

WHO Survey on ARV Use 2011

Françoise Renaud
HIV Technologies and Commodities Unit
HIV Department

Update 1 December 2011

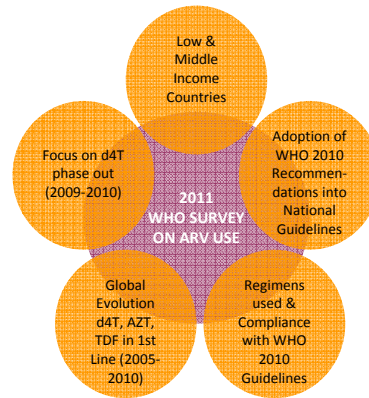


Survey 2011

- 67 reporting countries
- 5.73 millions patients on ART
- Use of ARVs by December 2010
- Results presented separately between 45 LMI countries * and 22 Latin America & Caribbean countries** to account for the difference in pattern of use

* 22 Sub-Saharan Africa, 8 East, South & South East Asia, 3 Europe & Central Asia, 8 North Africa & Middle East and 4 Western Pacific reporting countries with 5.36 M patients on ART

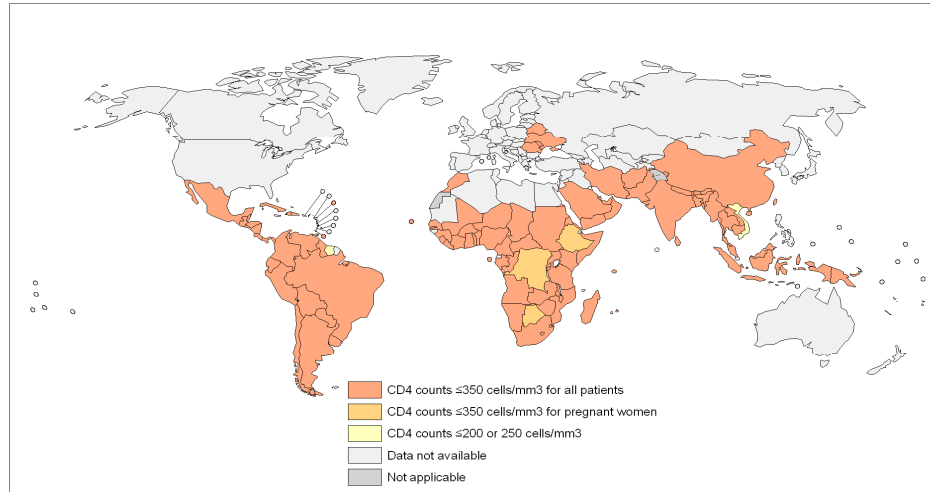
**22 reporting Latin America & Caribbean countries with 376 000 patients on ART



Update 1 December 2011

Most countries recommend initiating antiretroviral therapy for every one with CD4 counts of or below 350 cells per mm³

Adoption of WHO 2010 recommendations on CD4 counts <350 cells/mm³ for ART initiation into national ART guidelines, 2010–2011



The boundaries and names shown and the designations used on this map do not imply the expression of any opinion whatsoever on the part of the World Health Organization concerning the legal status of any country, territory, city or area or of its authorities, or concerning the delimitation of its frontiers or boundaries. Dotted lines on maps represent approximate border lines for which there may not yet be full agreement.

Data Source: World Health Organization
Map Production: Public Health Information
and Geographic Information Systems (GIS)
World Health Organization

