

ELIMINATION OF PARENT-TO-CHILD TRANSMISSION OF HIV AND SYPHILIS IN ASIA AND THE PACIFIC IN 2015 AND BEYOND

Progress Review and Road Map



Progress Review and Road Map: Elimination of parent-to-child transmission of HIV and Syphilis in Asia and the Pacific in 2015 and beyond

© UNICEF East Asia and Pacific Regional Office, August 2016

ISBN: 978-974-685-151-0

Published by UNICEF East Asia and Pacific Regional Office

UNICEF East Asia and Pacific Regional Office
19 Phra Atit Road
Bangkok 10200 Thailand
Tel: +(66 2) 356-9499
Fax: +(66 2) 280 3563
Email: eapro@unicef.org

www.unicef.org/eapro

ELIMINATION OF PARENT-TO-CHILD TRANSMISSION OF HIV AND SYPHILIS IN ASIA AND THE PACIFIC IN 2015 AND BEYOND

Progress Review and Road Map



CONTENTS

LIST OF FIGURES AND TABLES	vi
ACKNOWLEDGEMENTS	viii
ACRONYMS AND ABBREVIATIONS	ix
NOTE ABOUT DATA	ix
BACKGROUND	1
Elimination of parent-to-child transmission of HIV	3
Elimination of parent-to-child transmission of syphilis	5
HIV in the Asia-Pacific region	5
Regional framework for EPTCT of HIV and syphilis 2010-2015	8
Validation for EPTCT of HIV and congenital syphilis	9
REGIONAL PROGRESS TOWARDS ELIMINATION	10
Progress towards EPTCT targets in the Asia-Pacific region	10
Sexual and reproductive health and maternal, neonatal and child health services	12
Policies to support EPTCT of HIV and syphilis	15
Progress towards validation of EPTCT	16
Progress towards EPTCT of HIV	19
Early infant diagnosis	20
Antiretroviral coverage for children in Asia and the Pacific	22
Progress towards EPTCT of syphilis	22
SHARED COUNTRY EXPERIENCES TOWARDS EPTCT IN ASIA-PACIFIC	24
HIV surveillance for pregnant women in India	24
Boosted Linked Response for HIV care, prevention and treatment in Cambodia	25
Male involvement in antenatal care and EPTCT of HIV in Papua New Guinea	25
The role of civil society in assisting Thailand reach validation goals	26
COST ANALYSIS OF EPTCT OF HIV AND SYPHILIS	27
Cost analysis of HIV	27
Cost analysis of syphilis	29
ASIA-PACIFIC REGIONAL VALIDATION MECHANISM FOR EPTCT OF HIV AND SYPHILIS	30
Background	30
Regional mechanism of validation in Asia and the Pacific	30
CONCLUSIONS AND RECOMMENDATIONS	33
Conclusions	33
Recommendations for countries	34
Recommendations for partner organisations	35
NEXT STEPS	36
ANNEX: GUIDELINES AND GUIDANCE	47
Global documents	47
Regional documents	47
Toolkits	48
ENDNOTES	49

LIST OF FIGURES AND TABLES

FIGURES

Figure 1:	Trends in estimated new HIV infections and AIDS-related deaths (for all ages), global and Asia-Pacific, 2000-2014	2
Figure 2:	Distribution of new HIV infections in children (aged 0-14) by region, 2014	3
Figure 3:	HIV prevalence in adults (aged 15-49), Asia-Pacific, 2014	7
Figure 4:	Conceptual Framework for the Elimination of New Paediatric HIV Infections and Congenital Syphilis in Asia-Pacific	8
Figure 5:	Number of children (aged 0-14) living with HIV, new paediatric infections and AIDS-related deaths, Asia-Pacific, 2000-2014	10
Figure 6:	Estimated mother-to-child transmission rate of HIV, Asia-Pacific, 2014	11
Figure 7:	Unmet need for family planning, Asia-Pacific, 2001-2014	12
Figure 8:	Contraceptive prevalence, Asia-Pacific, 2006-2014	13
Figure 9:	Antenatal coverage (at least one visit), Asia-Pacific, 2007-2014 (Target: $\geq 95\%$ coverage)	13
Figure 10:	Attendance of skilled health personnel at birth, Asia-Pacific, 2006-2014	14
Figure 11:	Delivery at health facilities, Asia-Pacific, 2006-2014	14
Figure 12:	Policies and programmes to support the elimination of MTCT of HIV and syphilis, Asia-Pacific	15
Figure 13:	Summary of key indicators for monitoring progress towards EPTCT in selected countries in Asia-Pacific, where all indicators were reported, 2011 versus 2014	19
Figure 14:	HIV testing coverage of pregnant women, Asia-Pacific, 2014	20
Figure 15:	Estimated percentage of pregnant women living with HIV who received ART for PPTCT, Asia-Pacific, 2014 (Process Indicator: Target $\geq 90\%$)	21
Figure 16:	Estimated percentage of infants born to women living with HIV receiving a virological test by two months of age, Asia, Africa and global, 2009-2014	21
Figure 17:	Estimated ART coverage of children (aged 0-14) living with HIV, Asia-Pacific, 2014 (regional programmatic target $>90\%$ by 2015)	22
Figure 18:	Coverage of syphilis testing during first ANC visit (Process indicator: Target $\geq 95\%$) and treatment of syphilis-positive pregnant women (Process indicator: Target $\geq 95\%$) in Asia-Pacific, 2014 or most recent year	23
Figure 19:	HIV prevalence (percentage) among antenatal clinic attendees by district, 2012-2013	24
Figure 20:	Cost savings from prevention of new paediatric HIV cases	27
Figure 21:	Regional mechanisms of validation in Asia-Pacific	31

TABLES

Table 1:	HIV and syphilis prevalence rates, estimated annual births, maternal mortality ratio and under-5 mortality rate, Asia-Pacific, 2013-2015	6
Table 2:	Case rate of congenital syphilis in 2014, Asia-Pacific	11
Table 3:	Impact and process indicators for validation of EPTCT of HIV and syphilis, Asia-Pacific, 2005-2014	17
Table 4:	Percentage ANC attendees who were syphilis-positive by country, Asia-Pacific, 2014 or most recent year	23
Table 5:	Health and cost outcomes of universal versus targeted approach (per 1,000,000 annual births)	28
Table 6:	Next steps towards EPTCT of HIV and syphilis, by country, Asia-Pacific	36

ACKNOWLEDGEMENTS

This report is the result of a collaborative effort undertaken by the Asia-Pacific United Nations Task Force for the Prevention of Parent-to-Child Transmission of HIV and Syphilis to provide background documentation for the review of progress toward the elimination of HIV and syphilis in children in the region by 2015.

Under the guidance of Dr Naoko Ishikawa, Scientist, HIV, Hepatitis and STI, WHO Regional Office for the Western Pacific and Shirley Mark Prabhu, Regional HIV and AIDS Knowledge and Advocacy Specialist, the report was compiled by Dr Tammy Meyers, Consultant, UNICEF EAPRO. Additional thanks go to those who worked on the data compilation; Consultants, Data and Research; Saba Moussavi and Geoffrey Nan Li, Alex Wang MPH Candidate 2016, Emory University; Xue Gao, University of Western Australia and Murdoch Children's Research Institute; and Professor SS Lee and Edward Cheung, Stanley Ho Centre for Emerging Infectious Diseases & Department of Microbiology, Chinese University of Hong Kong, who assisted with the epidemiology map. We thank Tani Ruiz for editing the report.

We acknowledge the role of the following members of the Task Force for assistance with the preparation and review of the report: Wing-Sie Cheng, Regional Adviser, HIV and AIDS; Dr Annefrida Kisesa-Mkusa, Regional HIV/AIDS Advisor UNICEF ROSA; Dr Ying-Ru Lo, Team Leader, HIV, Hepatitis and STI, WHO Regional Office for the Western Pacific; Dr Razia Narayan Pendse, Regional Adviser, HIV/STI, WHO Regional Office for the South-East Asia; Dr Dongbao Yu, Technical officer, WHO Regional Office for the South-East Asia; Vladanka Andreeva, Regional Strategic Intervention Adviser Prevention and Treatment; UNAIDS Regional Support Team for Asia and the Pacific; Dr Khin Cho Win Htin and Dr Ye Yu Shwe, UNAIDS' HIV and AIDS Data Hub for Asia-Pacific; Lori Thorell, Regional ICT Specialist; Dr Lori Newman, Strategic Information Advisor, PEPFAR Cambodia. All country officers are thanked for their editorial comments and for responding to additional requests for data verification.

Lastly, governments, healthcare workers and researchers in the region are acknowledged for the contribution and efforts with continuing to improve the quality of data submitted on the indicators for the elimination of HIV and syphilis in children.

ACRONYMS AND ABBREVIATIONS

ANC	antenatal care
ART	antiretroviral therapy
ARV	antiretroviral
BLR	Boosted Linked Response
CD4	T lymphocyte cell count
EID	early Infant diagnosis
EPTCT	elimination of parent-to-child transmission
HBV	hepatitis B virus
HIV	human immunodeficiency virus
HTC	HIV testing and counselling
GARPR	Global AIDS Response Progress Reporting
GVC	Global Validation Committee
GVS	Global Validation Secretariat
MDGs	Millennium Development Goals
MMR	maternal mortality ratio
MTCT	mother-to-child transmission
MoH	Ministry of Health
MCH	maternal and child health
MNCH	maternal, neonatal and child health
MSM	men who have sex with men
NACO	National AIDS Control Organization
NVC	National Validation Committee
NVT	National Validation Team
PITC	provider initiated testing and counselling
PLHIV	people living with HIV
PNG	Papua New Guinea
PrEP	pre-exposure prophylaxis
PPTCT	prevention of parent-to-child transmission
PTCT	parent-to-child transmission
PWID	people who inject drugs
ROSA	South Asia Regional Office of UNICEF
RVC	Regional Validation Committee
RVS	Regional Validation Secretariat
RVT	Regional Validation Team
SDGs	Sustainable Development Goals
SEARO	South East Asia Regional Office of WHO
SRH	sexual and reproductive health
STIs	sexually transmitted infections
TWN	Thai Women's Network
UNAIDS	Joint United Nations Programme on HIV/AIDS
UNFPA	United Nations Population Fund
UNICEF	United Nations Children's Fund
VCT	voluntary counselling and testing
WHO	World Health Organization
WPRO	Western Pacific Regional Office of WHO

Note about data:

Although annual reporting on HIV and syphilis indicators is gradually improving, data gaps remain. Information about congenital syphilis, such as the case rate, and testing and treatment of pregnant women, is particularly scarce. For many countries, indicators for maternal and child health have not been recently updated. While this report presents the latest available data for select indicators, there is a wide variation in reporting years. In addition, the indicators and data collection methodologies are not always standardized across countries and sometimes even within a country. For this reason, the country data are not easily comparable.

BACKGROUND

The year 2015 was a milestone year for the global community, marking a stock taking of progress towards game-changing development goals set at the start of the millennium. It also reflected the transition towards a new sustainable development agenda to 2030, building on the considerable momentum galvanized over the previous 15 years.

In September 2000 world leaders adopted the United Nations Millennium Declaration,¹ committing to a new international partnership to reduce extreme poverty and improve key development indicators – enshrined in the Millennium Development Goals (MDGs) – by 2015. A review of the eight MDGs² shows that far-reaching advances have been made, even if the job remains unfinished for millions of people. Extreme poverty has been halved, many more girls go to school, fewer children under 5 are dying and maternal health has improved.³ Enormous strides have been made against HIV and AIDS, malaria and other diseases (MDG 6). In March 2015, the number of people receiving antiretroviral therapy (ART) reached its 15 million target. New global annual HIV infections fell by 35 per cent between 2000 and 2014 (from 3.1 million to 2 million) and AIDS-related mortality decreased by 42 per cent from a peak of 1.2 million deaths in 2004 (see *Figure 1*).⁴

