

Evidence for effective HIV prevention

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No perfect solution ...



A highly protective vaccine easy to administer and effective for all HIV transmission modes

Combination Prevention

“The evidence dilemma”

Firm evidence for efficacy is easier to obtain for well defined “technological” approaches



What works in Prevention?

Results from Randomized Controlled Trials-2011

Study

Effect size (95% CI)

Antiretroviral treatment for prevention
(HPTN 052 - Africa, Asia, Americas¹)

PrEP for discordant couples
(PartnersPrEP - Uganda, Kenya²)

PrEP for heterosexuals
(TDF2 - Botswana³)

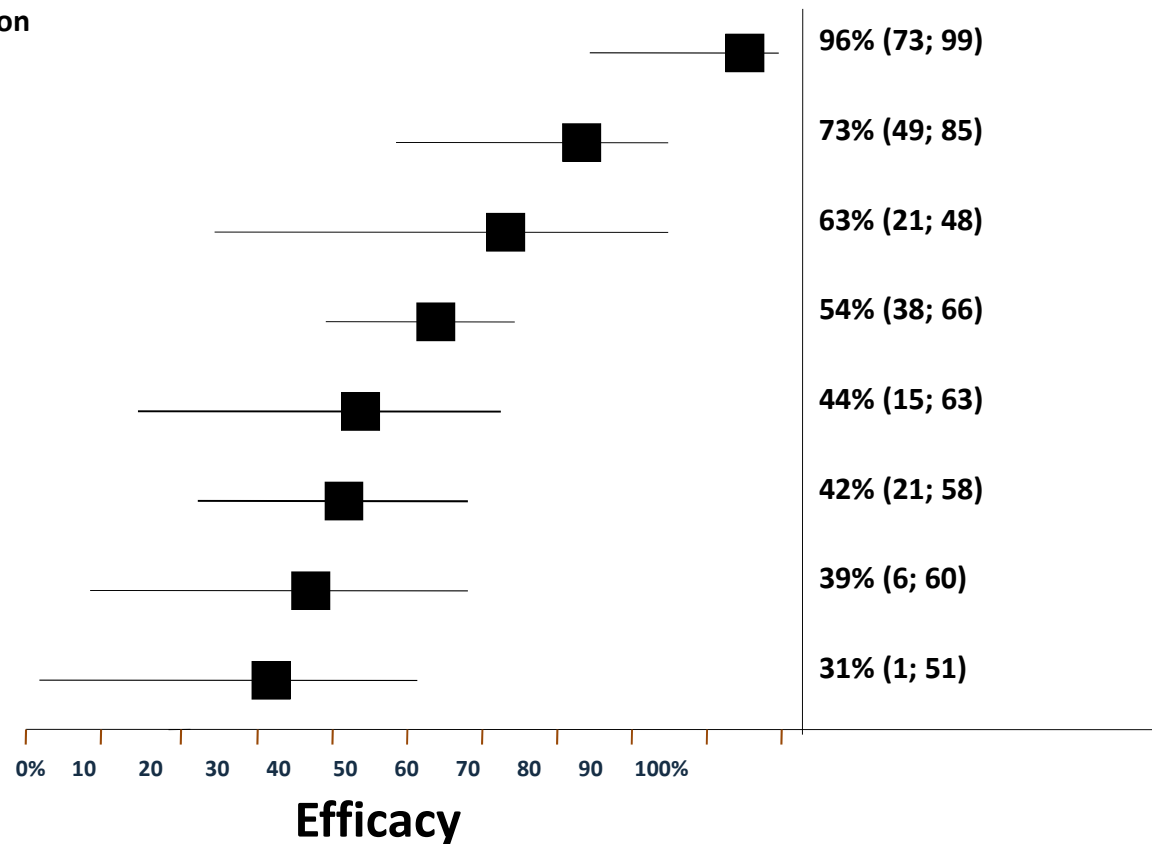
Medical male circumcision
(Orange Farm⁴, Rakai⁵, Kisumu⁶)⁷

