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# ***From HIV to Global Health***

*Stefano Vella MD*

*Istituto Superiore di Sanità - Rome*



# HIV / AIDS

**The success story**

**The “unfinished” job**

# HIV / AIDS

## The success story

1. The impact of ART
2. Treatment as Prevention
3. The battle towards universal access to ART
4. HIV/ AIDS as a model for Global Health

## The “unfinished” job

1. Insufficient ART coverage
2. Late presentation and low retention in care
3. Neglected regions
4. neglected populations

# HIV / AIDS

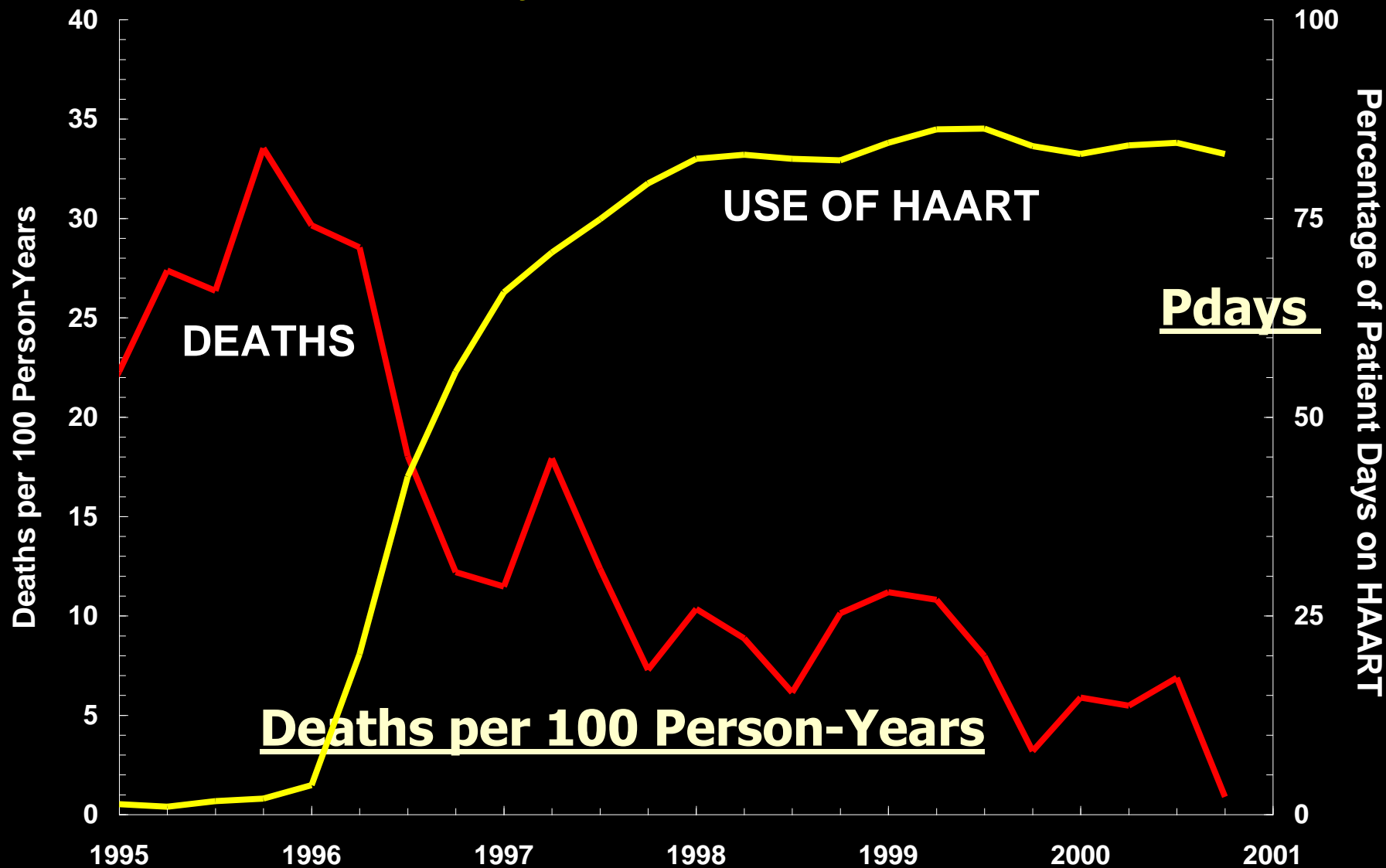
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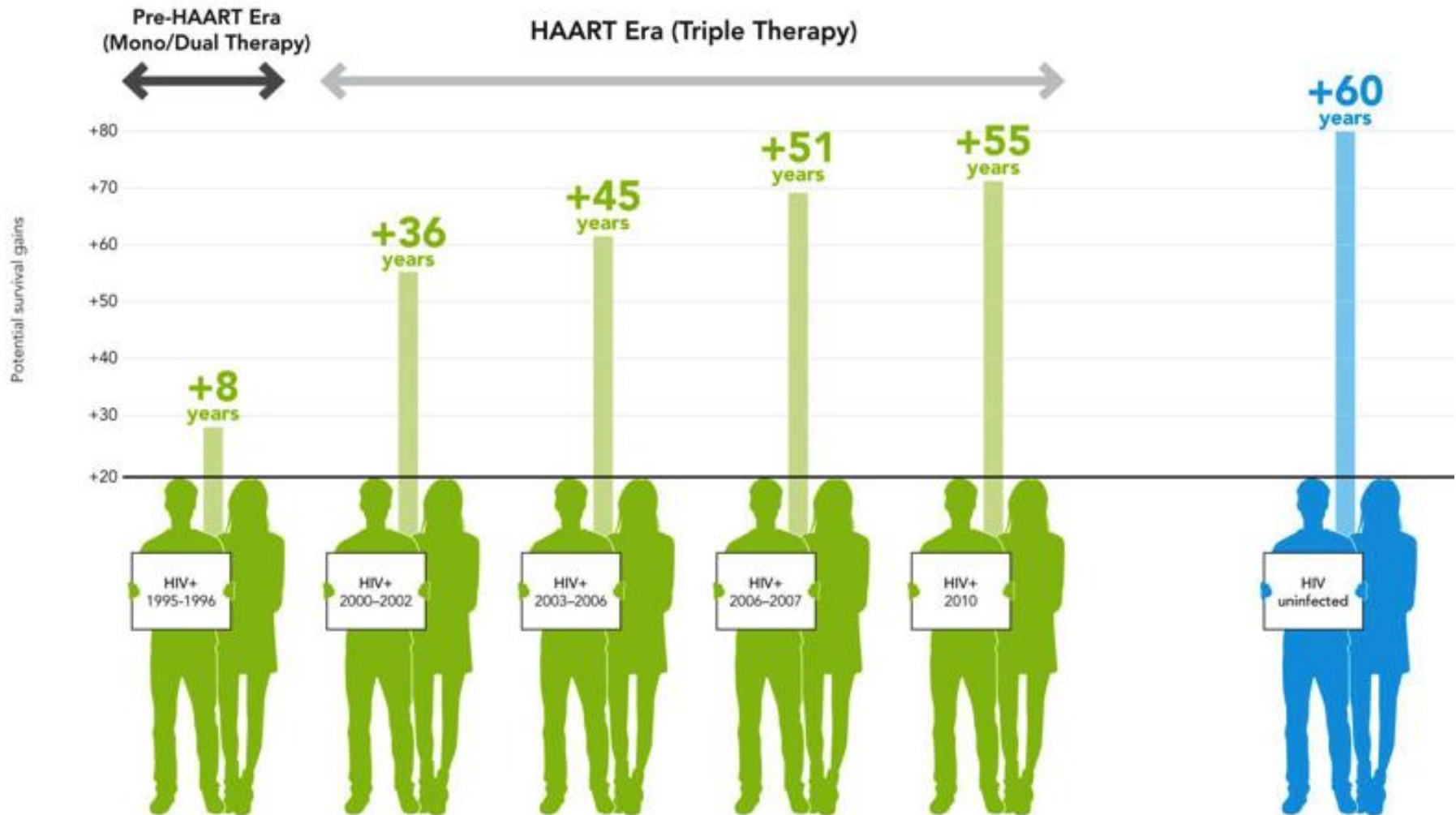
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# Mortality vs. HAART Utilization



Palella F et al, NEJM, 1998

# HIV treatment prevents HIV-related illness and disability, and AIDS-related death, thereby normalizing life-expectancy



**Expected impact of HIV treatment on survival of a 20 years old person living with HIV in a high income setting (different periods)**

# HIV / AIDS

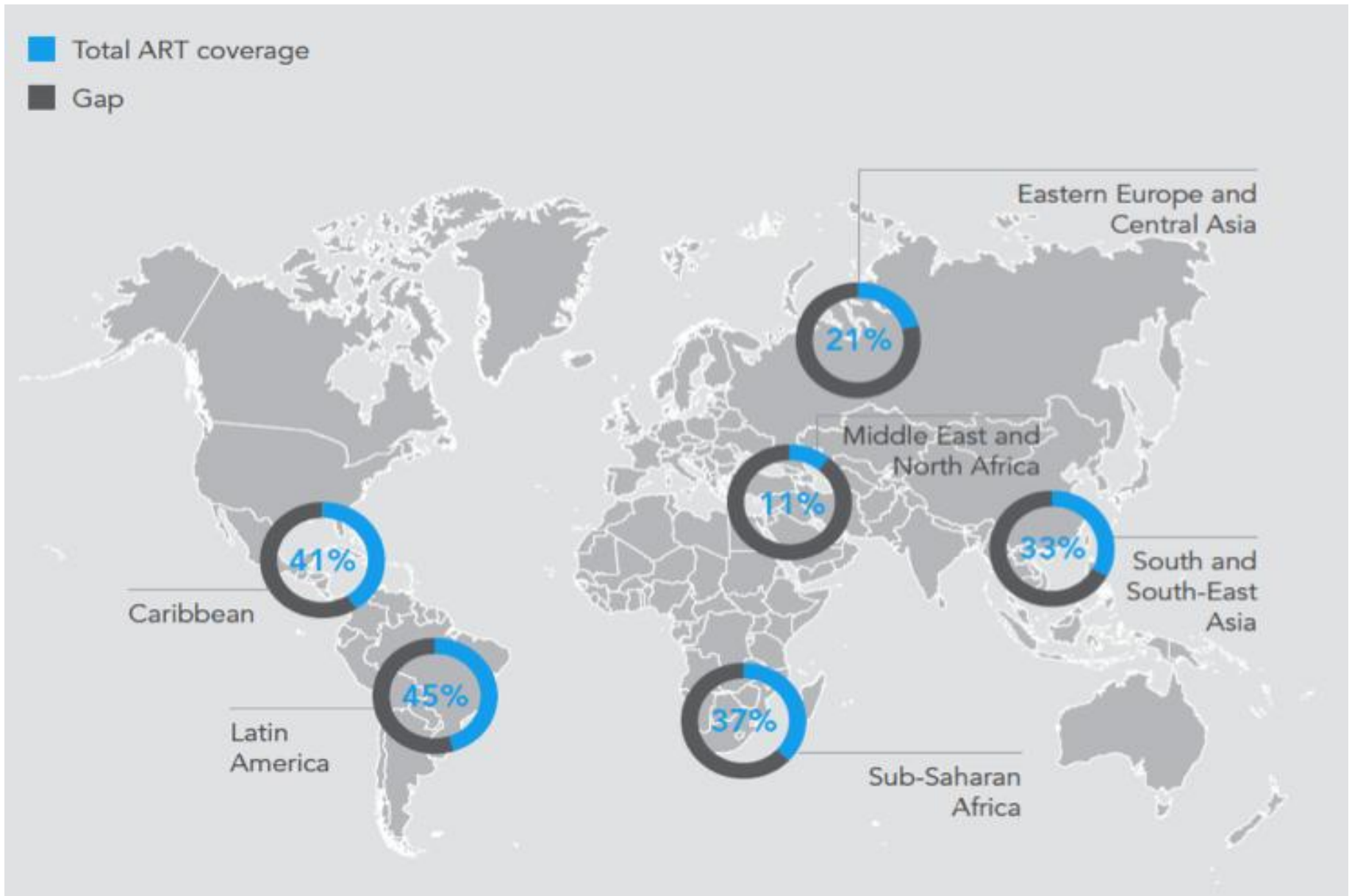
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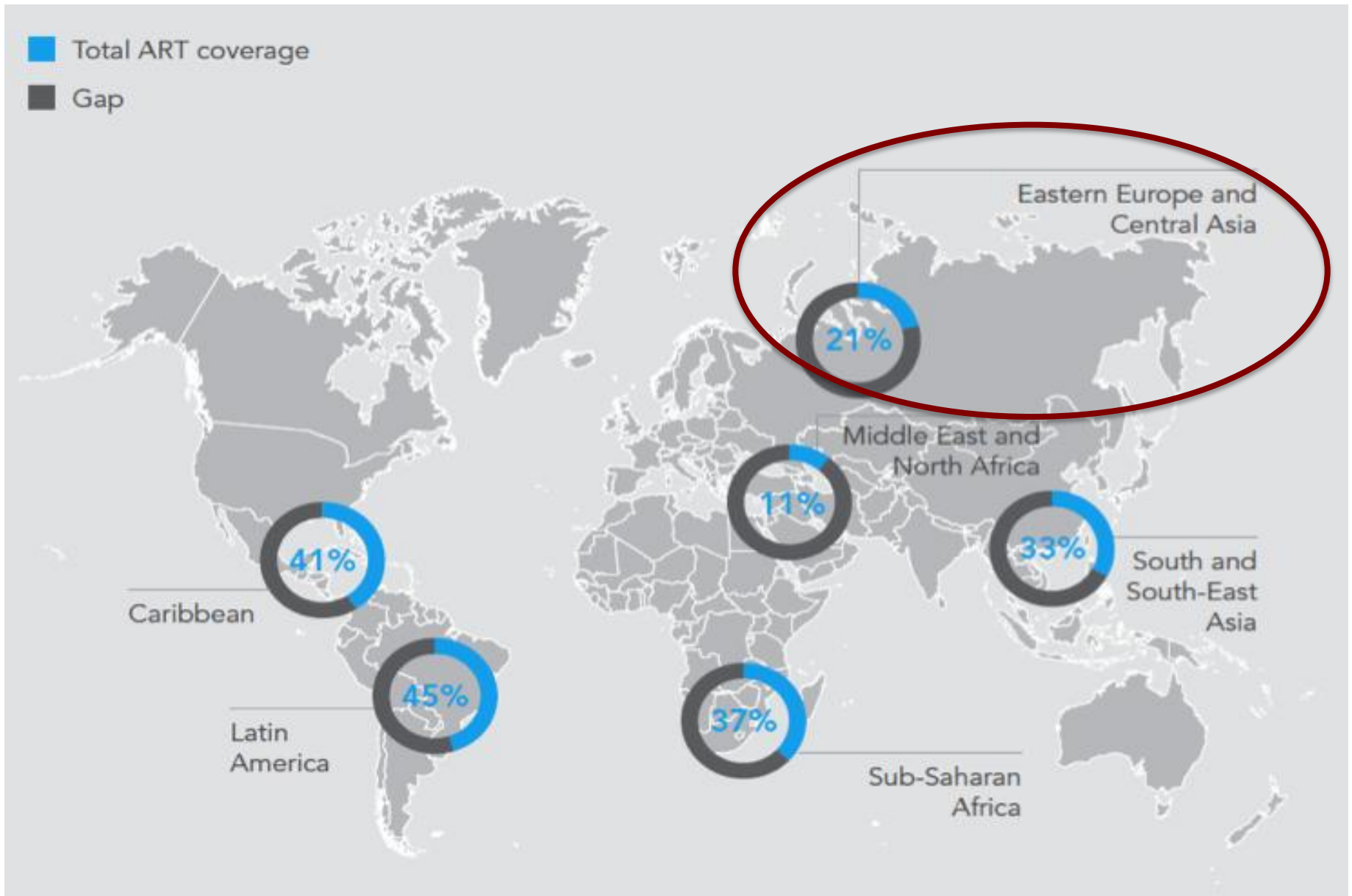
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# Very low ART coverage in low-middle income regions





# Very low ART coverage in low-middle income regions



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# *The* NEW ENGLAND JOURNAL *of* MEDICINE

ESTABLISHED IN 1812

AUGUST 11, 2011

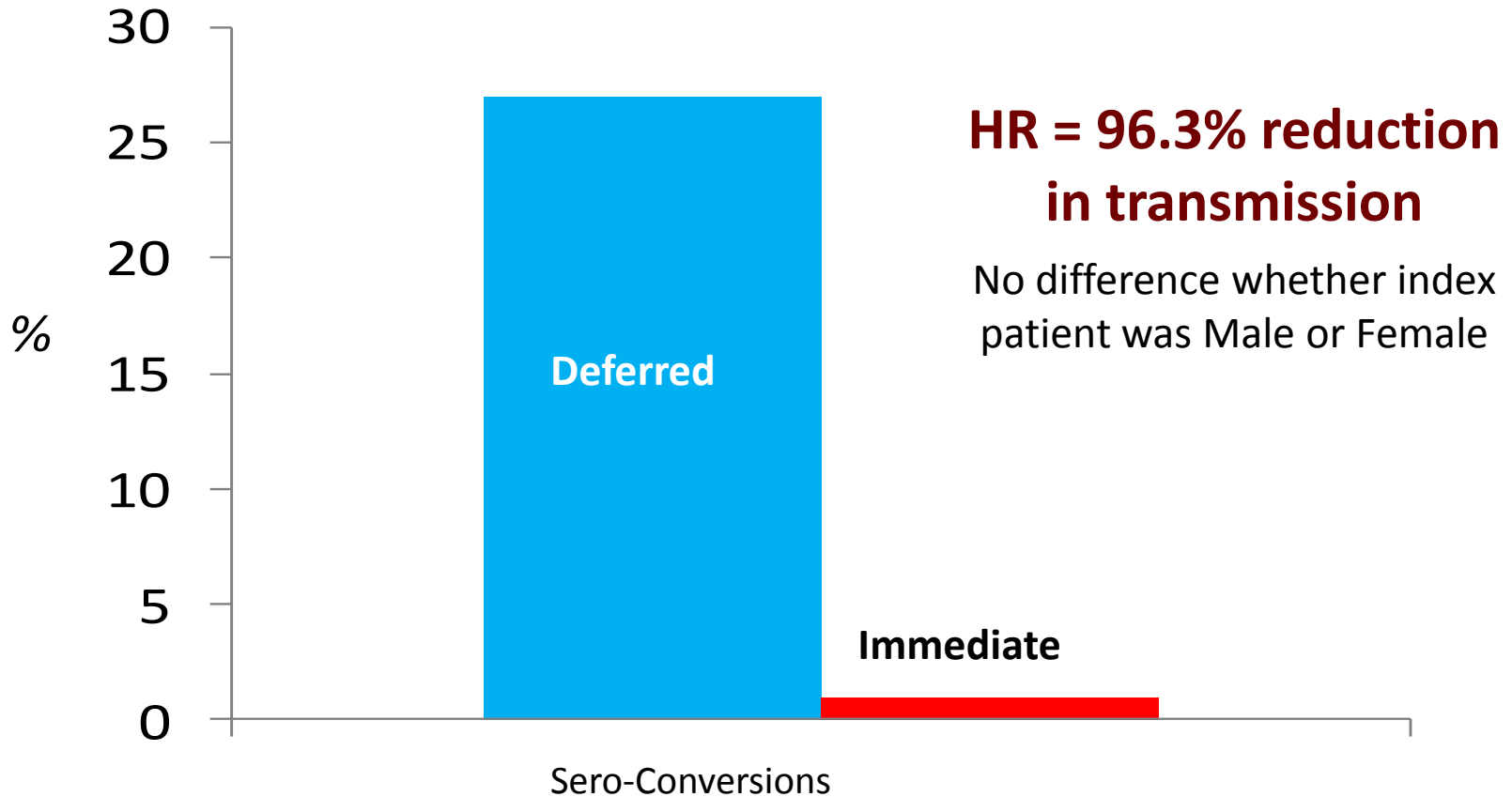
VOL. 365 NO. 6

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

Myron S. Cohen, M.D., Ying Q. Chen, Ph.D., Marybeth McCauley, M.P.H., Theresa Gamble, Ph.D.,  
Mina C. Hosseinipour, M.D., Nagalingeswaran Kumarasamy, M.B., B.S., James G. Hakim, M.D.,  
Johnstone Kumwenda, F.R.C.P., Beatriz Grinsztejn, M.D., Jose H.S. Pilotto, M.D., Sheela V. Godbole, M.D.,  
Sanjay Mehendale, M.D., Suwat Chariyalertsak, M.D., Breno R. Santos, M.D., Kenneth H. Mayer, M.D.,  
Irving F. Hoffman, P.A., Susan H. Eshleman, M.D., Estelle Piwowar-Manning, M.T., Lei Wang, Ph.D.,  
Joseph Makhema, F.R.C.P., Lisa A. Mills, M.D., Guy de Bruyn, M.B., B.Ch., Ian Sanne, M.B., B.Ch.,  
Joseph Eron, M.D., Joel Gallant, M.D., Diane Havlir, M.D., Susan Swindells, M.B., B.S., Heather Ribaudo, Ph.D.,  
Vanessa Elharrar, M.D., David Burns, M.D., Taha E. Taha, M.B., B.S., Karin Nielsen-Saines, M.D.,  
David Celentano, Sc.D., Max Essex, D.V.M., and Thomas R. Fleming, Ph.D., for the HPTN 052 Study Team\*

# HPTN 052

Immediate vs. Delayed ART in Sero-Discordant Couples

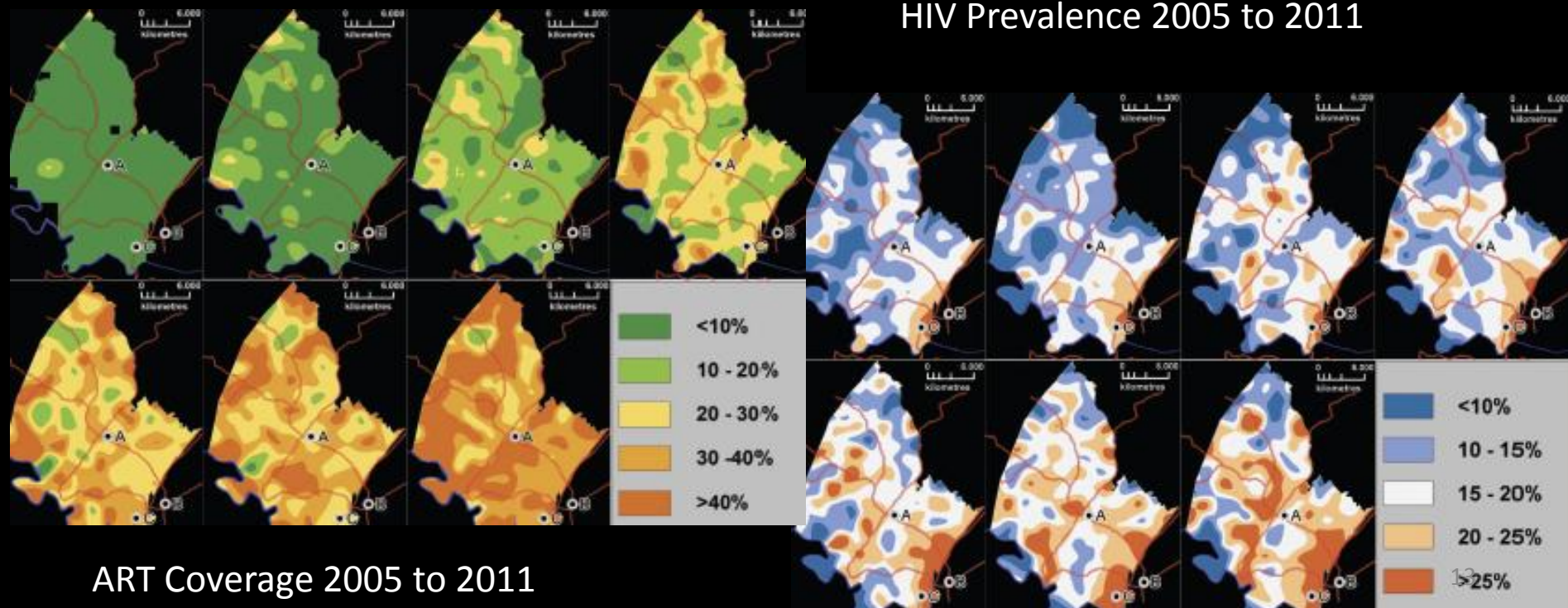


# High Coverage of ART Associated with Decline in Risk of HIV Acquisition in Rural KwaZulu-Natal, South Africa

Frank Tanser,<sup>1\*</sup> Till Bärnighausen,<sup>1,2</sup> Erofilo Grapsa,<sup>1</sup> Jaffer Zaidi,<sup>1</sup> Marie-Louise Newell<sup>1,3</sup>