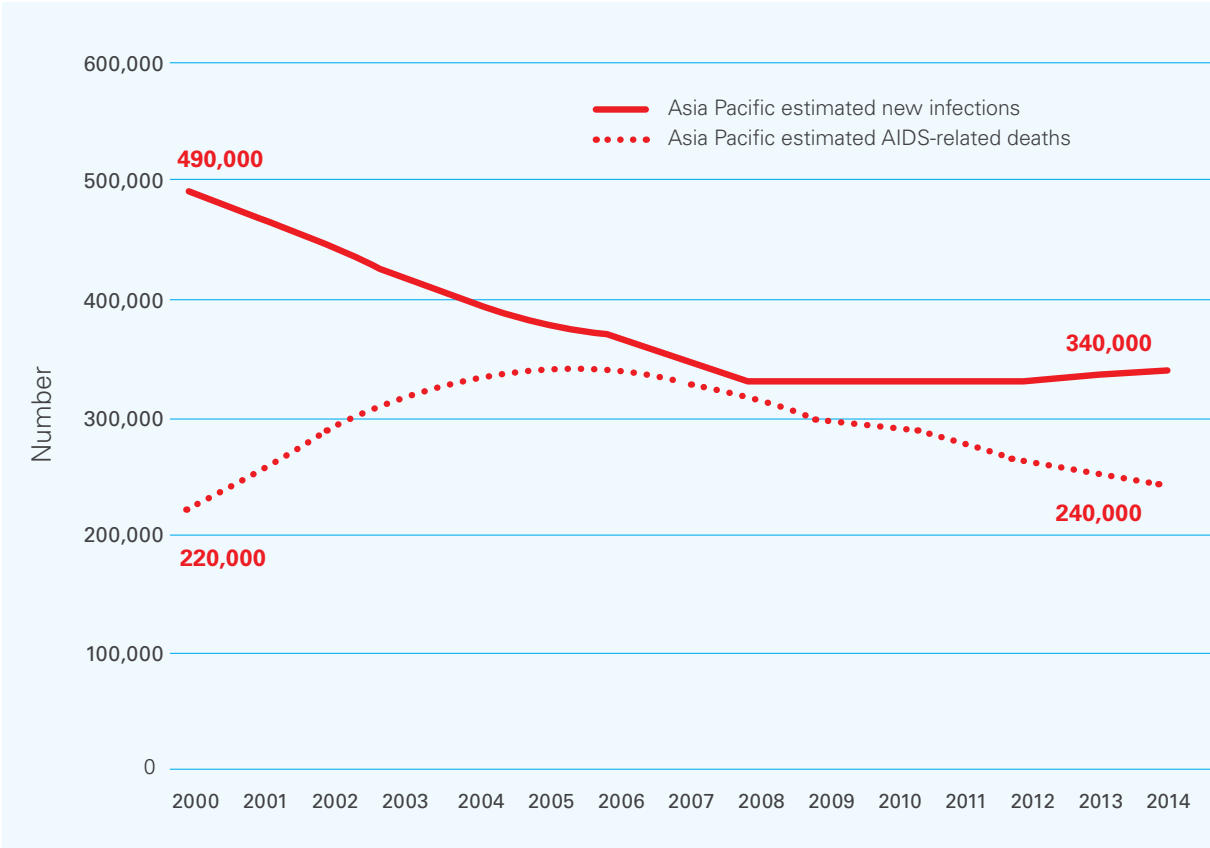
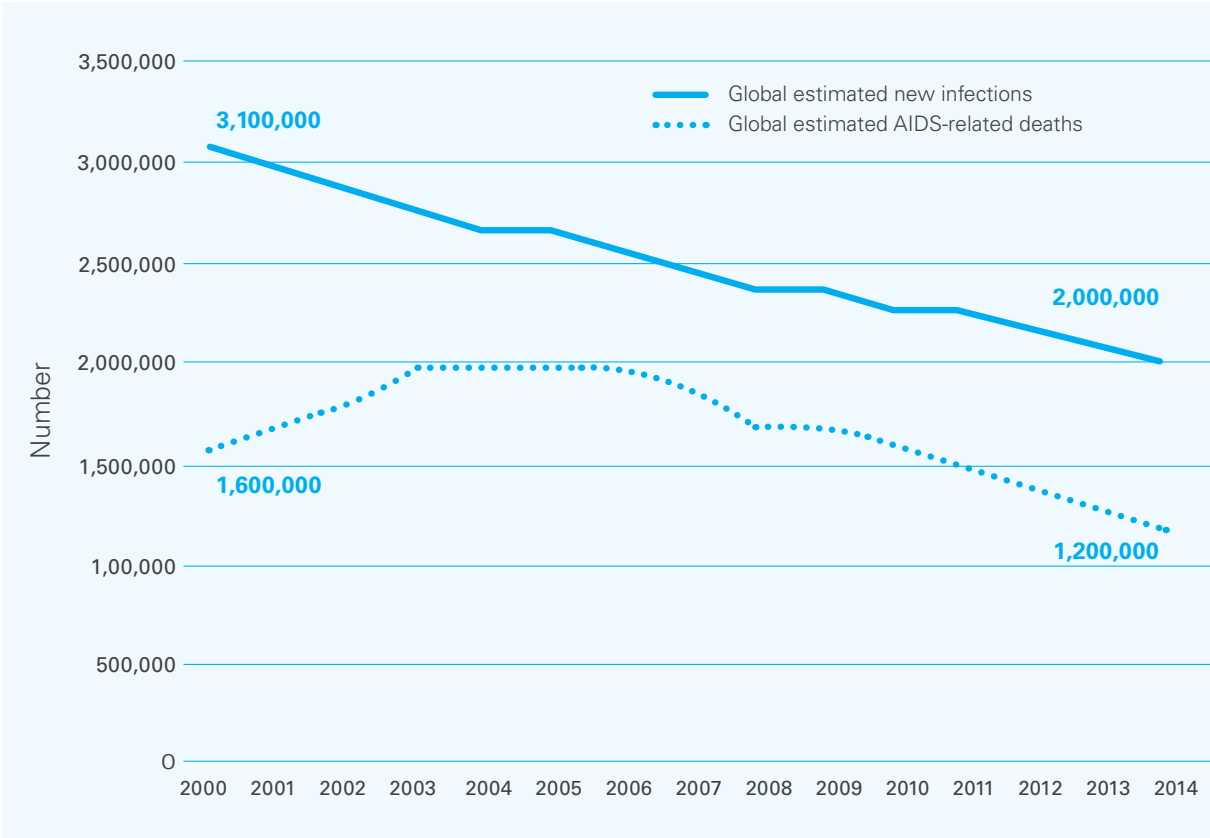
The Asia-Pacific region has contributed to these impressive successes. Estimated new annual HIV infections in the region decreased by 32 per cent between 2000 and 2014 (from 500,000 to 340,000) and AIDS-related deaths declined by 29 per cent from a peak of 340,000 in 2005 to 240,000 in 2014.

Some of the infections averted in Asia and the Pacific – as worldwide – were due to efforts to prevent the transmission of HIV from mothers to their children during pregnancy, birth and breastfeeding. To fast track efforts on this front, the Joint United Nations Programme on HIV/AIDS (UNAIDS) in 2011 launched the *Global Plan towards the elimination of new HIV infections among children by 2015 and keeping their mothers alive*, in collaboration with World Health Organization (WHO) and other partners.⁵

Syphilis, a sexually transmitted bacterial infection, affects almost 40 million people worldwide. Like HIV, it can be passed from a pregnant woman to her unborn child. In pregnancy, if untreated, syphilis can result in severe outcomes for mother and infant. Yet, transmission can be effectively prevented with inexpensive and easily available penicillin treatment for pregnant women.⁶ Recognizing the opportunity to test and treat mothers and babies during antenatal or perinatal care, in 2007, the WHO and its partners published the *Global elimination of congenital syphilis: rationale and strategy for action*.⁷ The goal was to increase the number of pregnant women tested for syphilis to 90 per cent and to provide adequate treatment to at least 90 per cent of seropositive pregnant women by 2015.

The dual goals of elimination of parent-to-child transmission (EPTCT) of HIV and syphilis are aspirational, although challenging for countries to achieve. The adoption of these goals – and for some countries triple elimination with the inclusion of screening for the hepatitis B virus (HBV) – has been instrumental to efforts to meet MDG 6. They are also important to realizing the health-related targets of the Sustainable Development Goals (SDGs), adopted by the international community in September 2015.

Figure 1: Trends in estimated new HIV infections and AIDS-related deaths (for all ages), global and Asia-Pacific, 2000-2014



Source: How AIDS Changed Everything – MDG 6: 15 years, 15 lessons of hope from the AIDS Response, UNAIDS, 2015.

The 17 SDGs are universally applicable goals that aim to shift the world onto a sustainable path. Their mission is not only to end poverty, hunger, ill health, lack of access to education and inequality but also to respond to climate change and protect eco-systems. For health-focused SDG 3, the first three targets are to: 1) further reduce maternal mortality; 2) end preventable deaths in infants and children under 5; and 3) end the epidemics of AIDS, tuberculosis, malaria and neglected tropical diseases and combat hepatitis, water-borne diseases and other communicable diseases by 2030.⁸

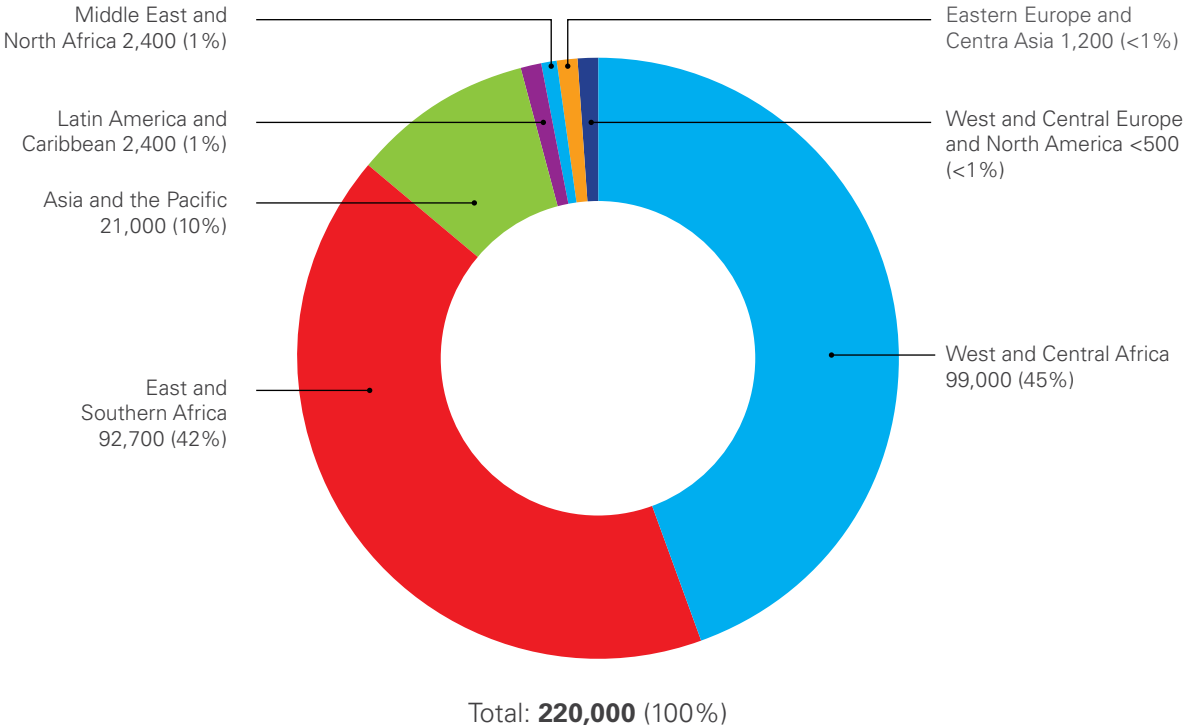
The goals of EPTCT of HIV and syphilis and controlling HBV are important for strengthening maternal and child health services through an integrated approach to healthcare delivery. In Asia and the Pacific, pregnant women living with HIV commonly belong to, or are partners of people from, key populations; many of whose members are hidden or marginalized and who thus have little or no access to public health services. Key populations include sex workers, men who have sex with men (MSM), transgender people and people who inject drugs (PWID) and their children. Reaching out to these women and children is part of providing equitable access to healthcare for all, achievable through universal health coverage.

In 2012, the United Nations passed a resolution endorsing universal health coverage as a pillar of sustainable development and global security.⁹ Two years later, more than 500 health and development organizations launched a coalition to accelerate universal health coverage, urging governments to rapidly scale up reforms to ensure access to quality healthcare for all.¹⁰

Elimination of parent-to-child transmission of HIV

Reflecting on the outcomes of MDG 6, it is evident that the ambitious targets set for reversing the spread of HIV in adults and children have generated inspiring results. Globally, new HIV infections in children declined by more than half (58 per cent) between 2000 and 2014 (from 520,000 to 220,000).¹¹

Figure 2: Distribution of new HIV infections in children (aged 0-14) by region, 2014



Source: UNAIDS, AIDSinfo, HIV and AIDS estimates, 2014.

However, the global target of reducing new cases of HIV in children to less than 40,000 by 2015¹² has yet to be achieved. In 2014, of the 220,000 children who acquired HIV worldwide, the Asia-Pacific region was estimated to account for the second highest number of new paediatric cases (21,000) after sub-Saharan Africa (see Figure 2).

Eliminating new infections in children is a plank of the UNAIDS 'Fast Track Strategy to end HIV by 2030',¹³ launched in 2014. This strategy calls for the achievement of the '90-90-90' targets: by 2020, 90 per cent of people living with HIV know their HIV status, 90 per cent of people who know their status receive treatment, and 90 per cent of people on HIV treatment have a suppressed viral load to ensure that their immune system remains strong and they are no longer infectious. The elimination of new HIV infections among children requires very high levels of ART coverage among pregnant women, exceeding the overall 90-90-90 targets for treatment.

The fast-track plan calls for the targets for the general population to increase to 95-95-95 by 2030 in order to reduce new infections among adults to 200,000 by that year.

Preventing HIV infection of children extends beyond therapeutic interventions alone. Prevention needs to begin prior to conception with the following components:¹⁴

Primary prevention of HIV infection among women of childbearing age:

- i. Preventing unintended pregnancies among women living with HIV;
- ii. Preventing HIV transmission from a woman living with HIV to her infant; and
- iii. Providing appropriate treatment, care and support to mothers living with HIV and their children and families.

Access to family planning services and contraception is key to preventing both HIV infections in women of child-bearing age as well as unintended pregnancies. Contraception availability and unmet family planning needs are thus used as indicators for monitoring progress in routine HIV country reporting. ART for women and their infants has long been recognized as a highly effective method for prevention of parent-to-child transmission (PPTCT) of HIV.¹⁵ In 2013, WHO released new consolidated guidelines on the use of antiretroviral (ARV) medicines for the prevention and treatment of HIV.¹⁶ These guidelines recommended ART for all pregnant and breastfeeding women living with HIV to prevent transmission to their children, with two specific options:

- Option B: recommending that all HIV-positive pregnant women begin ART. Those who were not eligible according to T lymphocyte (CD4) count or clinical stage criteria specified at the time were advised to stop ART when they stopped breastfeeding their babies, and lifelong treatment was advised only for women eligible for ART according to CD4 criteria.
- Option B+: recommending lifelong ART for all pregnant and breastfeeding women living with HIV regardless of CD4 count or WHO clinical stage. ART is to be continued after delivery and completion of breastfeeding.

The simplified regimen of tenofovir, lamivudine/emtricitabine and efavirenz (TDF+3TC/FTC+EFV), which are available as a fixed dose combination tablet and can be given once daily, was recommended for pregnant women.

In September 2015, the WHO updated its recommendations, announcing that all people diagnosed with HIV should immediately begin lifelong ART. Option B+ therefore became the only recommended strategy for pregnant women living with HIV.¹⁷ The WHO's announcement was based on the findings from clinical trials demonstrating superior outcomes for patients who started ART immediately, regardless of clinical stage or CD4 count.¹⁸

Elimination of parent-to-child transmission of syphilis

Syphilis is transmitted from pregnant women to their unborn infant in more than half of all cases, especially in the early stages of the disease when women are more likely to be asymptomatic. Undiagnosed syphilis in mothers and babies can have devastating consequences, including early foetal death, stillbirth, preterm delivery, low birth weight, neonatal death and syphilis in the newborn.¹⁹ Syphilis can be diagnosed through a combination of serological tests. More recently, new point-of-care (POC) tests have been introduced, which can use whole-blood samples from a finger prick. These can be used in all healthcare settings, even in the face of limited electricity, refrigeration or skilled laboratory staff.²⁰ If pregnant women are diagnosed with syphilis early on, penicillin given as a single dose intramuscular injection is effective in preventing most adverse consequences. Prevention of mother-to-child transmission (MTCT) of syphilis is therefore relatively simple, cheap, and cost-effective even in areas with low syphilis prevalence.²¹ Prevention of MTCT leads to better maternal and child health outcomes, along with the many beneficial social and economic implications of keeping families healthy.

In 2008, following the release of the global plan for EPTCT of syphilis,²² baseline global and regional estimates of syphilis in pregnancy and adverse pregnancy outcomes were established to measure progress under the plan. Since then, more countries have adopted universal syphilis testing and treatment in pregnancy and many have integrated plans for PPTCT of syphilis and HIV into maternal, newborn and child health (MNCH) programmes.