PrEP for MSMs
(iPrEX - Americas, Thailand, South Africa⁸)

STD treatment
(Mwanza - Tanzania⁹)

Microbicide
(CAPRISA 004 - South Africa¹⁰)

HIV Vaccine
(RV144 - Thailand¹¹)



Prevention tools cannot work without a behavioral component

- **Adhering** to ART , PreP or condom use
- **Seeking** health care for Male circumcision
- **Accepting** to be tested for HIV
- **Negotiating** condom use
- **Adopting** safer sex
- **Overcome stigma** to seek care

Combination prevention essential but evidence for effectiveness is more difficult to obtain

Proposed Investment Framework



CRITICAL ENABLERS

Social enablers

- Political commitment and advocacy
- Laws, legal policies and practices
- Community mobilization
- Stigma reduction
- Mass media
- Local responses to change risk environment

Programme enablers

- Community centered design and delivery
- Programme communication
- Management and incentives
- Procurement and distribution
- Research and innovation

BASIC PROGRAMME ACTIVITIES

Key populations at higher risk
(particularly sex workers and their clients, men who have sex with men, and people who inject drugs)

Eliminate new HIV infections among children

Behaviour change programmes

Condom promotion and distribution

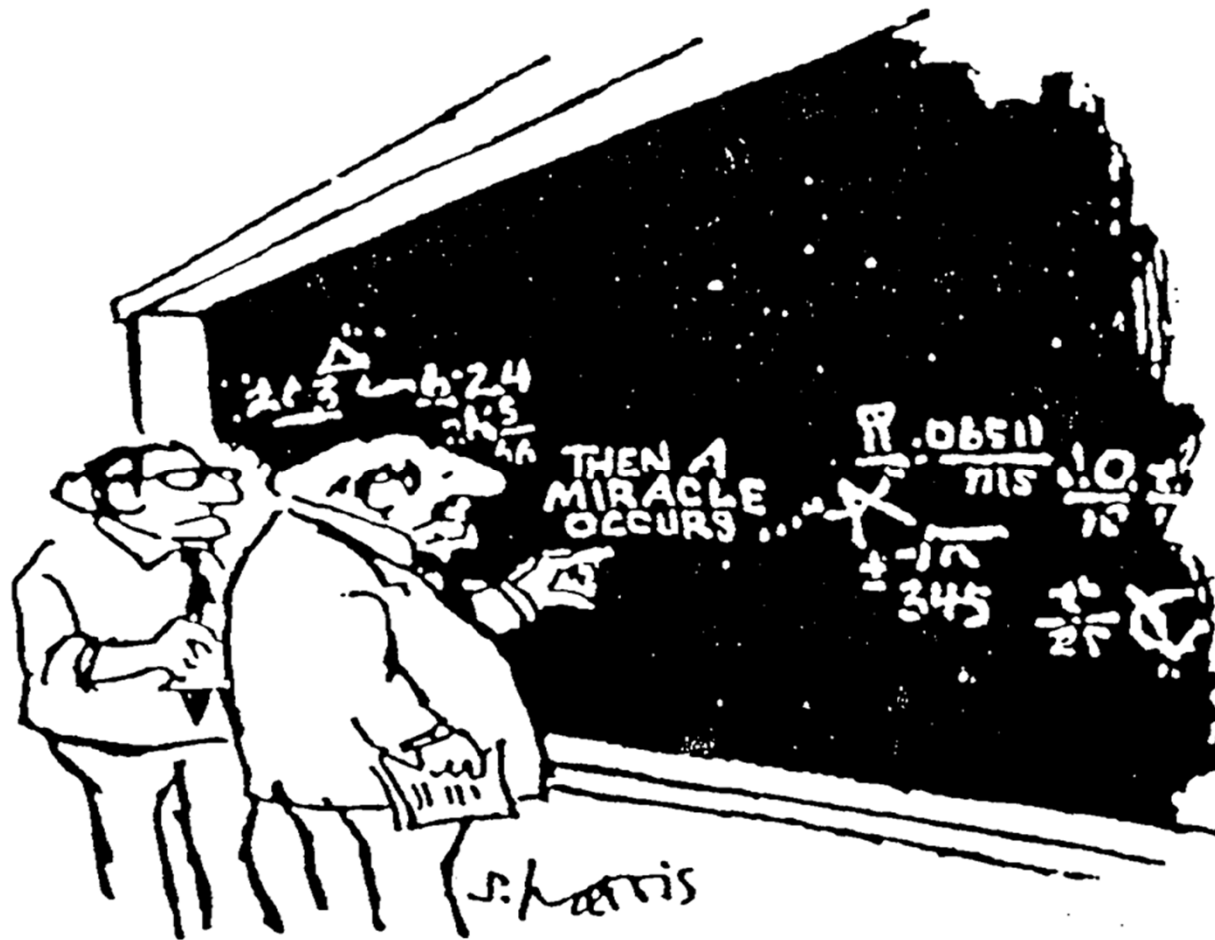
Treatment, care and support for people living with HIV