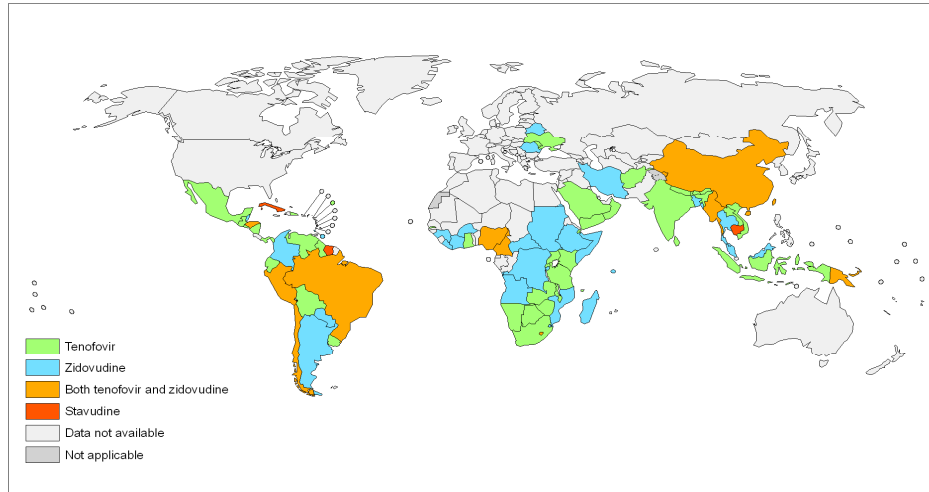
 World Health
Organization
© WHO 2011. All rights reserved.

Out of 102 reporting countries:

- 95 recommend initiating ART at CD4 ≤350 for all patients
- 5 recommend initiating ART at CD4 ≤350 for pregnant women only
- Only 2 countries recommend initiating ART at CD4 ≤200 or 250

Most countries recommend shifting away from stavudine to tenofovir or zidovudine-based regimens

Adoption of WHO 2010 recommendation on preferred molecule in first line regimen into national ART guidelines, 2010–2011



The boundaries and names shown and the designations used on this map do not imply the expression of any opinion whatsoever on the part of the World Health Organization concerning the legal status of any country, territory, city or area or of its authorities, or concerning the delimitation of its frontiers or boundaries. Dotted lines on maps represent approximate border lines for which there may not yet be full agreement.

Data Source: World Health Organization
Map Production: Public Health Information
and Geographic Information Systems (GIS)
World Health Organization

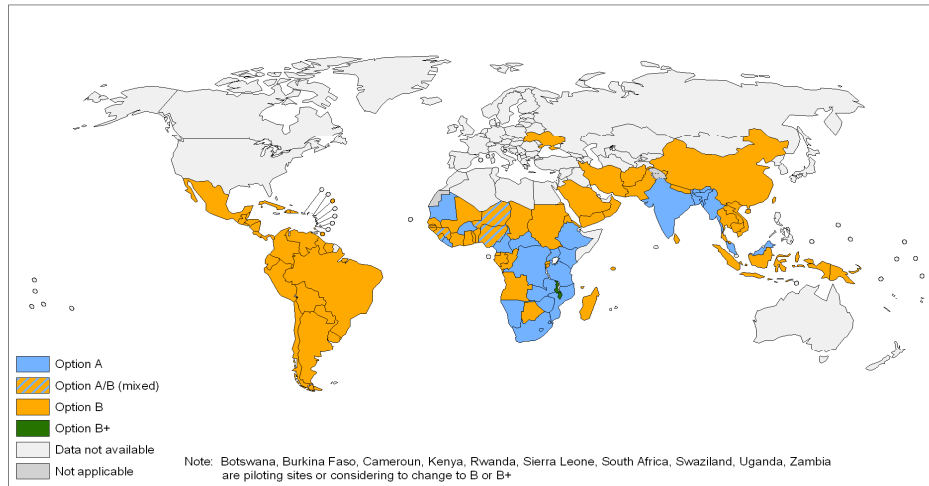
 World Health
Organization
© WHO 2011. All rights reserved.