SCIENCE VOL 339 22 FEBRUARY 2013

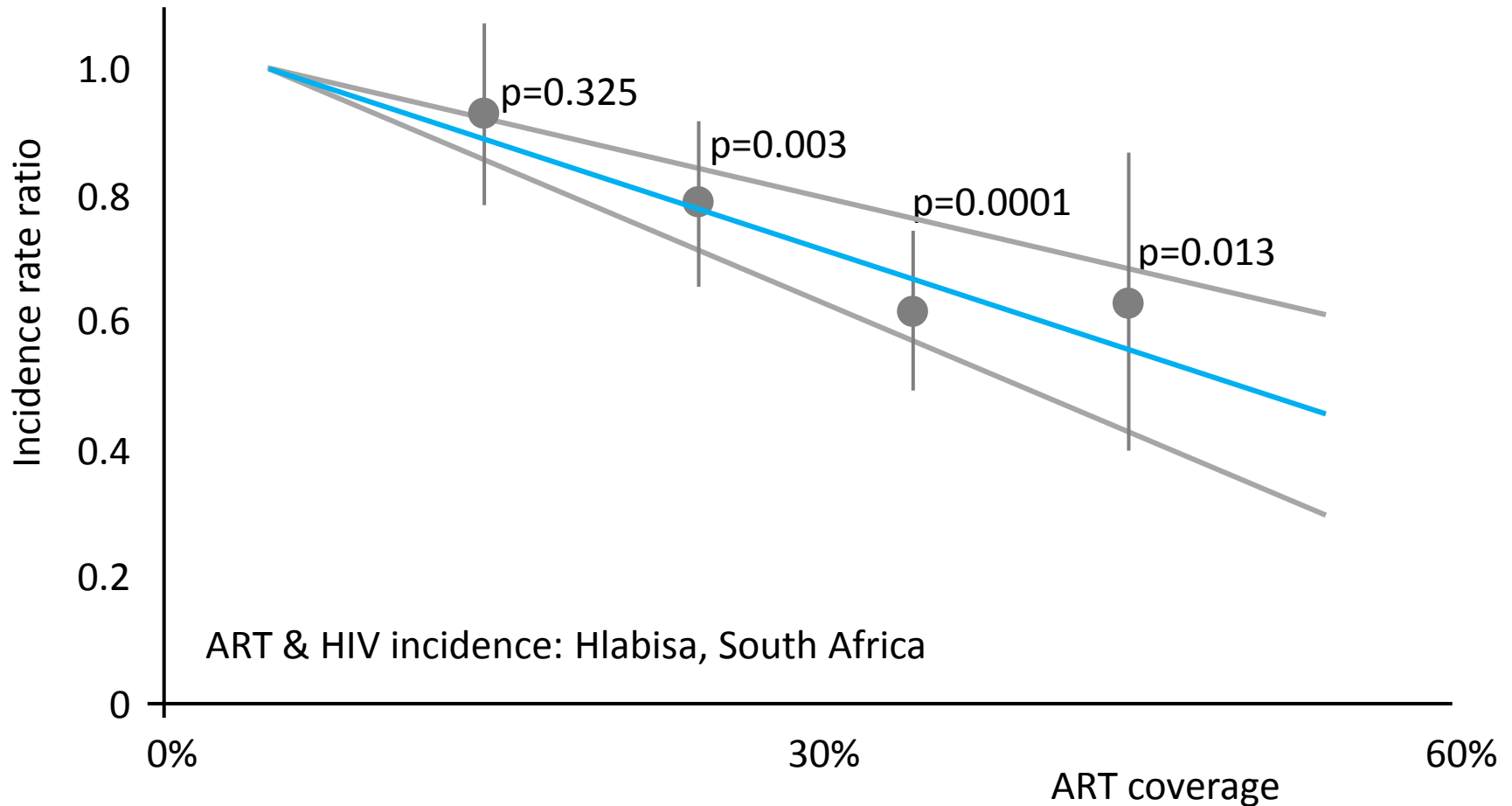
HIV Prevalence 2005 to 2011



ART Coverage 2005 to 2011

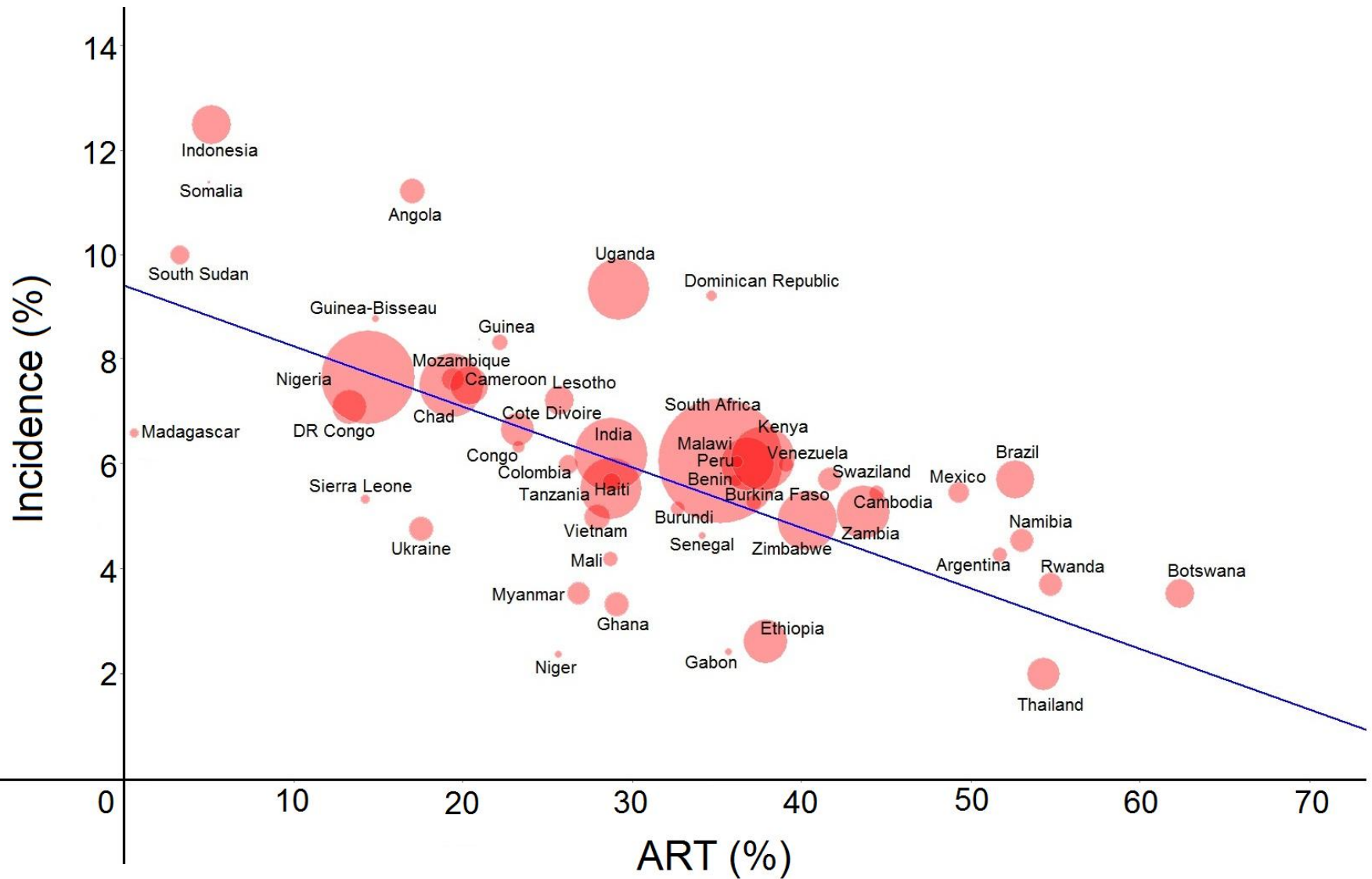
# Correlation between HIV treatment and incidence

1.1% (0.8%-1.4%) reduction in HIV incidence, for each 1.0% increase in treatment coverage.





# New HIV infections\* & ART Coverage



\* percentage growth

Modified from A. Hill et al. IAS 2014 [LBPE29]

# 90-90-90

An ambitious treatment target  
to help end the AIDS epidemic



# By 2020...

**90%**

**of all people  
living with HIV  
will know their  
HIV status**

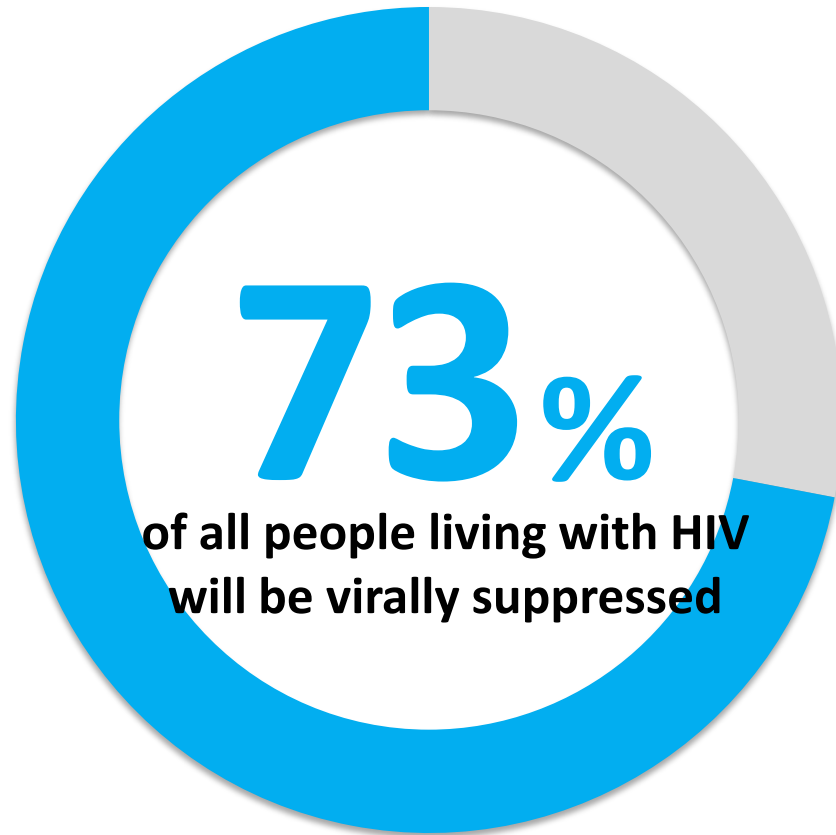
**90%**

**of all people  
diagnosed with  
HIV will receive  
sustained  
antiretroviral  
therapy.**

**90%**

**of all people  
receiving  
antiretroviral  
therapy will have  
durable  
suppression.**

# Expected result

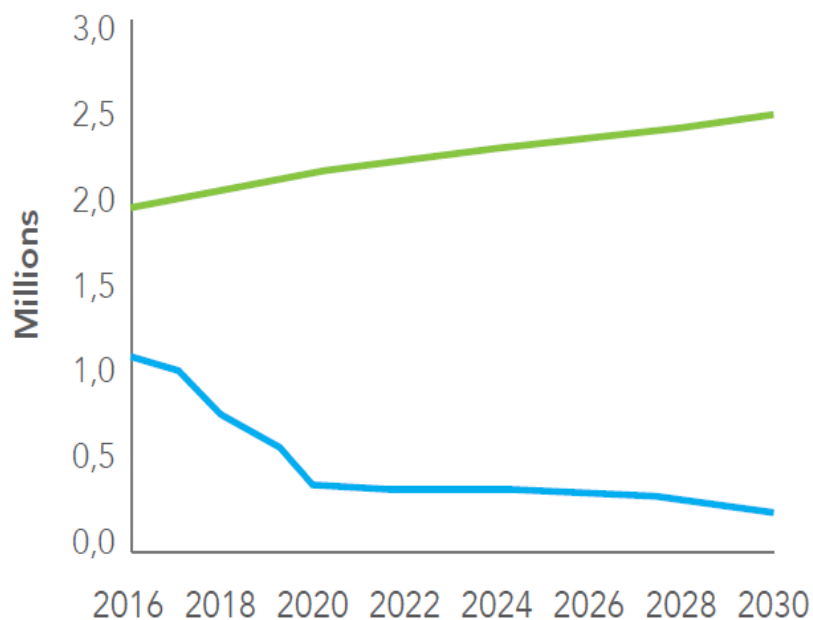


# Aim

“maximize the effectiveness of existing tools to virtually eliminate progression to AIDS, premature death and HIV transmission, and thereby transform the HIV/AIDS pandemic into a low level sporadic endemic.”

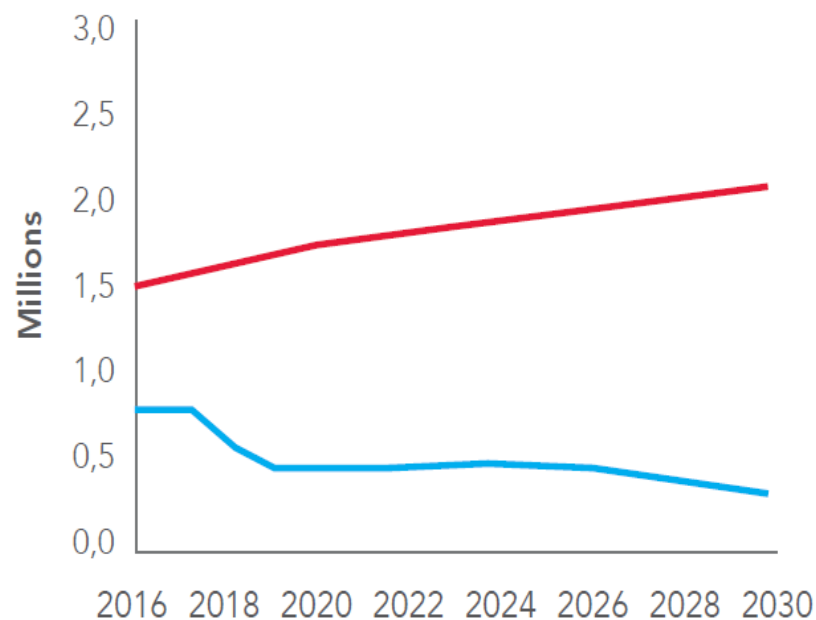
# Potential impact, 2016-2030

New HIV infections



— 2020 Goal — Constant Coverage

AIDS-related deaths



— 2020 Goal — Constant Coverage

Source: The Gap Report, UNAIDS, 2014.

# HIV / AIDS

## The success story

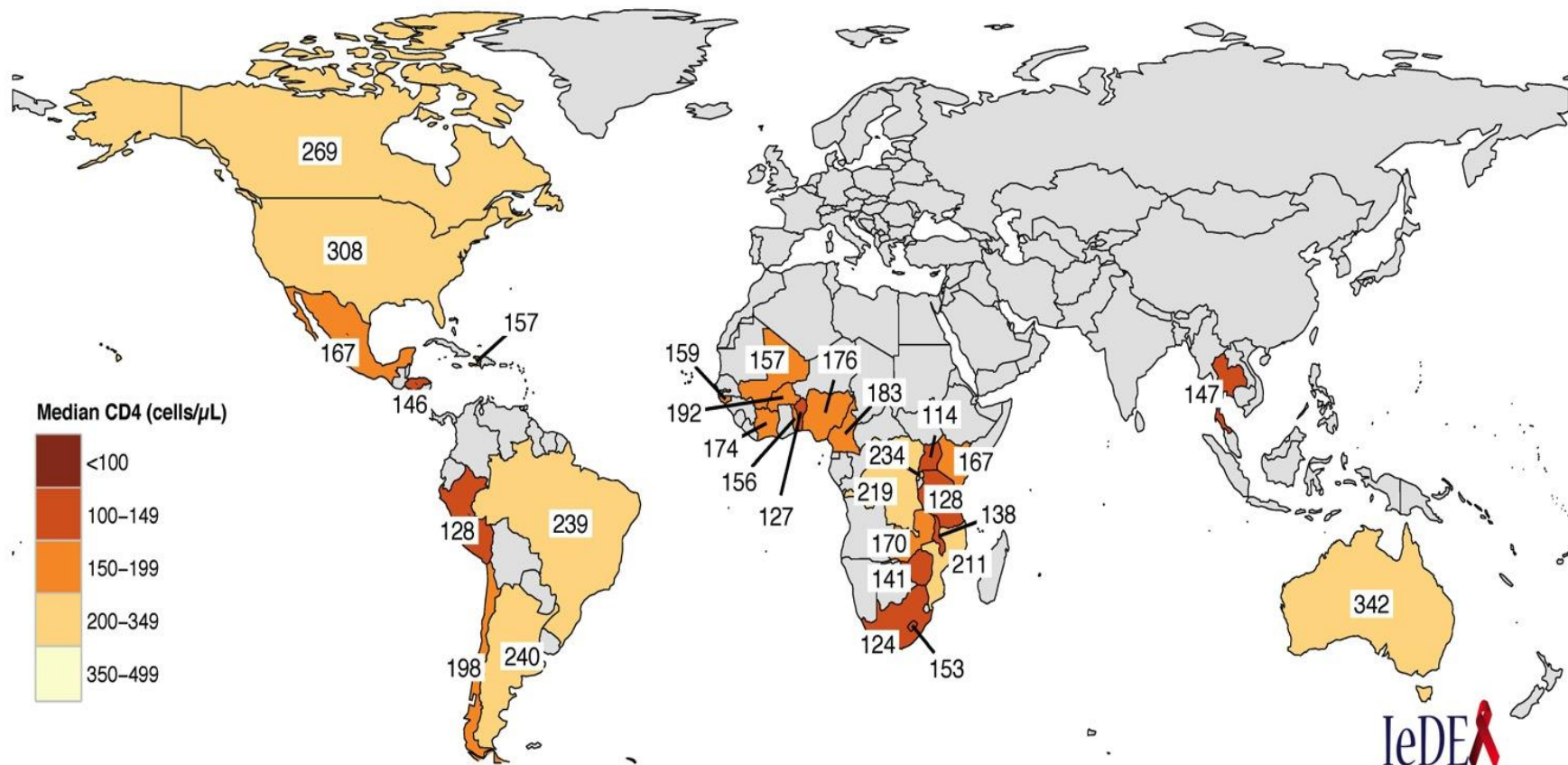
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# Treatment initiation late in the large majority of countries

Median CD4 count at start in 2010



# 2013 WHO ART Guidelines in Adults

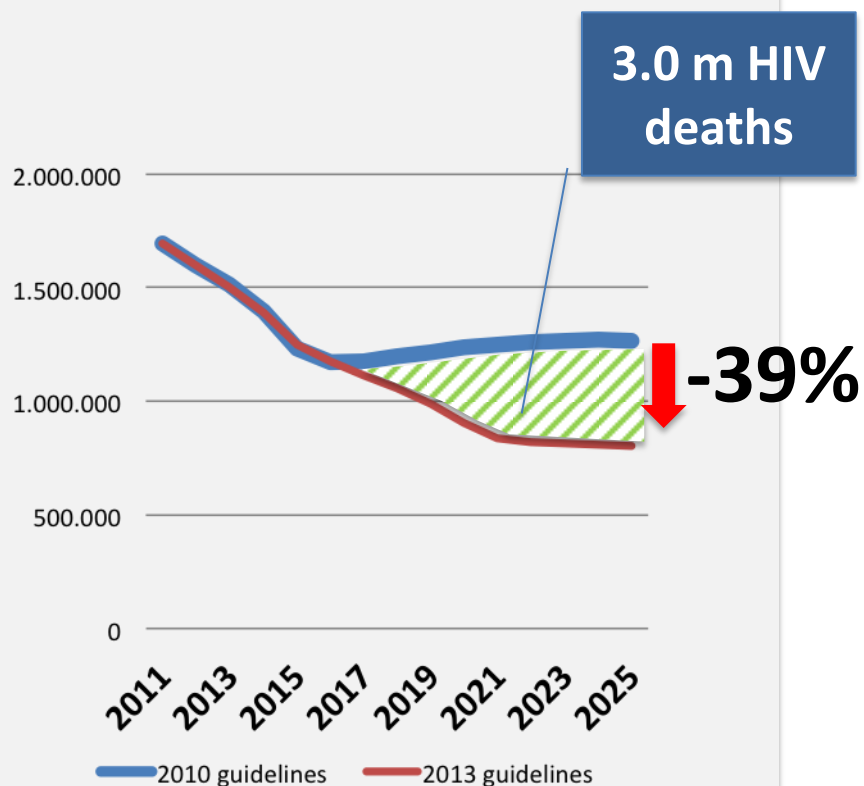
Topic	2002	2003	2006	2010	2013
<b>When to start</b>	CD4 $\leq$ 200	CD4 $\leq$ 200	CD4 $\leq$ 200 - Consider 350 - CD4 $\leq$ 350 for TB	CD4 $\leq$ 350 - Irrespective CD4 for TB and HBV	<b>CD4 <math>\leq</math> 500</b> - Irrespective CD4 for TB, HBV, PW and SDC - <b>CD4 <math>\leq</math> 350 as priority</b>
Earlier initiation					
<b>1<sup>st</sup> Line</b>	8 options - AZT preferred	4 options - AZT preferred	8 options - AZT or TDF preferred - d4T dose reduction	6 options & FDCs - AZT or TDF preferred - d4T phase out	<b>2 options &amp; FDCs</b> - TDF and EFV preferred across all populations
Simpler treatment					
<b>2<sup>nd</sup> Line</b>	Boosted and non-boosted PIs	Boosted PIs - IDV/r LPV/r, SQV/r	Boosted PI - ATV/r, DRV/r, FPV/r LPV/r, SQV/r	Boosted PI - Heat stable FDC: ATV/r, LPV/r	<b>Boosted PIs</b> - Heat stable FDC: ATV/r, LPV/r
Less toxic, more robust regimens					
<b>3<sup>rd</sup> Line</b>	None	None	None	DRV/r, RAL, ETV	<b>DRV/r, RAL, ETV</b>
<b>Viral Load Testing</b>	No	No (Desirable)	Yes (Tertiary centers)	Yes (Phase in approach)	<b>Yes</b> (preferred for monitoring, use of PoC, DBS)
Better monitoring					