Between 2008-2012, maternal syphilis infections and adverse pregnancy outcomes declined globally by one third. Worldwide, there were an estimated 950,000 maternal syphilis infections in 2012, resulting in 360,000 adverse outcomes, including 150,000 early foetal deaths or stillbirths, 50,000 preterm or low birth-weight infants, 60,000 neonatal deaths and 110,000 infants with congenital infections, based on modelled data reported through the Global AIDS Response Progress Reporting (GARPR) (WHO/UNICEF/UNAIDS) and previously published estimates.²³ The decline in maternal syphilis was most evident in South Asia, with India accounting for 37 per cent of this reduction due to the improved data quality and efforts to control sexually transmitted infections (STIs). Excluding India from the analysis, the prevalence of maternal syphilis decreased by 11 per cent and there were 10 per cent fewer adverse pregnancy outcomes during 2008-2012.²⁴ These data indicate that STI prevention efforts are having a positive effect.²⁵

Despite impressive reductions in cases of paediatric HIV and congenital syphilis, elimination targets remain elusive for most countries.

HIV in the Asia-Pacific region

Asia and the Pacific is home to 60 per cent of the world's population.²⁶ After sub-Saharan Africa, the region has the highest number of people living with HIV, estimated at 5 million (4.5-5.6 million) in 2014.²⁷ While HIV prevalence among the general population is under 1 per cent in most countries (see *Figure 3*), it is much higher among key populations (at greater risk of HIV), resulting in concentrated epidemics, particularly in capital cities and large urban areas. In Thailand, for example, the HIV prevalence among all MSM was estimated at 7.1 per cent in 2012, but it was more than triple that – 24.4 per cent – in Bangkok.²⁸

Asia-Pacific countries with a relatively high HIV burden include Cambodia, China, India, Indonesia, Myanmar, Papua New Guinea (PNG), Thailand and Viet Nam. HIV prevalence varies widely within some of these countries, creating challenges for the development of national policies for EPTCT of HIV and syphilis.

HIV prevalence among pregnant women ranged from 0.09 per cent in Timor-Leste to 0.7 per cent in Myanmar, among the 21 countries that are the focus of this report (where data were available, see *Table 1*). Syphilis prevalence ranged from 0.07 per cent in Thailand to 2.7 per cent in Mongolia, among reporting countries.

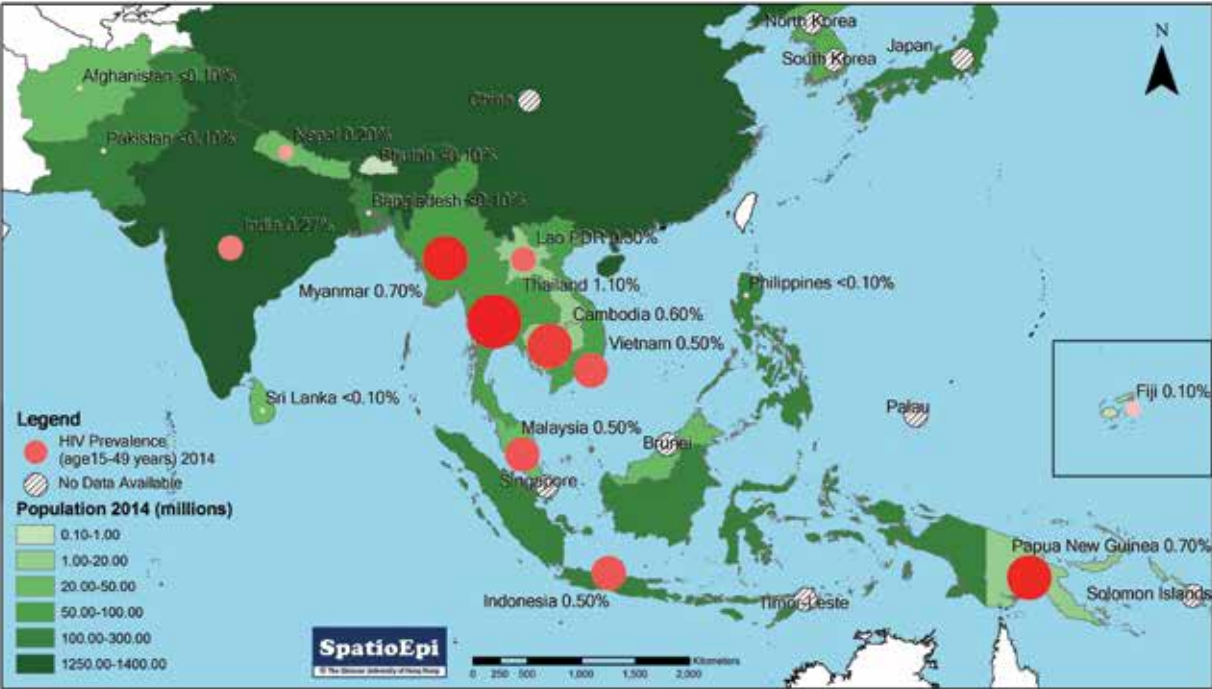
Table 1: HIV and syphilis prevalence rates, estimated annual births, maternal mortality ratio and under-5 mortality rate, Asia-Pacific, 2013-2015

Country	Estimated % of HIV prevalence in adults (15-49 years) ¹ 2014	Estimated # of annual births (2013) ²	Estimated # of HIV+ pregnant women delivering (2014) ¹	% HIV among ANC attendees (2014) ³	% Syphilis among ANC attendees (2014) ⁴	Maternal mortality ratio/100,000 live births (2015) ⁵	Under 5 mortality rate per 1,000 live births (2015) ⁶
Afghanistan	<0.1	1,042,000	<300	–	–	396	91
Bangladesh	<0.1	3,138,000	<200	0.3	1	176	38
Bhutan	<0.1	15,000	–	–	–	148	33
Cambodia	0.6	389,000	1,000	0.2	0.02	161	29
China	–	18,440,000	–	0.05	0.23	27	11
Fiji	0.1	18,000	<100	0.1	–	30	22
India	0.27	25,595,000	38,202*	0.1	0.2	174	48
Indonesia	0.5	4,691,000	14,000	0.6	1.7	126	27
Lao PDR	0.3	181,000	<500	–	–	197	67
Malaysia	0.5	525,000	<500	0.03	0.1	40	7
Maldives	–	8,000	–	0.03	0.1	68	9
Mongolia	–	64,000	–	0.01	2.6	44	22
Myanmar	0.7	917,000	4,600	0.7	0.7	178	50
Nepal	0.2	584,000	<500	0.1	–	258	36
Pakistan	<0.1	4,599,000	1,700	–	–	178	81
Papua New Guinea	0.70	212,000	1,300	0.7	–	215	57
Philippines	<0.1	1,800,000**	<500	–	0.1	114	28
Sri Lanka	<0.1	380,000	<100	0.01	0.03	30	10
Thailand	1.1	790,000***	4,800	0.6	0.07	20	12
Timor-Leste	–	41,000	–	0.09	0.52	215	53
Viet Nam	0.5	1,424,000	3,000	0.12	–	54	22

Sources:

- ¹ How AIDS Changed Everything – MDG 6: 15 Years, 15 Lessons of Hope from the AIDS Response, UNAIDS, 2015; GARPR, 2013, country online tool, <https://aidsreportingtool.unaids.org/>.
 - ² The State of the World's Children 2015: Executive Summary 'Reimagine The Future Innovation For Every Child', <http://sowc2015.unicef.org>
 - ³ Prevalence calculated from number of HIV-positive women among those tested including known positives.
 - ⁴ Global Health Observatory data repository, at <http://apps.who.int/gho/data/node.main.A1362STI?lang=en>
 - ⁵ WHO, UNICEF, UNFPA, World Bank, United Nations, Trends in Maternal Mortality: 1990-2015, http://apps.who.int/iris/bitstream/10665/194254/1/9789241565141_eng.pdf?ua=1
 - ⁶ UNICEF, WHO, World Bank, United Nations, Levels & Trends in Child Mortality Report 2015, http://www.childmortality.org/files_v20/download/IGME%20Report%202015_9_3%20LR%20Web.pdf
- * The National AIDS Control Organization (NACO) technical estimates report 2012 (recent unconfirmed report from NACO: 34,000).
- ** 2014 National Safe Motherhood Program (NSMP) (Philippines);
- *** Reported by country October 2015: Live births registered to Ministry of Interior.

Figure 3: HIV prevalence in adults (aged 15-49), Asia-Pacific, 2014

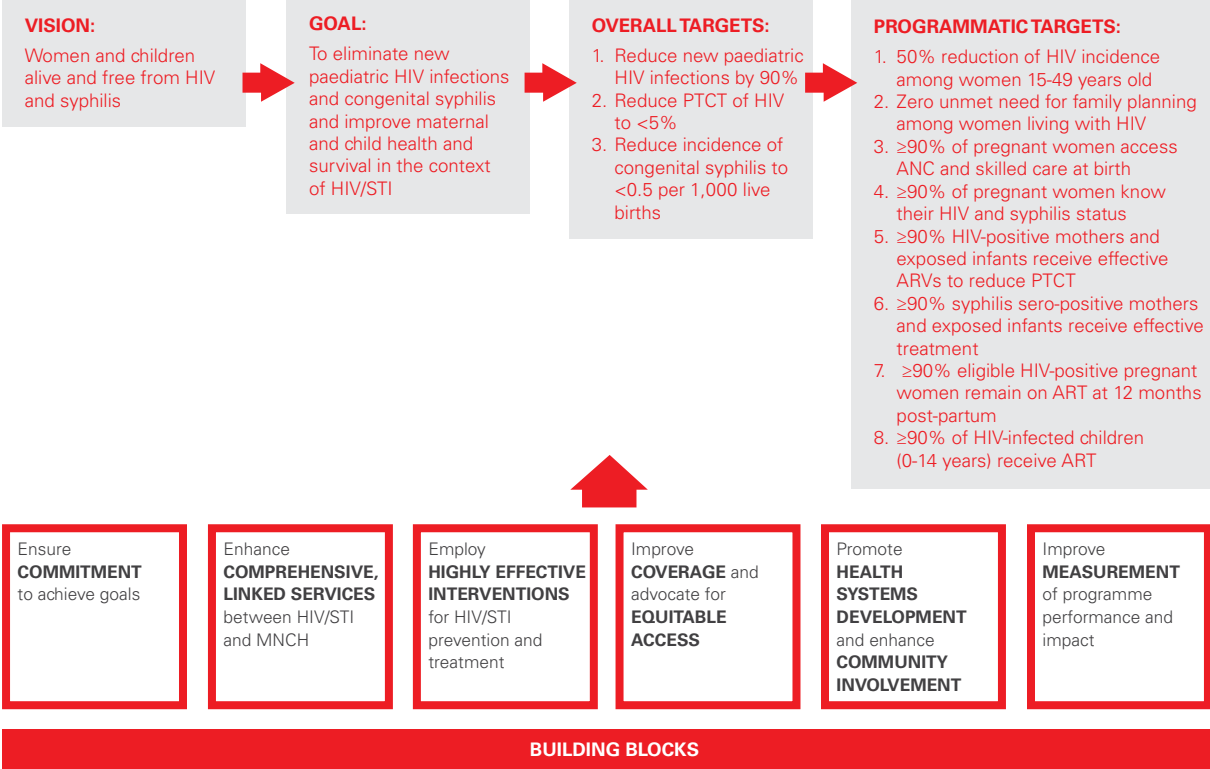


Source: UNAIDS, How AIDS Changed Everything – MDG 6: 15 Years, 15 Lessons of Hope from the AIDS Response, UNAIDS, Geneva, 2015 and worldometers.
<http://www.worldometers.info/world-population/population-by-country/>

The Asia-Pacific United Nations Task Force for the Prevention of Parent-to-Child Transmission of HIV and Syphilis was set up in 1998 to assist countries in strengthening interventions for pregnant women. As a regional technical forum, the PPTCT Task Force supported national actions to prevent new HIV infections and congenital syphilis in children, scale up HIV prevention among parents, enhance access to quality services for care, treatment and support of children and families living with HIV, and contribute to the achievement of MDGs 4-6 in the Asia-Pacific region. The United Nations Children’s Fund (UNICEF) and WHO jointly served as the Secretariat of the Task Force, organizing regional meetings twice every three years.

Following a reduction in new paediatric HIV cases in the region from an estimated 32,000 in 2003 to 25,000 in 2009, focus shifted from *prevention* to the *elimination* of PTCT of HIV, with the added commitment to EPTCT of syphilis. Key strategies contributing to the decline in new paediatric HIV cases included improved early diagnosis of HIV in pregnant women and improved ART coverage for those diagnosed with HIV.

Figure 4: Conceptual Framework for the Elimination of New Paediatric HIV Infections and Congenital Syphilis in Asia-Pacific



Source: Elimination of New Paediatric HIV Infections and Congenital Syphilis in Asia-Pacific 2011-2015: Conceptual Framework and Monitoring and Evaluation Guide.³⁰

Regional framework for EPTCT of HIV and syphilis 2010-2015

At the 8th Asia-Pacific UN PPTCT Task Force meeting held in Vientiane, Lao PDR, in October 2010, delegates from 20 countries across the region agreed to endorse the regional goal of the dual EPTCT of HIV and syphilis by 2015.

A regional framework for the EPTCT of HIV and syphilis was developed for 2011-2015²⁹ to provide a common systematic approach to the elimination goal, as well as to improve maternal and child health in the context of HIV and other STIs. The framework also served to advocate for regional governments to endorse the EPTCT HIV and syphilis goals, aiming to significantly reduce the number of children with either condition (see Figure 4).

At the 9th Task Force Meeting, held in August 2013 in Kathmandu, Nepal, participants discussed issues and solutions for scaling up PPTCT services to accelerate progress on the elimination agenda.³¹

Eight countries (Cambodia, China, Fiji, Indonesia, Malaysia, Sri Lanka, Papua New Guinea and Thailand) committed to the dual goal of the EPTCT of HIV and syphilis. China and Fiji included control of HBV in their elimination initiative, while Myanmar committed to eliminating new cases of paediatric HIV. Bangladesh pledged to issue National Guidelines for the Prevention of Vertical Transmission of HIV and Congenital Syphilis, which it did in December 2013.

Recommendations made at this Task Force Meeting included:

- Increase political commitment and investment for the PPTCT agenda.
- Consider implementing universal HIV and syphilis testing to enable the EPTCT of HIV and syphilis to succeed.
- Improve linkages with MNCH, reproductive health and epidemiology departments.
- Institute appropriate monitoring to report on scale-up and early experiences on implementing Option B/B+.
- Update ART guidelines for children in accordance with WHO consolidated guidelines published in 2013.
- Increase the involvement of civil society and linkages with HIV prevention programmes.
- Develop and support key linkages between PPTCT and other programmes that focus on HIV prevention, treatment and care for populations at high risk of HIV exposure, including adolescents and migrants.

The following measures were agreed on to push forward the elimination agenda:

- Promote and facilitate South-South knowledge and experience sharing, information exchange and technical assistance.
- Document positive experiences and lessons learned in implementing new PPTCT programme options, in particular Option B+, including the role of MNCH in treatment of HIV-positive mothers, treatment adherence and long-term retention in care.
- Establish and run a bi-regional validation committee for elimination of MTCT of HIV, syphilis and HBV as one of its core tasks.
- Facilitate the stronger participation of civil society in future Task Force meetings to cultivate a healthy debate on critical issues of access and programme quality in recognition that civil society organizations (CSOs) and key populations play a crucial role in the EPTCT of HIV and congenital syphilis.

