The U.S. President's Emergency Plan for AIDS Relief

Meeting Objectives and HIV Prevention in the PEPFAR Context

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Reality Check

Over 25 million deaths

- 33 million people now live with HIV/AIDS
- 2.7 million new infections annually
- Investment – UNAIDS estimates US $13.8 billion 2008

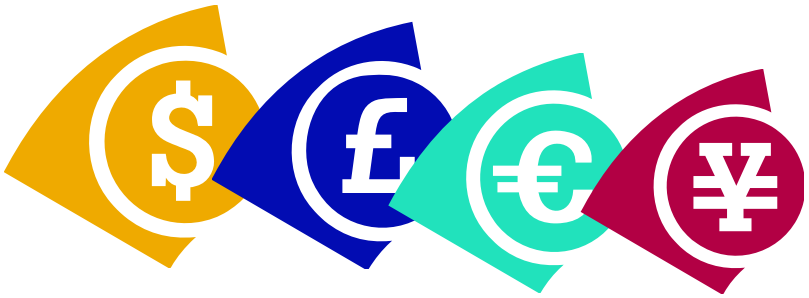
<u>Among newly infected people</u>:
50% are women (higher in some areas)
95% live in developing countries

80–90% of all HIV+ people in southern Africa do not know they have HIV

Economic Crisis

•>$14.5 trillion or 33% of the value of the world's companies has been wiped out

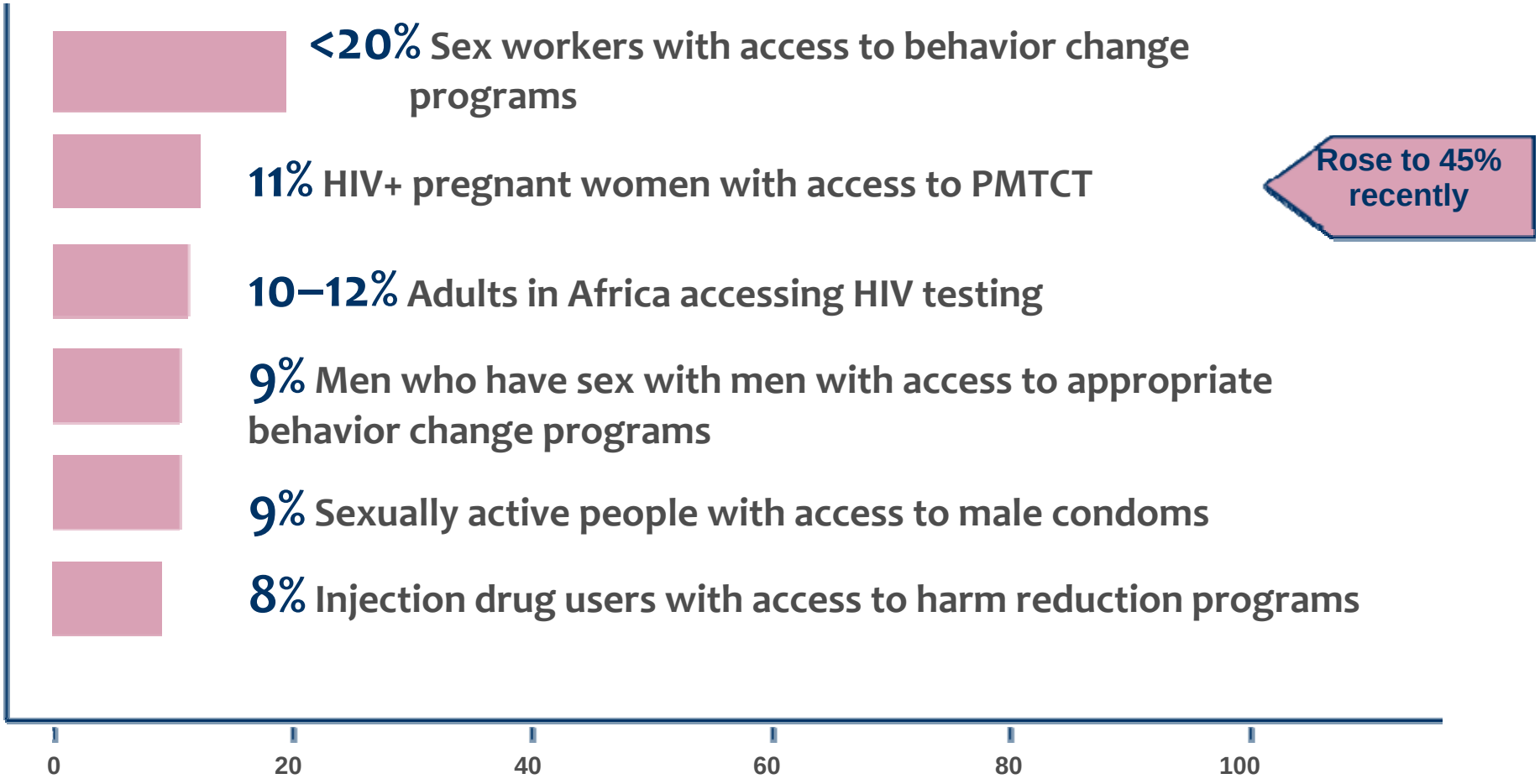
• US taxpayers alone will spend US $9.7 trillion in bailout packages and plans