*An important step towards the global alignment of the HIV standard of care*

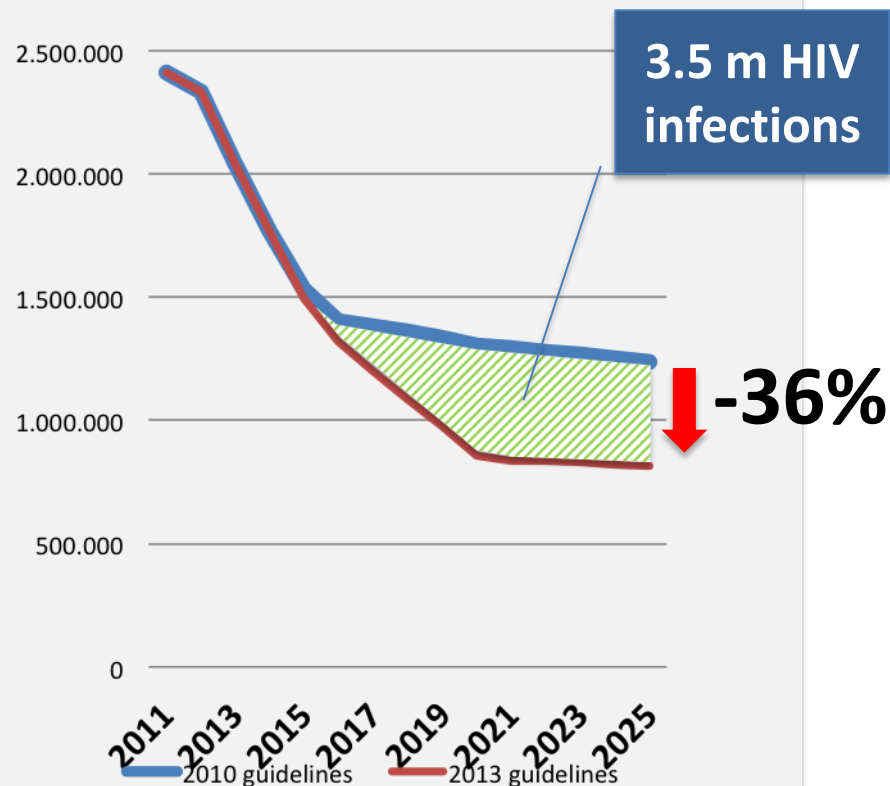
## HIV TREATMENT

## 03 | Looking ahead: Enhancing impact on mortality and incidence

Annual HIV related deaths



Annual new HIV infections

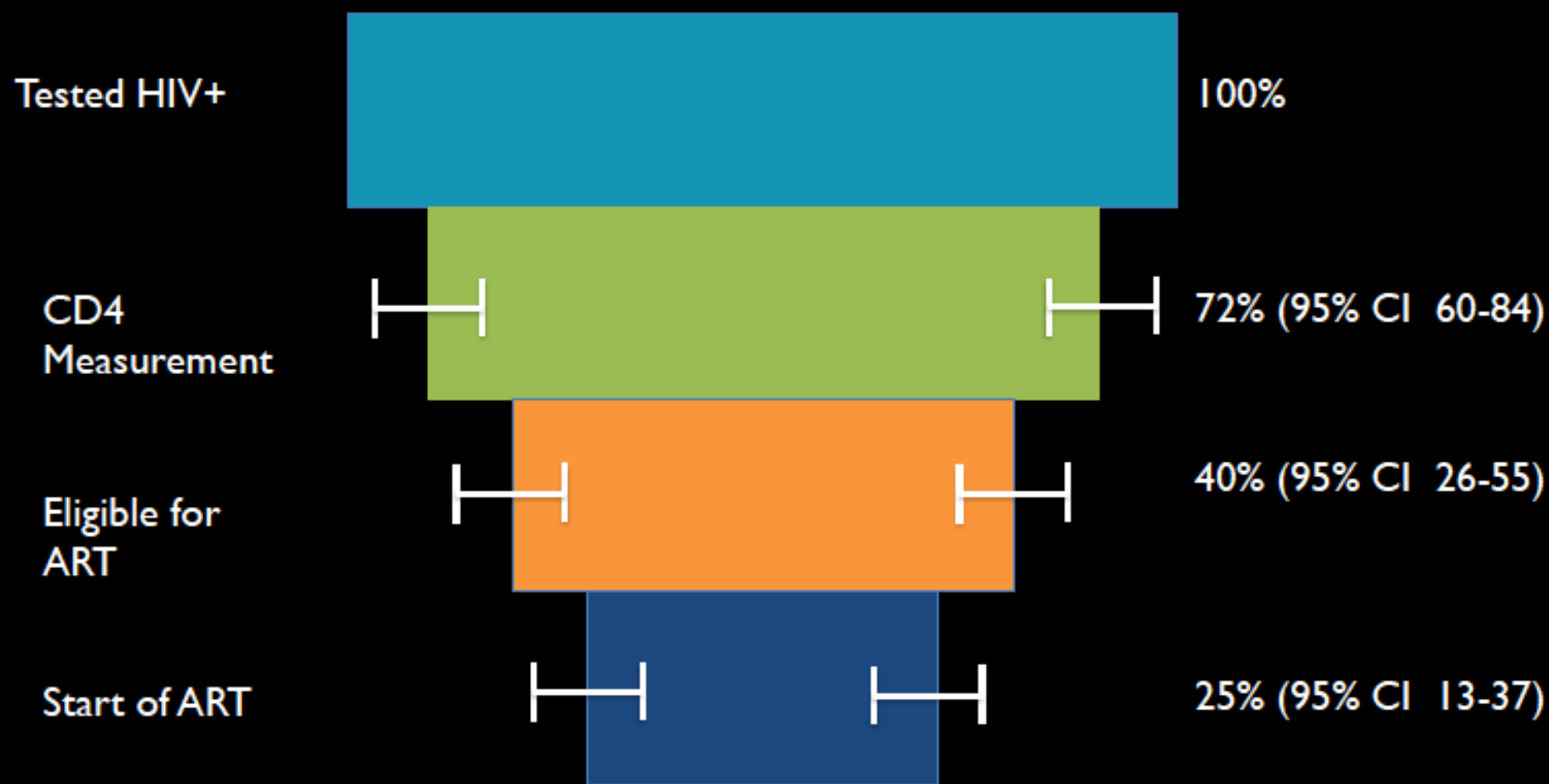


Source: Special analysis conducted by Futures Institute, 2013



# HIV Care Cascade in Sub Saharan Africa

29 studies included



Of 100 HIV+ patients, on average, 25 started ART.

Of ART-eligible patients 62% (95% CI 55.2-70.7%) started ART.

# Large disparities in HIV treatment cascades between European and high-income countries: analysis of break points.

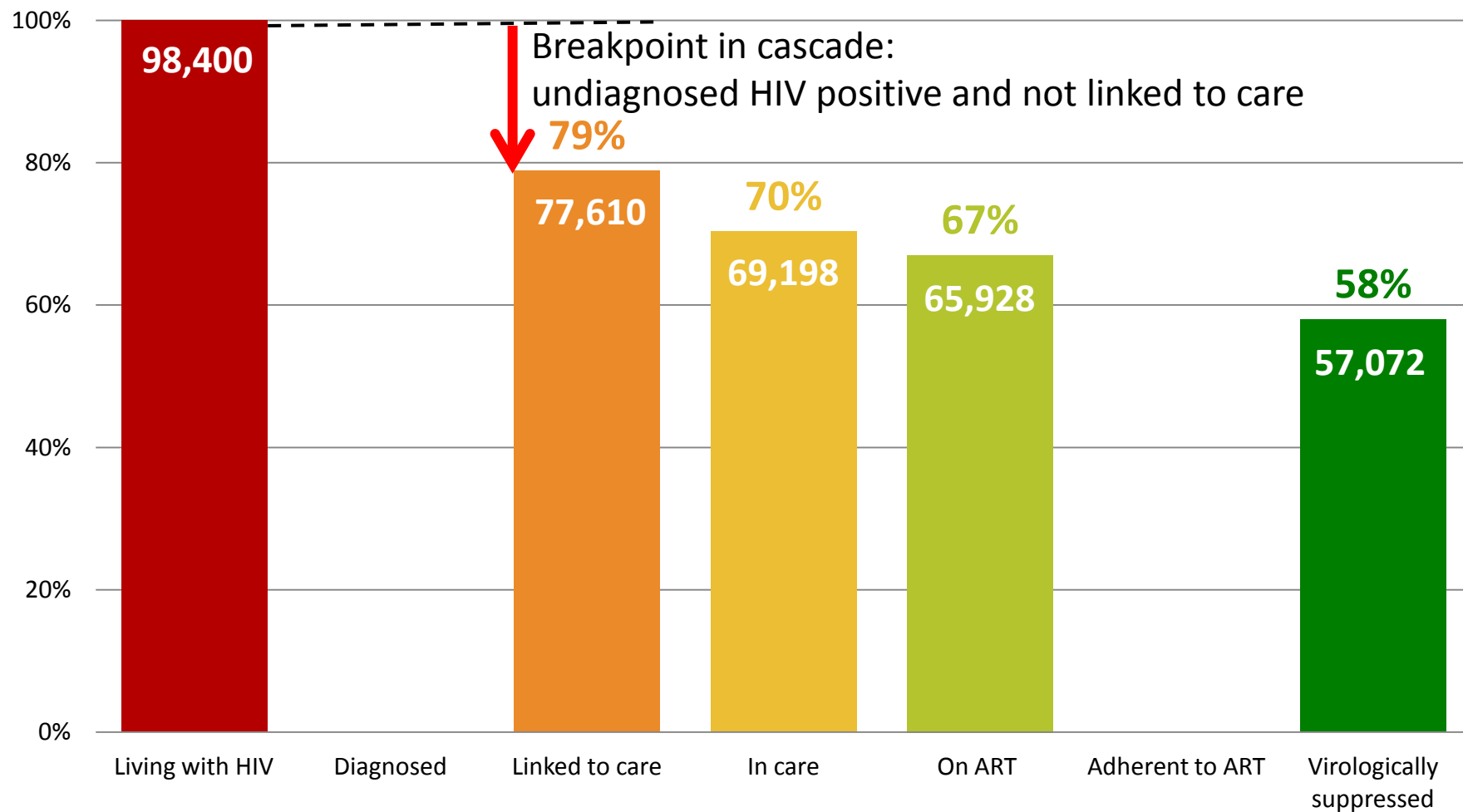


Alice Raymond<sup>1</sup>; Andrew Hill<sup>2</sup>; Anton Pozniak<sup>3</sup>

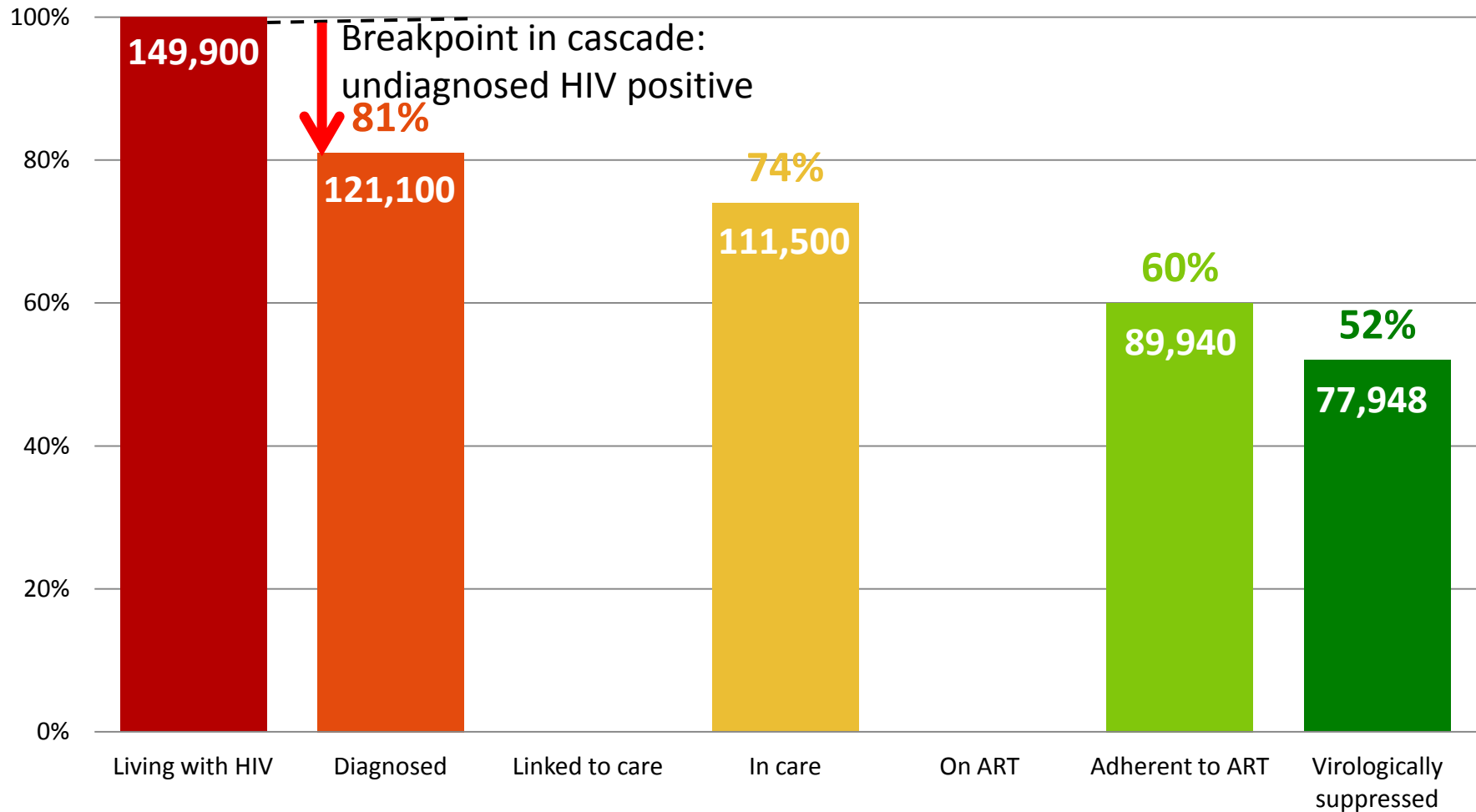
<sup>1</sup>Imperial College London, Department of Public Health, London, United Kingdom; <sup>2</sup>Liverpool University, Molecular and Clinical Pharmacology, Liverpool, United Kingdom; <sup>3</sup>Chelsea and Westminster Hospital, St Stephens Centre, London, United Kingdom

**HIV Drug Therapy Meeting, Glasgow 2014, UK [O-237 ]**

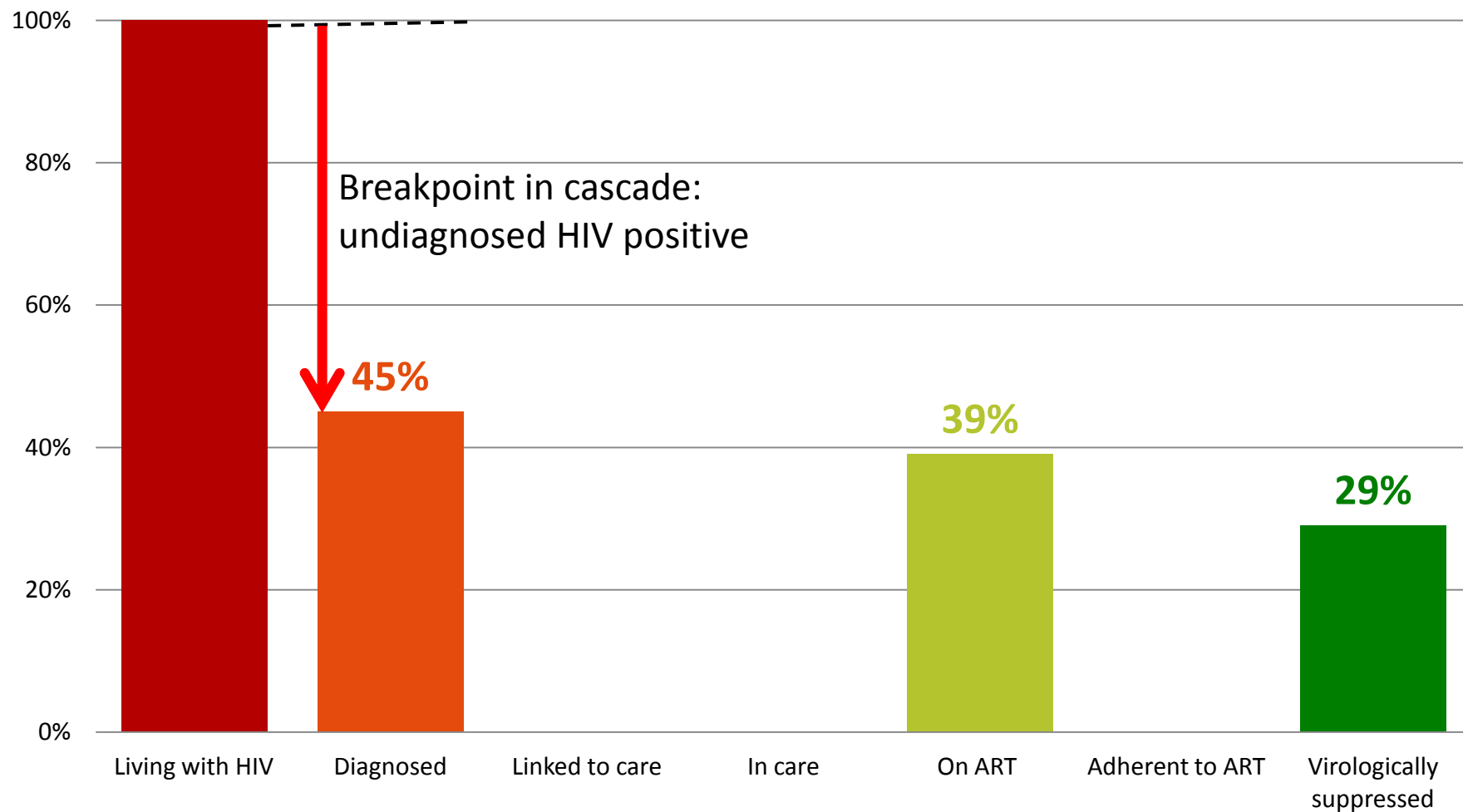
# Cascade of HIV care – United Kingdom



# Cascade of HIV care – France



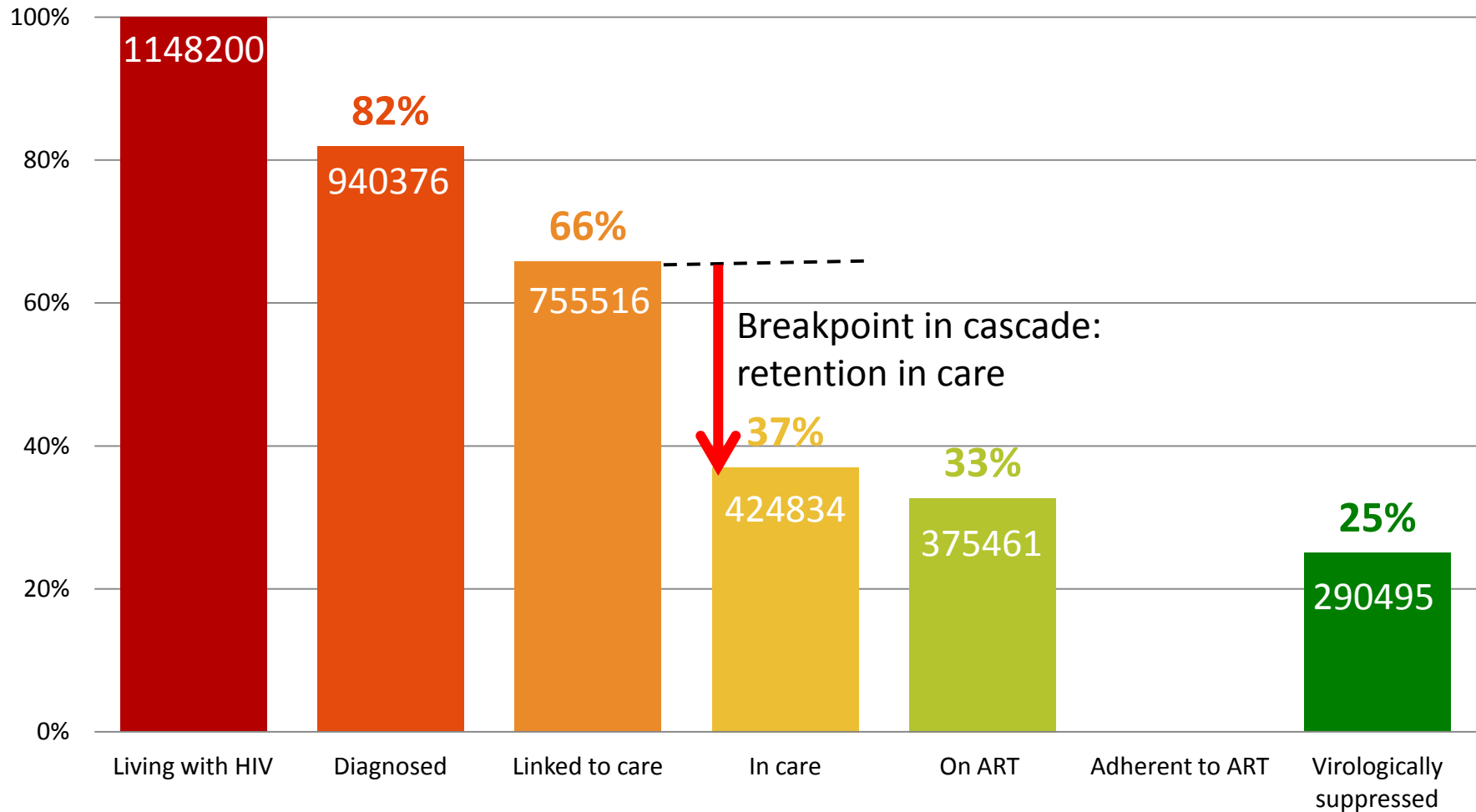
# Cascade of HIV care – Sub-Saharan Africa



Reference: UNAIDS Gap Report 2014

<http://www.unaids.org/en/resources/documents/2014/name,97466,en.asp>

# Cascade of HIV care – United States



Reference: Hall et al. *JAMA internal medicine* 2013; 173(14) 1337-1344.

Centres for Disease Control Fact sheet, December 2013

<http://www.cdc.gov/nchhstp/newsroom/docs/hivfactsheets/todaysepidemic-508.pdf>

The 90-90-90 target:

will we be able to get there ?