Voluntary medical male circumcision
(in countries with high HIV prevalence and low rates of circumcision)

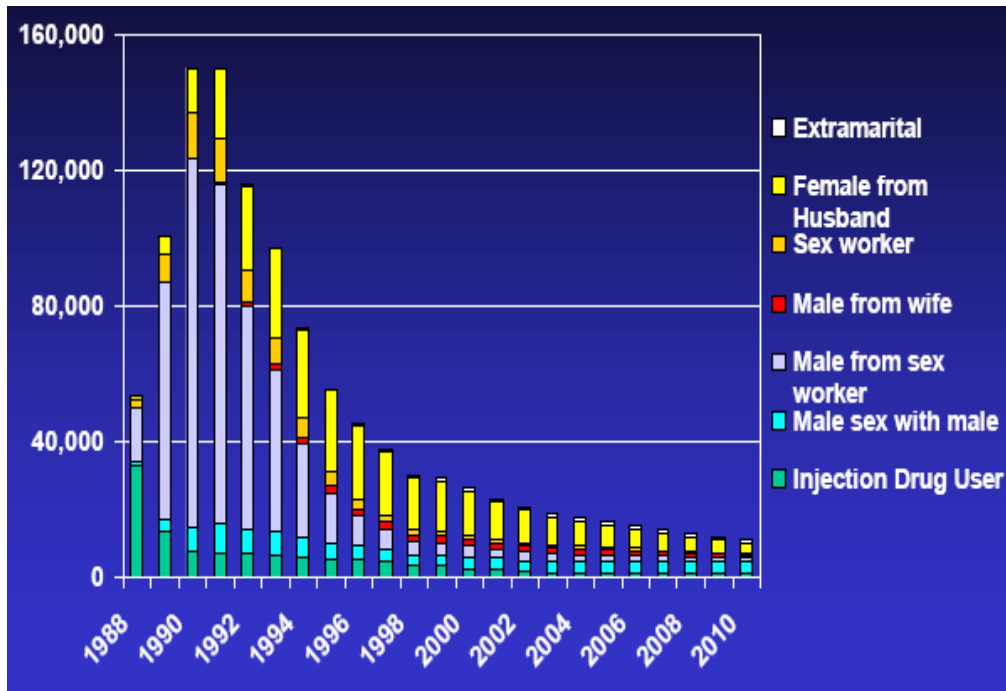
SYNERGIES WITH DEVELOPMENT SECTORS

Social protection, Education, Legal reform, Gender equality, Poverty reduction, Gender-based violence, Health systems (incl. STI treatment, Blood safety), Community systems, and Employer practices.