Importance of HIV prevention

- ARV treatment alone will not be able to stem this epidemic
  - HAART is limited by knowledge of HIV serostatus
  - Those who know their status, eligible for HAART years after infection
- No HIV prevention intervention will be fully protective, so need:
  - Multiple HIV prevention strategies
  - Short-term interventions (while pursuing HIV vaccines & microbicides)
- Need interventions that reduce HIV infectiousness & susceptibility
- Challenges of HIV prevention trials
  - Outcome is rare compared to treatment trials (3-5% HIV seroconversion rate)
  - Thus, HIV prevention efficacy trials are large (often >3000 participants)
- Need combination HIV prevention strategies, analogous to combination ART to increase effectiveness

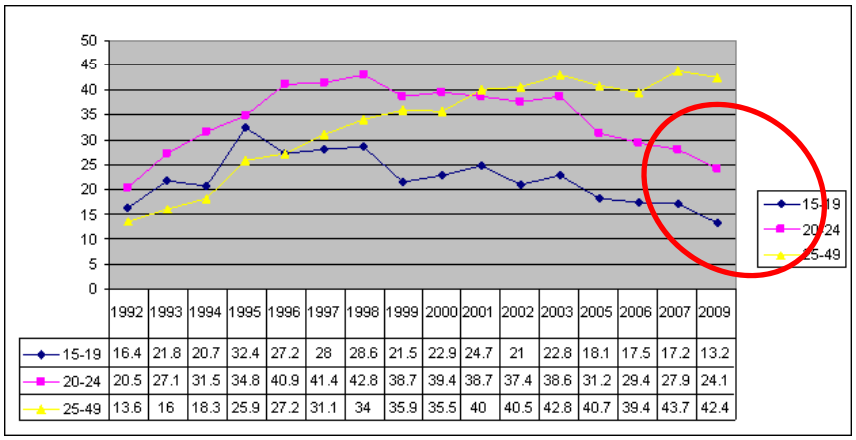
Percentage of at-risk people with access to HIV prevention



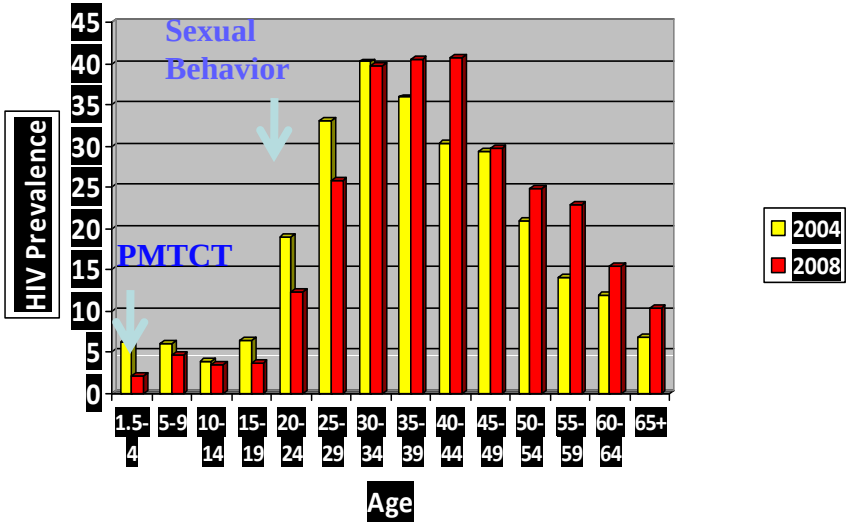
Global HIV Prevention Working Group 2008; WHO/UNAIDS/UNICEF 2007

Are we making a difference?

