

### Country Situation

#### Background Statistics

HIV prevalence - adults (ages 15-49) <sup>[1]*</sup>	24.8% [23.8-25.8%]	2009
HIV prevalence - pregnant women (all ages) <sup>[2]*</sup>	28.7%	2010
Number of women living with HIV delivering <sup>[3]</sup>	13,500	2011
Est. # children (ages 0-14) living with HIV <sup>[1]*</sup>	16,000 [9,900-20,000]	2009
Maternal mortality ratio <sup>[4]</sup>	160/100,000	2010
Est. annual births <sup>[5]</sup>	47,000	2010
Infant mortality rate <sup>[6]</sup>	36/1,000	2010
Under-5 mortality rate <sup>[7]</sup>	49/1,000	2010

Adult HIV prevalence (ages 15-49) in Botswana, estimated at 24.8% in 2009, has declined slightly over the past decade down from 26.3% in 2001<sup>[1]</sup>. Prevalence among pregnant women (28.7%) is slightly higher than the prevalence in the general adult population.

Overall, facility coverage for PMTCT within ANC services is high (>90%)<sup>[8]</sup>. HIV testing among pregnant women was over 95% in 2010<sup>[9]</sup>, and the vast majority of pregnant women with HIV (93%) received ARVs for PMTCT in 2011<sup>[3]</sup>.

Botswana has adopted WHO 2010 PMTCT Guidelines Option B regimen for prophylaxis and a costed national PMTCT scale-up plan (2011-2015) is in place<sup>[10]</sup>.

### Reaching High Level Targets

#### Global 2015 Targets

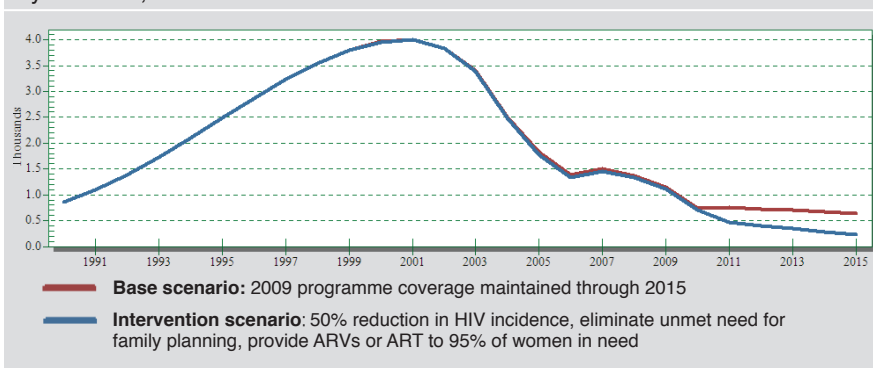
- Reduce the number of new HIV infections among children by 90%
- Reduce the number of HIV-associated deaths to women during pregnancy, delivery or puerperium by 50%

#### Child Targets

- Reduce under-five deaths due to HIV by at least 50%
- Provide antiretroviral therapy for all children with HIV

An estimated 1,100 children were newly infected with HIV in 2009. Modeling data from UNAIDS indicates that if all interventions are scaled up and Global Plan targets are achieved (see Figure 1), there would be 200 new child infections in 2015 – an 82% decline in the number of new child infections between 2009 and 2015<sup>[11]</sup>.

**Figure 1:** Number of new child HIV infections due to mother to child transmission, by scenario, Botswana



Source:<sup>[11]</sup> Joint United Nations Programme on HIV/AIDS, Unpublished estimates on PMTCT country targets, 2010