Out of 82 reporting countries:

- 41 countries recommend shifting to tenofovir-based regimen,
- 27 countries to zidovudine-based regimen and
- 11 to both tenofovir- or zidovudine-based regimen
- Only 3 countries did not change their national guidelines: Cambodia, Cuba and Suriname

Most countries recommend Option A or option B for treating pregnant women and preventing HIV infection in infants

Adoption of WHO 2010 recommendation on option A and option B for treating pregnant women and preventing HIV infection in infants in national ART guidelines, 2010–2011



The boundaries and names shown and the designations used on this map do not imply the expression of any opinion whatsoever on the part of the World Health Organization concerning the legal status of any country, territory, city or area or of its authorities, or concerning the delimitation of its frontiers or boundaries. Dotted lines on maps represent approximate border lines for which there may not yet be full agreement.

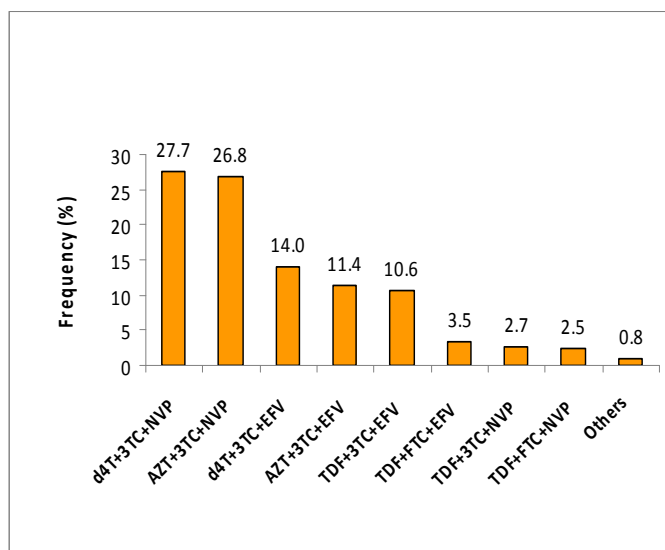
Data Source: World Health Organization
Map Production: Public Health Information
and Geographic Information Systems (GIS)
World Health Organization

 World Health
Organization
© WHO 2011. All rights reserved.

Out of 90 reporting countries:

- 63 recommend option B
- 22 recommend option A
- 4 recommend a mix of options A and B
- Only 1 recommend option B+ (Malawi)

Main first-line regimens used in adults in LMI countries (except America region)



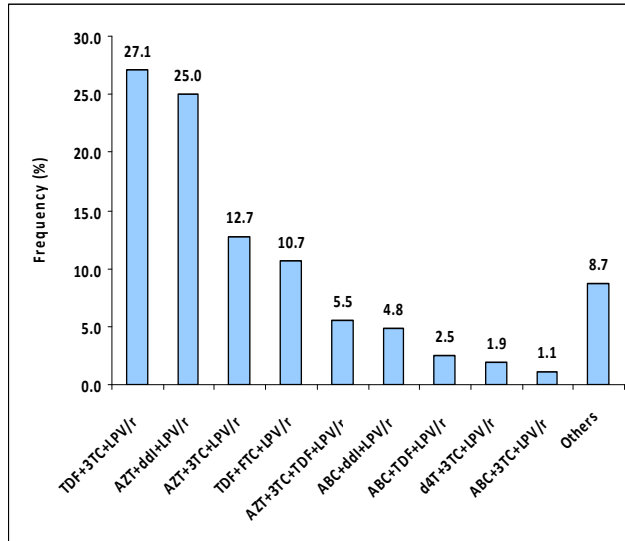
- ✓ 97.1% adults on 1st line
- ✓ 38.5% used AZT and 19.3% TDF
- ✓ 59.9% used NVP and 39.7% EFV



Update 1 December 2011

Total compliance with WHO GL is 99.9%, with a compliance rate of 57.5% to preferred regimen and 42.4% to alternative regimens

Main second-line regimens used in adults in LMI countries (except America region)