Validation for EPTCT of HIV and congenital syphilis

In 2014, WHO in collaboration with UNICEF, UNFPA and UNAIDS published the *Global Guidance on Criteria and Processes for Validation for Elimination of Mother-to-Child Transmission of HIV and Syphilis*.³² The guidance sets forth the minimum processes and criteria necessary for the achievement of validation of EPTCT in a country.

HIV impact indicators include: MTCT case rate below 50 new paediatric infections per 100,000 live births and an MTCT rate below 5 per cent in breastfed and 2 per cent in non-breastfed populations. For syphilis, the impact indicator is an incidence of congenital syphilis of fewer than 50 cases per 100,000 live births. A number of process indicators have also been set: antenatal coverage (at least one visit) and coverage of the testing of pregnant women for syphilis and HIV above 95 per cent, ART for HIV-positive women above 90 per cent, and treatment for syphilis seropositive pregnant women above 95 per cent.

In 2014, the Global Validation Advisory Committee was established, composed of independent experts. In June 2015, Cuba became the first country to be officially validated for the EPTCT of HIV and syphilis.

REGIONAL PROGRESS TOWARDS ELIMINATION

Progress towards EPTCT targets in the Asia-Pacific region

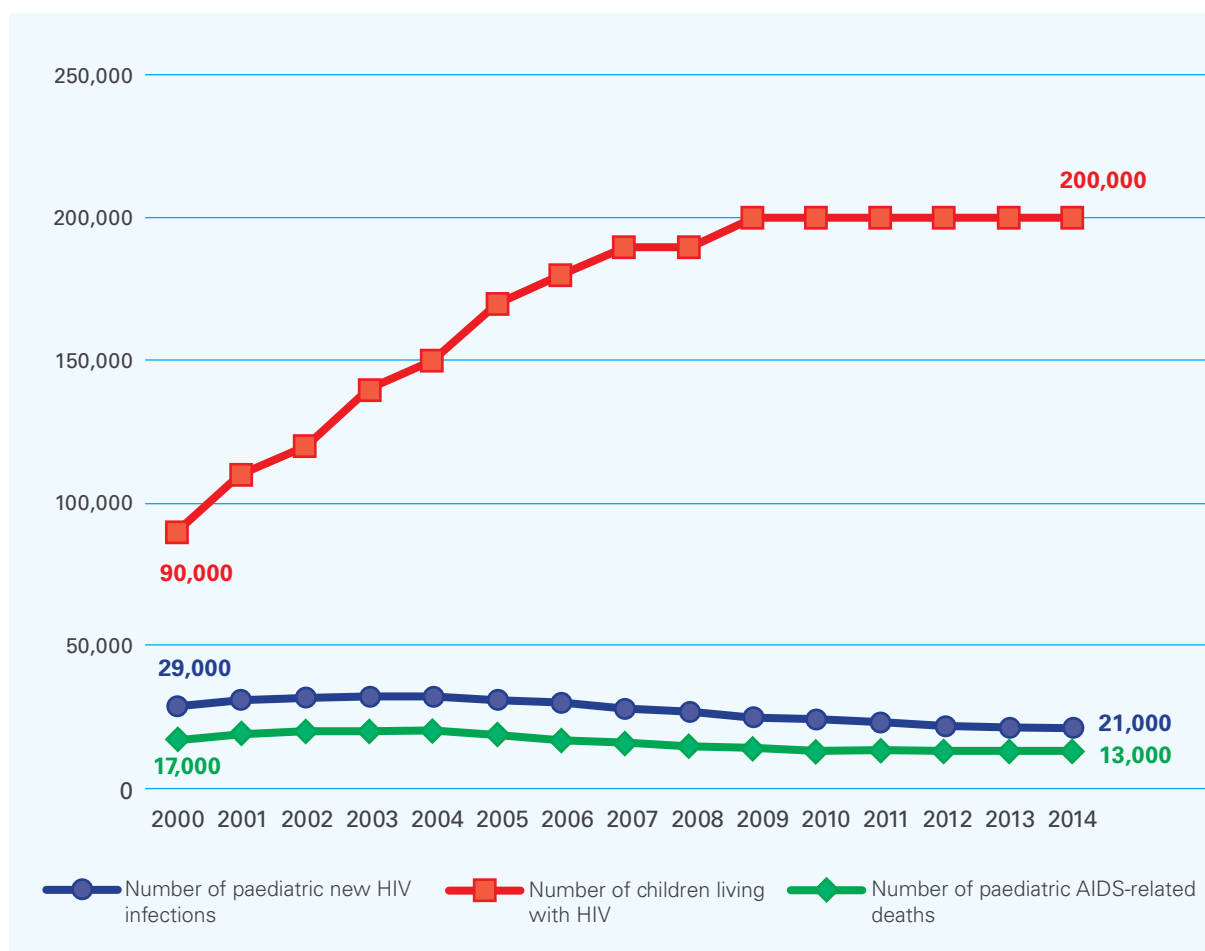
The Regional Framework for EPTCT of HIV and Syphilis 2011-2015 set out key targets for countries.³³ Progress towards these targets has been described below.

Reduce new paediatric infections by 90 per cent by 2015 (from 2009 baseline)

Regional reports show a 27 per cent decline in new HIV cases among children aged 0-14 between 2000-2014 (from 29,000 to 21,000, see Figure 5).

Achieving the targeted 90 per cent drop in new HIV infections in children from 2009 would have translated into about 3,000 new cases for 2015. With an estimated 21,000 new paediatric HIV cases in 2014, the region remained far off the 2015 target.

Figure 5: Number of children (aged 0-14) living with HIV, new paediatric infections and AIDS-related deaths, Asia-Pacific, 2000-2014



Source: How AIDS Changed Everything – MDG 6: 15 Years, 15 Lessons of Hope from the AIDS Response, UNAIDS, 2015; UNAIDS 2014 HIV and AIDS estimates, July 2015.

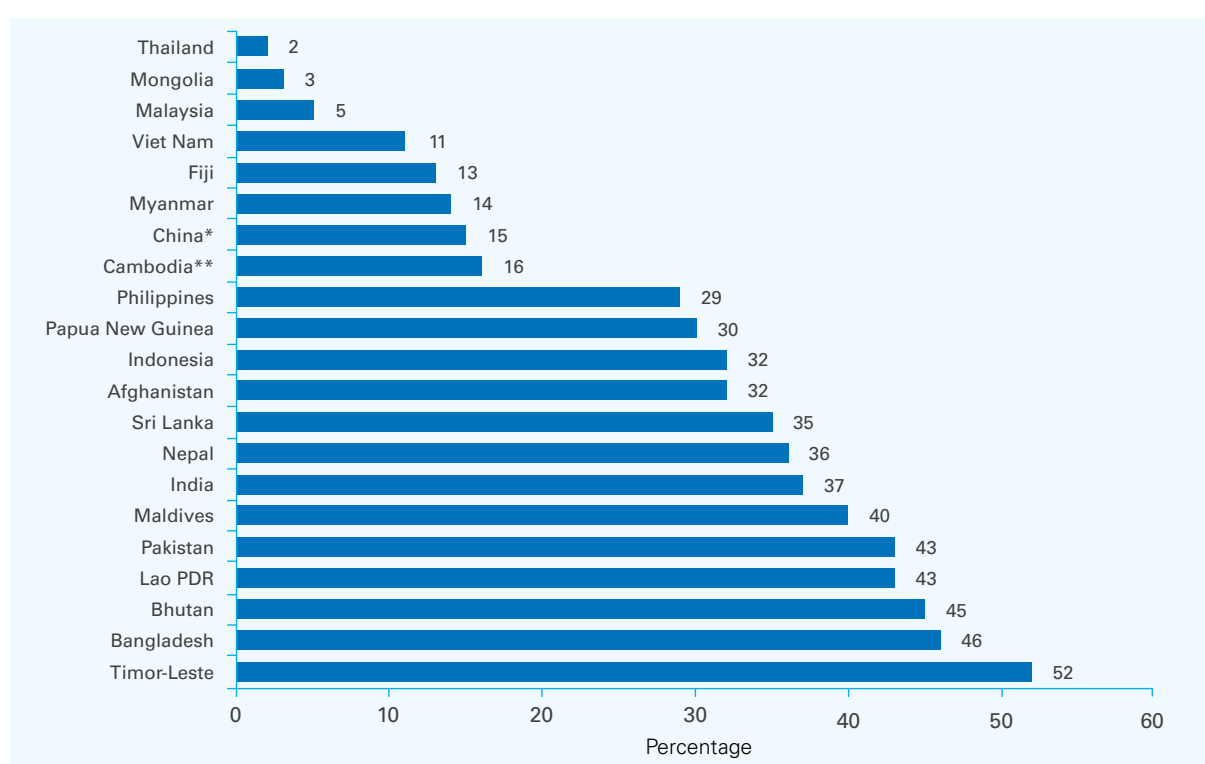
Reduce PTCT of HIV to below 5 per cent (from the 2009 baseline) in breastfeeding populations and below 2 per cent in non-breastfeeding populations

Estimates of parent-to-child transmission of HIV have remained at levels consistent with no intervention in many countries (28-45.7 per cent). Thailand, Malaysia and Mongolia achieved transmission levels of under 5 per cent, while Cambodia, China, Fiji, Myanmar and Viet Nam have progressed towards the elimination target (see Figure 6).

Reduce incidence of congenital syphilis to 50 cases/100,000 live births

Only five of the 21 countries covered in this Report reported data on incident cases of congenital syphilis. Sri Lanka, Malaysia and Mongolia fell within the target, while China was close to the target (see Table 2).

Figure 6: Estimated mother-to-child transmission rate of HIV, Asia-Pacific, 2014



Source: UNAIDS, UNICEF, WHO, 2015 Global AIDS Response Progress Reporting and UNAIDS 2014 HIV and AIDS estimates, July 2015.

* China reported MTCT rate of 6.1 per cent, GARPR 2013.

** Cambodia reported MTCT rate of 7.1 per cent, GARPR 2013.

Table 2: Case rate of congenital syphilis in 2014, Asia-Pacific

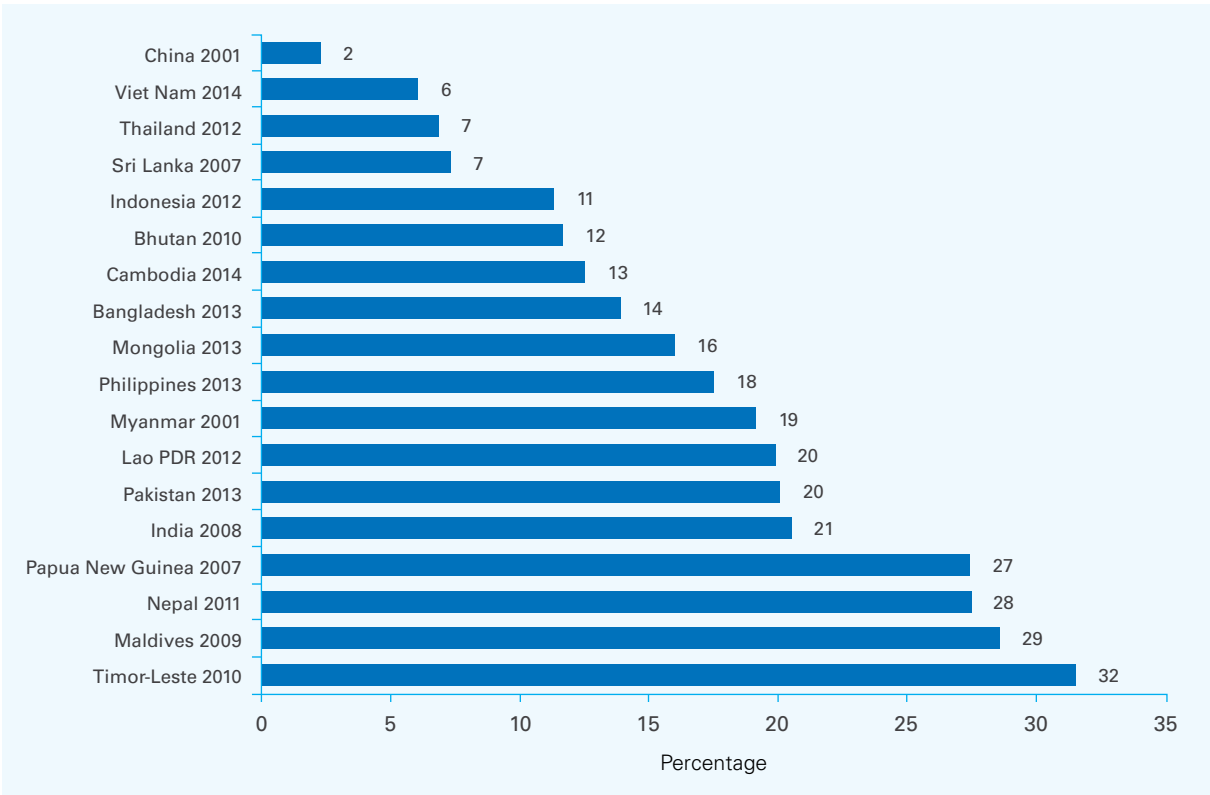
Country	Cases/100,000 live births
China	62
Fiji	235
Malaysia	7
Mongolia	37
Sri Lanka	2

Source: GARPR online reporting tool 2014, at <https://aidsreportingtool.unaids.org/>

Sexual and reproductive health and maternal, neonatal and child health services

Data on selected indicators of sexual and reproductive health (SRH) and MNCH services are shown below. The unmet need for family planning ranged from 2.3 per cent in China (2001) to 31.5 per cent in Timor-Leste (2010) (see Figure 7). Contraceptive prevalence was 50 per cent or below in many countries (see Figure 8) while antenatal coverage for pregnant women (at least one antenatal visit) did not meet the under 95 per cent target in 10 of the 21 countries (see Figure 9). Several countries had a low percentage of skilled birth attendants at delivery (see Figure 10), while in more than half, delivery at health facilities was under 90 per cent (see Figure 11). It is important to note that in many countries data have not been recently updated, and because the year of reporting varies widely between countries, direct comparisons of progress are not possible.