### Global Plan Targets, Baseline and Current Status

	Indicators	2009 Baseline [or last available data]	2010	2011	2012	2013	2014	2015
Overall Targets	Number new paediatric HIV infections <sup>[3]</sup>	700	–	500	–	–	–	–
	Number HIV-associated maternal deaths <sup>[4]</sup>	220 (2005)	80	–	–	–	–	–
Child Targets	Percentage of under-5 deaths due to HIV	17% <sup>[12]</sup> (2008)	15% <sup>[7]</sup>	–	–	–	–	–
	ART coverage among children (ages 0-14) <sup>[3]</sup>	91%	–	89%	–	–	–	–
Prong One	HIV incidence in women (ages 15-49) <sup>[3]</sup>	1.34%	–	1.18%	–	–	–	–
Prong Two	Percentage of married women with unmet need for family planning (ages 15-49)	–	–	–	–	–	–	–
Prong Three	Mother-to-child transmission rate <sup>[3]</sup>	5%	–	4%	–	–	–	–
	Maternal ARV coverage (prophylaxis and ART coverage, excluding single-dose nevirapine) <sup>[3]</sup>	92% <sup>a</sup>	–	93%	–	–	–	–
	Breastfeeding ARV Coverage <sup>[3]</sup>	31%	–	44%	–	–	–	–
Prong Four	ART coverage among HIV+ pregnant women in need of treatment <sup>[3]</sup>	62%	–	77%	–	–	–	–

## PRONG 1 & 2 Primary prevention of HIV among women of childbearing age Preventing unintended pregnancies among women living with HIV

### Global 2015 Targets

- Reduce HIV incidence in women (ages 15-49) by 50%
- Reduce unmet need for family planning among women to zero

#### Background Statistics

Young people (ages 15-24) HIV prevalence <sub>[11]</sub> *	Female: 11.8% [9.0-15.9%]	2009
	Male: 5.2% [3.7-7.3%]	2009
Condom use at last sex among young people (ages 15-24) with 2+ sexual partners in the last 12 months	Female: –	–
	Male: –	–
Male partners of pregnant women attending ANC tested in last 12 months <sub>[8]</sub> *	Male: 13%	2010
Unintended pregnancies (ages 15-49)	Female: –	–

### Key Points

Among young people (ages 15-24), HIV prevalence was over two times higher among females (11.8%) than males (5.2%) in 2009. Botswana has seen a slight decline in HIV incidence in women (ages 15-49) between 2009 and 2011—from 1.34% to 1.18%<sub>[13]</sub>. Prevalence of contraceptive use is moderate in Botswana, with about half (53%) of married women (ages 15-49) using any method in 2007<sub>[13]</sub>. Currently, no data are available on the unmet need for family planning or unintended pregnancies.

## PRONG 3 Preventing HIV transmission from a woman living with HIV to her infant

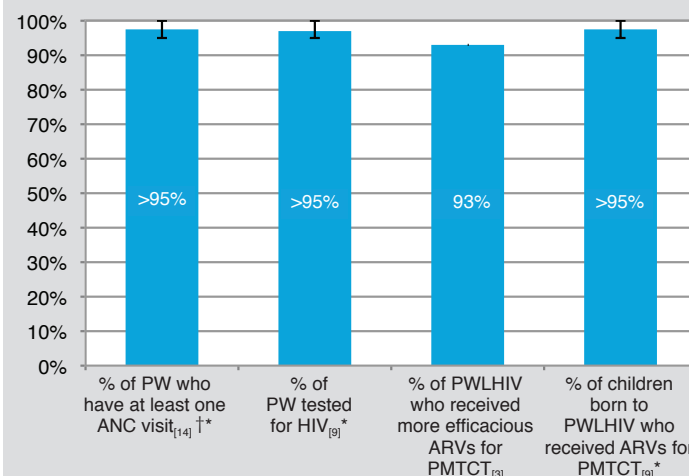
### Global 2015 Targets

- Reduce overall mother-to-child transmission of HIV to <5%
- 90% of mothers receive perinatal ART or ARVs
- 90% of breastfeeding infant-mother pairs receive ART or ARVs

#### Background Statistics

Timing of 1 <sup>st</sup> ANC visit (months) <sub>[13]</sub>	No ANC: 5.6% 1-4 months: 53.0% 4-5 months: 41.3%	2007
Percentage of women attending at least 4 ANC visits during pregnancy <sub>[13]</sub>	Total: 73.3% Urban: 76.2% Rural: 69.7%	2007
Percentage of pregnant women tested for HIV & received results in ANC, L&D, & post-partum (<72hrs) <sub>[9]</sub> *	>95%	2010
Estimated % of infants born to HIV+ women receiving ARVs for PMTCT <sub>[9]</sub> *	>95% [ <sub>&gt;95-&gt;95%</sub> ]	2010
Skilled attendant at delivery (%) <sub>[13]</sub>	95%	2007
Exclusive breastfeeding for infants <6 months <sub>[13]</sub>	20%	2007

**Figure 2: Coverage of selected PMTCT interventions (2010)**



† Indicator calculated from ANC health facility data for numerators and estimates of need for denominators. Not comparable to survey data presented under Background Statistics or elsewhere in this fact sheet.