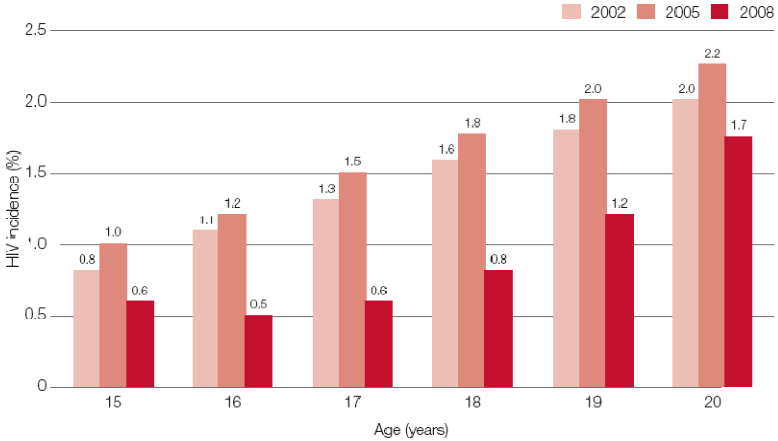
Botswana ANC HIV prevalence by age & year (1992 -2009)



	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2005	2006	2007	2009
15-19	16.4	21.8	20.7	32.4	27.2	28	28.6	21.5	22.9	24.7	21	22.8	18.1	17.5	17.2	13.2
20-24	20.5	27.1	31.5	34.8	40.9	41.4	42.8	38.7	39.4	38.7	37.4	38.6	31.2	29.4	27.9	24.1
25-49	13.6	16	18.3	25.9	27.2	31.1	34	35.9	35.5	40	40.5	42.8	40.7	39.4	43.7	42.4



Comparison of HIV incidence in the 15–20 age group, South Africa
2002, 2005, and 2008



Shisana O, Rehle T, Simbayi LC, Zuma K, Jooste S, Pillay-van-Wyk V, Mbelle N, Van Zyl J, Parker W, Zungu NP, Pezi S & the SABSSM III Implementation Team (2009)

Purpose of this Expert Consultation

To inform PEPFAR HIV Prevention Guidance, with specific focus on those interventions whose effectiveness or role in generalized epidemics is not yet clear

Objectives of this Consultation

Objectives: To draw on the knowledge base, insights, and perspectives of global experts and key international partners working in HIV/AIDS prevention to:

1. Review the evidence on HIV prevention interventions where there are still unresolved issues, weighing different types of evidence on the efficacy and effectiveness of these interventions

2. Discuss the appropriate mix and prioritization of interventions for generalized epidemics, identifying criteria that should be used to determine appropriate interventions for diverse settings, and how best to maximize synergies within a portfolio of interventions implemented at scale

What We Asked the Speakers to Address

- Summarize the range of evidence to provide information on the breath, depth and effectiveness
  - Can include complementary information from observational data
- Selection criteria
- Strengths of the Evidence
- Limitations of the Evidence
- Gaps in the Evidence
- Implications of the Evidence
  - Practice – potential for scale up (population -level effectiveness)
  - Policy
  - Implications/Linkage to other interventions and services
  - Program monitoring and evaluation
  - Operational research

What is not on the Consultation Agenda

- PMTCT
- Male Circumcision
- Condom Promotion
- Interventions targeted toward MARPs
  - IDU Guidance
  - MSM Guidance
  - SW Guidance