Dealing with “complexity”



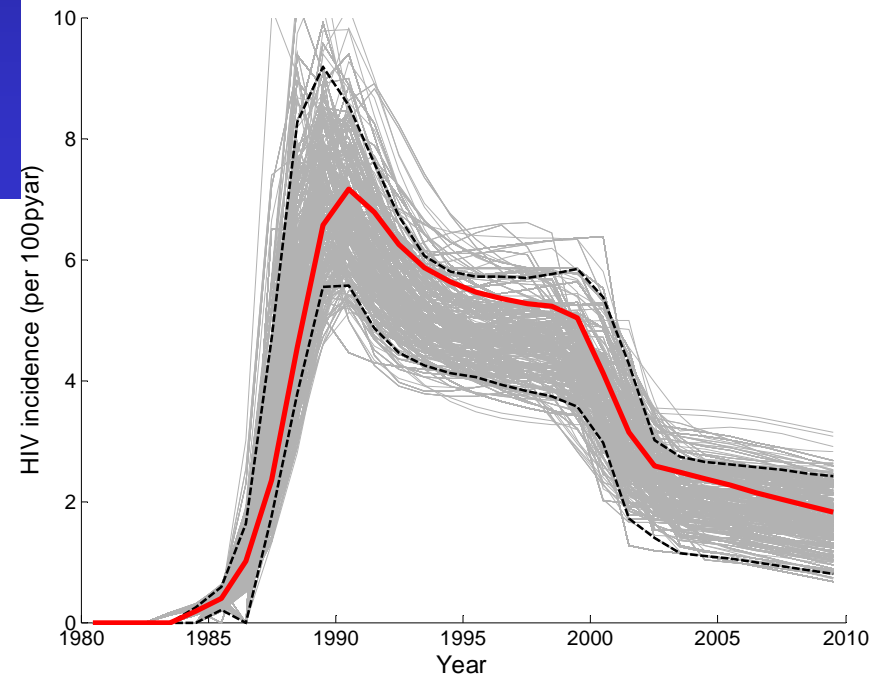
Learning from National Success stories



Thailand
Estimated number of new infections, 1988-2008

Zimbabwe
HIV incidence (modelled)

Source: Analysis and Advocacy (A²) Thailand Team, Pattaya presentation to ASAP meeting, January 2006.