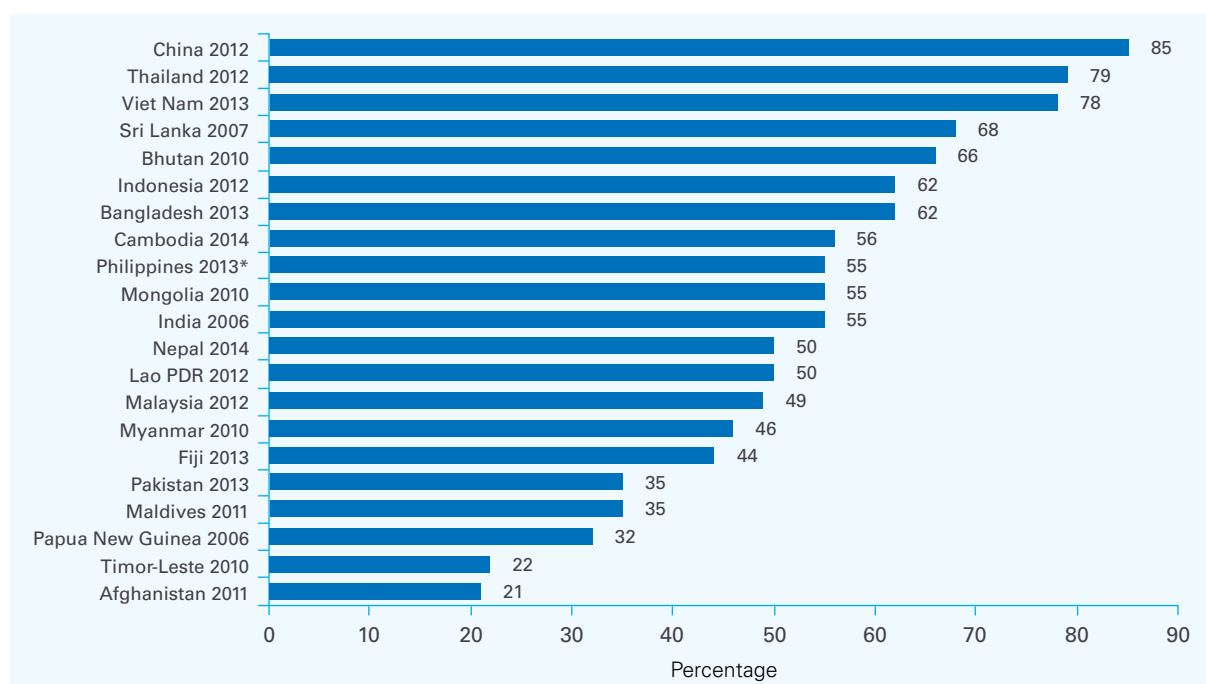
Figure 7: Unmet need for family planning, Asia-Pacific, 2001-2014*



Source: United Nations, Department of Economic and Social Affairs, Population Division (2015), 2015 Update for the MDG Database: <http://www.un.org/en/development/desa/population/theme/mdg/index.shtml>

*Data not reported for Afghanistan, Fiji and Malaysia.

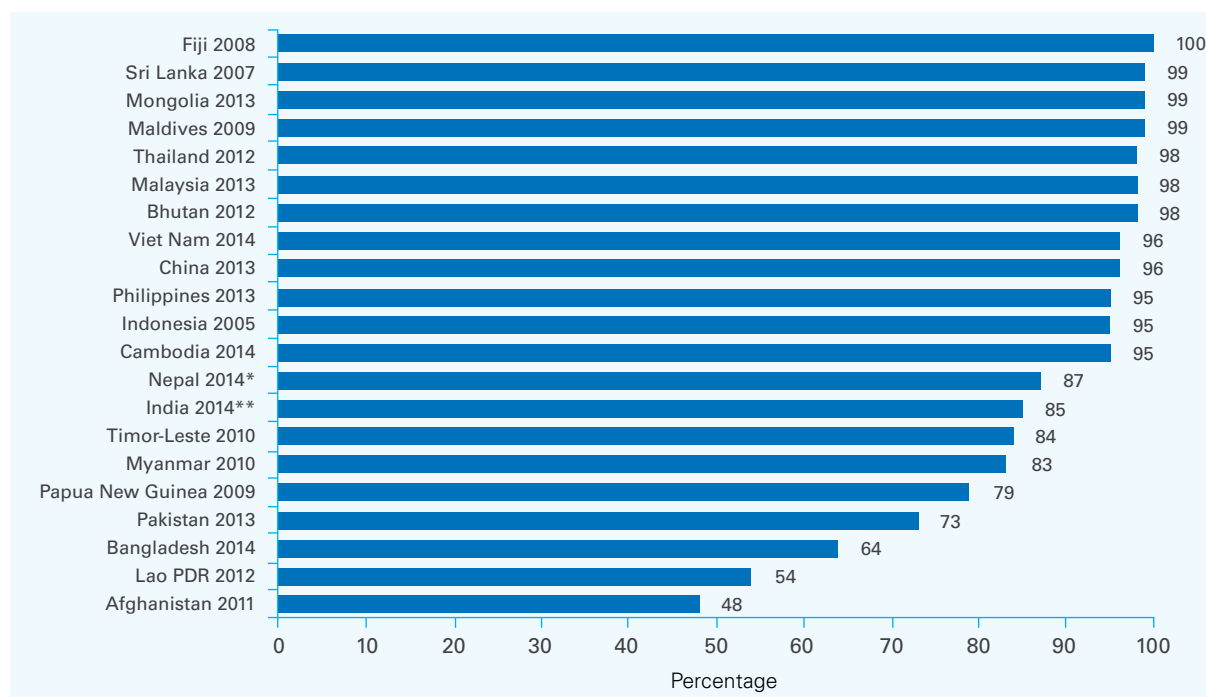
Figure 8: Contraceptive prevalence, Asia-Pacific, 2006-2014



Source: UNICEF, The State of the World's Children 2015: Executive Summary, 'Reimagine the future Innovation for every child', at http://www.unicef.org/publications/files/SOWC_2015_Summary_and_Tables.pdf

*Philippines National Demographic Health Survey, 2013.

Figure 9: Antenatal coverage (at least one visit), Asia-Pacific, 2007-2014 (Target: ≥95% coverage)

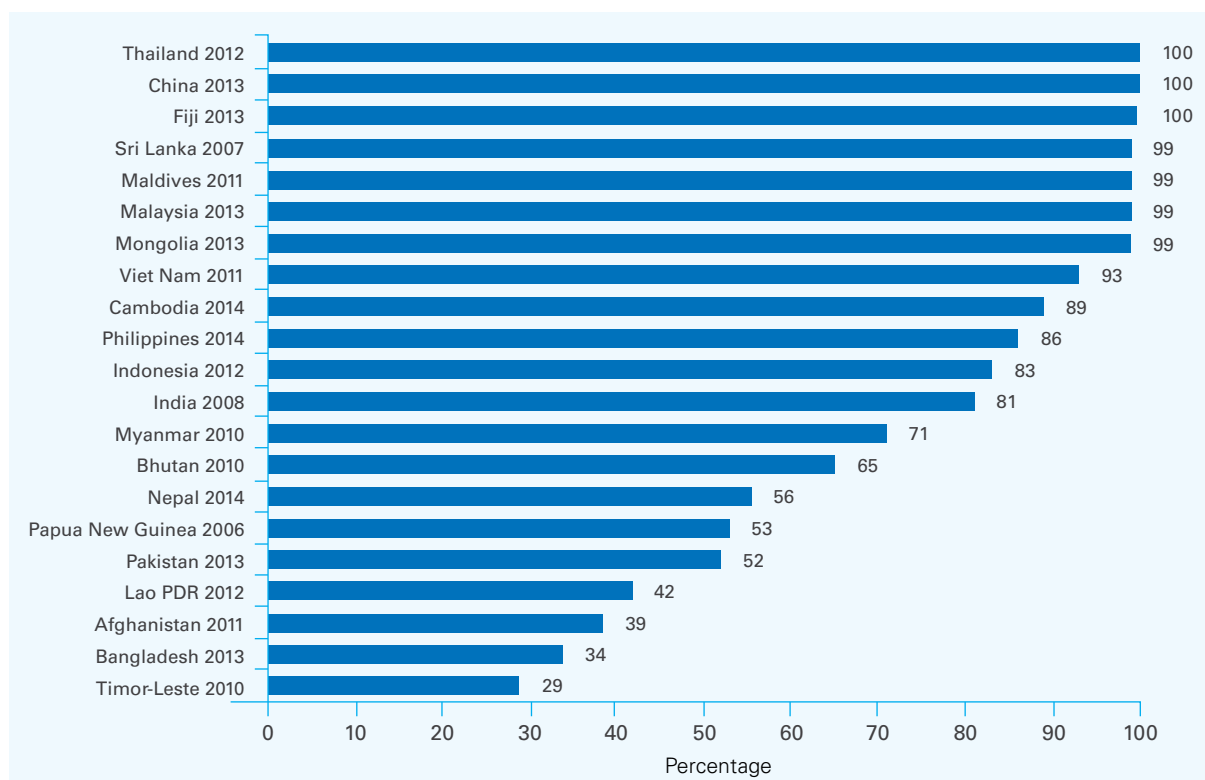


Source: UNICEF data, Monitoring the Situation of Children and Women, at <http://data.unicef.org/maternal-health/antenatal-care.html>

*Multiple Indicator Cluster Survey Key Findings and Tables, Nepal 2014, https://mics-surveys-prod.s3.amazonaws.com/MICS5/South%20Asia/Nepal/2014/Key%20findings/Nepal%202014%20MICS%20KFR_English.pdf

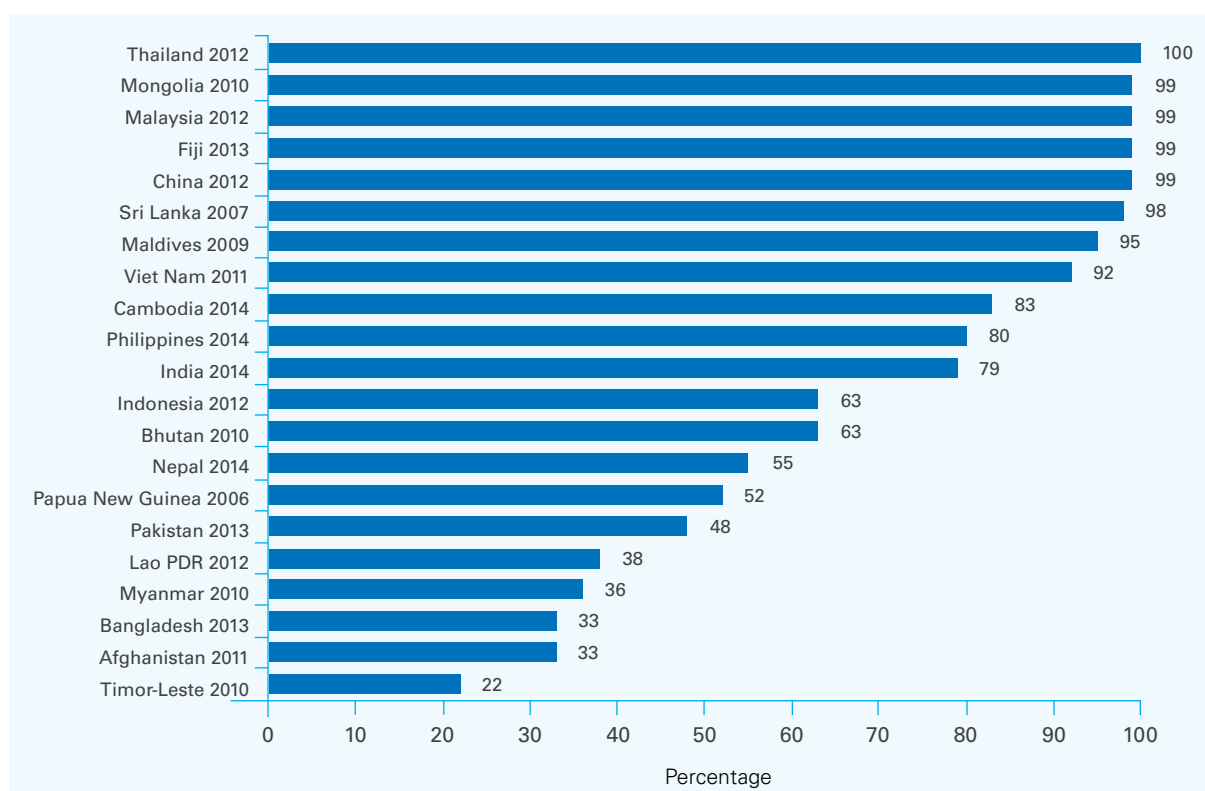
**Ministry of Women and Child Development, Rapid Survey on Children, 2013-2014, http://wcd.nic.in/issnip/National_Fact%20sheet_RSOC%20_02-07-2015.pdf

Figure 10: Attendance of skilled health personnel at birth, Asia-Pacific, 2006-2014



Source: UNICEF data, Monitoring the Situation of Children and Women, at <http://data.unicef.org/maternal-health/antenatal-care.html>

Figure 11: Delivery at health facilities, Asia-Pacific, 2006-2014



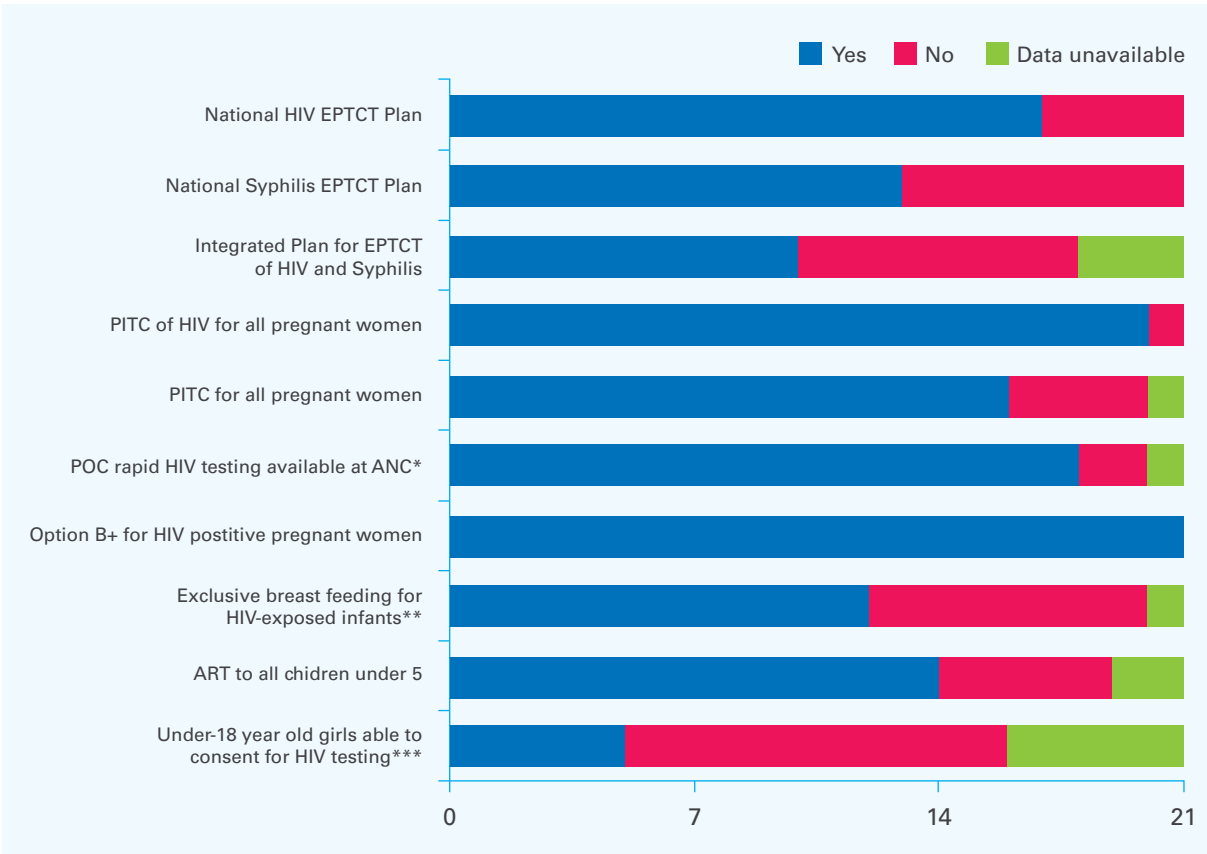
Source: UNICEF data, Monitoring the Situation of Children and Women, at <http://data.unicef.org/maternal-health/antenatal-care.html>

Policies to support EPTCT of HIV and syphilis

National policy documents and reports, in addition to sources already mentioned, were used to determine the extent to which countries in the region have adopted policies in support of the dual elimination goal (see Figure 12). All countries have adopted Option B+ strategies for the treatment of pregnant women and most have a national EPTCT of HIV plan. Policies for EPTCT of syphilis lagged behind those for HIV, with just over half of countries reporting a national EPTCT of syphilis plan. These plans were integrated into those for HIV in about 50 per cent of cases. Exclusive breastfeeding for six months was the recommended policy for infants at risk of exposure to HIV in 12 of the 18 countries where data were available. Of those reporting, a majority of countries had adopted the 2013 WHO HIV treatment recommendation to provide ART to all children under 5 who are living with HIV.