Accelerating PMTCT

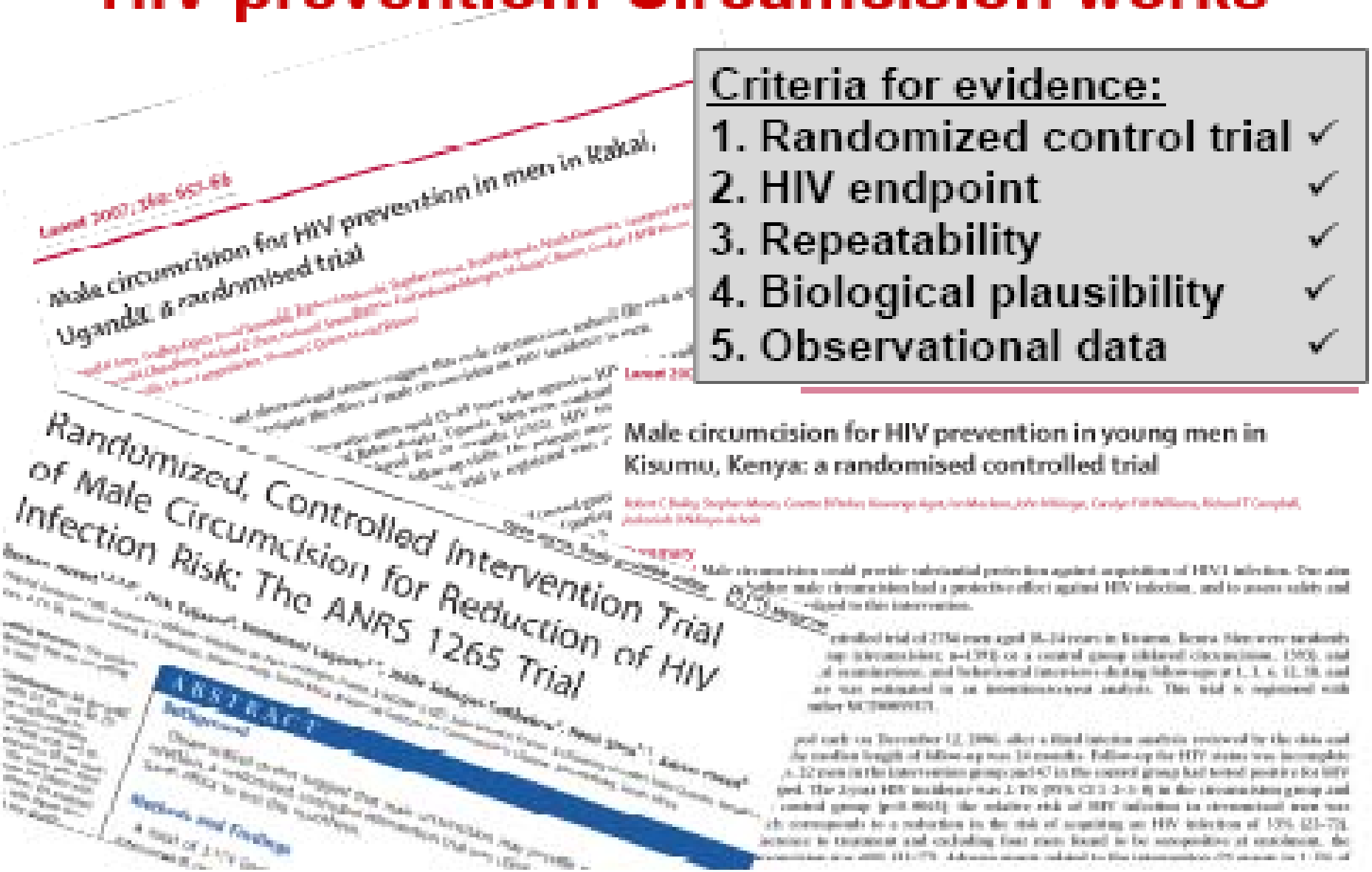
PMTCT is extraordinarily effective

PEPFAR Commitment:

- **80% coverage** of testing at the national level, and **85% coverage** of prophylaxis/treatment for infected pregnant women, by 2014
- **additional $100 million** in 2010-2011 to support 6 countries in accelerating expansion of HIV testing and ARV prophylaxis

Increased investments are linked with maternal and child health, family planning, and nutrition as a part of wider efforts to support **comprehensive services** under the Global Health Initiative

HIV prevention: Circumcision works



Criteria for evidence:

1. Randomized control trial ✓
2. HIV endpoint ✓
3. Repeatability ✓
4. Biological plausibility ✓
5. Observational data ✓

Timeline of PEPFAR Prevention

2004: ABC Prevention Guidance

2005:
Gender Based Violence initiative

Male Norms initiative

2006:
Vulnerable Girls initiative

Limited funding for MC

2007:
MC RCTs 25M additional funds

Alcohol Initiative

2008:
Reauthorization of PEPFAR

Partnership Framework

SAPI

2009:
New PEPFAR strategy

PMTCT plus-up announced

2010:
Gender Based Violence scale-up

SAPI Mobile & Migrant Populations Grant

PEPFAR's Second Phase Prevention Strategy

Four priorities for prevention moving forward:

- Emphasizing Combination Prevention
- Know Your Epidemic, Know Your Response, Adjust Your Portfolio
- Scaling up What Works
- Supporting Evaluation of All Prevention

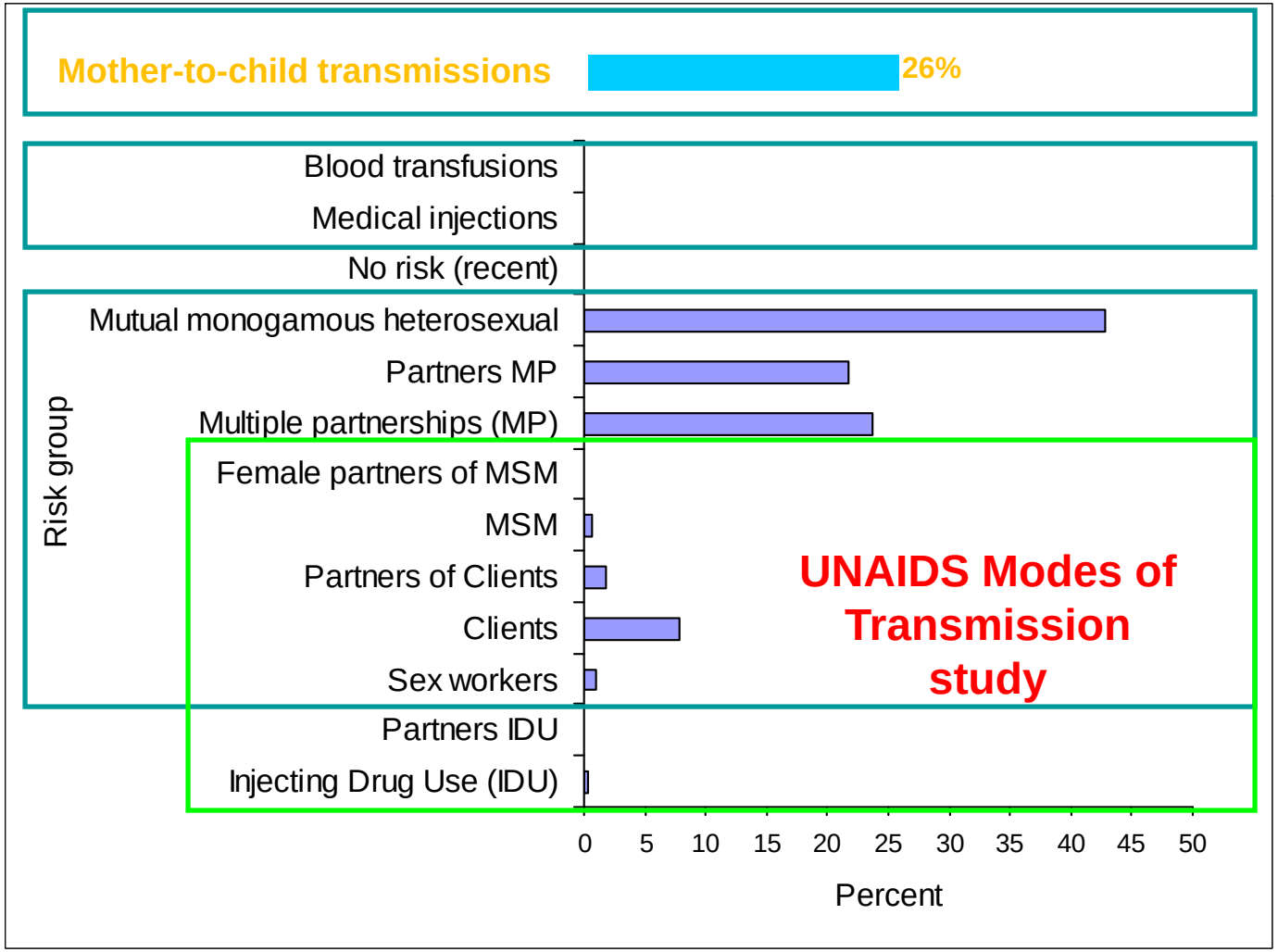
Know Your Epidemic - The view from 30,000 feet