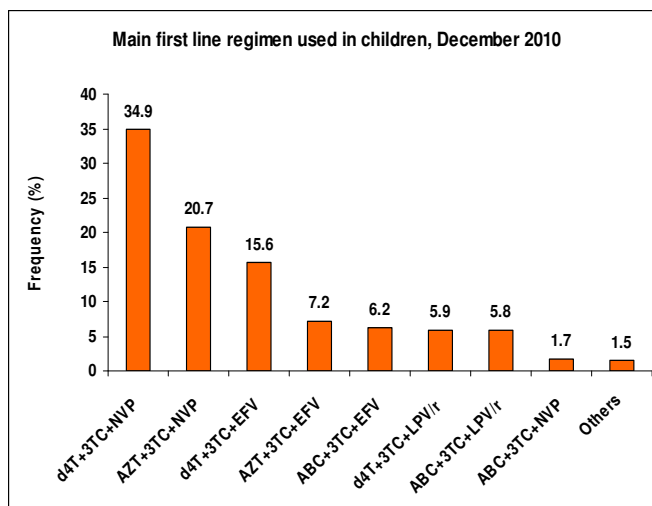
- ✓ 2.9% adults on 2nd line
- ✓ 49.2% used TDF and 46.3% AZT
- ✓ 94.9% used LPV/r



Update 1 December 2011

Total compliance with WHO GL is 95.7%, with a compliance rate of 57.4%% to preferred regimen and 38.3% to alternative regimens

Main first-line regimens used in children in LMI countries (except America region)



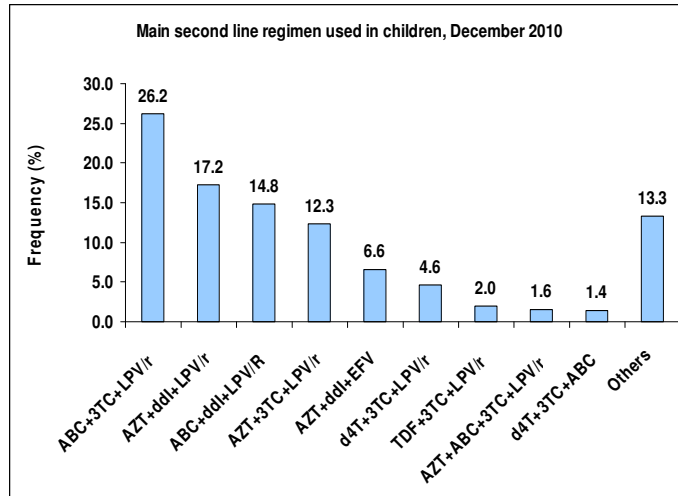
- ✓ 96.8% children on 1st line
- ✓ 56.5% used d4T, 29.0% AZT and 14.7% ABC
- ✓ Uptake of LPV/r: 12.2% (mostly in South Africa)



Update 1 December 2011

Total compliance with WHO GL is 99.9%, with a compliance rate of 42.8% to preferred regimen and 57.1% to alternative regimens

Main second-line regimens used in children in LMI countries (except America region)



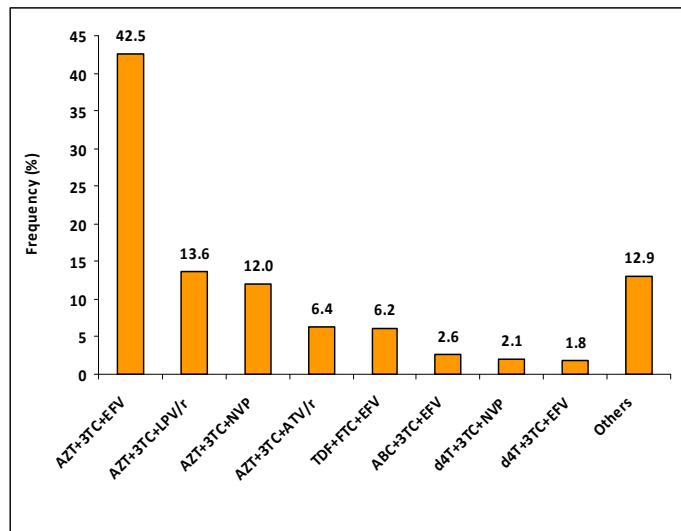
- ✓ 3.2% children on 2nd line
- ✓ 49.9% used ABC, 40% AZT
- ✓ 87.5% used LPV/r