Most countries have policies for provider initiated testing and counselling (PITC) of HIV and syphilis for pregnant women, with POC tests available in 16 out of the 18 countries where this information has been reported.

Figure 12: Policies and programmes to support the elimination of MTCT of HIV and syphilis, Asia-Pacific



Source: GARPR, 2014, country online tool and UNICEF, Monitoring the Situation of Children and Women (some data points were updated directly by country surveys). For data on PITC of syphilis, sources included UNICEF Regional Office for South Asia: PPTCT Fact sheets on Afghanistan, Bhutan, India, Maldives, Pakistan; Bangladesh National Guidelines for the Prevention of Vertical Transmission of HIV and Congenital Syphilis (2013); Standard Operating Procedure for Implementation of the Boosted Linked Response between HIV and SRH for Elimination of New Paediatric HIV Infections and Congenital Syphilis in Cambodia; China National Syphilis Prevention and Control Plan; Elimination of Congenital Syphilis in the Pacific, Policy and Technical Guidance from the Pacific STI Working Group (Fiji); National Strategy and Action Plan on HIV/AIDS/STI 2011-2015, NCCA, Lao PDR; Mongolian National Strategic Plan on HIV, AIDS, and STIs; National HIV/AIDS Strategy, 2011-2016, National Centre for AIDS and STD Control Nepal; Global AIDS Response Program and Universal Access

Reports, Papua New Guinea, 2014: http://www.unaids.org/sites/default/files/en/dataanalysis/knowyourresponse/countryprogressreports/2014countries/PNG_narrative_report_2014.pdf; Guidelines on the Management of Sexually Transmitted Infections (STIs) in Pregnancy (2010), National Center for Disease Prevention and Control, Department of Health, the Philippines; Guidelines for the Management of Maternal Syphilis and Congenital Syphilis, NSACP, Sri Lanka, 2011; Thailand National AIDS Strategy 2012-2016; <http://www.searo.who.int/timorleste/publications/first-ever-syphilis-screening-programme-for-pregnant-women/en/>

*Among the 16 countries that provide POC rapid HIV testing at ANC for the first test, 13 countries also provide POC rapid HIV testing for the confirmatory test.

**Cambodia and Viet Nam report the recommendation of exclusive breastfeeding for HIV-exposed infants for the first six months of life, but also use full replacement feeding if available and safe.

*** Bangladesh: requires parental consent for HIV testing for girls under 18 in the general population, but not for most at-risk adolescents. Mongolia does not require parental consent for HIV testing for girls under 18, but it is unclear for girls under 16. Sri Lanka requires parental consent for girls under 16.

Progress towards validation of EPTCT

Regional progress towards validation of the EPTCT of HIV and syphilis is uneven. Thailand has covered the most ground, achieving four of the six impact and process indicators that need to be met in order to reach the global validation criteria (see *Table 3*).

Table 3: Impact and process indicators for validation of EPTCT of HIV and syphilis, Asia-Pacific, 2014

	Elimination target year – HIV and syphilis	Estimated number of new HIV infections among children ¹	Mother-to-child transmission rate of HIV based on modelled estimation ² (country reported data) (%)	Case rate of congenital syphilis (per 100,000) ^{3,5}	Antenatal care coverage – 1 or more visits (year) ⁴ (%)	Coverage of HIV testing of pregnant women ⁵ (%)	HIV positive pregnant women who received antiretroviral medicines ¹ (%)	Coverage of syphilis testing of pregnant women (at first antenatal visit) ^{3,5} (%)	Pregnant women tested positive for syphilis who received treatment ^{3,5} (%)
Global target		50	5%	50	95%	95%	90%	95%	95%
Afghanistan		<100	32	na	48 (2011)	0.04	1	na	na
Bangladesh		<100	46	na	64 (2014)	0.43	18	58	100
Bhutan		na	45	na	98 (2012)	na	na	97 (2010)	na
Cambodia	2025	<200	16 (7)	na	95 (2014)	76	65	45	97
China	2020	na	15 (6)	62	96 (2013)	74	na	95 (2012)	68
Fiji	2020	na	13	235	100 (2008)	76	na	100	na
India	2020	14,522 ⁶	37 (22)	na	85 (2014) ⁷	41	na	65	21
Indonesia	2020	4,500	32	na	95 (2013)	2	10	1	50
Lao PDR	2020	111 ⁵	43	na	54 (2012)	2	10 ⁵	na	na
Malaysia	2018	<100	5	7	98 (2013)	92	78	99	100
Maldives		na	40	na	99 (2009)	49	na	66	100
Mongolia	2020	na	3 ⁸	37	99 (2013)	>95	100 ⁹	97	89 (2012)
Myanmar	2020	<1,000	14	na	83 (2010)	61	79	10 ¹⁰	86 (2012)
Nepal		<200	36	na	87 (2014) ¹¹	27	33	na	na
Pakistan		<1,000	43	na	73 (2013)	0.1	3	na	na
Papua New Guinea		<500	30	na	79 (2006)	34	47	9 (2011)	na

	Elimination target year – HIV and syphilis	Estimated number of new HIV infections among children ¹	Mother-to-child transmission rate of HIV based on modelled estimation ² (country reported data) (%)	Case rate of congenital syphilis (per 100,000) ^{3,5}	Antenatal care – 1 or more visits (year) ⁴ (%)	Coverage of HIV testing of pregnant women ⁵ (%)	HIV positive pregnant women who received antiretroviral medicines ¹ (%)	Coverage of syphilis testing of pregnant women (at first antenatal visit) ^{3,5} (%)	Pregnant women tested positive for syphilis who received treatment ^{3,5} (%)
Philippines		<200	36	na	95 (2013)	na	na	na	43 (2011)
Sri Lanka	2017	<100	35	2	99 (2007)	45	16	86 ¹⁰	99 ¹²
Thailand	2015	<200	2	na	98 (2014) ¹³	>95	>95	99 ¹⁴	95 ¹⁵
Timor-Leste		na	52	na	84 (2010)	23	na	56	na
Viet Nam	2020	<500	11	na	96 (2014)	87	54	na	na

2014 data unless indicated otherwise.

na Data not available.

¹ AIDSinfo - <http://aidsinfo.unaids.org/>

² UNAIDS/WHO spectrum data for 2014.

³ WHO Global Health Observatory Data Repository <http://apps.who.int/gho/data/node.main.CONGENITALSYPHSTI?lang=en>

⁴ UNICEF Data: monitoring the situation of children and women <http://data.unicef.org/maternal-health/antenatal-care.html>

⁵ Global AIDS Response Progress Reporting.

⁶ Indian NACO Technical Estimates report, 2012.

⁷ India Rapid Survey on Children, 2013-2014.

⁸ UNAIDS/WHO spectrum data for 2013.

⁹ Mongolia National Center for Communicable Disease annual report 2014.

¹⁰ At any ANC visit.

¹¹ Multiple Indicator Cluster Survey Key Findings and Tables, Nepal 2014.

¹² https://mics-surveys-prod.s3.amazonaws.com/MICS5/South%20Asia/Nepal/2014/Key%20findings/Nepal%202014%20MICS%20KFR_English.pdf

¹³ Country reported data.

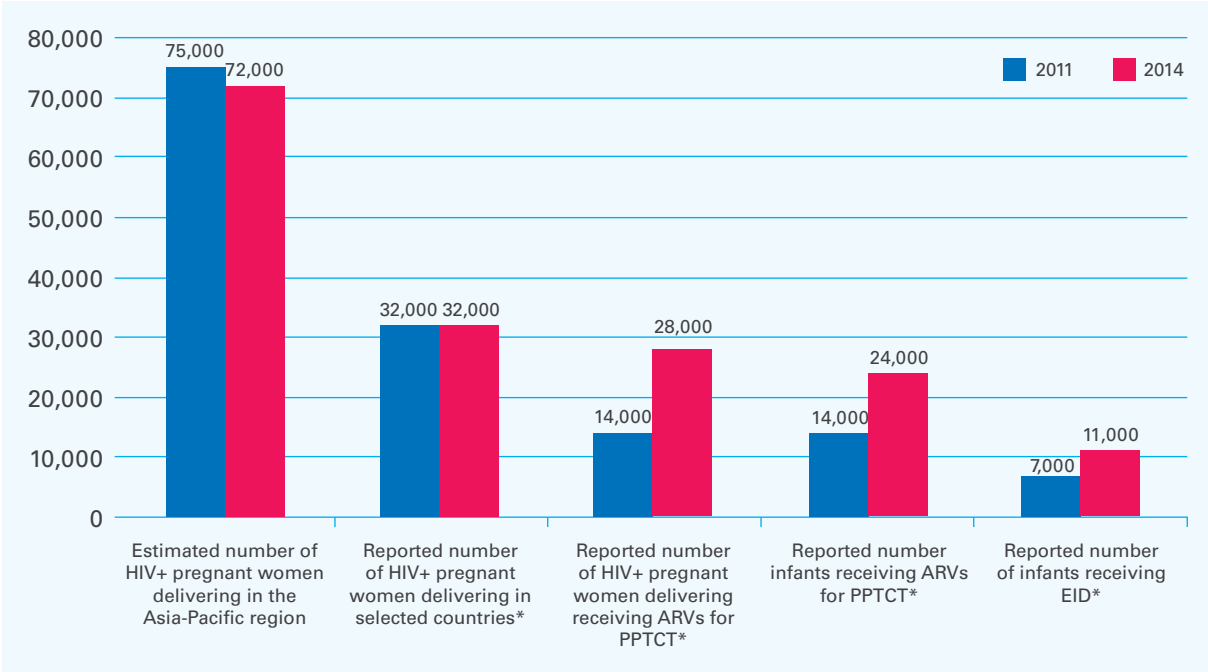
¹⁴ Country reported data.

¹⁵ Country reported data.

Progress towards EPTCT of HIV

An estimated 72,000 (61,000-85,000) pregnant women were living with HIV in Asia and the Pacific in 2014.³⁴ Although it is not possible to illustrate the cascade of care that they and their infants received, data on key indicators from the 11 countries are illuminating. As shown in *Figure 13*, among these countries, HIV diagnosis of pregnant women improved only slightly between 2011 and 2014, although ART coverage for pregnant women doubled in these countries. The number of infants exposed to HIV receiving prophylactic ART increased, however the early diagnosis of infants, a critical step to ensuring an early and rapid start of life-saving treatment for children with HIV, did not rise substantially. *Figure 13* provides valuable information on progress in the countries where all the indicators were reported. However, countries with the highest number of HIV-positive people, namely China and India, did not report all the indicators and are not included in the cascade, which therefore cannot be taken to represent the region as a whole.

Figure 13: Summary of key indicators for monitoring progress towards EPTCT in selected countries in Asia-Pacific,* where all indicators were reported for 2011 and 2014



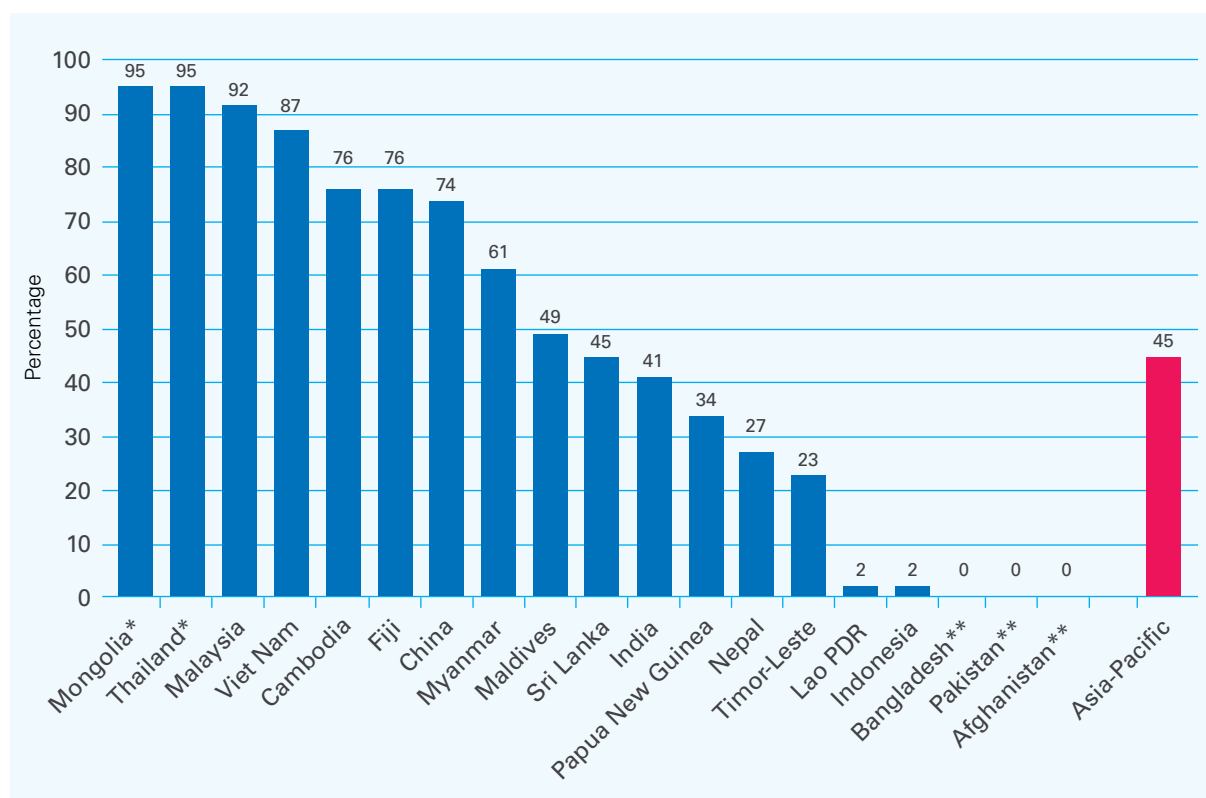
Source: UNAIDS, UNICEF, WHO 2015 GARPR and UNAIDS 2014 HIV and AIDS estimates, July 2015.