- Some occur from mother-to-child (~25%)

- Most infections occur sexually (~75%)

- MARPs: poor data availability, guess work >> poor estimates

- Almost none occur in health care setting (injections, transfusions)



KNOW YOUR RESPONSE- Prevention Portfolio Reviews

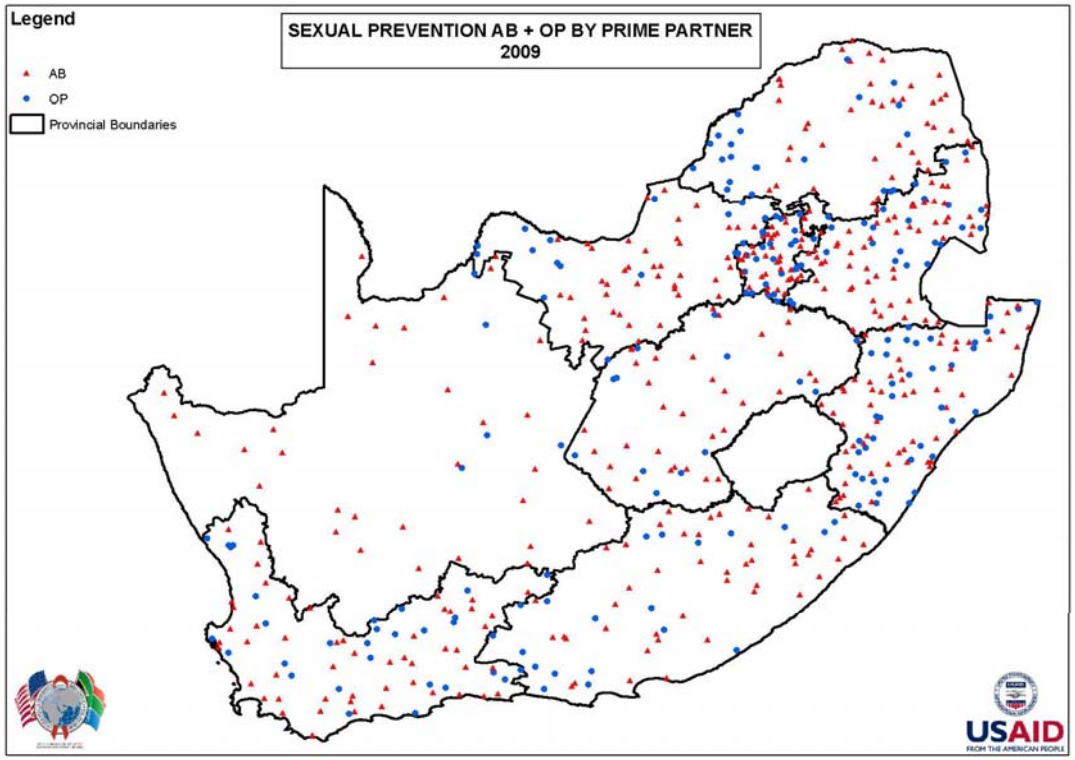
- GOAL
  - to review the PEPFAR portfolio in a systematic manner in order to conduct a gap analysis of the portfolio's effectiveness in interrupting HIV transmission
- OBJECTIVE
  - Understand (targeting, selection, delivery and funding, M&E) the prevention portfolio
  - Recommendations for improved programming
  - Engage government and other partners
- PROGRAM EVALUATION QUESTIONS
  - Is the program meeting the actual needs of the populations most affected?
  - Is it being implemented correctly with quality standards maintained?
  - Is it implemented on a scale that will make a difference?

KYR - Countries that have undertaken Prevention Portfolio Reviews

- Botswana 2010
- Guyana: 2010
- South Africa: 2009
- Ethiopia: 2009
- Uganda: 2010
- Mozambique: 2009.
- Tanzania: reviews annually with the GOT
- Kenya: starting in 2008, reviews annually with the GOK

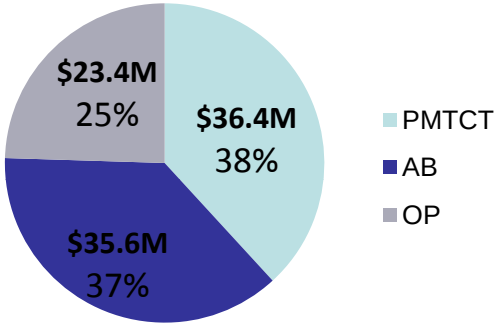
Recalibration of South Africa's Prevention Strategy

- PEPFAR/South Africa underwent a comprehensive review of their prevention portfolio evaluating available data and a partner partners' portfolios and location
- RESULT - They reprogrammed 26% of its prevention funding to better address the geographic areas and populations most impacted by HIV.