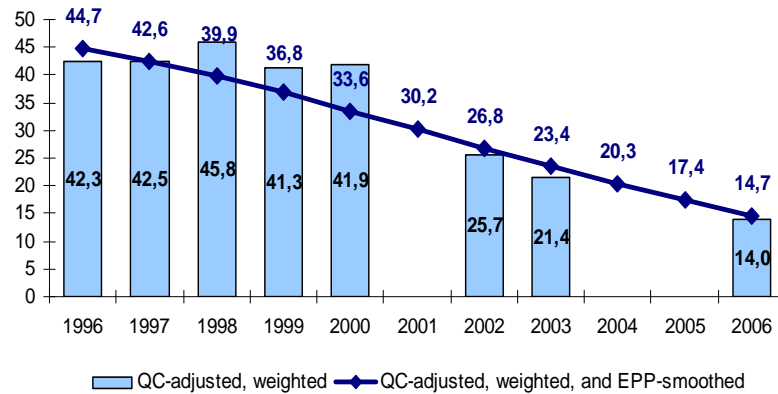


Source: Hallett, Gregson, Gonese, et al., *Epidemics*, 2009

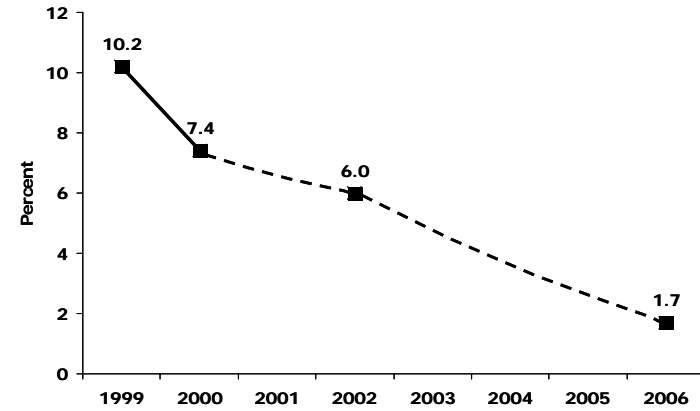
Success stories: female sex workers

Prevalence

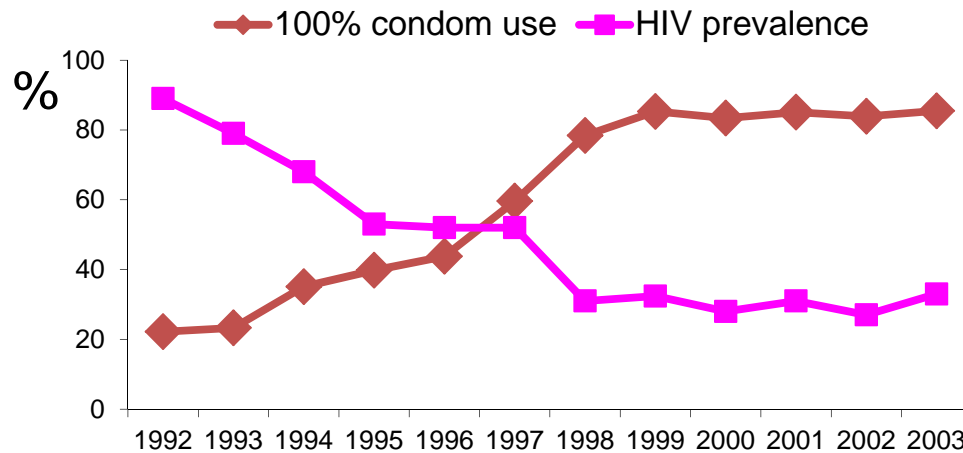
Cambodia



Incidence



Ly Penh Sun et al, NCHADS Cambodia. Presented at the 2nd Global HIV/AIDS Surveillance meeting, Bangkok, 2009