## Challenges for ART for Prevention



Unaware of HIV Status



Late Diagnosis of HIV Infection



Failure of HIV-Positive Patients to Link to Care



Late Initiation of ART



Inability to Achieve and Maintain Viral Suppression

**Figure 1.** Challenges for antiretroviral therapy (ART) for prevention of human immunodeficiency virus (HIV) transmission.



# Testing

- **Know your epidemic !**
- *Test the right people:*
  - *Train how to recognize “signature” diseases & conditions*
  - *Focus on key populations*
- *Community based testing / Home-based self-testing*
- *oral swab / 4<sup>o</sup> generation assays / dried blood spots*
- *De-stigmatize / inform /*
- *Human rights*

# When to start: to which direction we might be going....

Estimated millions of people eligible for ART in lower & middle-income countries in 2011

11

15

23

>25

32

1

$CD4 \leq 200$

Recommended  
Since 2002

2

$CD4 \leq 350$

+

3

$CD4 \leq 350$

+

*Expanded CD4  
independent  
conditions*

4

$CD4 \leq 500$

5

Test  
&  
Treat

all  
“detected”  
HIV+

## **A word of caution....**

**...it will not be easy to find the right balance  
(and the supporting evidence)  
to reconcile  
the Public Health Benefit  
with the Individual Benefit**

The bottom line:  
new ambitious targets require **innovations** across  
the continuum of care



**INNOVATION for drugs, diagnostics & service delivery:**

- Rapid diagnostics for HIV, CD4, and viral load testing (PoC)
- Simplified service delivery and care packages that improve the leaky cascade (including community support)
- Better first, second and third line regimens (new FDCs)

# HIV / AIDS

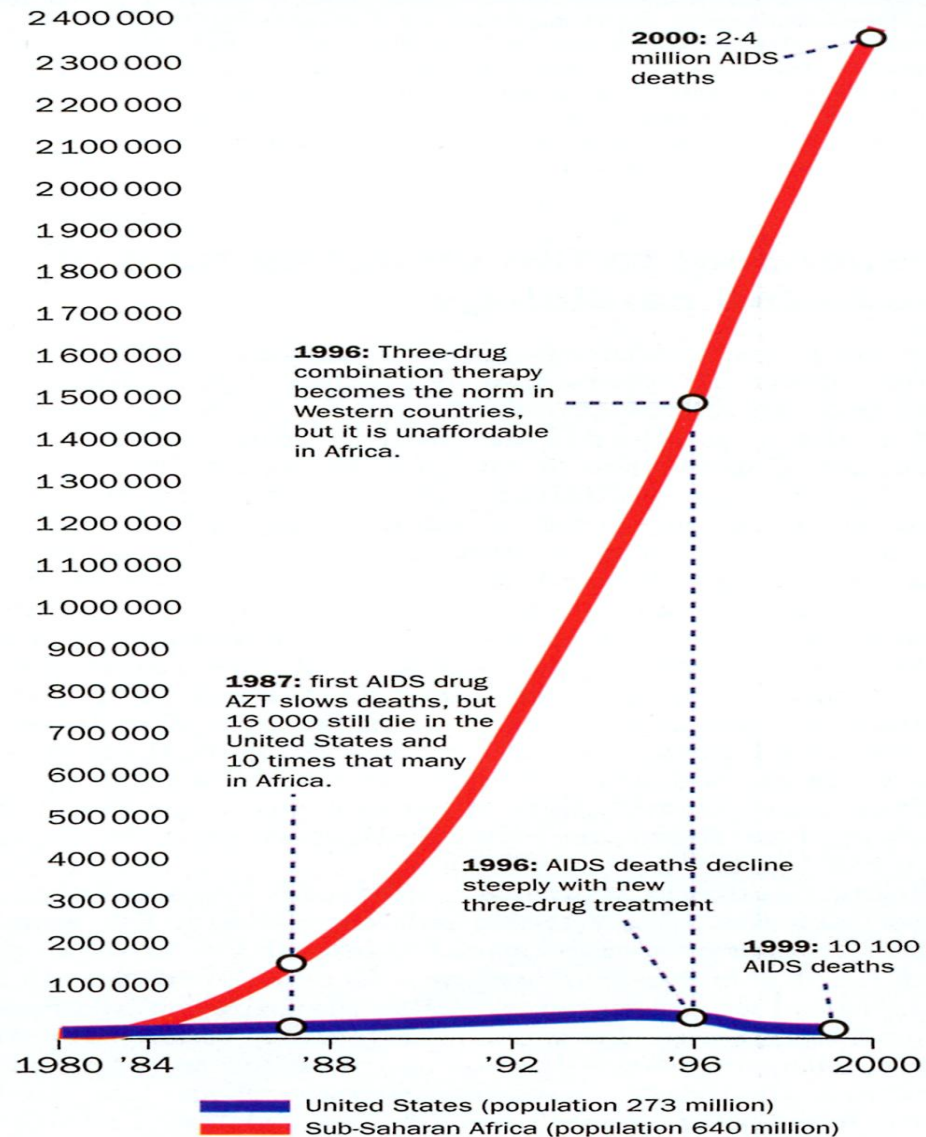
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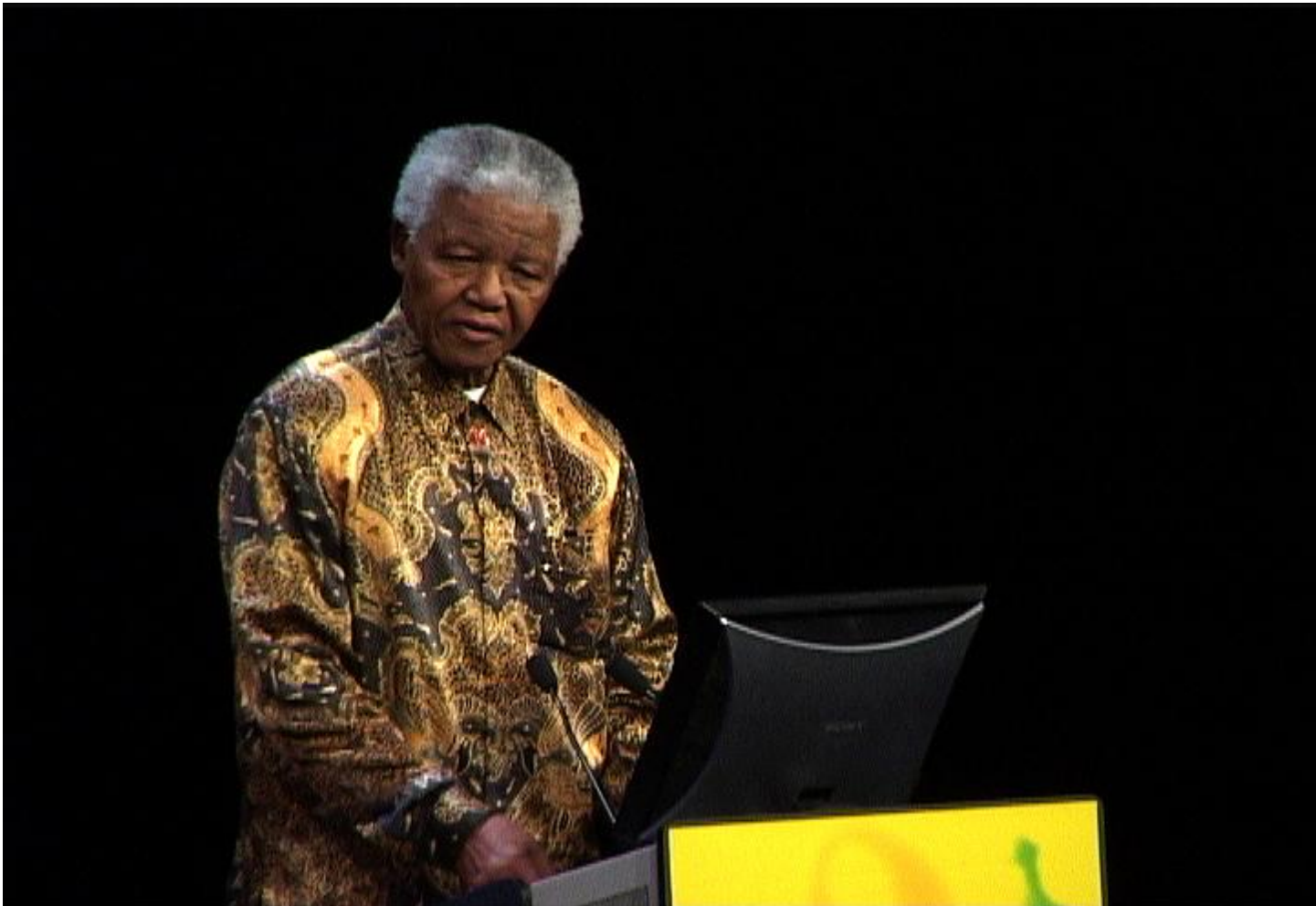
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## Annual AIDS deaths since 1982



## World AIDS Conference DURBAN, 2000





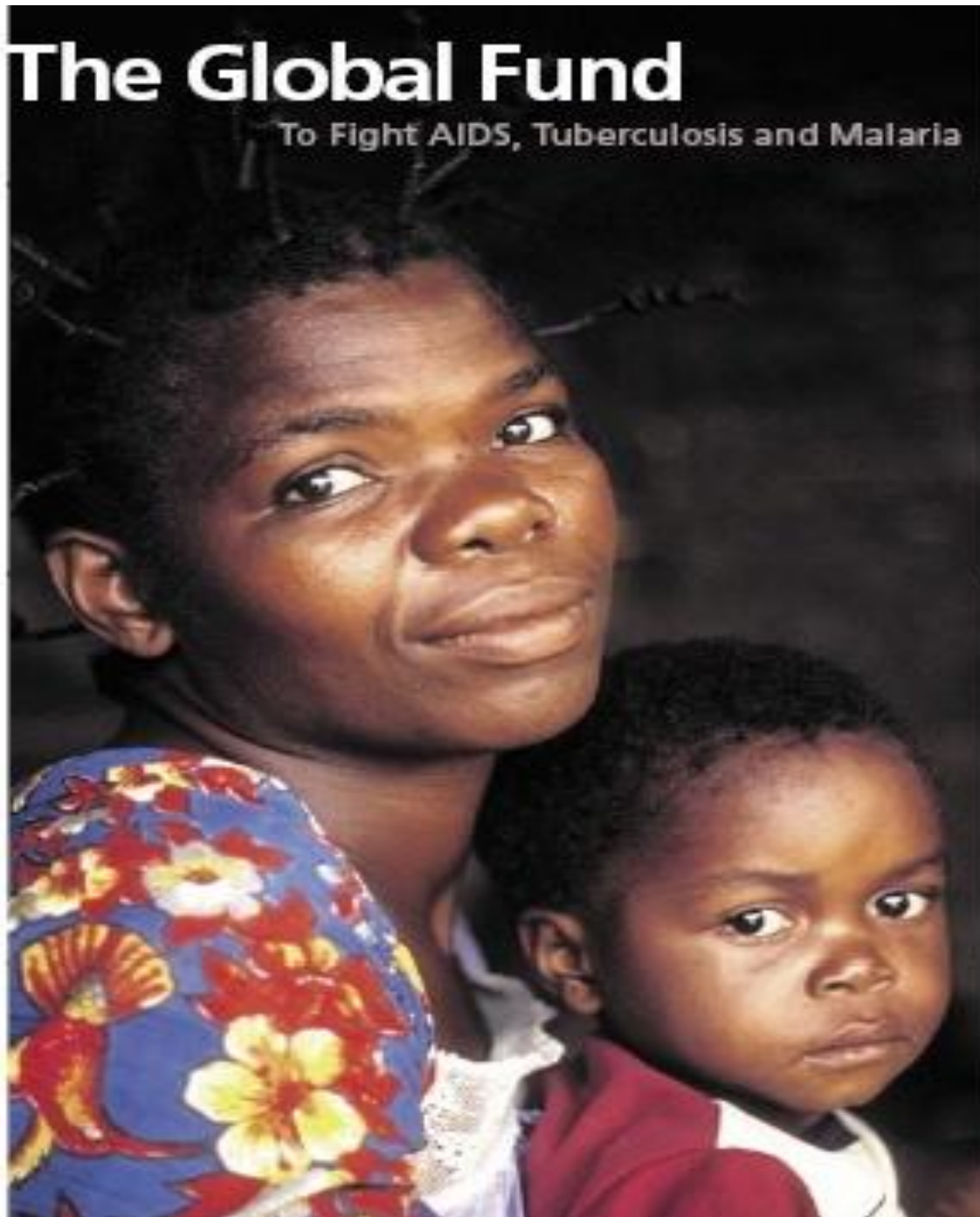




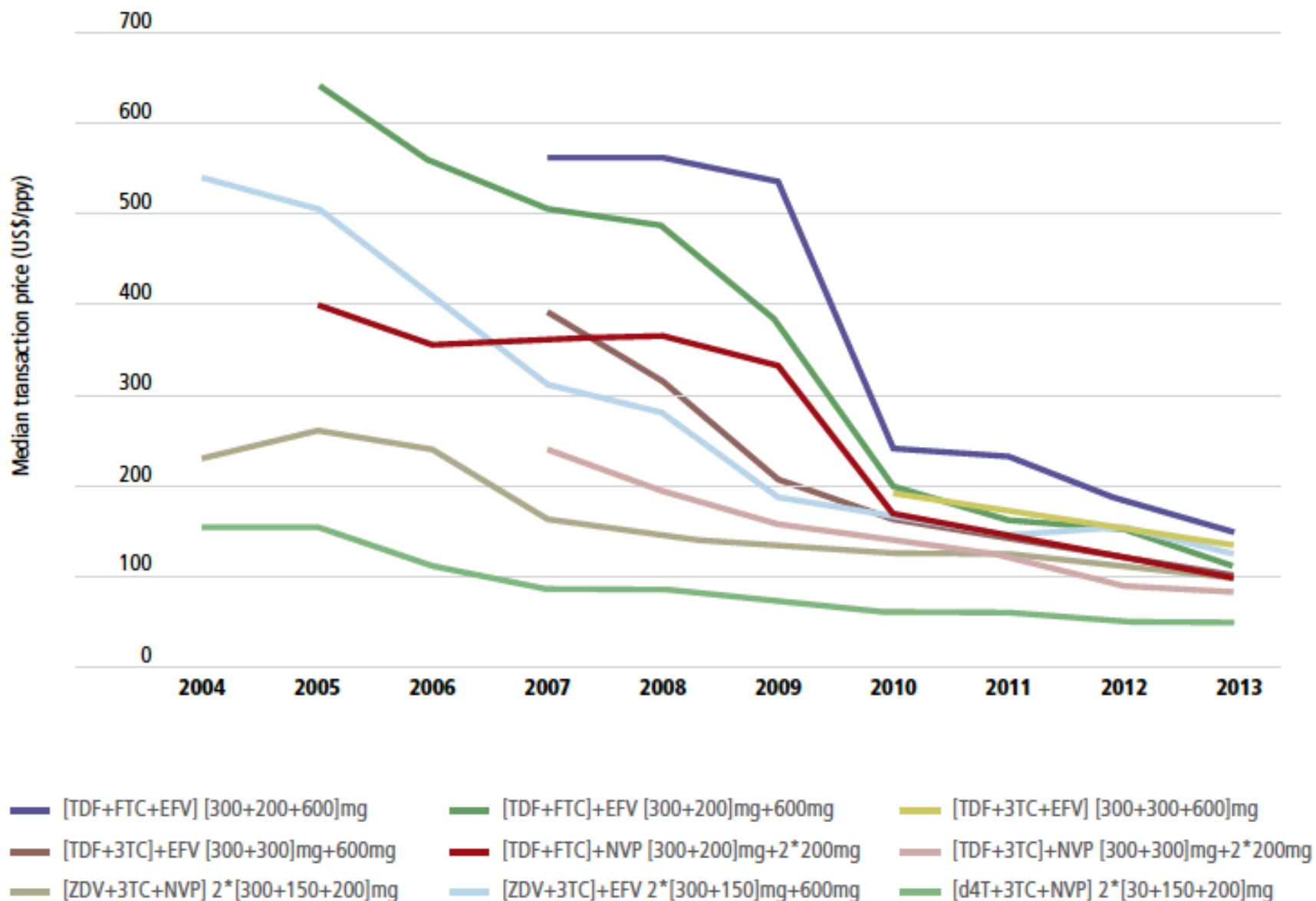


# The Global Fund

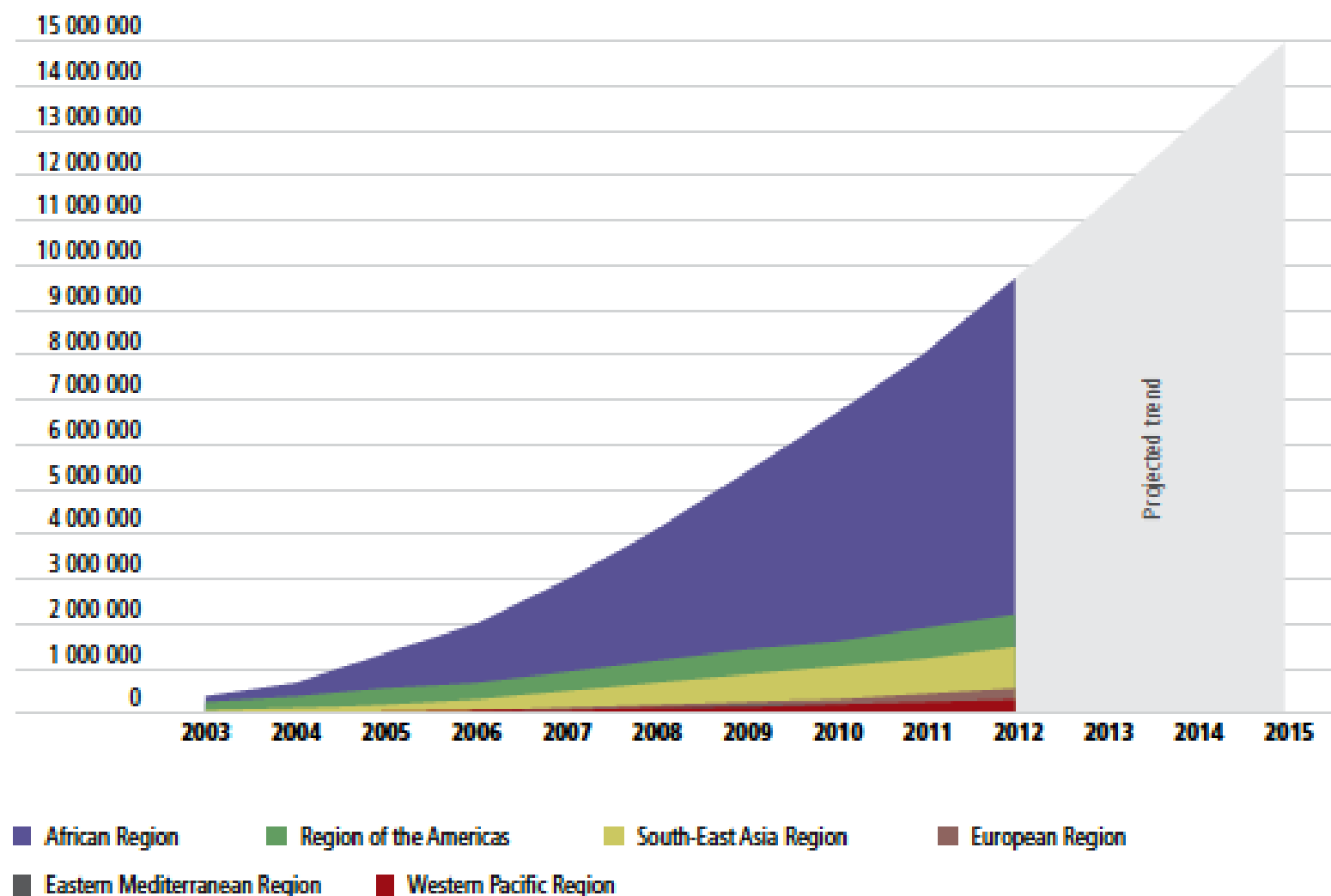
To Fight AIDS, Tuberculosis and Malaria



**Fig. 14. Median prices of WHO preferred first-line regimens per patient year, in US\$, in low- and middle-income countries, 2004-2013**

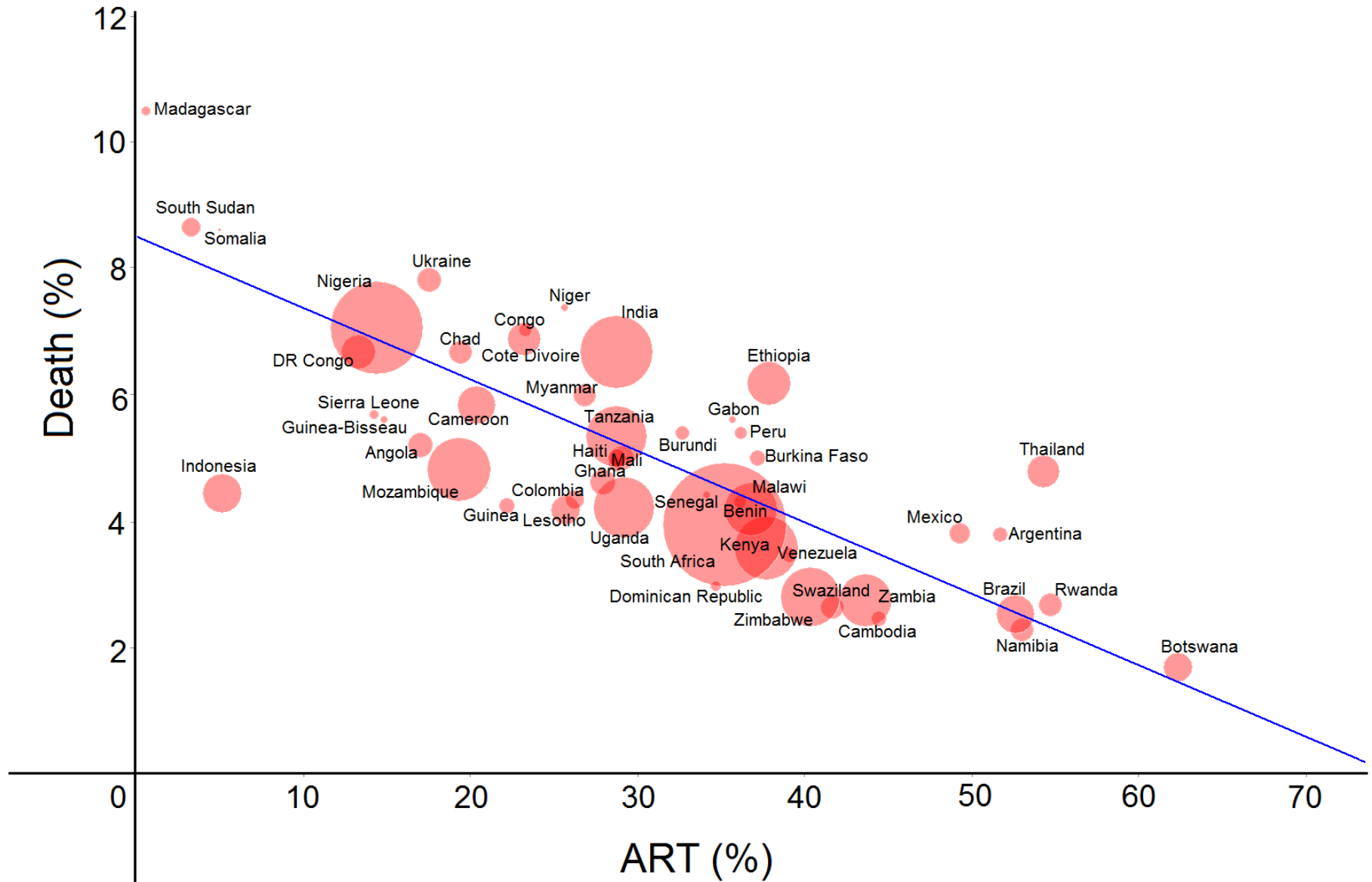


**Fig. 8. Actual and projected numbers of people receiving antiretroviral therapy in low- and middle-income countries, globally and by WHO Region, 2003–2015**