Update 1 December 2011

Total compliance with WHO GL is 88.3%, with a compliance rate of 43.3% to preferred regimen and 45.0% to alternative regimens

Main first-line regimens used in adults in America region



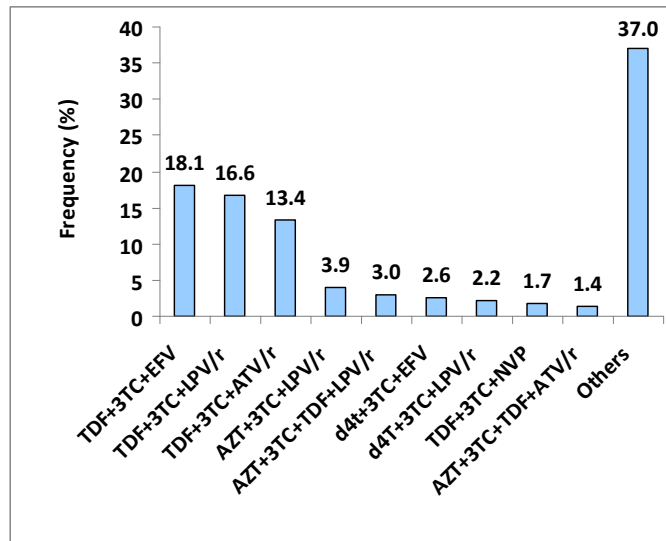
- ✓ 69.6% adults on 1st line
- ✓ 76.3% used AZT and 11.8% TDF
- ✓ 16.0% used NVP and 54.3% EFV



Update 1 December 2011

Total compliance with WHO GL is 96.9%, with a compliance rate of 63.9% to preferred regimen and 33.0% to alternative regimens

Main second-line regimens used in adults in America region



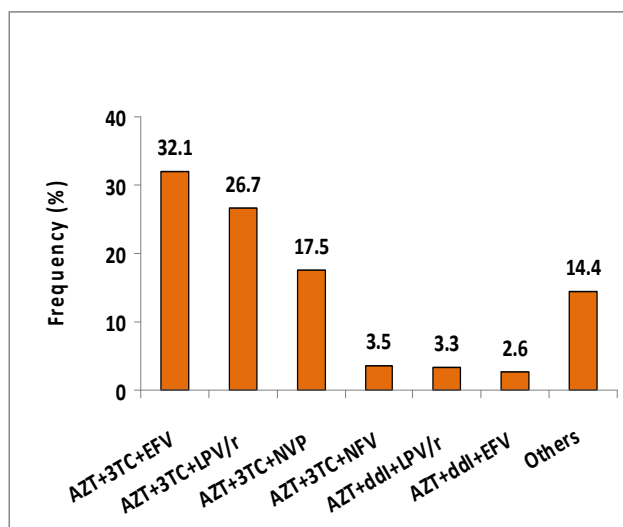
- ✓ 26.8% adults on 2nd line
- ✓ 60.5% used TDF and 14.4% AZT
- ✓ 32.8% used LPV/r and 17.8% ATV/r



Update 1 December 2011

Total compliance with WHO GL is 57.6%, with a compliance rate of 45.9% to preferred regimen and 11.6% to alternative regimens