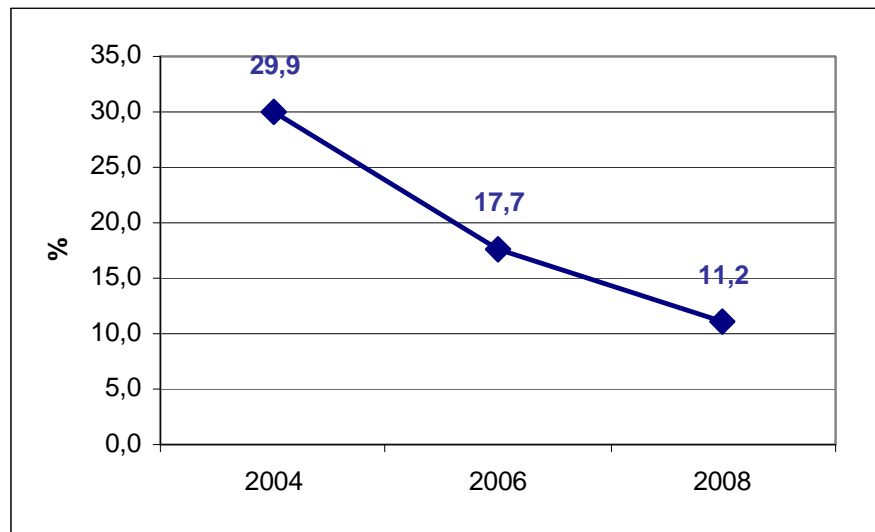


Côte d'Ivoire

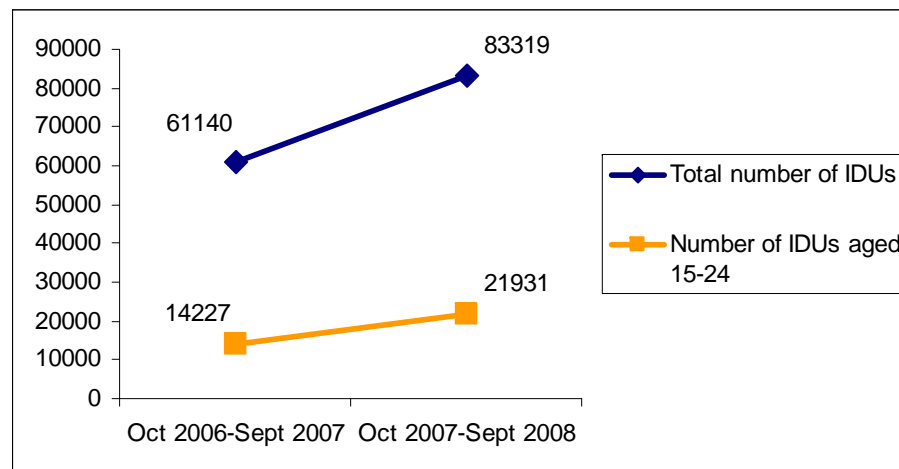
Ghys et al. AIDS. 2002 Jan 25;16(2):251-8.

Impact of harm reduction to prevent HIV among IDU in Ukraine

Median HIV prevalence among recent IDUs (less than 2 years of injection drugs), 8 cities in Ukraine



Programmatic monitoring (SYREX database):
Coverage of harm reduction program



From: Tetiana Saliuk et al; Int AIDS Alliance, Ukraine

Presented at the 2nd Global HIV/AIDS Surveillance Meeting Bangkok, 2009

“Evidence informed” Combination Prevention

- Based on Understanding the EPIDEMIC-
Prevention for **WHO?**
- Using effective TOOLS and APPROACHES
WHAT to do?
- Into programs for and by communities in
contexts-
HOW to do it?

ADDRESSING the IMPLEMENTATION GAP

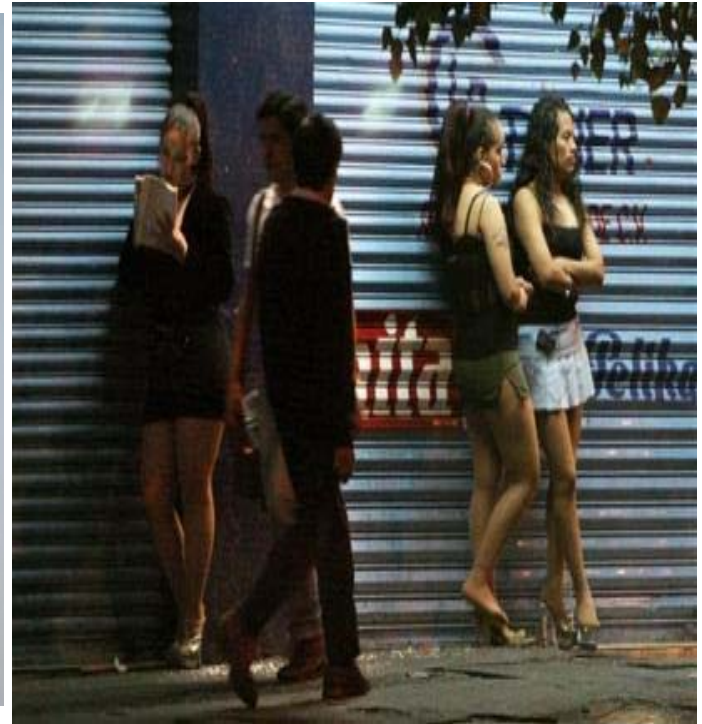
Median Coverage prevention programs worldwide
(2010)



**Intravenous
Drug Users
32%**



**Men who have Sex
with Men
55%**



**Sex Workers
48%**



Microbicides for women

Abdool Karim Q, Science 2010

Male circumcision



Auvert B, PloS Med 2005
Gray R, Lancet 2007
Bailey R, Lancet 2007

Treatment of STIs



Grosskurth H, Lancet 2000

Treatment for prevention



Donnell D, Lancet 2010
Cohen M, NEJM 2011

Female Condoms



Male Condoms



Behavioural positive prevention



Fisher J, JAIDS 2004

HIV Counselling and Testing



Coates T, Lancet 2000

Oral pre-exposure prophylaxis



Grant R, NEJM 2010 (MSM)
Baeten J, 2011 (Couples)
Paxton L, 2011 (Heterosexuals)