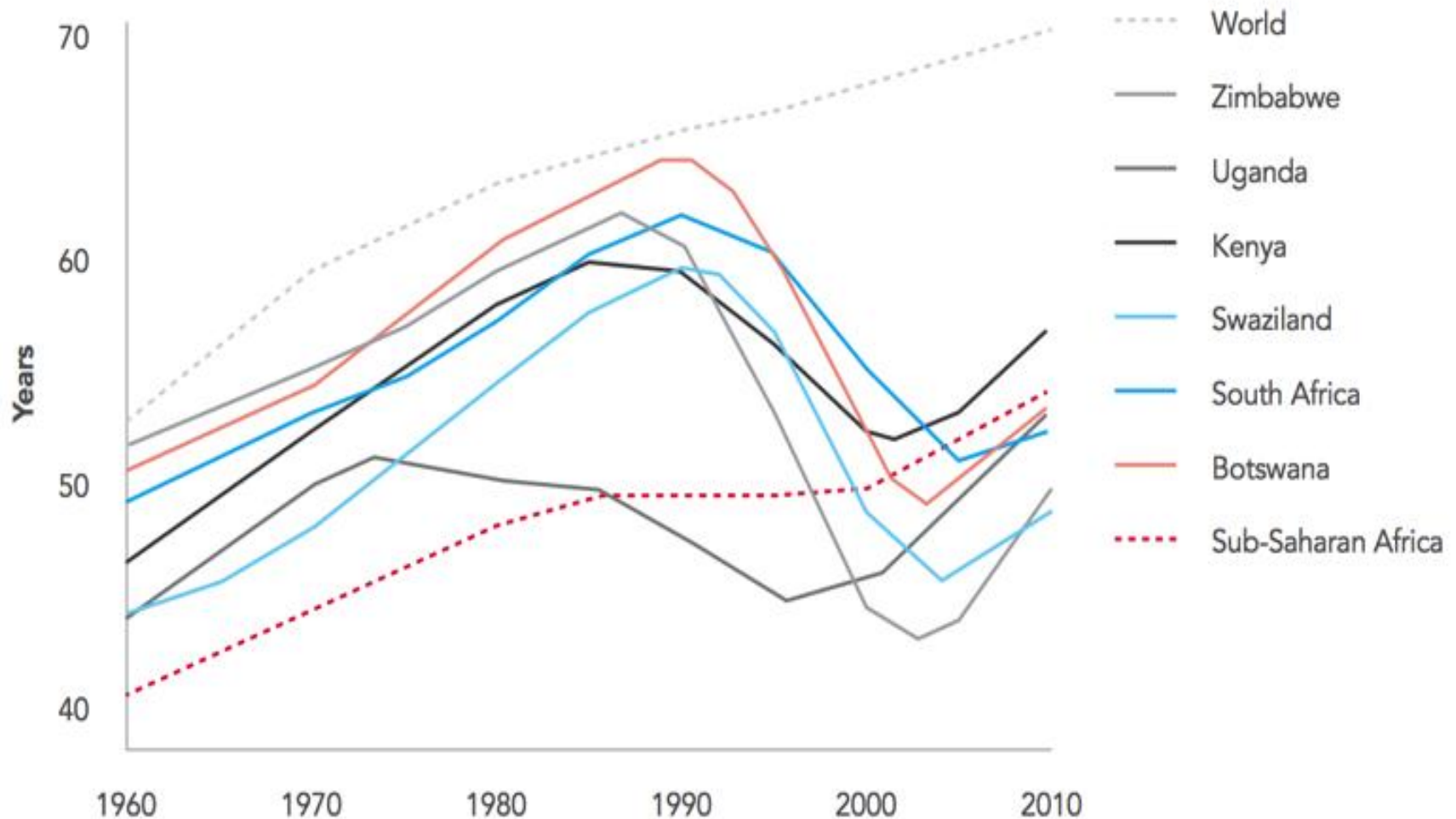
Source: 2013 Global AIDS Response Progress Reporting (WHO/UNICEF/UNAIDS).

# Mortality & ART Coverage

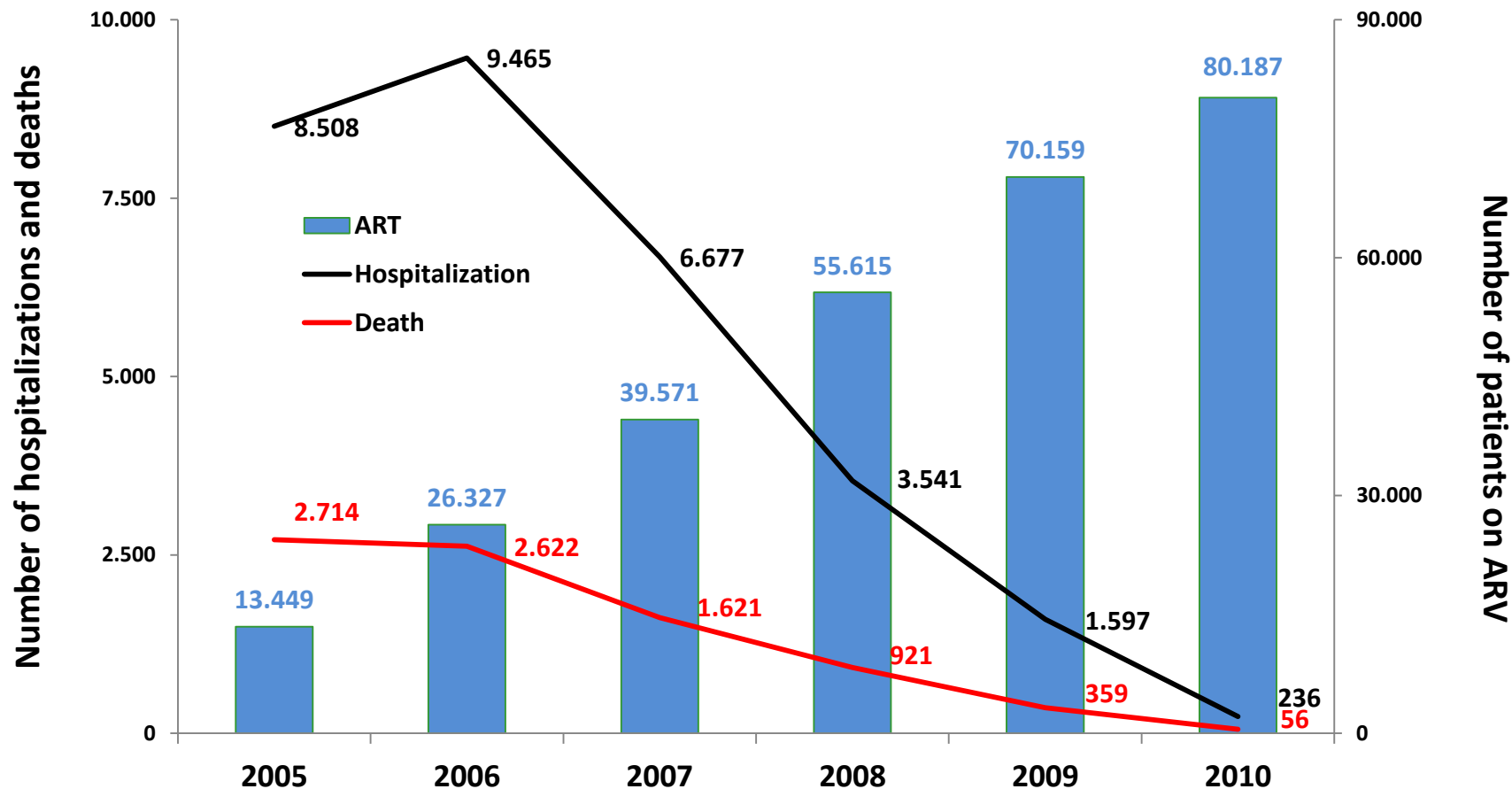


Modified from A. Hill et al. IAS 2014 [LBPE29]

# At the country-level, the HIV response is already having a dramatic impact on life expectancy

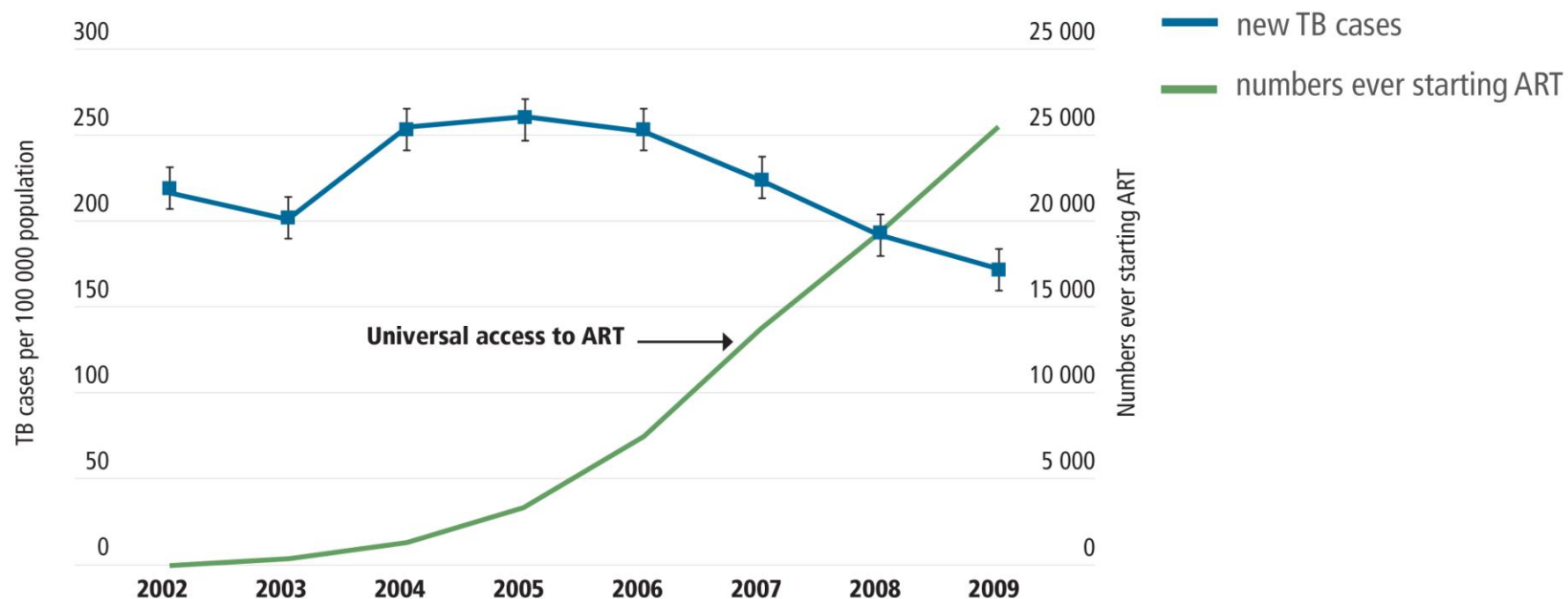


# HIV: from numbers to population coverage and impact, Namibia



## 02 | Impact: Notification of new cases of TB in relation to the scaling up of ART in Malawi

Notification of new cases of TB in relation to the scaling up of antiretroviral therapy in Thyolo District, Malawi, 2002–2009



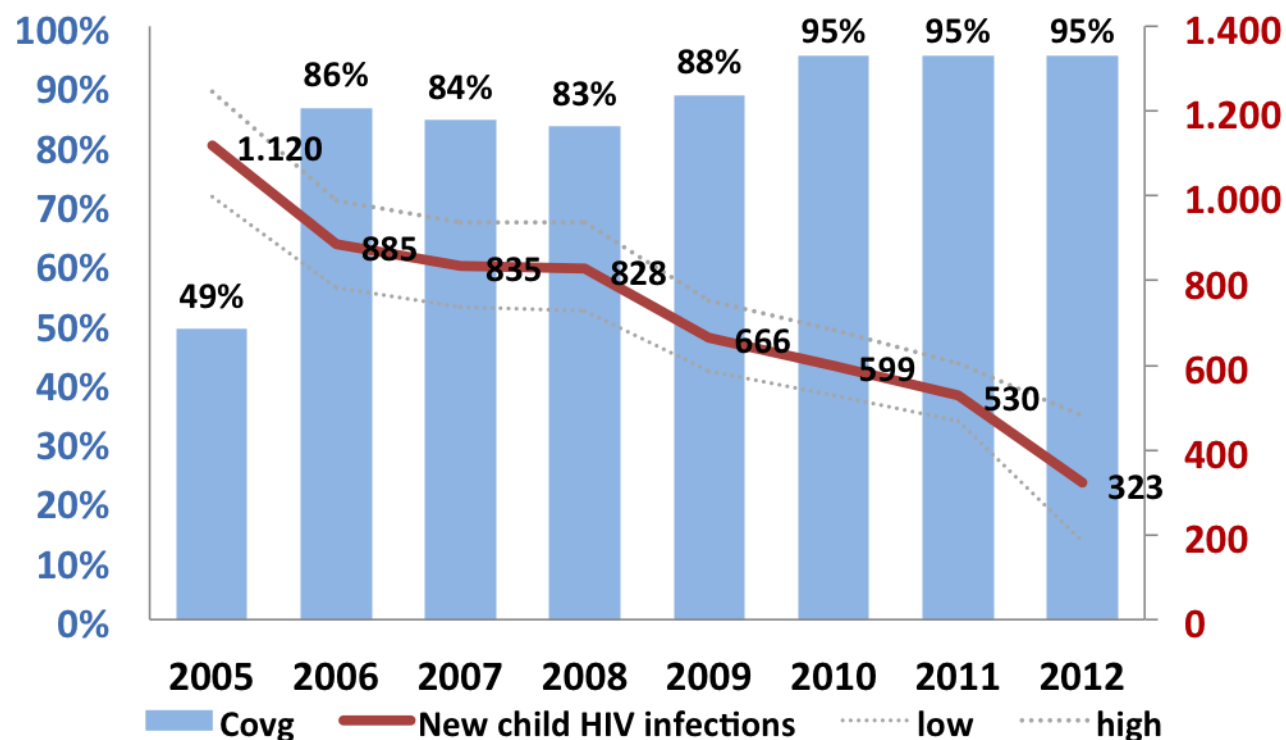
Source:

Zachariah et al. Reduced tuberculosis case notification associated with scaling up antiretroviral treatment in rural Malawi. *International Journal of Tuberculosis and Lung Diseases*, 2011, 15:933–937.

Reprinted with permission of the International Union Against Tuberculosis and Lung Disease. Copyright © The Union.

## 02 | Impact: Drop in child infections in Botswana

PMTCT coverage and number of new child infections in Botswana, 2005- 2012





# HIV / AIDS

## The success story

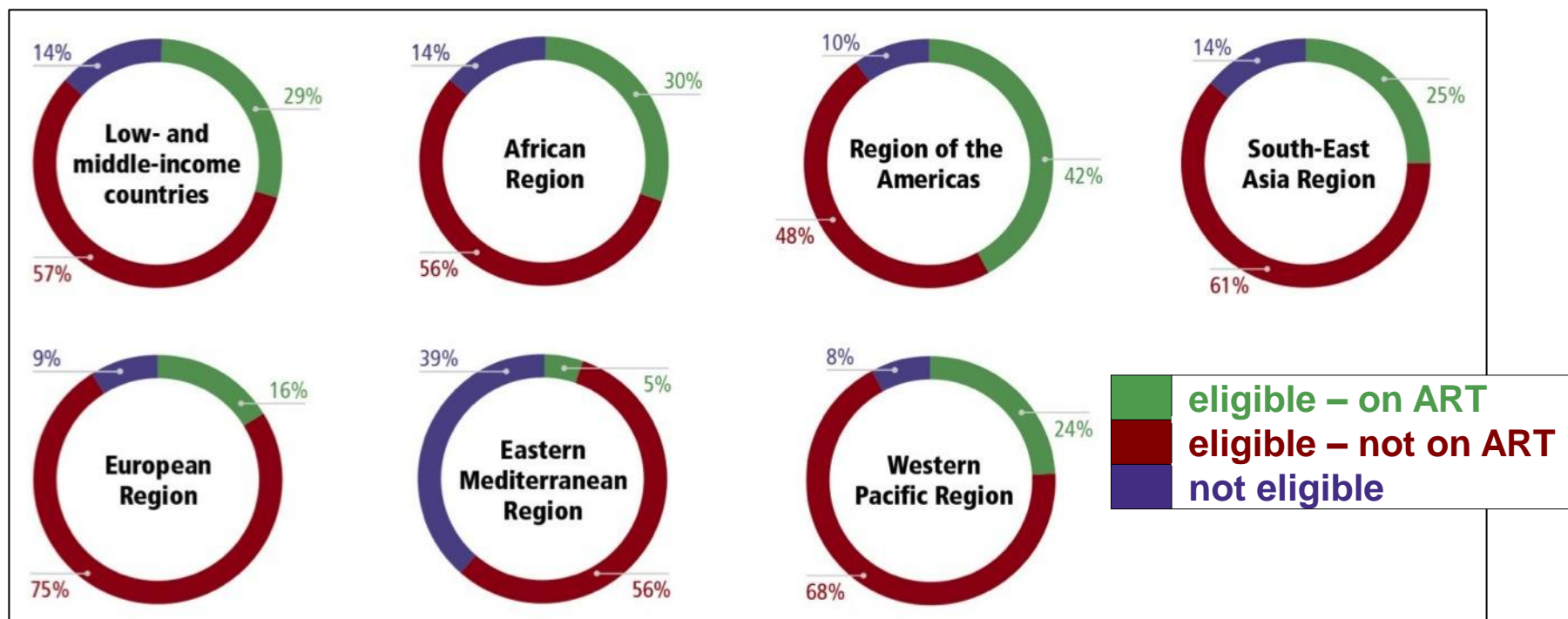
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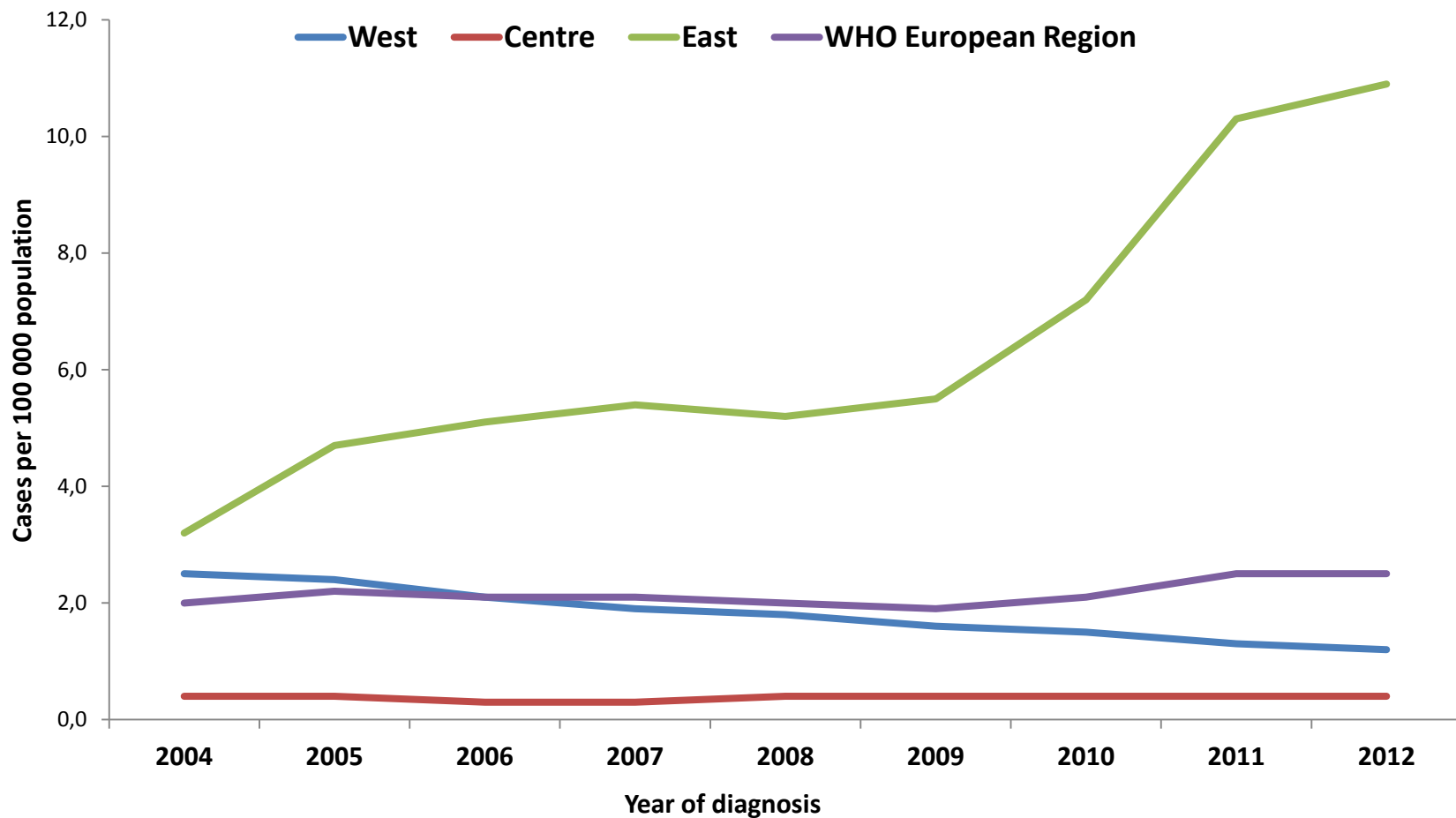
### WHO: eligible but not on ART 2012

% of people living with HIV in LMIC who were eligible for ART\* and who were receiving or were not receiving ART, and % who were not eligible for ART, 2012



\* eligible according to the WHO 2013 consolidated ARV guidelines

# AIDS cases per 100 000 population in the WHO European Region and three geographical area, 2004-2012



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# Health inequalities

- At least 20 million people die prematurely (half of them before the age of 5) in developing countries for lack of adequate access to basic health care
- They die for causes preventable or treatable
- Health disparities arise from the lack of capacity of countries to provide accessible healthcare
- It largely depends on the poor availability and use of national resources to finance health systems, health infrastructure, health workforce, medicines, research, monitoring and prevention