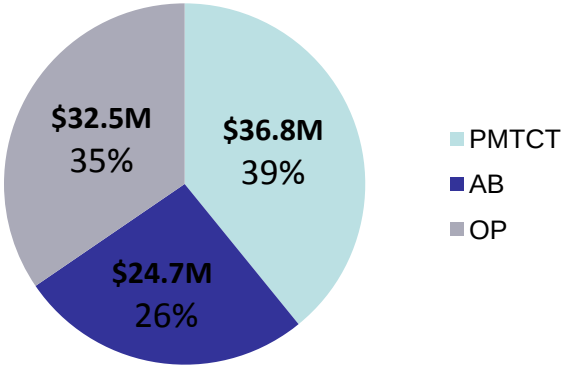


Prevention Budget by Program Area, South Africa

Prevention Funding Prior to April 2009 Reprogramming



Prevention Funding Post-Reprogramming Process



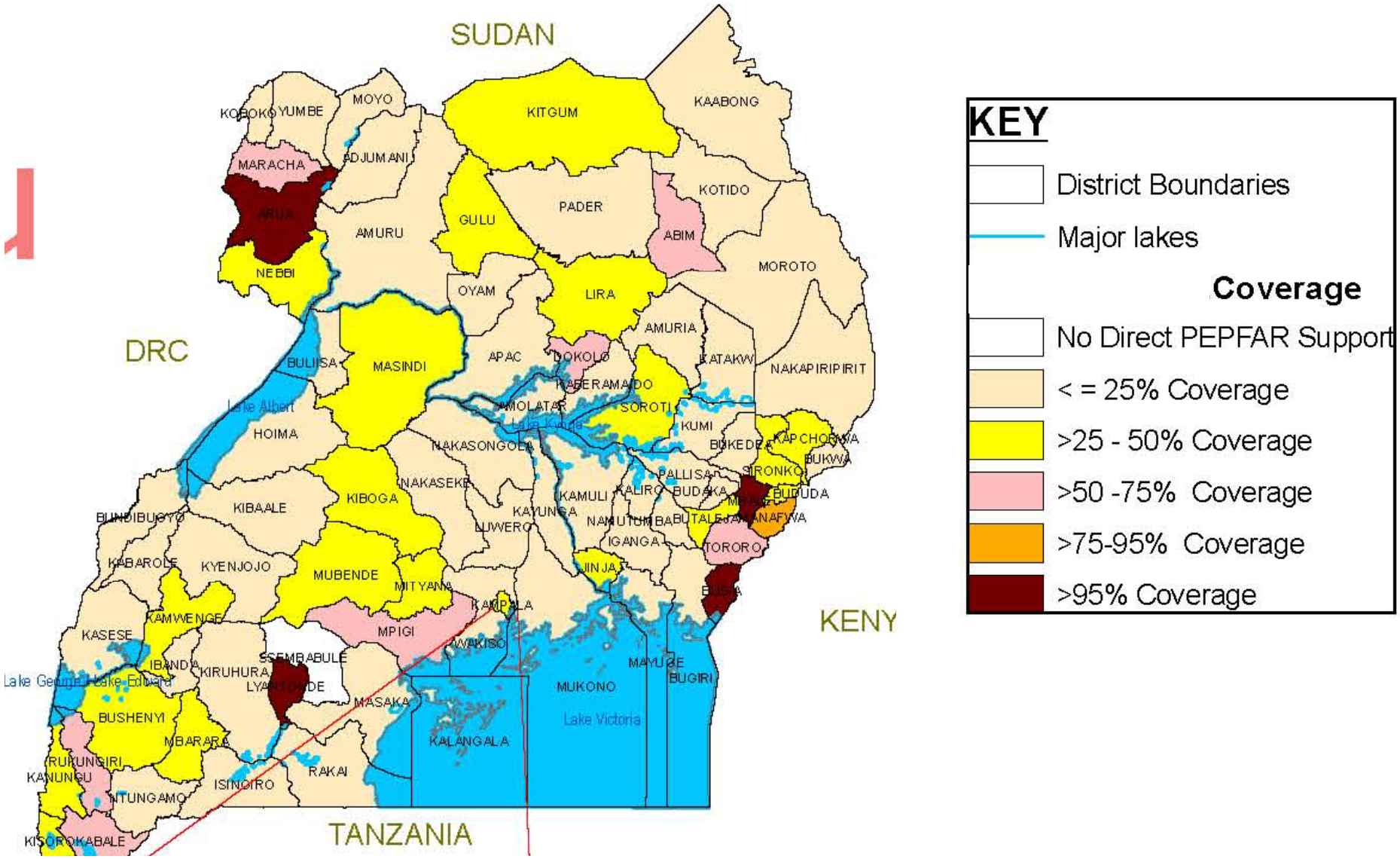
Kenya Portfolio Review

Summary Results and Recommendations

CE Rank	Cost/case averted	Intervention	Population	Epi setting
Most favorable CE	~$2,500	VAMC	Males	Nyanza, Nairobi
		NE; RR counseling	IDUs	Nyanza; Coast
		CSM; CT; STIrx; PwP	Prison	Nairobi; Coast
			SW and partners	Nyanza, Nairobi
			MSM	Nyanza; Coast
Moderate CE	~ $6,000	Standard package	Females	Nairobi - Urban
			Males	Central - Rural
			Males & Females	Coast-Urban
			Females	Nyanza - Rural
			Females	Rift - Rural
			Males & Females	Western - Rural
Least favorable CE	~$14,000 +	Standard package esp. if emphasizes schools-based programs; IEC; female condoms; STI-Rx	General pop. Esp. Youth and those ~45+	Central Eastern North Eastern

Population and epi settings are confined to KAIS and MoT data. Thus, results and recommendations are partial and indicative, not exhaustive.

PEPFAR UGANDA PREVENTION COVERAGE



KEY

- District Boundaries
- Major lakes

Coverage

- No Direct PEPFAR Support
- < = 25% Coverage
- >25 - 50% Coverage
- >50 -75% Coverage
- >75-95% Coverage
- >95% Coverage

Challenges as Defined by Countries

- While it important to periodically conduct KYE and KYR assessments, the "knowing" is challenged with limited, incomplete, and non-standardized data
  - Limited data on behavioral interventions, incidence, and size of MARP population
- Limited focus on monitoring and evaluation activities within programs
- Moving toward greater country ownership (a challenge if the partner governments have different priorities)
- Coverage - low scale (geographic and pop-based coverage)
  - Africa 2009: PMTCT range 2% to 95%