*Countries that reported: Afghanistan, Bangladesh, Cambodia, Lao PDR, Malaysia, Nepal, Pakistan, Papua New Guinea, Sri Lanka, Thailand and Viet Nam).

HIV testing and ART coverage for pregnant women living with HIV

HIV testing coverage of pregnant women is below the validation target for most of the countries in the region where data are available. Only Thailand and Mongolia reported a rate higher than 95 per cent. The average HIV testing coverage of pregnant women was 45 per cent in 2014, less than half the validation target (see Figure 14).

Figure 14: HIV testing coverage of pregnant women, Asia-Pacific, 2014



Source: GARPR online reporting tool 2014, <https://aidsreportingtool.unaids.org/>

Note: Data were not reported for Bhutan and the Philippines.

* Testing coverage in Mongolia and Thailand was above 95 per cent.

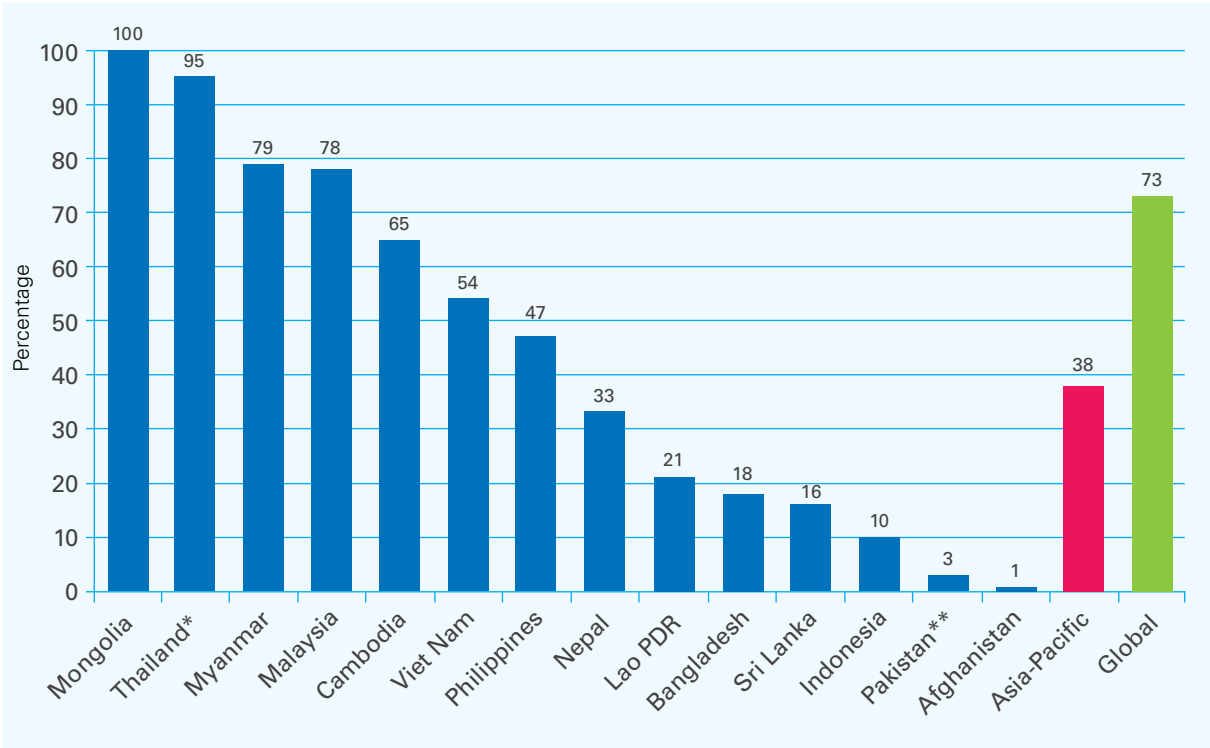
** Testing coverage in Bangladesh, Pakistan and Afghanistan was below 0.5 per cent.

ART coverage for HIV-positive pregnant women in East Asia and the Pacific was 47 per cent in 2014 and 30 per cent for South Asia (with overall estimated coverage for Asia and the Pacific at 38 per cent). While these figures were an increase over previous years, they fell short of the global estimated coverage in 2014 of 73 per cent (68-79 per cent) of HIV-positive pregnant women receiving treatment to prevent parent-to-child transmission of HIV. Thailand surpassed the targeted threshold of 90 per cent coverage, while Cambodia, China, Malaysia and Myanmar recorded coverage ranging from two thirds to three quarters of pregnant women living with HIV (see Figure 15).

Early infant diagnosis

In East Asia and the Pacific, coverage of early infant diagnosis (EID) declined between 2009-2014 (from 26 per cent to 24 per cent), to about half the average for Africa and just under half of the global average (see Figure 16). In South Asia, coverage rose during this period, but from a very low base. This step in the overall PPTCT cascade highlights the large fall-off between the number of women diagnosed with HIV and the early diagnosis of their infants.

Figure 15: Estimated percentage of pregnant women living with HIV who received ART for PPTCT, Asia-Pacific, 2014# (Process indicator: Target $\geq 90\%$)



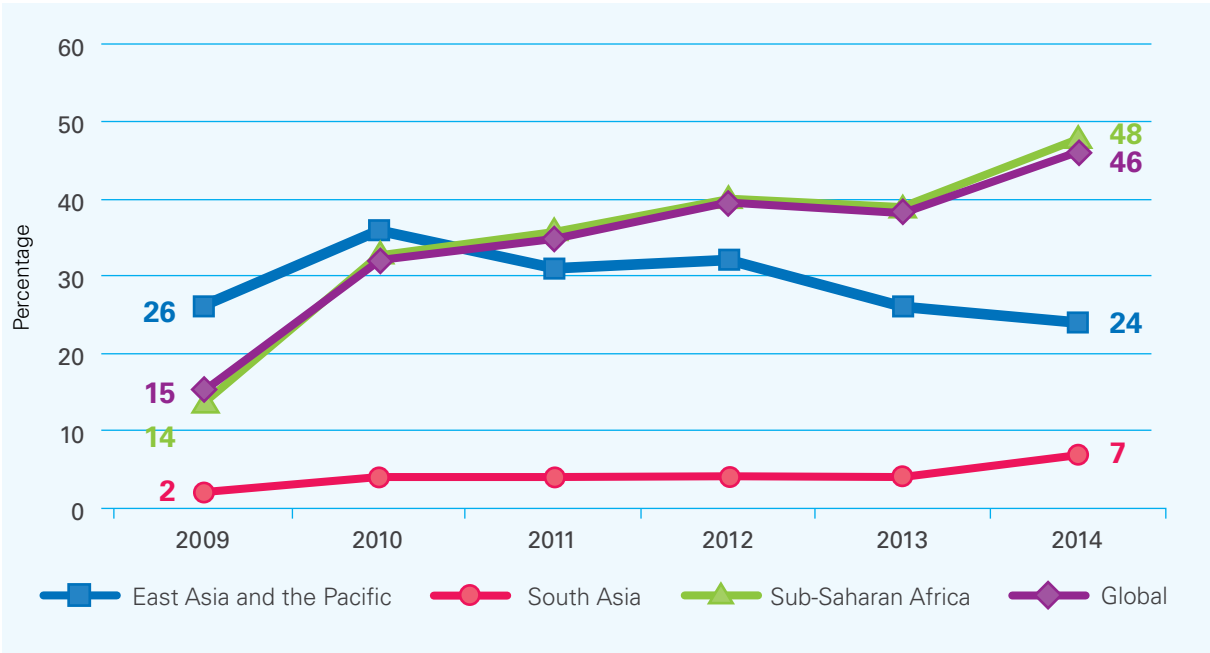
Source: AIDSinfo, at <http://aidsinfo.unaids.org/>

#Data not available for Bhutan, China, Fiji, India, Maldives, the Philippines and Timor-Leste.

*Thailand coverage of ART for pregnant women was above 95 per cent.

**Pakistan reported coverage of 8 per cent in 2013, as reported in GARPR 2014.

Figure 16: Estimated percentage of infants born to women living with HIV receiving a virological test by two months of age, Asia, Africa and global, 2009-2014

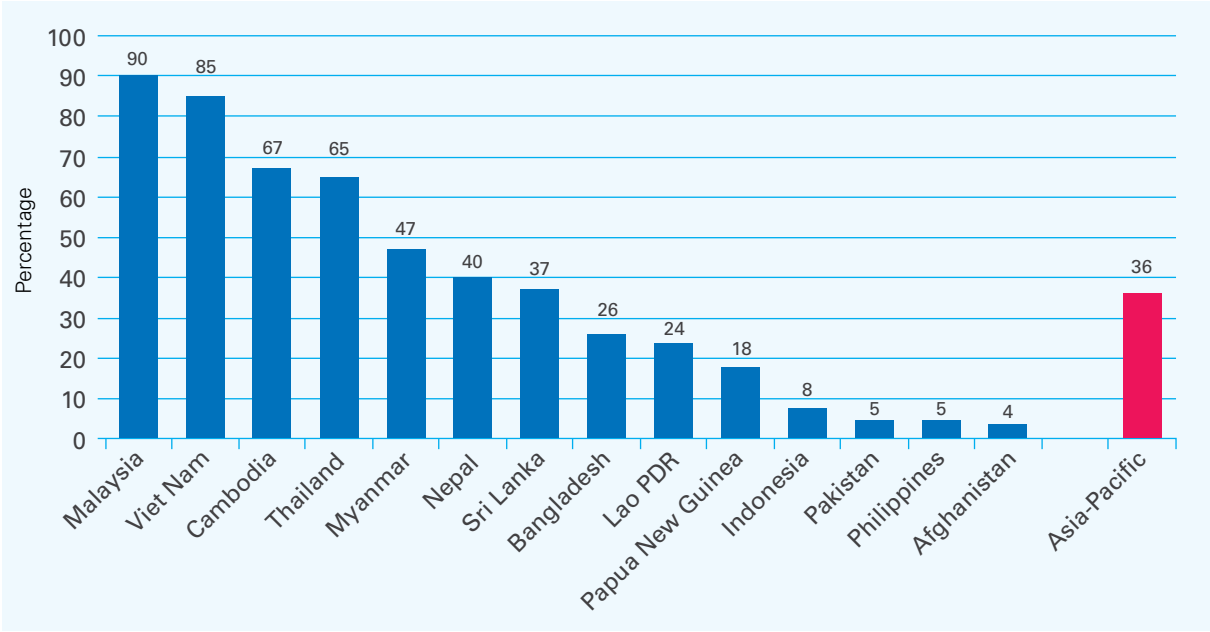


Source: UNAIDS AIDSInfo online data at, www.aidsinfoonline.org; UNAIDS Spectrum estimates.

Antiretroviral coverage for children in Asia and the Pacific

An estimated 200,000 (180,000-230,000) children aged 0-14 were living with HIV in the region in 2014, with an estimated overall ART coverage of 36 per cent (33-40 per cent).³⁵ Most countries fell substantially short of the programmatic target of 90 per cent ART coverage by 2015 (see Figure 17), with only four countries reporting rates above 50 per cent.

Figure 17: Estimated ART coverage of children (aged 0-14) living with HIV, Asia-Pacific,* 2014 (regional programmatic target >90% by 2015)



Source: UNAIDS, How AIDS Changed Everything – MDG 6: 15 years, 15 lessons of hope from the AIDS Response, UNAIDS, 2015.

*Data not available for Bhutan, China, Fiji, India, Maldives and Mongolia.

Progress towards EPTCT of syphilis

Syphilis reporting lags behind that for HIV, with significant data gaps in the coverage of syphilis testing and treatment of pregnant women in 2014. Coverage in most countries that did report fell below the target of 95 per cent for both indicators (see Figure 18), with treatment coverage rates in most cases higher than testing rates.

Table 4: Percentage of ANC attendees who were syphilis-positive by country, Asia-Pacific, 2014 or most recent year

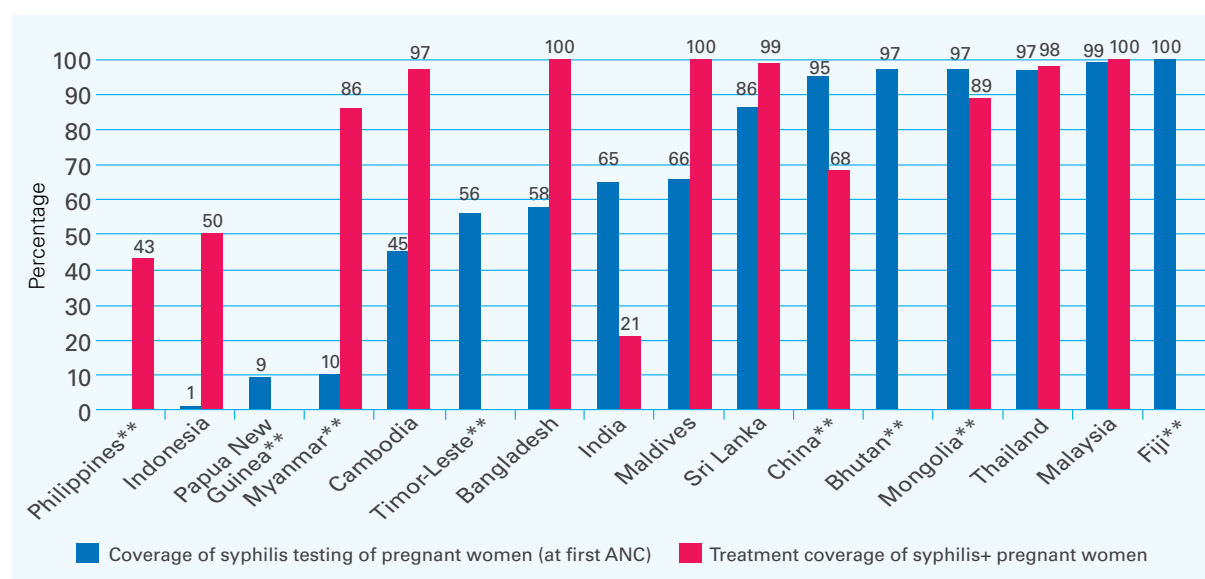
Countries	% of ANC attendees tested who were syphilis positive
Afghanistan	Data not available
Bangladesh	0.50
Bhutan	Data not available
Cambodia	0.02
China (2012)*	0.20
Fiji (2012)*	0.90
India	0.20
Indonesia	1.75
Lao PDR (2009)*	0.80
Malaysia	0.10
Maldives	0.10
Mongolia	2.60
Myanmar	0.70
Nepal	Data not available
Pakistan	Data not available
Papua New Guinea (2011)*	6.70
Philippines	0.10
Sri Lanka**	0.03
Thailand	0.07
Timor-Leste	0.52
Viet Nam (2013)*	0.30

Source: GARPR online reporting tool 2014, <https://aidsreportingtool.unaids.org/>

* Global Health Observatory data repository, <http://apps.who.int/gho/data/node.main.A1359STI?lang=en>.