### Key Points

Health facility data indicate most pregnant women (>95%) attended at least one ANC visit in 2010, but survey data suggest fewer attended at least four visits, as recommended by WHO. In a 2007 survey, 94% of women reported attending at least one ANC visit, but only 73% reported attending at least four, with higher coverage in urban than in rural areas (76% vs. 70%)<sub>[13]</sub>. Over 95% of pregnant women were tested for HIV in 2010 and, in 2011, 93% of HIV-infected pregnant women received more efficacious ARV regimens for PMTCT. Almost all HIV-exposed infants also received ARVs for PMTCT (>95%), suggesting success throughout the continuum of care.

## PRONG 4 Providing appropriate treatment, care and support to women living with HIV and their children and families

### Global 2015 Target

• 90% of HIV-positive pregnant women in need of ART for their own health are started on lifelong ART

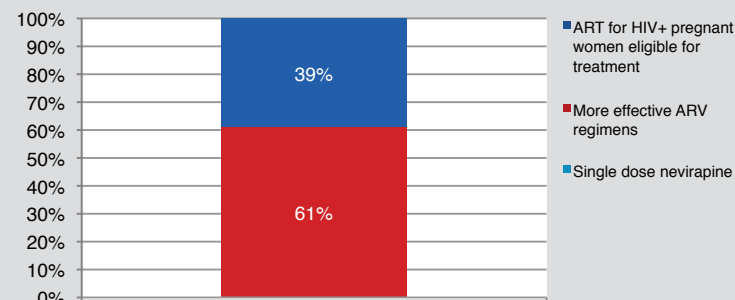
#### Background Statistics

Percentage of HIV-infected pregnant women assessed with CD4 testing <sup>[8]</sup> *	21%	2010
Percentage of infants born to HIV-infected women started on CTX prophylaxis within 2 months of birth <sup>[9]</sup> *	78% [69-87%]	2010
Percentage of infants born to HIV-infected women tested for HIV within 2 months of birth <sup>[9]</sup> *	53% [47-59%]	2010

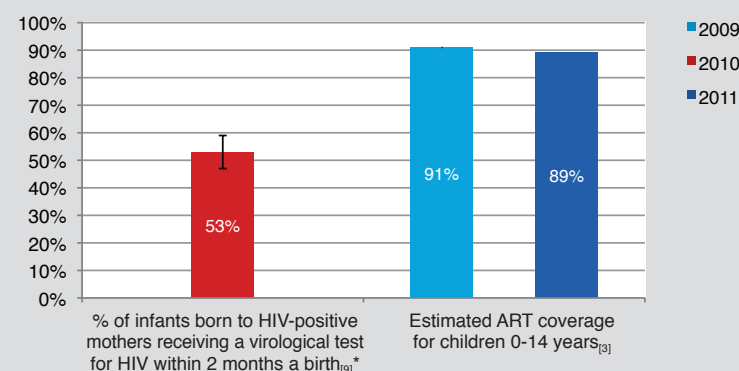
### Key Points

In 2010, only 21% of pregnant women with HIV were assessed with CD4 testing to determine if they were in need of treatment for their own health and about half (53%) of HIV-exposed infants were tested for HIV within two months of birth. Approximately 78% of infants born to HIV-infected women received cotrimoxazole prophylaxis in 2010. Of the HIV-infected pregnant women receiving ARVs for PMTCT in 2010, 61% received more efficacious ARV regimens and 39% received ART. Paediatric ART coverage declined very slightly between 2009 and 2011, from 91% to 89%.