Main first-line regimens used in children in America region



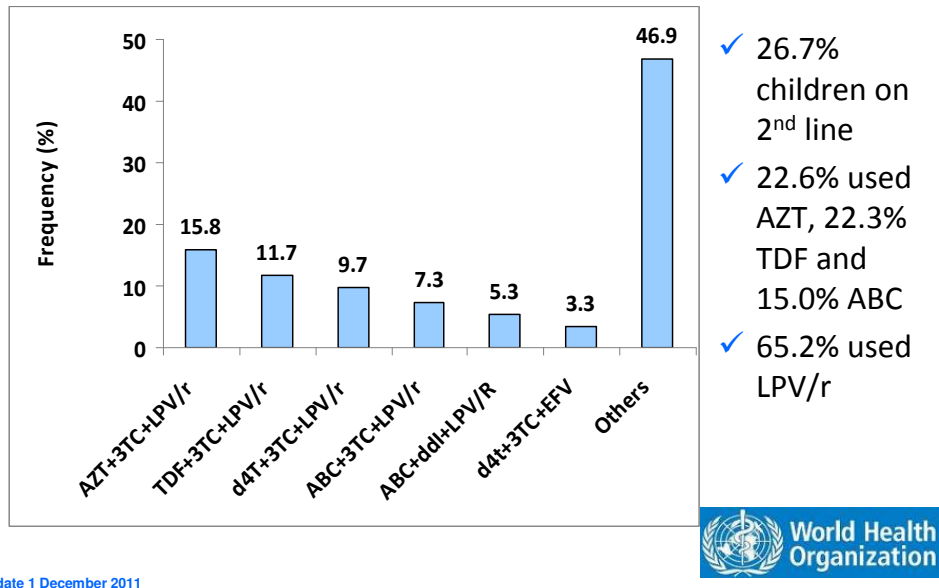
- ✓ 68.9% children on 1st line
- ✓ 86.9% used AZT
- ✓ Uptake of LPV/r: 34.8%



Update 1 December 2011

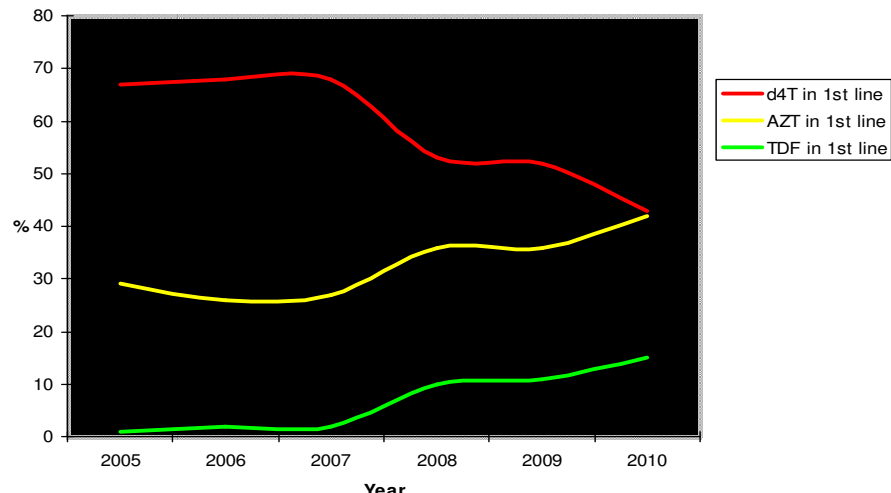
Total compliance with WHO GL is 84.8%, with a compliance rate of 81.7% to preferred regimen and 3.1% to alternative regimens

Second-line regimens used in children in America region



Total compliance with WHO GL is 84.3%, with a compliance rate of 58.0% to preferred regimen and 26.3% to alternative regimens

Global evolution of d4T, AZT and TDF use in 1st line therapy* (2005-2010)



*15 countries : Burkina Faso, Burundi, Cambodia, Cameroon, Ethiopia, India, Kenya, Lesotho, Namibia, Nigeria, Swaziland, the United Republic of Tanzania, Uganda, Zambia and Zimbabwe

Update 1 December 2011



In the sub-group of 15 countries:

use of stavudine decreased from 66.8% in 2006 to 42.6% in 2010

use of zidovudine increased from 29.5% to 41.8%

and tenofovir increased concomitantly from less than 0.1% to 15.0%

Two main strategies of d4T phase out have been implemented by countries...