Behavioural Interventions



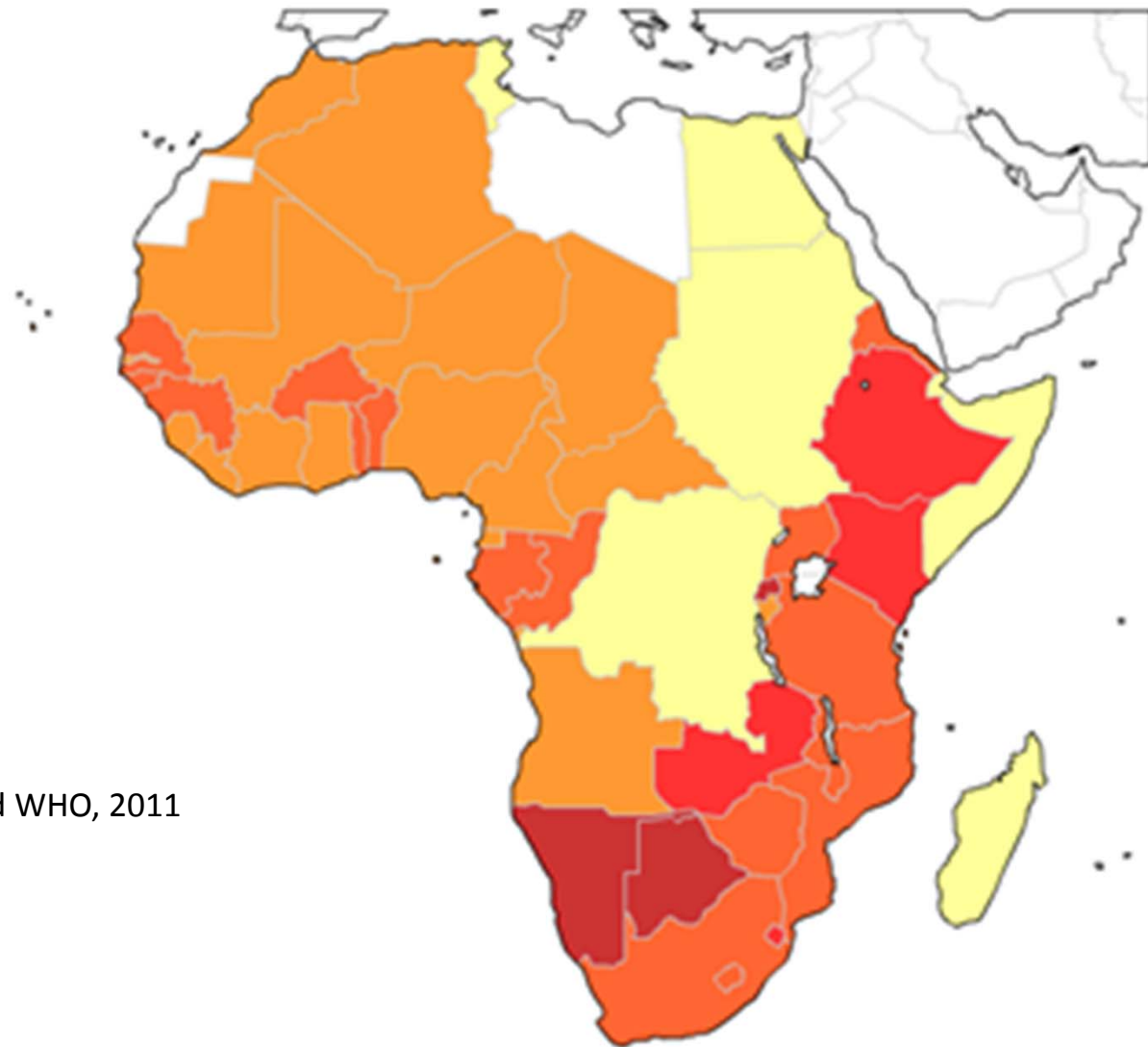
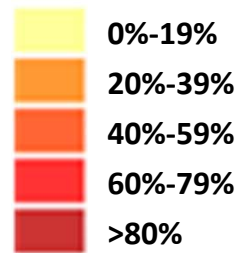
Post Exposure prophylaxis (PEP)