**Figure 3:** Percentage distribution of various regimens provided to HIV+ pregnant women to prevent mother-to-child transmission of HIV, 2010<sup>[8]</sup>\*



**Figure 4:** Percentage of infants born to HIV+ women tested for HIV at 2 months of birth (EID) & Percentage of children living with HIV receiving ART, 2009-2011



## Key Challenges & The Bottom Line

### Key Challenges

Few HIV+ PW assessed with CD4

ART coverage among pregnant women and children with HIV is low

Few infants born to HIV+ women tested within 2 months of birth

Data on some key PMTCT indicators are not available at national level, hindering tracking of progress towards the EMTCT targets

### The Bottom Line

*If national EMTCT targets for Botswana are to be met by 2015, the following actions should be considered:*

Expand CD4 testing and enroll those eligible for treatment on ART

Improve access to ART for pregnant women with HIV and children with HIV

Expand the provision of EID

Strengthen routine monitoring system to ensure timely collection and reporting of quality data on Global Plan indicators.

## References:

- 1 Joint United Nations Programme on HIV/AIDS, *Report on the Global AIDS Epidemic*, 2010
- 2 Joint United Nations Programme on HIV/AIDS, unpublished estimates, 2010
- 3 Joint United Nations Programme on HIV/AIDS, *Together We Will End AIDS*, 2012
- 4 World Health Organization, United Nations Children's Fund, United Nations Population Fund and the World Bank, *Trends in Maternal Mortality: 1990-2010*, Estimates developed by WHO, UNICEF, UNFPA and the World Bank, 2012
- 5 United Nations Children's Fund, *State of the World's Children 2012: Children in an Urban World, 2012*
- 6 United Nations Children's Fund, World Health Organization, the World Bank, United Nations DESA/Population Division, *Levels & Trends in Child Mortality, Report 2011*, Estimates Developed by the UN Inter-agency Group for Child Mortality Estimation, 2011
- 7 Liu L, Johnson HL, Cousens S, et al, for the Child Health Epidemiology Reference Group of WHO and UNICEF. *Global, regional, and national causes of child mortality: an updated systematic analysis for 2010 with time trends since 2000*. Lancet 2012
- 8 World Health Organization, Joint United Nations Programme on HIV/AIDS, United Nations Children's Fund, *Towards Universal Access: Scaling up Priority HIV/AIDS Interventions in the Health Sector. Progress report, 2011*
- 9 World Health Organization, Joint United Nations Programme on HIV/AIDS, United Nations Children's Fund, *Towards Universal Access: Scaling up Priority HIV/AIDS Interventions in the Health Sector. Progress report, 2011*
- 10 Government of Botswana, Ministry of Health, *Strategic Plan towards the Elimination of Mother-to-Child Transmission of HIV 2011-2015*, 2011
- 11 Joint United Nations Programme on HIV/AIDS, Unpublished estimates on PMTCT country targets, 2010
- 12 UN Inter-agency Group for Child Mortality Estimation, United Nations Children's Fund, World Health Organization, The World Bank, United Nations DESA/Population Division, *Levels & Trends in Child Mortality, Report 2010*, Estimates Developed by the UN Inter-agency Group for Child Mortality Estimation, UNICEF, WHO, The World Bank, United Nations DESA/Population Division, 2010
- 13 Botswana Family Health Survey 2007-2008, Final Report
- 14 WHO/UNICEF/UNAIDS, calculated from Universal Access country reported unpublished data, 2011

## Notes:

- \* Please note that the corresponding country data for this indicator have not been revised and, therefore, refer to what was published in the ***Global HIV/AIDS Response – Epidemic Update and Health Sector Progress Towards Universal Access, Progress Report 2011***. Revised country data for this indicator will be published towards the end of 2012.
- Data not available.
- † Indicator calculated from ANC health facility data for numerators and estimates of need for denominators. Not comparable to survey data presented under *Background Statistics* or elsewhere in this fact sheet.
- <sup>a</sup> 2009 data are not directly comparable to later years. Definition changed in 2010 to exclude single-dose nevirapine.

## Acronyms:

- ANC: Antenatal care
- ART: Antiretroviral therapy
- ARVs: Antiretroviral prophylaxis
- CTX: Co-trimoxazole prophylaxis
- EID: Early infant diagnosis
- EMTCT: Elimination of mother-to-child transmission of HIV
- FP: Family planning
- L&D: Labour and delivery
- MMR: Maternal mortality ratio
- MNCH: Maternal, newborn and child health
- PMTCT: Prevention of mother-to-child transmission of HIV
- PWLHIV: Pregnant women living with HIV
- SRH: Sexual and reproductive health
- WHO: World Health Organization