A DISCUSSION PAPER

# **HIV, UNIVERSAL HEALTH COVERAGE AND THE POST-2015 DEVELOPMENT AGENDA**

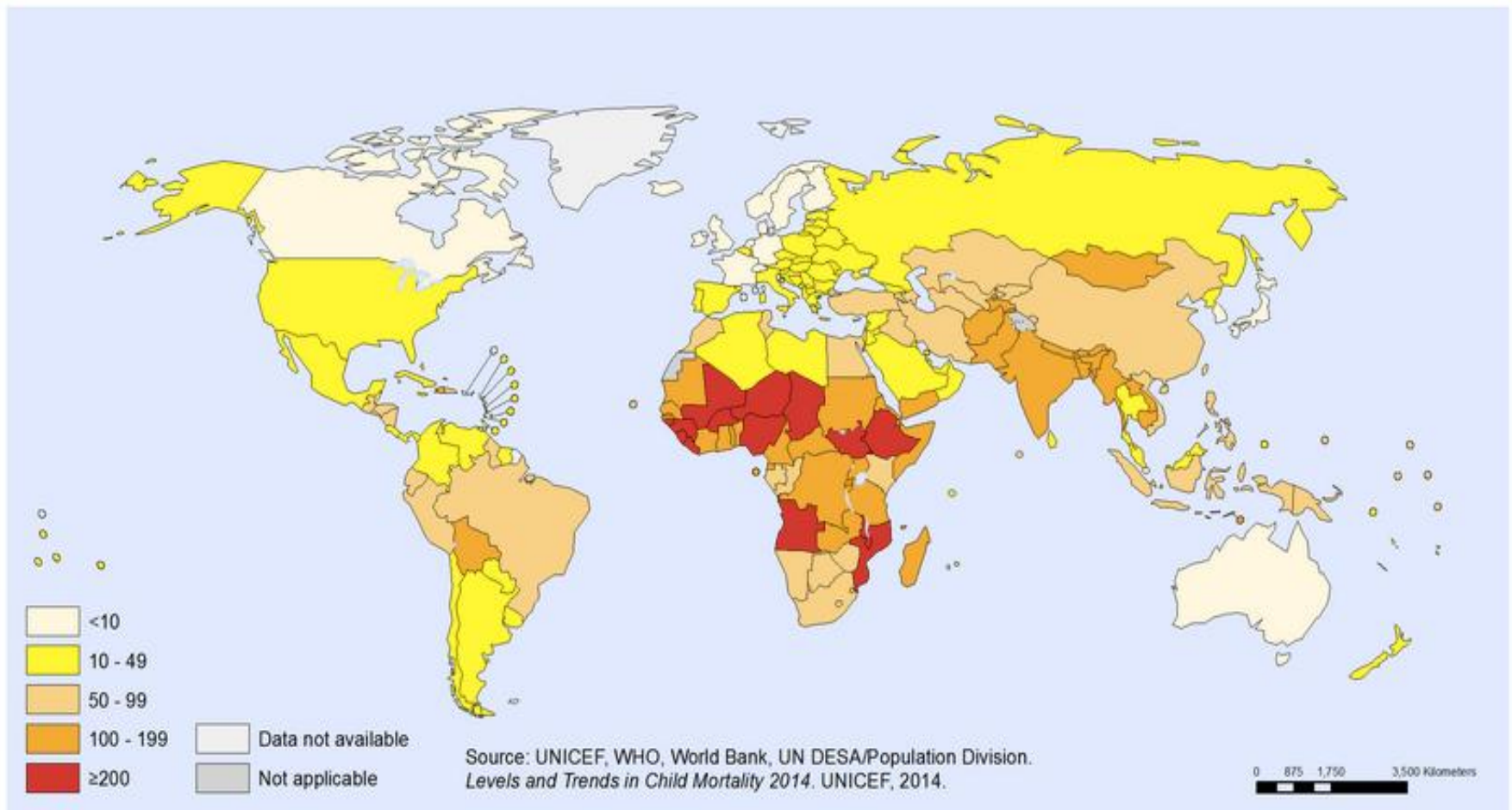


## Key Messages

- Finishing the MDG agenda should be a core element of the post-2015 development framework, and specifically the health goal, with expanded scope and more ambitious targets.
- Ending the AIDS epidemic by 2030 is a possible target within the health goal.
- The HIV target could have three subtargets: reducing HIV incidence; reducing AIDS-related mortality; and reducing stigma and discrimination.
- Strengthening the links between HIV and other health areas (including tuberculosis, maternal and child health, sexual and reproductive health, drug dependence, and noncommunicable diseases and mental health) could be highlighted in the framework.



## Under-five mortality rate (probability of dying by age 5 per 1000 live births), 1990



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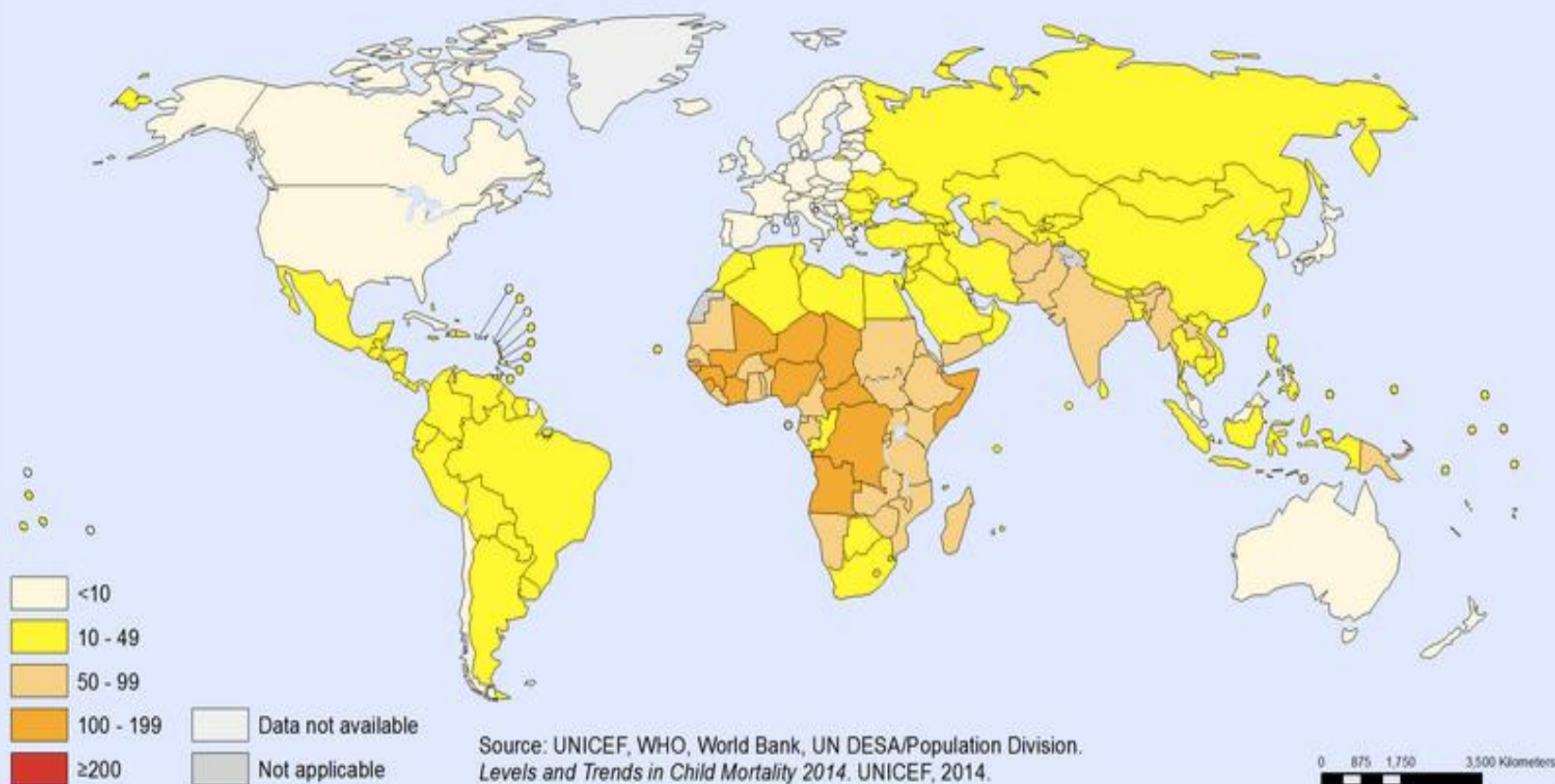
Data Source: World Health Organization  
 Map Production: Health Statistics and  
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 World Health Organization



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## Under-five mortality rate (probability of dying by age 5 per 1000 live births), 2013

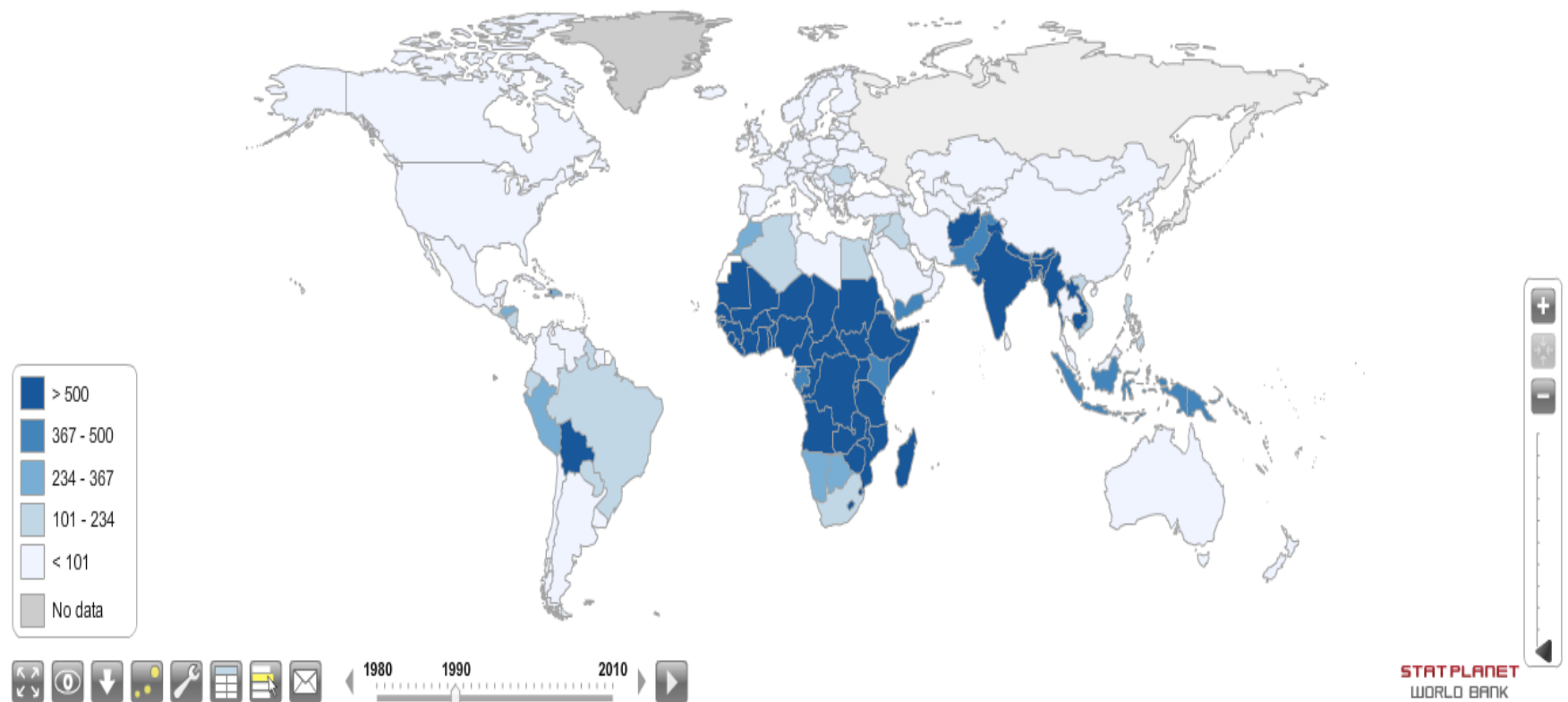
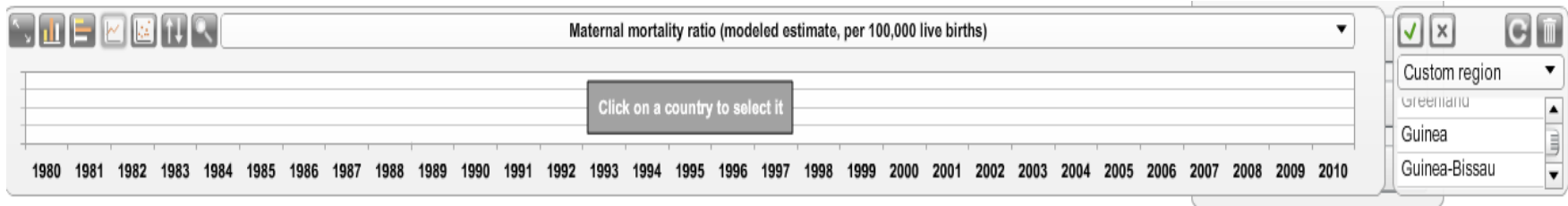


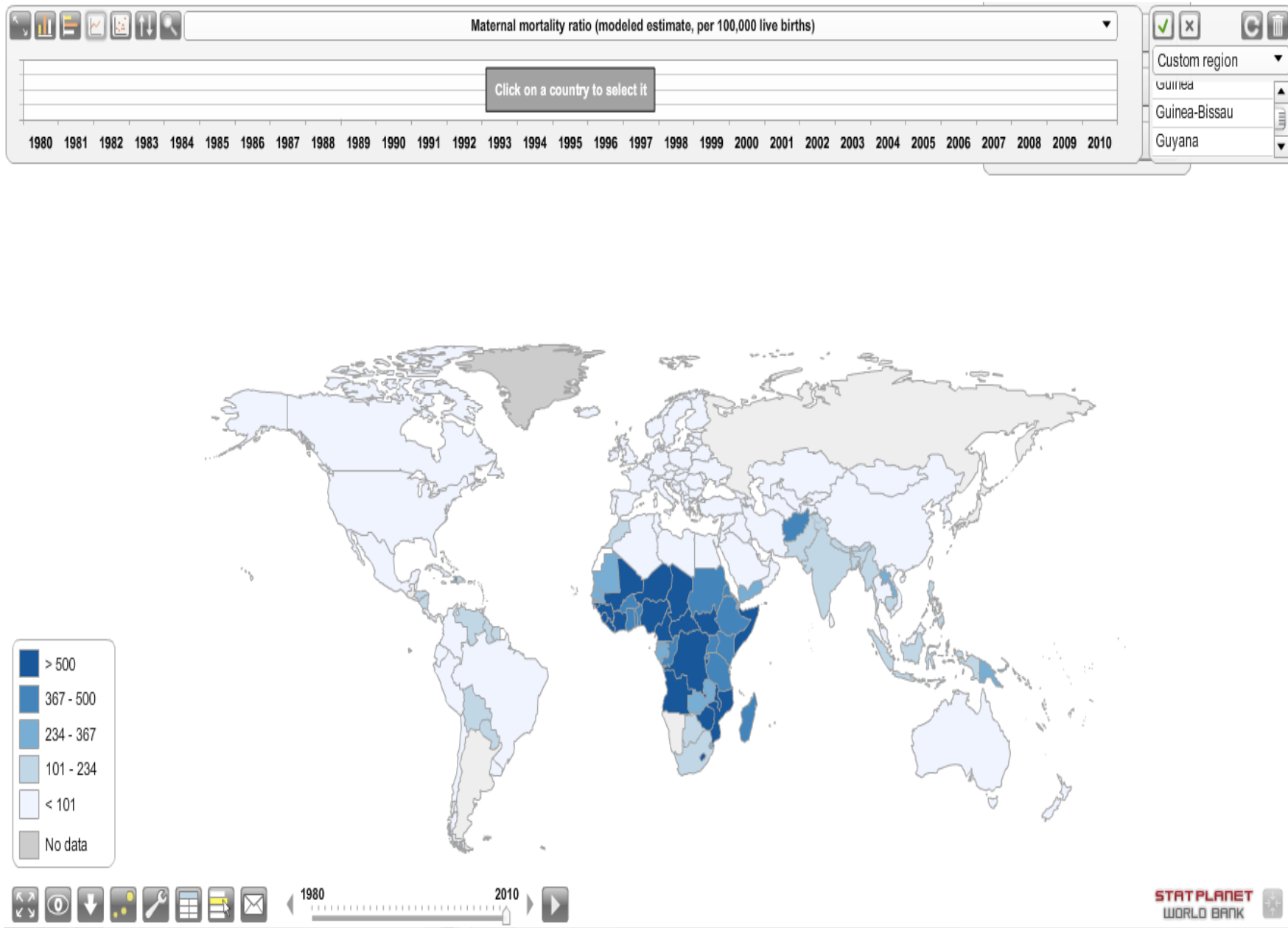
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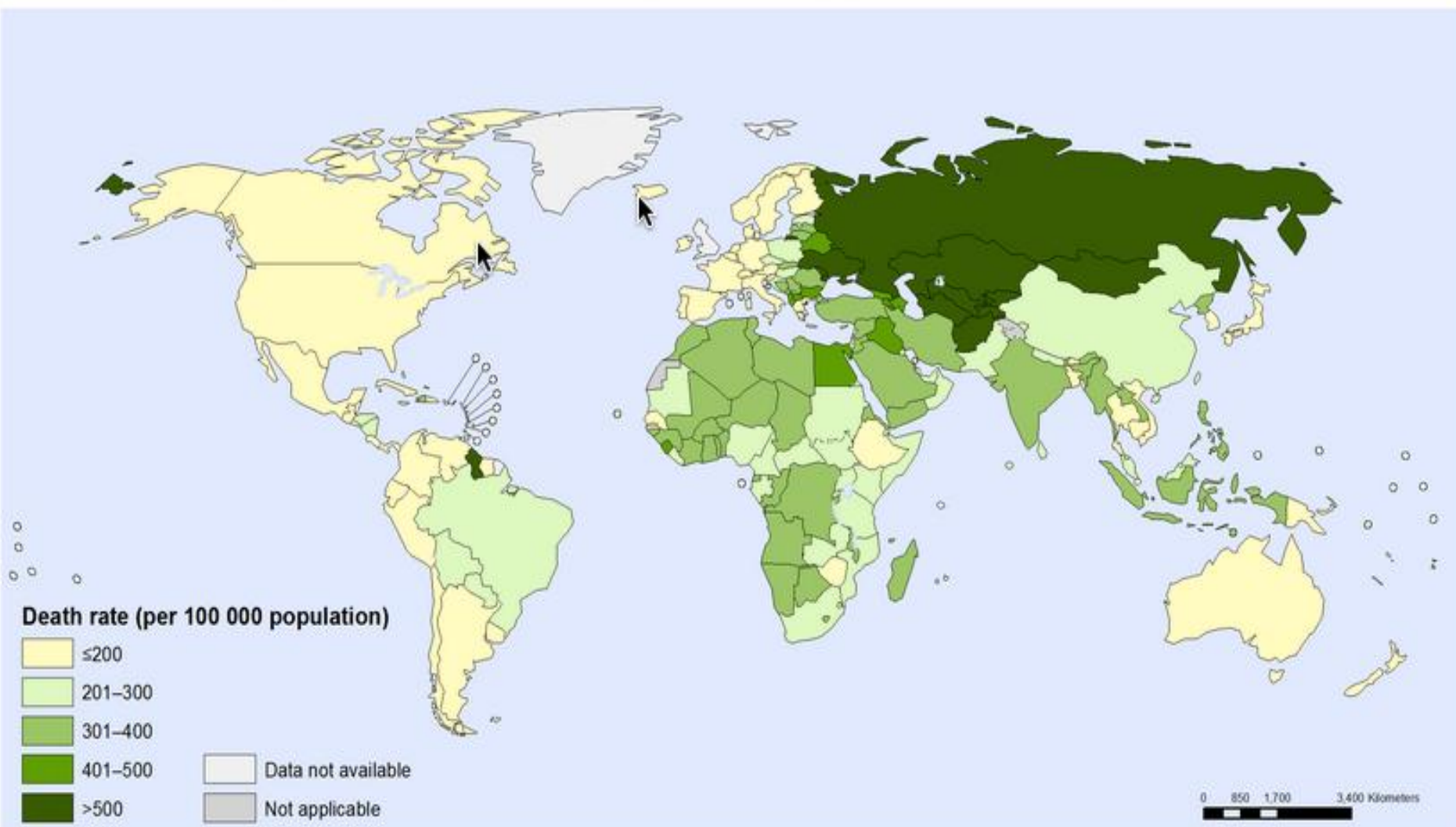
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NCDs: the emerging epidemic

**Cardiovascular diseases mortality:  
Age-standardized death rate per 100 000 population, both sexes, 2012**



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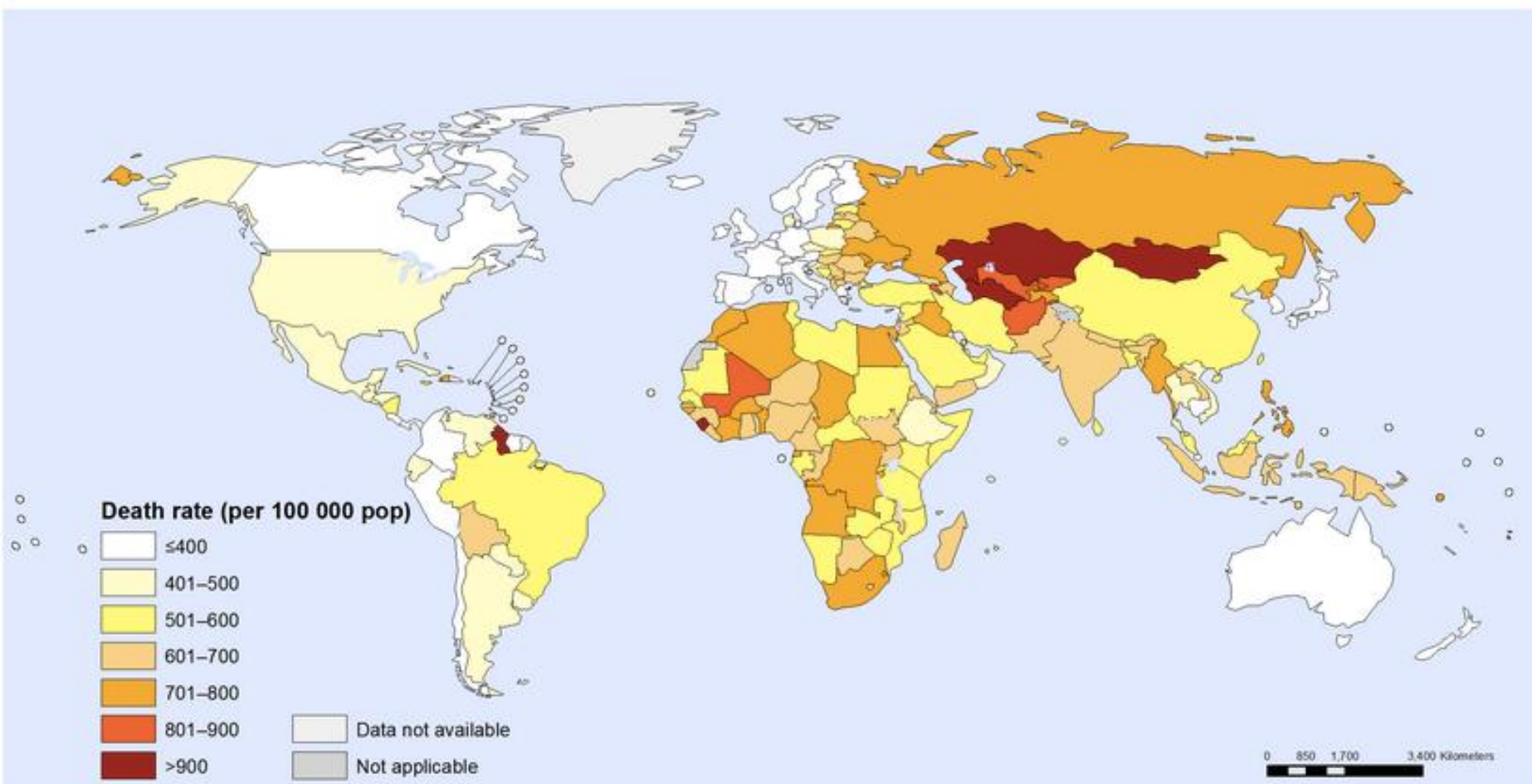
Data Source: World Health Organization  
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## Deaths due to noncommunicable diseases: age-standardized death rate (per 100 000 population) Both sexes, 2012