Scheckter M, 2002

TREATMENT as PREVENTION : opportunity for synergies

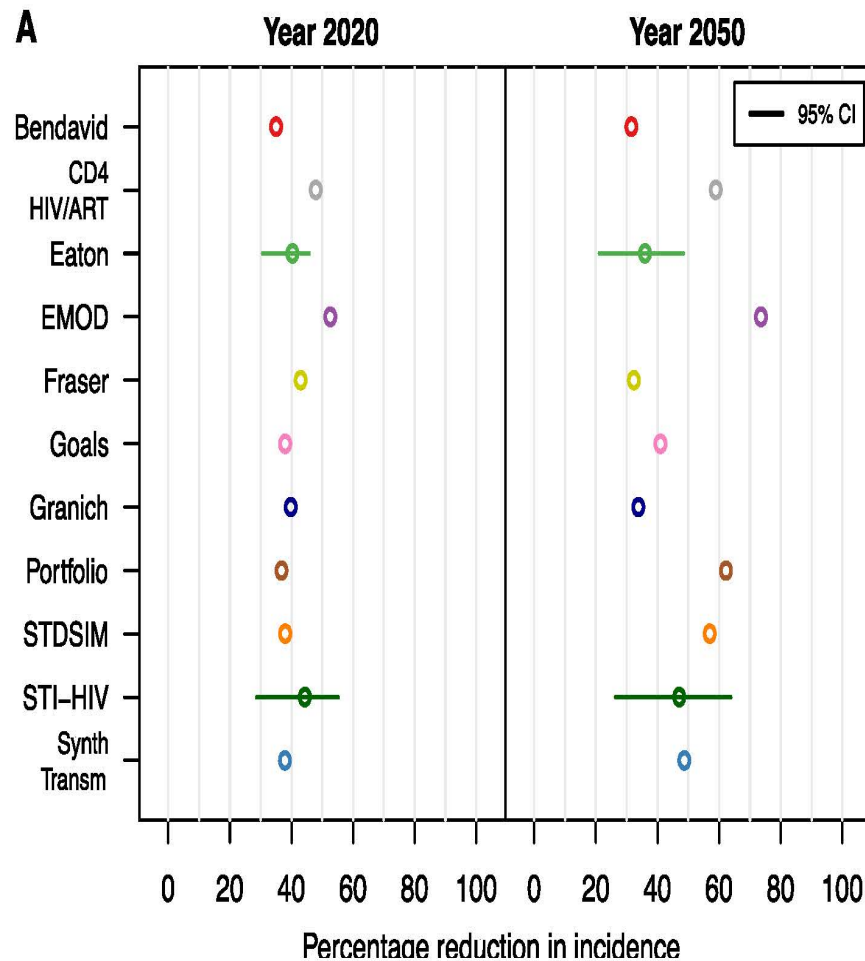
Proportion of eligible population receiving antiretroviral therapy in Africa at end of 2010



Data source: UNAIDS and WHO, 2011

Potential Impact of Current Guidelines ?

South Africa



**Universal access
to treatment
for <350 CD4**

KEEP on Treatment !

INSIDE THIS WEEK: TECHNOLOGY QUARTERLY

The
Economist

JUNE 4TH-10TH 2011

Economist.com

The trap for Turkey
Wall Street's plumbing problem
Lady Gaga, Mother Teresa and profits
Brazil's boiling economy
The farce that is FIFA

The end of AIDS?



How 5 million lives have
been saved, and a plague
could now be defeated

HOW to engage ?

Confront Epidemic & Context

Combine new with old tools

Customize programs

Communities center

Leadership

The Economist: June 4-10th, 2011