Fast d4T phase out*:

- ✓ South Africa ↓51%
- ✓ Kenya ↓21%
- ✓ Uganda ↓89%
- ✓ Mozambique ↓91%
- ✓ Swaziland ↓33%
- ✓ Vietnam ↓20%
- ✓ Ukraine ↓25%

Slow d4T phase out*:

- ✓ Zimbabwe ↓2%
- ✓ Tanzania ↓13%
- ✓ Malawi ↓2%
- ✓ Ethiopia ↓6%
- ✓ Cameroon ↓10%
- ✓ China ↓10%
- ✓ PNG ↓7%

* Reduction rate during the 2009-2010 period

Update 1 December 2011



Country responses show that substantial progress has been made in phasing out the use of stavudine

However, this process has been uneven:

- d4T has already been almost completely replaced in a few countries, or complete d4T replacement expected to take place within one or two years
- roll-out of new first-line regimens is still ongoing or has only recently started in others , and will take between 3 to 5 years

Stavudine (d4T) phase out: current status in selected African countries



Country	Preferred NRTI for substitution	Percentage on d4T use (2009)	Percentage on d4T use (2010)	Estimated percentage of reduction	Start date of implementation	Timeline for completion
South Africa	TDF	82%	40%	↓51%	Feb 2010	NA
Mozambique	AZT	78%	7%	↓91%	March 2010	2011
Tanzania	TDF	72%	63%	↓13%	Jan 2011	2015
Uganda	TDF	18%	2%	↓89%	2009	2010
Kenya	TDF	68%	54%	↓21%	Feb 2010	2013-2015
Cameroon	TDF	63%	57%	↓10%	Jun 2010	2015
Ethiopia	TDF	63%	59%	↓6%	2009	2014

Update 1 December 2011

Implementation of phase-out plans proceeded more swiftly where:

- national treatment guidelines were quickly revised to reflect updated WHO guidance,
- service delivery providers were adequately trained,
- phase-out strategies were clearly defined and
- where active financial partner support was secured.

Stavudine (d4T) phase out: current status in selected Asian countries

Country	Preferred NRTI for substitution	Percentage on d4T use (2009)	Percentage on d4T use (2010)	Estimated percentage of reduction	Start date of implementation	Timeline for completion
China	AZT	48%	43%	↓10%	2011	under discussion
India	TDF	46%	47%	↑1%	under discussion	under discussion
PNG	AZT or TDF	62%	58%	↓7%	2011	2013-2014
Vietnam	TDF	81 %	65%	↓20%	2011	2012-2013



Update 1 December 2011

Thanks

Sigrid Thierry, Epidemiologist, Consultant;
Cushla Coffey, Sophie Druelles and Casey Schreiber, Interns;
WHO/HIV, Treatment and Care Unit: Marco Vitoria, Shaffiq Essajee;
WHO Regional Officers: Franck Lule (AFRO), Agnes Chetty (EMRO), Annemarie Rinder Stengaard (EURO), Omar Sued (PAHO), Iyanthi Abeyewickreme (SEARO), Dongbao Yu (WPRO);
WHO Country Officers from the 66 participating countries;
National ART Programme Managers from the 66 participating countries;
Health Economics and Epidemiology Research Office, Boston University/ University of the Witwatersrand, Johannesburg, South Africa: Gesine Meyer-Rath;
Clinton Health Access Initiative, South Africa Team: Jessica Fast;
U.S. President's Emergency Plan for AIDS Relief (PEPFAR): Larissa Stabinski;
WHO/HIV, AMDS Team: Vincent Habiambere and Boniface Dongmo Nguimfack;
WHO/HIV, Strategic Information and Planning Unit, Coordinator: Yves Souteyrand;
WHO/HIV, HIV Technologies and Commodities Unit, Coordinator: Joseph Perriens.

Update 1 December 2011