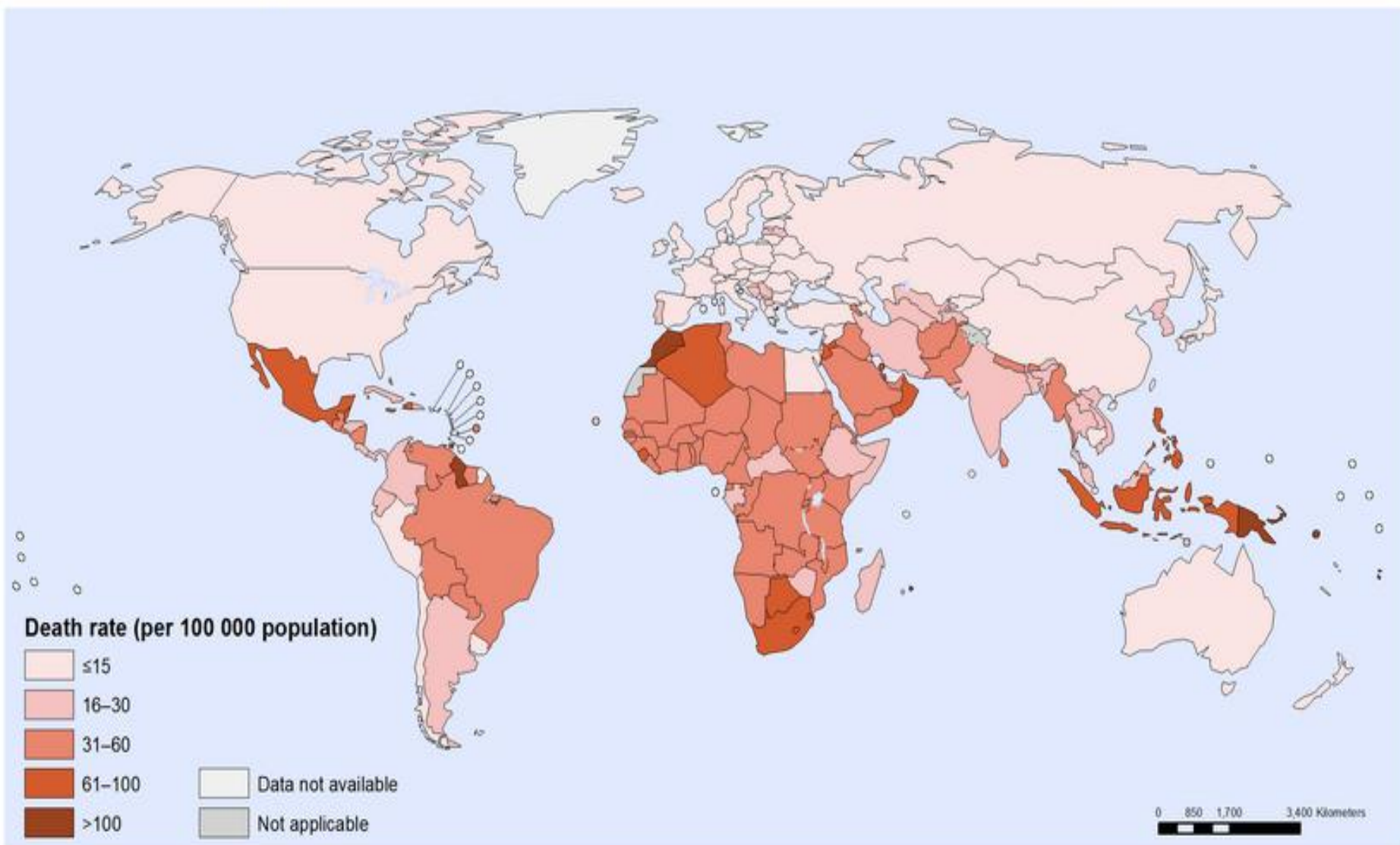
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Data Source: World Health Organization  
Map Production: Health Statistics and  
Information Systems (HSI)  
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# Diabetes mortality: Age-standardized death rate per 100 000 population, both sexes, 2012



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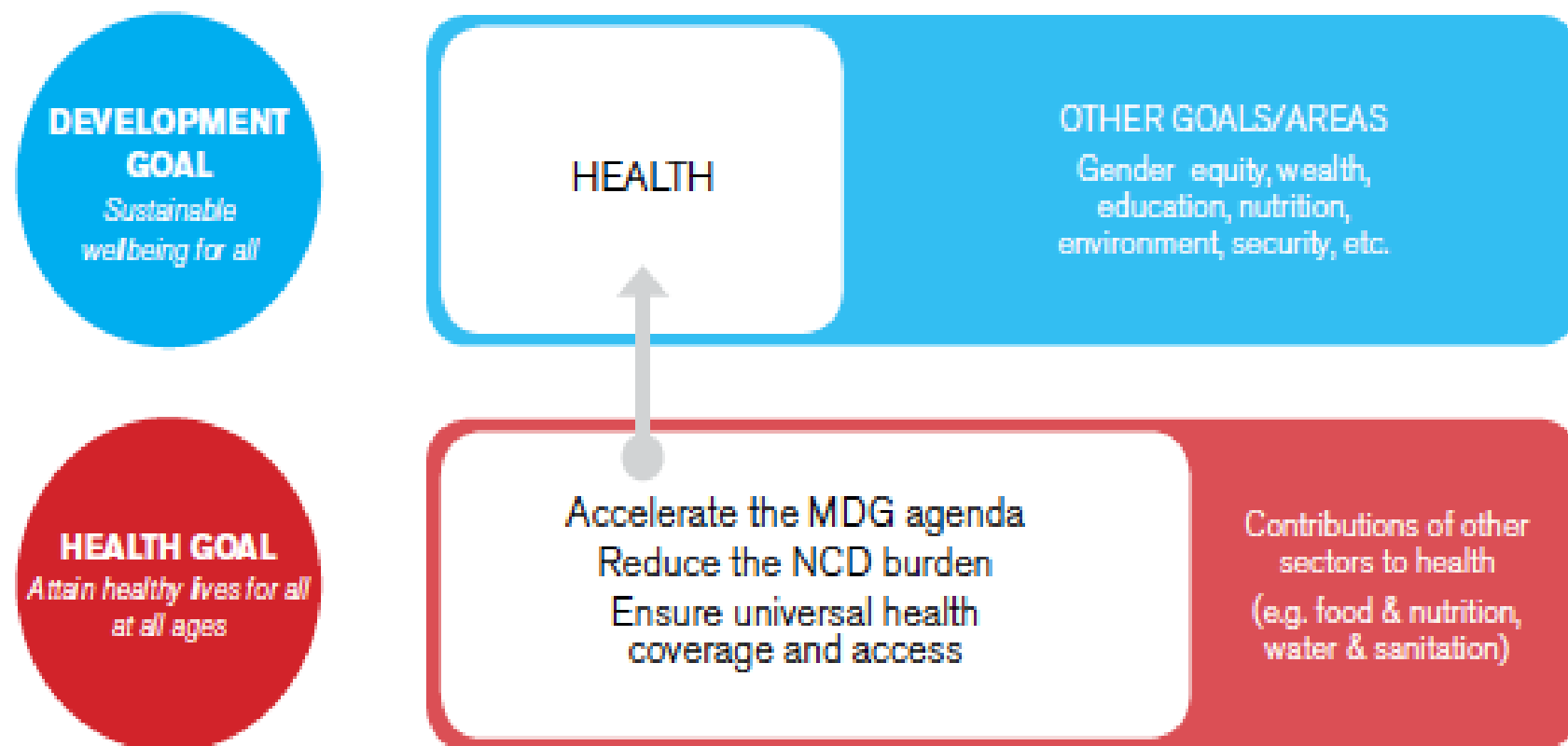
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Figure 1:

**Health in the post-2015 development agenda, adapted from the thematic consultation on health<sup>13</sup>**





## REVIEW ARTICLE

## GLOBAL HEALTH

Response to the AIDS Pandemic —  
A Global Health Model

Peter Piot, M.D., Ph.D., and Thomas C. Quinn, M.D.

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JUST OVER THREE DECADES AGO, A NEW OUTBREAK OF OPPORTUNISTIC INFECTIONS and Kaposi's sarcoma was reported in a small number of homosexual men in California and New York.<sup>1,2</sup> This universally fatal disease, which was eventually called the acquired immunodeficiency syndrome (AIDS), was associated with a complete loss of CD4+ T cells. Within the first year of its description, the disease was also identified in patients with hemophilia, users of injection drugs, blood-transfusion recipients, and infants born to affected mothers. Soon thereafter, a heterosexual epidemic of AIDS was reported in Central Africa, preferentially affecting women.<sup>3,4</sup> Little did we know at the time that this small number of cases would eventually mushroom into tens of millions of cases, becoming one of the greatest pandemics of modern times.

Within 2 years after the initial reports of AIDS, a retrovirus, later called the human immunodeficiency virus (HIV), was identified as the cause of AIDS.<sup>5</sup> Diagnostic tests were developed to protect the blood supply and to identify those infected. Additional prevention measures were implemented, including risk-reduction programs, counseling and testing, condom distribution, and needle-exchange programs. However, HIV continued to spread, infecting 10 million persons within the first decade after its identification.

The second decade of AIDS was marked by further intensification of the epidemic in other areas of the world, including the southern cone of Africa, which saw an explosive HIV epidemic. Asia and the countries of the former Soviet Union also reported a marked increase in the spread of HIV. However, by the mid-1990s, with the discovery of highly active antiretroviral therapy, rates of death in developed countries started to decline. The use of antiretroviral drugs during pregnancy also resulted in a substantial decline in mother-to-child transmission of HIV in high-income countries. However, without access to antiretroviral drugs in low- and middle-income countries, rates of death and mother-to-child transmission continued to increase, with 2.4 million deaths and more than 3 million new infections reported in 2001. Of these new infections, two thirds occurred in sub-Saharan Africa.<sup>6</sup>

INTERNATIONAL RESPONSE TO AIDS — A GLOBAL HEALTH  
MODEL

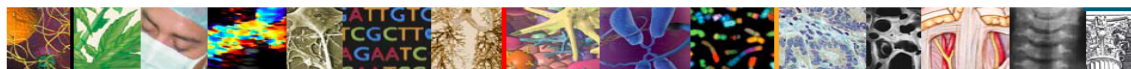
It was not until the third decade of the epidemic that the world's public health officials, community leaders, and politicians united to combat AIDS. In 2001, the United Nations General Assembly endorsed a historic Declaration of Commitment on HIV/AIDS, a commitment that was renewed in 2011.<sup>7</sup> These actions resulted in the formation of the Global Fund to Fight AIDS, Tuberculosis, and Malaria, which was established to finance anti-AIDS activities in developing countries. In 2003, President George W. Bush announced the President's Emergency Plan for AIDS



An interactive graphic including a prevalence map, a timeline, and details of HIV structure and life cycle is available at [NEJM.org](http://NEJM.org)

# **HIV and example for appropriate response to other health threats**

- **Demand for services**
- **Access to services**
- **Trained health care workers**
- **Support for adherence**
- **Infrastructure and equipment**
- **Program management**
- **Drug and laboratory supplies**
- **Linkage to care**
- **Community involvement**



# The NEW ENGLAND JOURNAL of MEDICINE

## Perspective

JUNE 6, 2013

### How AIDS Invented Global Health

Allan M. Brandt, Ph.D.

Related article, p. 2210

Over the past half-century, historians have used episodes of epidemic disease to investigate scientific, social, and cultural change. Underlying this approach is the recognition that disease, and

especially responses to epidemics, offers fundamental insights into scientific and medical practices, as well as social and cultural values. As historian Charles Rosenberg wrote, “disease necessarily reflects and lays bare every aspect of the culture in which it occurs.”<sup>1</sup>

Many historians would consider it premature to write the history of the HIV epidemic. After all, more than 34 million people are currently infected with HIV. Even today, with long-standing public health campaigns and highly active antiretroviral therapy (HAART), HIV remains a major contributor to the burden of disease in many countries. As Piot and Quinn indicate in this issue of the *Journal* (pages 2210–

2218), combating the epidemic remains a test of our expanding knowledge and vigilance.

Nonetheless, the progress made in addressing this pandemic and its effects on science, medicine, and public health have been far-reaching (see timeline). The changes wrought by HIV have not only affected the course of the epidemic: they have had powerful effects on research and science, clinical practices, and broader policy. AIDS has reshaped conventional wisdoms in public health, research practice, cultural attitudes, and social behaviors. Most notably, the AIDS epidemic has provided the foundation for a revolution that upended traditional approaches to “international

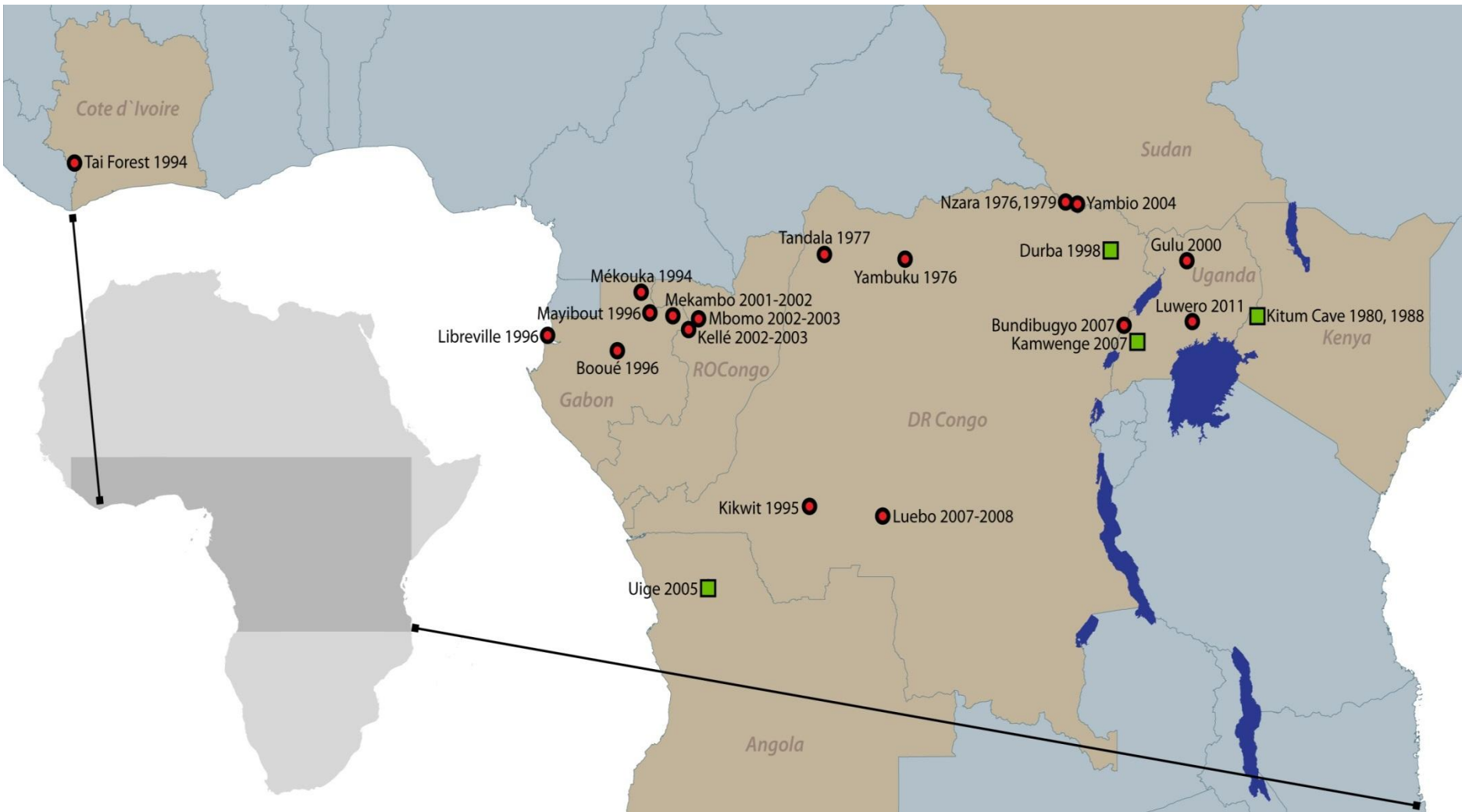
health,” replacing them with innovative global approaches to disease. Indeed, the HIV epidemic and the responses it generated have been crucial forces in “inventing” the new “global health.”

This epidemic disrupted the traditional boundaries between public health and clinical medicine, especially the divide between disease prevention and treatment. In the 1980s, before the advent of antiretroviral therapies, public health officials focused on controlling social and behavioral risk factors; prevention was seen as the only hope. But new treatments have eroded this distinction and the historical divide between public health and clinical care.<sup>2</sup> Clinical trials have shown that early treatment benefits infected patients not only by dramatically extending life expectancy, but by significantly reducing the risk of transmission to their uninfected sexu-

# Global Health

- **Global health is the health of populations in a global context**
- **It transcends the perspectives and concerns of individual nations**
- **Global health is an extensive multisectorial domain that links health with the areas of development, humanitarian aid, and research**
- **It deals with:**
  - **worldwide improvement of health**
  - **reduction of disparities**
  - **protection against global threats that disregard national borders**

# Outbreaks of Ebola and Marburg Virus Disease – (Before 2013)



Ebola 2,387 cases  
24 outbreaks

Marburg 571 cases  
10 outbreaks

# HIV AS A MODEL FOR GLOBAL HEALTH

1. It draws **together scientists, clinicians, public health officials, researchers, politicians, economists, and patients**, while relying on new sources of funding, expertise, and advocacy.
2. It recognizes the **essential supranational character of problems of disease** and their amelioration, and the fact that no individual country can adequately address diseases in the face of the movement of people, trade, microbes, and risks.
3. It mobilizes innovative drug production, pricing and procurement, both from generic and proprietary manufacturers

# HIV AS A MODEL FOR GLOBAL HEALTH

4. it focuses on deeper knowledge of the burden of disease to **identify key health disparities and develop strategies for their reduction.**
5. it recognizes that **people affected by disease have a crucial role in the discovery and advocacy of new modes of treatment and prevention and their equitable access**
6. it is based on **ethical and moral values that recognize that equity and rights are central** to the larger goals of preventing and treating diseases worldwide.

# HIV / AIDS

## The success story

1. The impact of ART
2. Treatment as Prevention
3. The battle towards universal access to ART
4. HIV/ AIDS as a model for Global Health

## The “unfinished” job

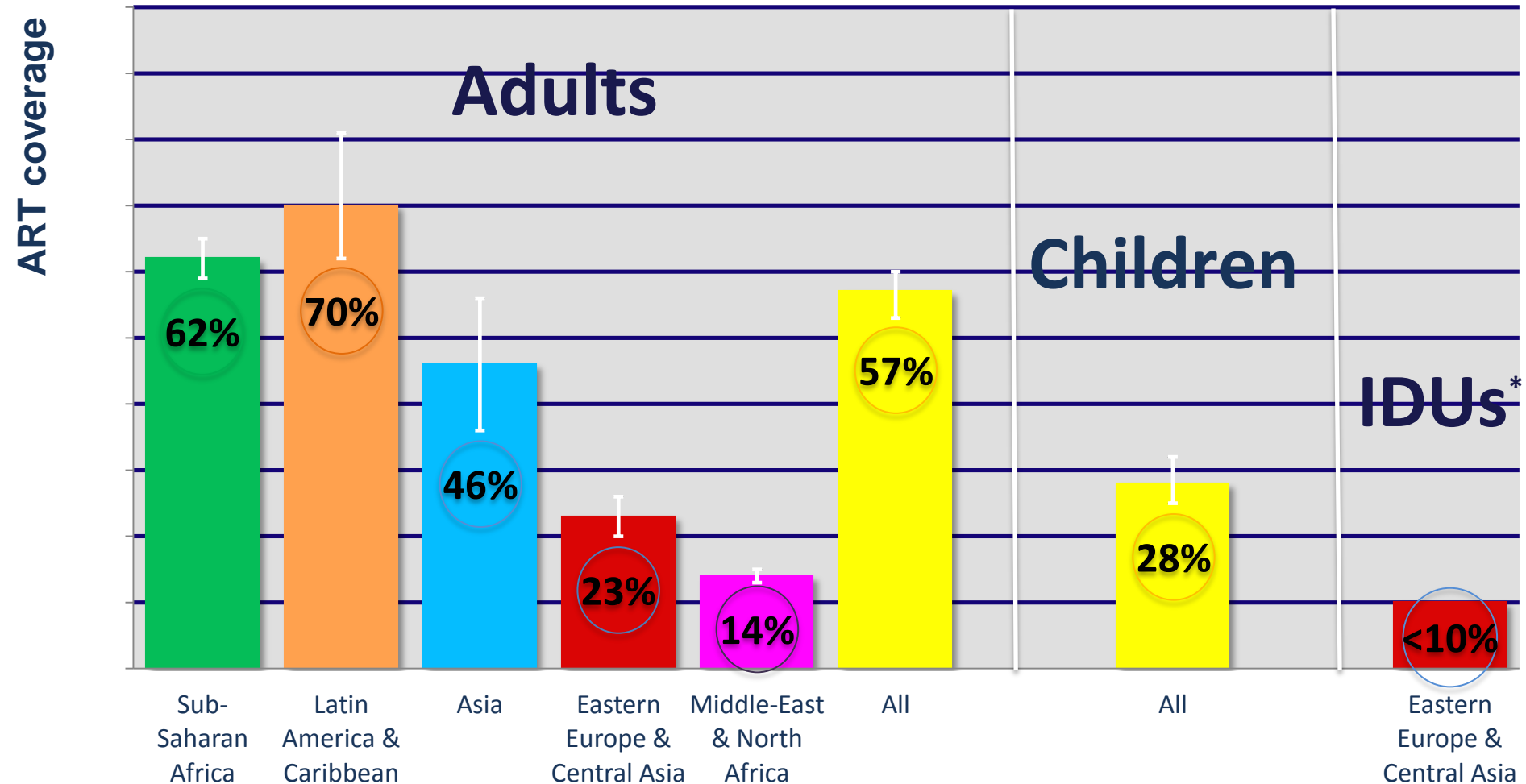
1. Insufficient ART coverage
2. Late presentation and low retention in care
3. Neglected regions
- 4. Neglected populations**