  - Africa 2009: ART range 5% to 88%

Challenges as Defined by Countries

- Not targeting & prioritizing high risk groups (MARPS)
- Difficulty reaching adequate coverage of male & female condoms
- Weak linkages between prevention & care, treatment
- How to best evaluate effective interventions
- Reality of time it takes to shift portfolios – e.g. contracts with partners
- Lack of standardized messages
- Stigma and discrimination
- Structural conditions
- How can we adequately address the extremely complex, interwoven cultural, social and economic vulnerability of girls and young women in hyperendemic areas of southern Africa?

Some Questions For You to Consider

- What is the role of early HIV infection?
  - 38.4% of ongoing HIV transmission in Lilongwe can be attributed to EHI index cases - Powers et. al
  - Could not eliminated HIV even with 100% coverage of CHI
- Where are the gaps in evidence that need to be explored to ensure effective programming?
- What are facilitating and limiting programmatic factors?
- What do we know about the cost effectiveness of interventions?
- Are there other types of evidence that should be considered?
- Is the evidence sufficient to take public health action?
- What are the key elements of successful, quality programs?
- What should we be doing differently?

Prevention - Looking forward

- Need to strike an appropriate, country-specific balance of interventions between those with strong evidence base and where evidence base is emerging

- Move prevention portfolio along continuum to allow for innovation but ensure greater/sufficient proportionality of funding is allocated to areas where evidence is strong

- Evaluate **impact** as we go and shift approaches accordingly

"Only those who dare to fail greatly can ever achieve greatly."

Robert F. Kennedy, 1925 - 1968