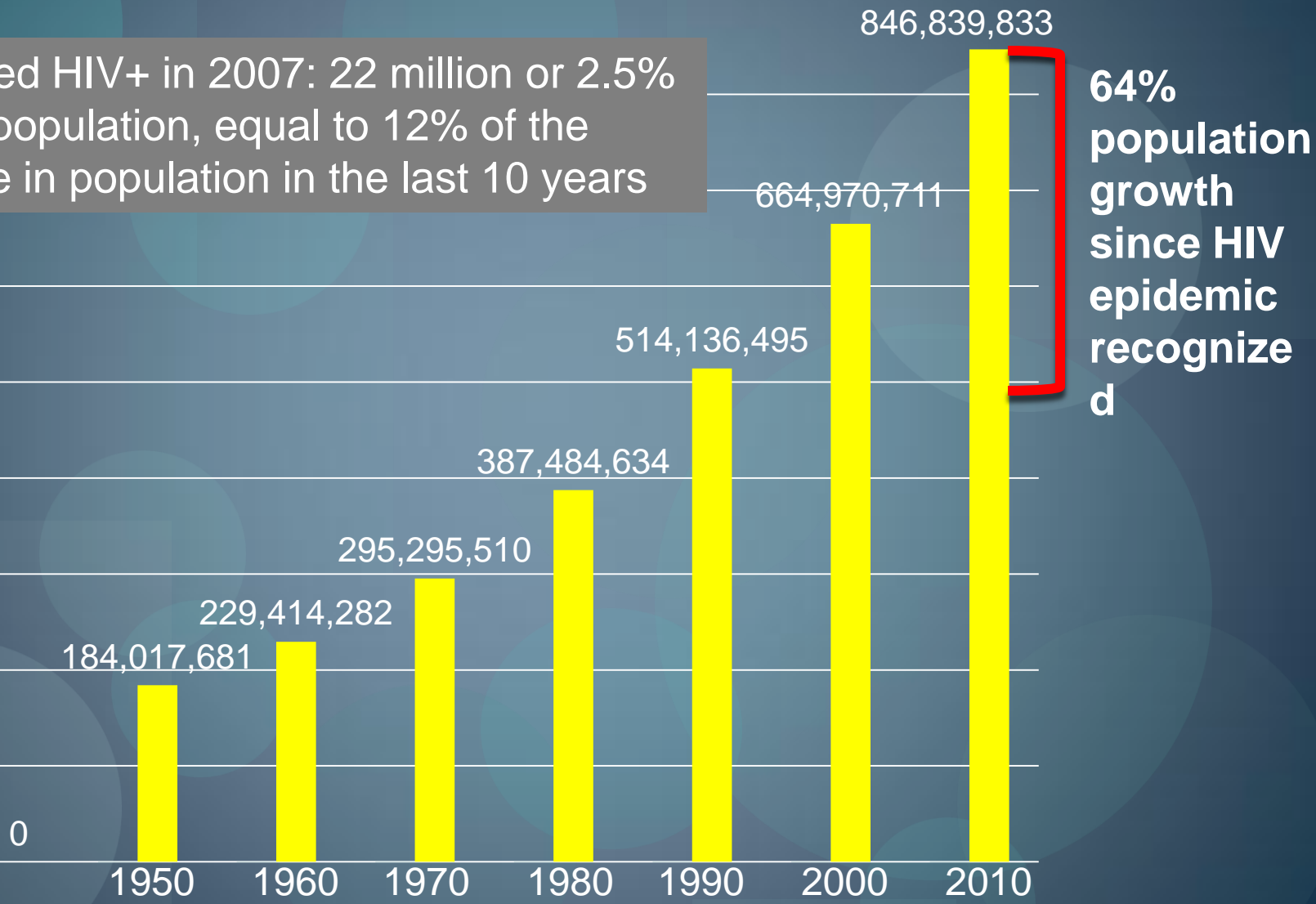
- Asked to consider TNT in discordant couples
- 5000 couples x 20% discordant x \$675/year for ARV=\$675,000/year to prevent 70 infections/year -- OR
- \$675,000 would provide CVCT to 10,227 more couples and prevent 285 infections in one year, and a cumulative 1282 infections in 5 years

# Cost advantage of CVCT over TNT



# POPULATION GROWTH IN AFRICA

Estimated HIV+ in 2007: 22 million or 2.5% of total population, equal to 12% of the increase in population in the last 10 years



National Institutes of Mental Health (NIMH)

National Institutes for Allergy and Infectious Diseases (NIAID)

Centers for Disease Control (CDC)

International AIDS Vaccine Initiative (IAVI)

Program in Appropriate Technology and Health (PATH)

**THANK YOU**

# PROFESSOR GORDON STREEB

US Ambassador to Zambia 1990-1993

Career Foreign Service Officer, 30 years

Vice President for Peace programs, Carter Center, 1994-2004

Visiting Professor of Economics, Emory University, focusing on economic development and political economy of Africa