*From HIV ...to Global Health .....to HIV*

**Without putting health in its global perspective  
and without addressing the inequalities in social determinants  
( including poverty, hunger, human rights, punitive laws,  
stigma and discrimination)  
we we will never get rid of AIDS  
( in the South and in the North of the world)**

# Disparities in ART coverage between regions and populations



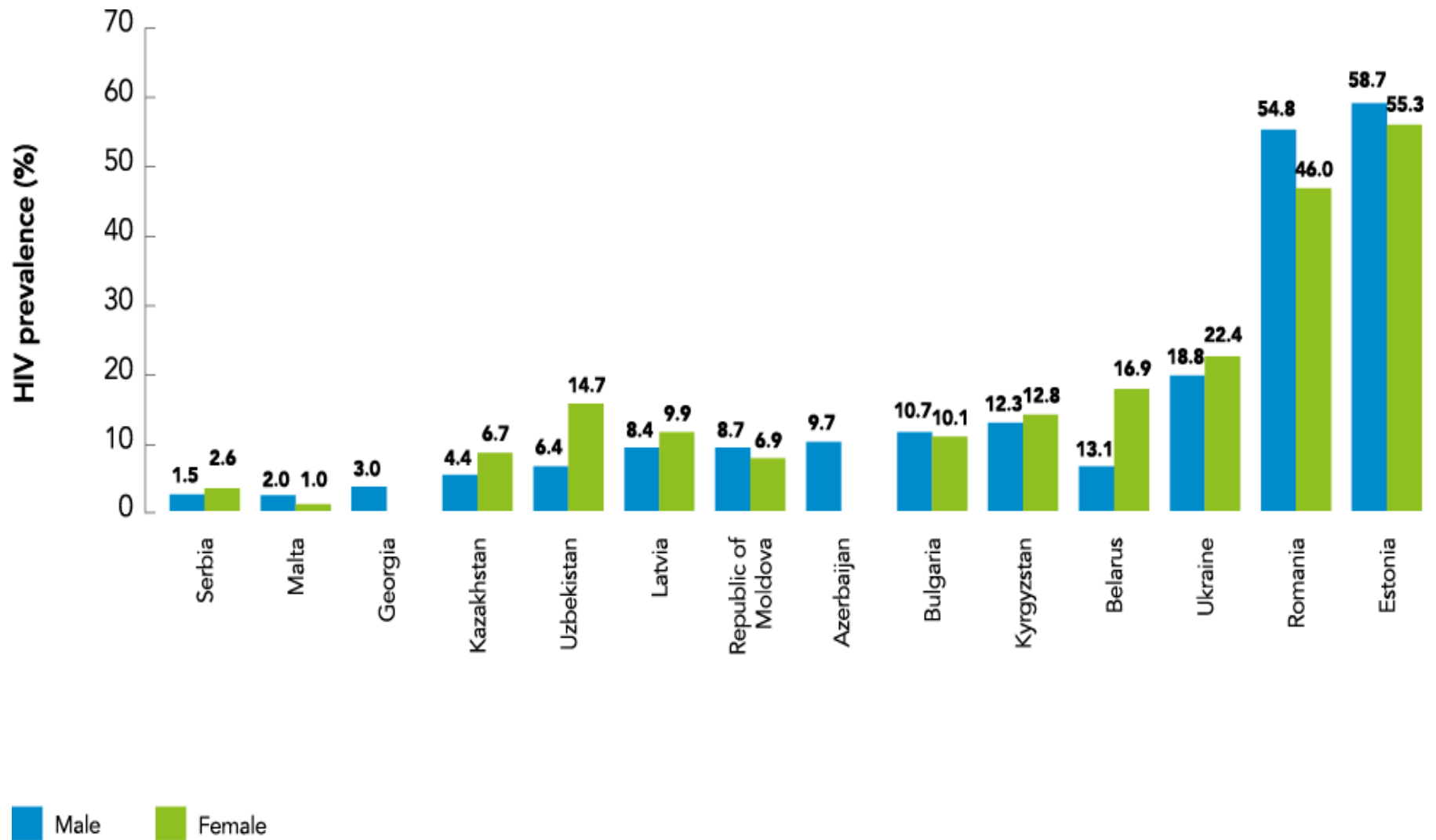
\* 2010 HIV case reporting (18 countries)

# **Key populations and vulnerable groups in almost all settings are disproportionately affected by HIV**

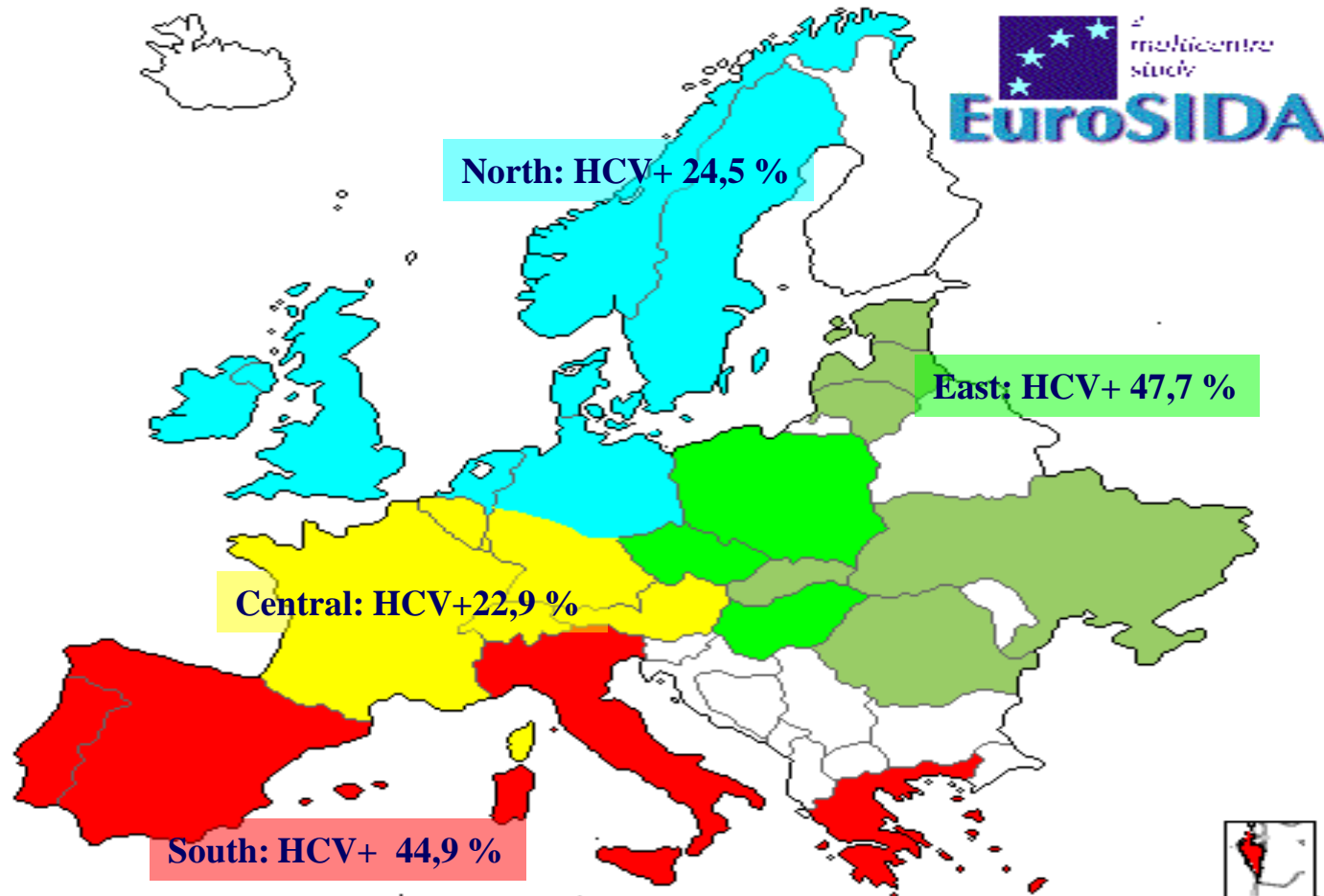
- **people who inject drugs**
- **men who have sex with men**
- **people in prisons and other closed settings**
- **sex workers**
- **transgender people**

**Without addressing the needs of key populations,  
a sustainable response to HIV  
will never be achieved.**

# HIV prevalence among people who inject drugs in eastern Europe and central Asia



# Prevalence of HCV Co-infection in persons living with HIV in EuroSIDA cohort



Konopnicki D et al.; AIDS. 2005.

Rockstroh J et al.; JID 2005

Table 1. HIV burden and risk factors among key affected populations

Population	Prevalence	Incidence	OR	Major risk factors	Existing interventions
MSM	15% (N. America, S. and SE Asia)	6.8/100 py (Kenya and South Africa) [13]	19.3 <sup>a</sup> [14]	Unprotected receptive anal intercourse; high number of male partner frequency; high number of lifetime male partners; injection drug use; high viral load in index partner; non-injection drug use (stimulants); network-level effects [5]	Behavioural: reduce alcohol and drug use; reduce number of partners; increase condom use and adherence to ART Biomedical: ART; oral PrEP Structural: decriminalization of homosexuality and "sodomy"; accessible and acceptable health services [9]
	18% (sub-Saharan Africa)	7.7% (Thailand) [15]			
	25% (Caribbean) [14]	10% (China) [16]			
SW	11.8% (50 countries)	3.6/100 py (Cambodia) [17]	13.5 <sup>b</sup> [18]	High-risk sexual exposures; high number of partners; high prevalence of STI; poverty; gender inequity; sexual violence [10]	Behavioural: condom use; HIV testing Biomedical: STI diagnosis and treatment; ART; HBV immunization Structural: decriminalization of sex work; anti-discrimination laws; accessible and acceptable health services; addressing violence; empowerment and community mobilization [10]
	36.9% (sub-Saharan Africa) [18]	13.9/100 py (Tanzania) [19]			
PWID	18.8% worldwide	4.5/100 py (Russia) [20]	No data	Reusing injecting equipment; detention and incarceration [21]	Behavioural: HIV testing; condom promotion for PWID and their partners; tailored education and communication Biomedical: opioid substitution therapy; ART; STI treatment; prevention and treatment of TB; prevention, vaccination, and treatment of viral hepatitis Structural: needle and syringe programmes [11]
	9–22% in 6 highest burden countries [22]	8.01/100 py (India) [23]			
Transgender women	27.7% (US) [24]	No data	4 <sup>c</sup> [25]	Unprotected receptive anal sex; network-level effects (sexual networks overlap with MSM populations) [12]	Behavioural: increase condom and lubricant use; HIV testing Biomedical: PrEP; early ART; microbicides Structural: decriminalization of "cross-dressing" and "sodomy"; anti-discrimination laws; legal recognition of gender identity; gender-affirming health services; community engagement and empowerment; peer outreach [26]
	27.3% (TG sex workers, 13 countries)				
	14.7% (13 countries) [25]				
	19.1% (15 countries) [12]				

<sup>a</sup>OR compared to general male population, low- and middle-income countries; <sup>b</sup>OR compared to general female population, low- and middle-income countries; <sup>c</sup>transgender sex workers versus female sex workers.

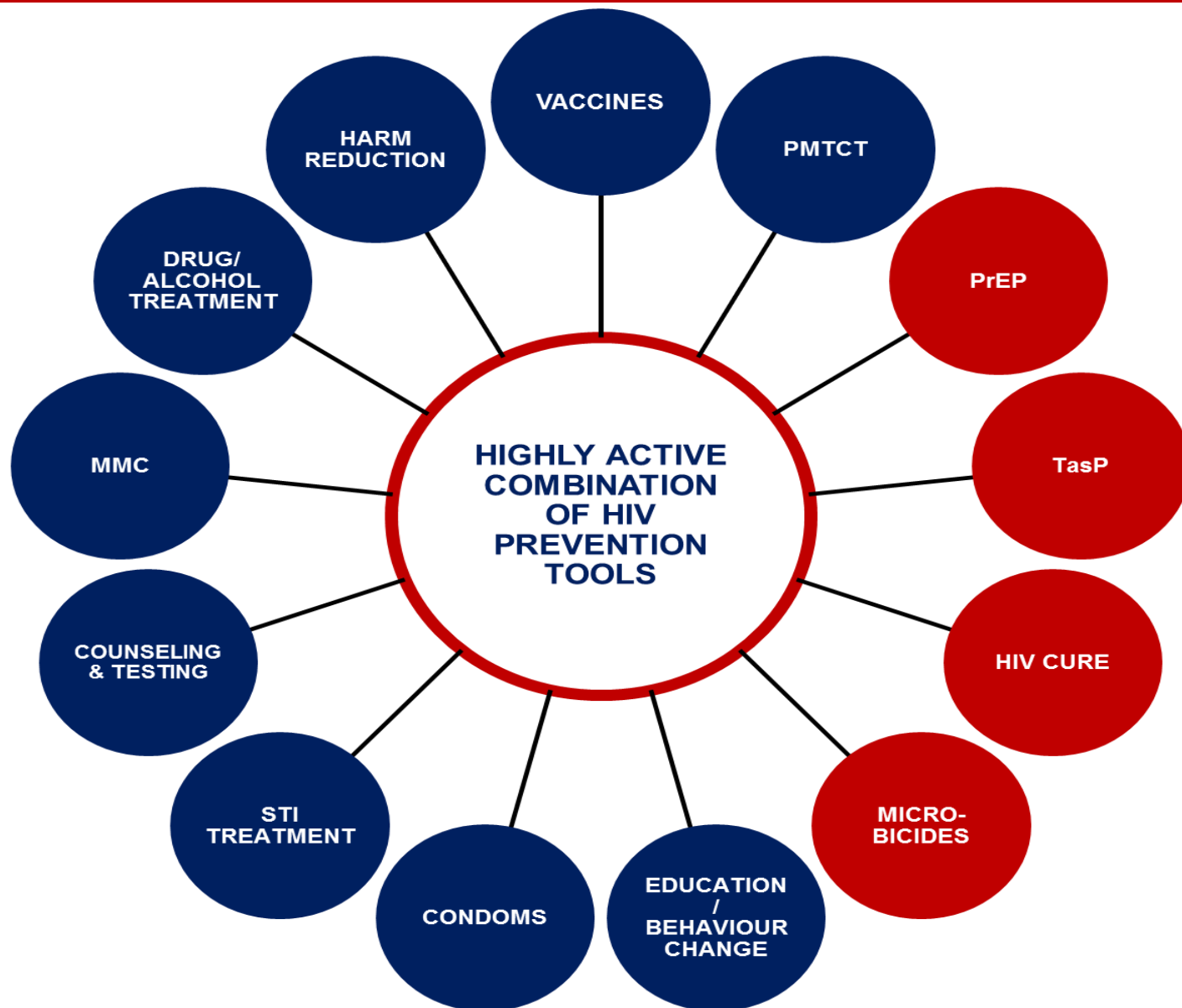
# Guiding principles for an effective response

- human rights
  - access to quality health care
    - access to justice
    - acceptability of services
    - health literacy
  - integrated service provision
- prevention & care**

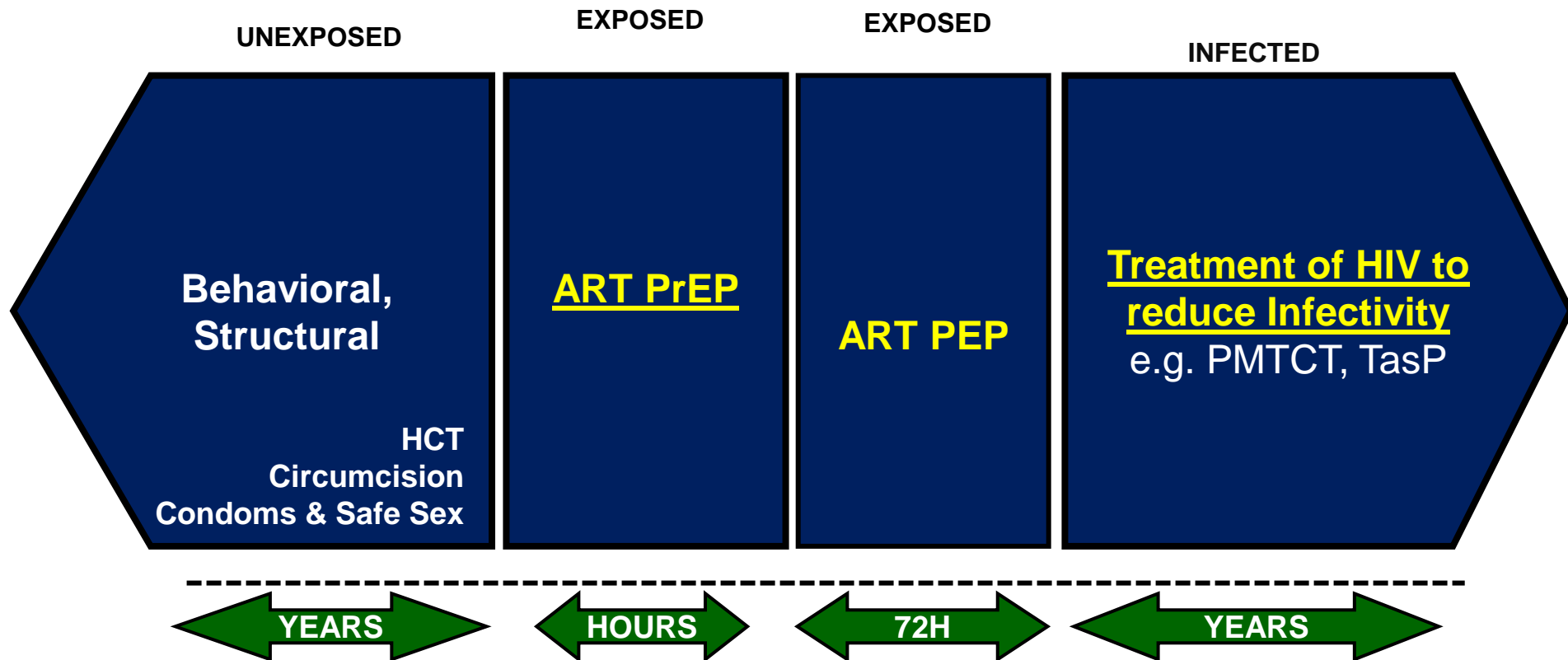


# HIV PREVENTION

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# HIV PREVENTION: FOUR PREVENTION OPPORTUNITIES

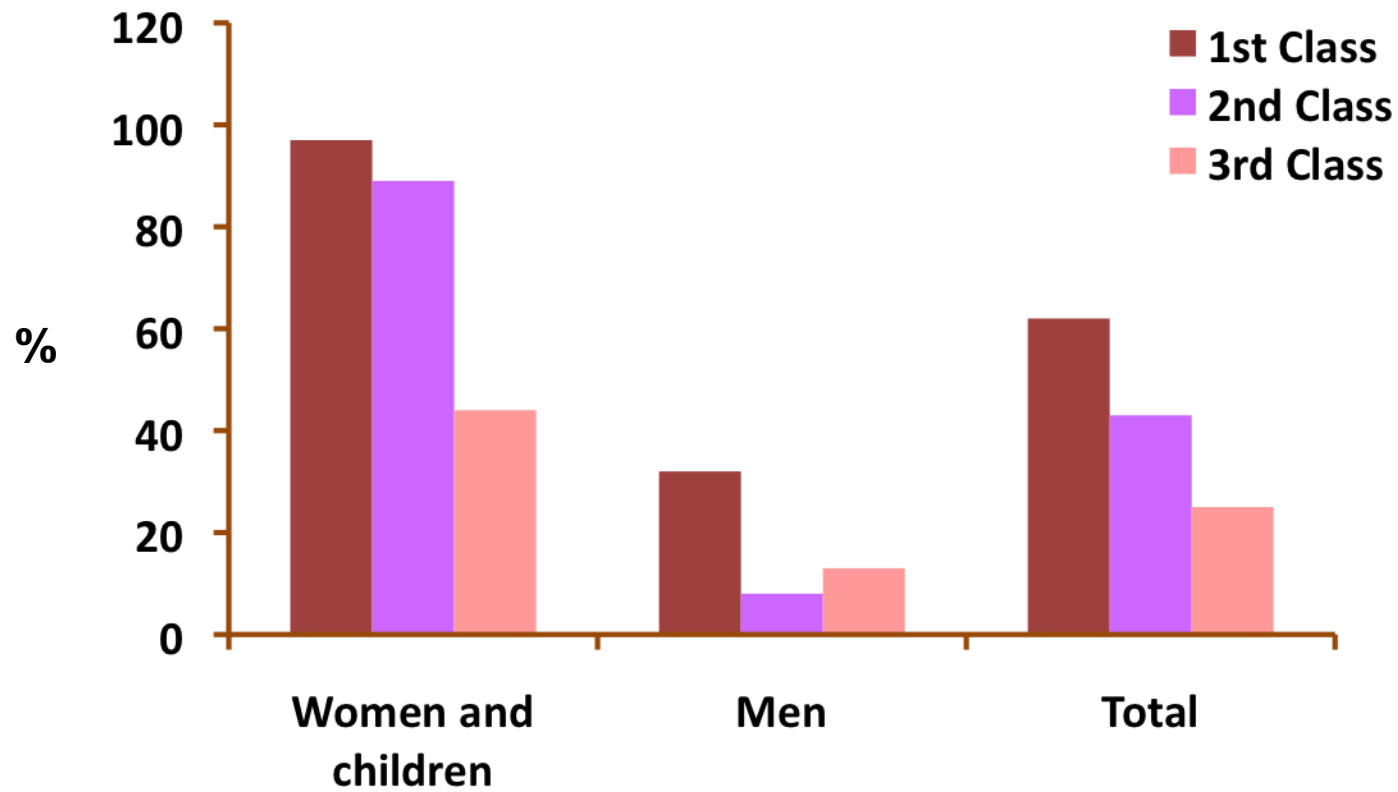


# Titanic



- April 1912: 2223 passengers – lifeboat capacity of 1178 – 32% survivors

# Percentage of survivors by class





Presidenza Italiana  
del Consiglio  
dell'Unione Europea



## DIALOGUE:

How can the European Union support the development of sustainable responses to HIV in neighboring countries ?

# HIV in Eastern Europe and Central Asia

- An expanding HIV epidemic, largely driven by unsafe injection drug use
- Access to antiretroviral treatment remains very low, particularly for key affected populations
- HIV prevention is not accessible at sufficient scale, access to harm reduction remains very limited
- Health systems are vertical and provider-centered
- High levels of stigma and discrimination, numerous structural, cultural, societal and political obstacles to the AIDS response
- Low levels of co-operation between government and the non-governmental sector
- Significant issues around financial sustainability

*Michel Kazatchkine*