** Sri Lanka Family Health Bureau annual report, 2014.

Figure 18: Coverage of syphilis testing during first ANC visit (Process indicator: Target ≥ 95 per cent) and treatment of syphilis-positive pregnant women (Process indicator: Target $\geq 95\%$) in Asia-Pacific* in 2014 or most recent year



Source: GARPR online reporting tool 2014, at <https://aidsreportingtool.unaids.org/>; Global Health Observatory data repository. <http://apps.who.int/gho/data/node.main.A1359STI?lang=en>

* No data available for Afghanistan, Lao PDR, Nepal, Pakistan and Viet Nam.

** Testing data for Bhutan, Papua New Guinea, and China is from 2010, 2011, and 2012. Treatment data for Philippines is from 2011 and for both Mongolia and Myanmar is from 2012. Absent bars denote unreported data.

SHARED COUNTRY EXPERIENCES TOWARDS EPTCT IN ASIA-PACIFIC

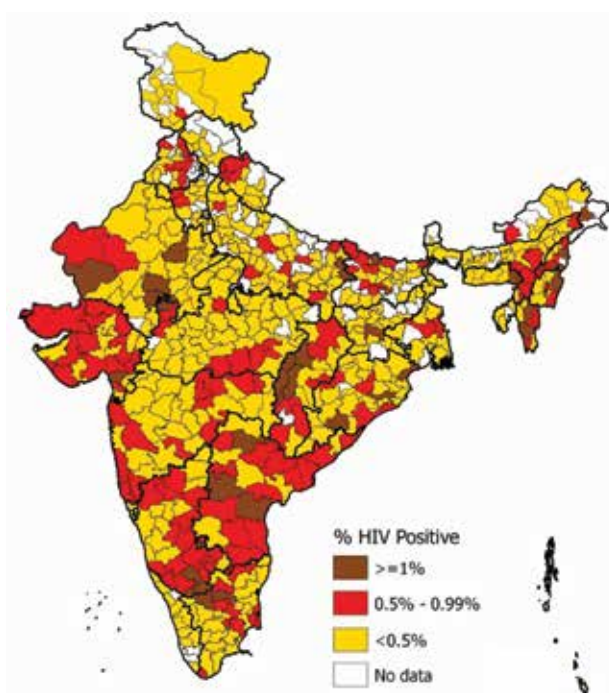
Integrating HIV into MCH care is recognized as critical to improving early diagnosis of HIV-positive women and children, ensuring that they quickly access appropriate treatment and are retained in lifelong care. The majority of countries (57 per cent) reported having integrated PPTCT and MCH services and additional healthcare personnel were normally available where needed to implement these programmes successfully. Some of the strategies adopted by countries to address such issues as the diagnosis of pregnant women and identification of high burden areas, task shifting, male partner involvement and engagement of CSOs to help strengthen programmes are highlighted below.

HIV surveillance for pregnant women in India

In India, sentinel surveillance for HIV was first conducted in 1985 by the India Council of Medical Research. In 1998, the National AIDS Control Organization (NACO) formally launched HIV ANC sentinel surveillance in 92 sites. Since then, ANC sentinel surveillance has expanded to more than 750 sites across the country, covering 566 districts and 34 states. Sentinel surveillance data have been critical to understanding the spread of the HIV epidemic and enabling the national programme to scale up PMTCT interventions, including the expansion of universal antenatal HIV testing.

HIV sentinel surveillance in 2012-2013 indicates that considerable differences remain in HIV prevalence across different geographic regions. There were 80 sentinel sites across 19 states which recorded an HIV prevalence of 1 per cent or above, with the majority of these sites in the Southern and North-eastern states of Andhra Pradesh, Karnataka, Maharashtra, Tamil Nadu, Manipur, Mizoram and Nagaland. Notably, however, several states with overall low HIV prevalence were also detected to have districts with an ANC HIV prevalence above 1 per cent (see Figure 19).

Figure 19: HIV prevalence (percentage) among antenatal clinic attendees by district, 2012-2013



Source: NACO Sentinel HIV surveillance 2012-2013, A Technical Brief.

Boosted Linked Response for HIV care, prevention and treatment in Cambodia

A defining event in HIV testing and care in Cambodia was the start, in 2007, of the Linked Response for Prevention, Care and Treatment of HIV/AIDS and Sexual and Reproductive Health Issues. In 2013 this became the Boosted Linked Response (BLR) between HIV and SRH for Elimination of New Paediatric HIV Infections and Congenital Syphilis in Cambodia.³⁶ Policy guidelines detail the procedures for the implementation of PITC and other HIV-related services. The guidelines specifically recommend offering routine HIV testing and counselling (HTC) in ANC settings, either on-site, by specimen collection/transport or referral to voluntary counselling and testing (VCT) facilities for all pregnant women in Cambodia.

The BLR system is organized by clusters of hospitals and health facilities within a designated geographic area that form a 'linked response' network. Each cluster consists of multiple sub-satellite health centres, or primary level health facilities in which HTC and PPTCT services are established and/or strengthened, several satellite referral hospitals that have existing ANC, PPTCT and VCT services, and one Hub, which is the referral hospital that provides the most comprehensive clinical and laboratory services within the designated geographic area. The Hub is further linked to the national referral facility in Phnom Penh. The BLR plan stipulates the policies and procedures for dual EPTCT of HIV and congenital syphilis. Some sub-satellite health centres may conduct HTC via specimen transport. Furthermore, the sub-satellite health centres also link through community outreach to villages, and in some settings may provide HTC in conjunction with immunization services at the village level. HTC is provided daily at all levels of healthcare settings, from the Hub referral hospitals to sub-satellite health centres.

An active case management approach is in place, using trained community members to keep track of individual HIV-positive cases after testing, including mothers and their HIV-exposed infants, to ensure that they receive care and treatment at facilities providing paediatric HIV care. This approach has been implemented in 15 operational districts among the 33 flagged as high burden.

In Cambodia, ANC attendance coverage (at least one visit) more than doubled from 38 per cent in 2000 to 95 per cent in 2014. HIV testing of pregnant women who received the results increased from 16.4 per cent in 2007 to 75 per cent in 2014. The number of HIV-positive pregnant women who received ART also rose substantially, from 11.1 per cent in 2007 to 65 per cent in 2014.³⁷

Male involvement in antenatal care and EPTCT of HIV in Papua New Guinea

The importance of engaging men in PPTCT and other maternal and child health interventions is well recognized. UNICEF commissioned a study on male involvement in PPTCT of HIV in Papua New Guinea, using focus group discussions and key informant interviews to provide information for the strengthening PPTCT programmes.³⁸ Formative research showed that the majority of men wanted to be involved in their pregnant partners' antenatal care. Factors encouraging their involvement included a sense of shared responsibility for the unborn child, concern for the health of the mother or baby if it was their first child, and the availability of male health workers.

However, fathers' involvement was often limited due to a lack of knowledge about pregnancy and PPTCT, information that was usually not provided to men but which women received at antenatal clinics. In addition, sociocultural norms and taboos were significant barriers, with men reporting that they felt ashamed or embarrassed to attend ANC visits with their partner. Other constraints mentioned were fear of testing for HIV and other STIs, a lack of separate waiting spaces for men, rude treatment by health workers and being in a polygamous relationship. Making facilities welcoming to men, inviting fathers to attend consultations and raising community awareness were suggested as viable strategies for increasing fathers' involvement in ANC.

UNICEF Papua New Guinea is helping to strengthen male involvement in PPTCT through various innovative approaches. For example, in the Kama health clinic in the Eastern Highlands province of Papua New Guinea, it is supporting health workers provide counselling to pregnant women and their spouses. The clinic has designated Friday mornings specifically for providing information to male partners on maternal and child health issues and for HIV testing, either individually or as a couple. Pregnant women are requested to invite their spouses to the Friday clinic, where health workers have adequate time to attend to the men and the women do not have to wait long for the tests. The number of male partners who have tested for HIV at the clinic has increased since this service started in 2013. Discordant couples (where one partner has HIV and the other does not) have been diagnosed and the appropriate support has been provided.

Health workers have reported that women whose husbands received counselling as a couple were receiving better support from their spouse and the family in general. Health workers observed that if both men and women were educated, the family was able to make healthy choices such as family planning, adopting HIV risk reduction behaviours and regular attendance at health facilities. It was very difficult for mothers to adhere to ART without the support of their spouses and family. Counselling couples has contributed to increased enrolment in PPTCT services and adherence to ART.

The role of civil society in assisting Thailand reach validation goals

Thailand is on track to becoming the first country in the region to be validated for EPTCT of HIV and syphilis. The success of Thailand's PMTCT programme has justifiably received considerable attention over the past several years. This success is a result of strong political commitment, well-developed and well-utilized MNCH infrastructure and the early adoption of PITC as a national policy for key populations, including antenatal clients. These factors are critical to consider as other countries in Asia continue to expand antenatal HTC services.

Voluntary counselling and testing for HIV in Thailand started in 1991 at anonymous clinics in Government hospitals, where staff were given training. In 1993, an HIV counselling curriculum was introduced in ANC settings, and routine VCT was endorsed the following year. By 1995, half of all pregnant women were accessing HTC and since 2000, PPTCT services have been integrated into maternal and child health. In 2014, 100 per cent of pregnant women were reported to have received HIV testing and counselling and 96 per cent of those diagnosed as HIV-positive received ART.³⁹ The reported rate of MTCT of HIV in 2014 was 2.6 per cent.⁴⁰

Civil society engagement has contributed to Thailand's achievements in this area. The Thai Women's Network (TWN) has played an active part in addressing – together with healthcare workers – the rights of HIV-positive pregnant women. As a result, women face less coercion to undergo sterilization and less discrimination for seeking SRH services.⁴¹

The TWN assists the PPTCT of HIV and syphilis programme with activities that include helping staff at ANC clinics and accompanying them on home visits, providing counselling to couples, performing individual risk assessments, providing HIV-positive pregnant women with information and psychosocial support, and support to mothers and their children for adherence to ART. It provides information on infant care, fosters communication between partners and their families, and assists individuals with referrals to other related sectors. In short, members of the TWN work to assure that HIV-positive women receive the necessary support through pregnancy and delivery, and after birth.⁴²

COST ANALYSIS OF EPTCT OF HIV AND SYPHILIS

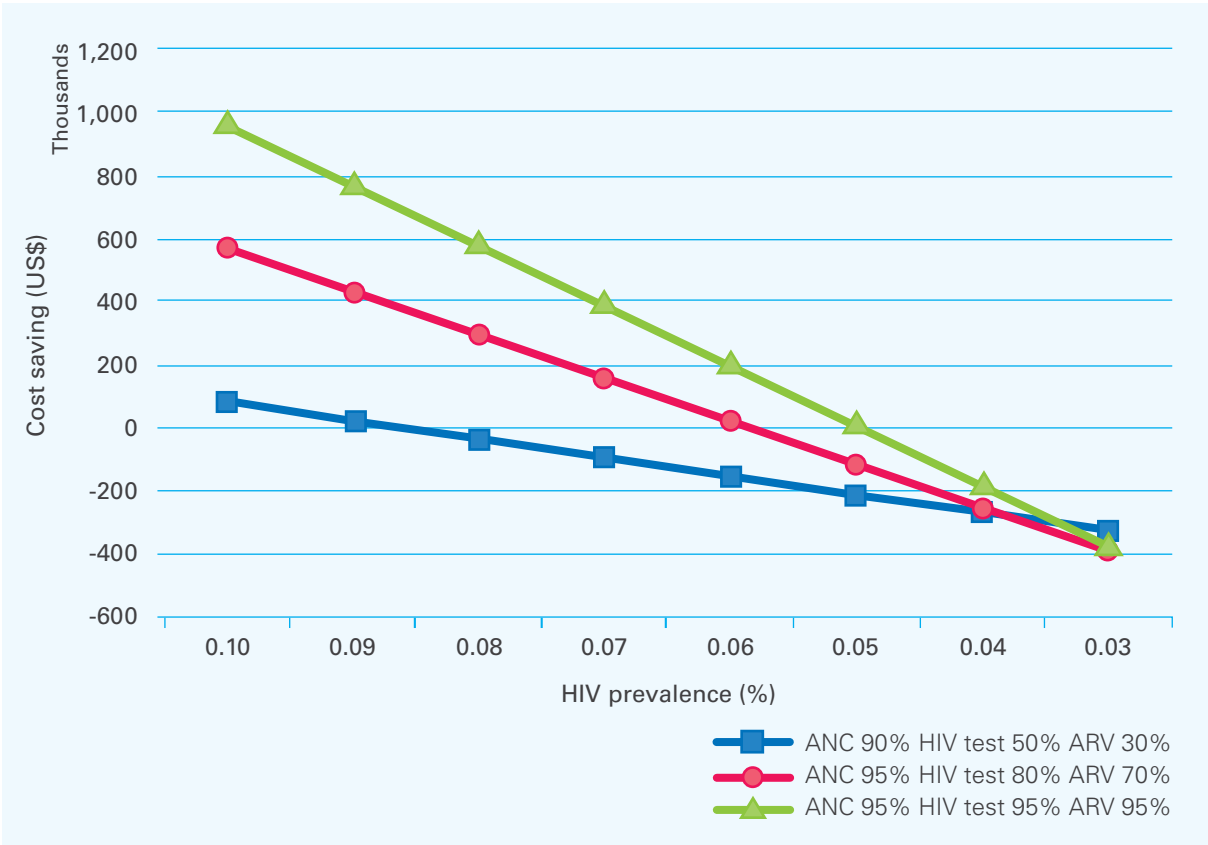
Elimination of parent-to-child transmission of HIV and syphilis requires high levels of testing coverage of pregnant women. The results of a cost analysis for HIV and syphilis are presented below.

Cost analysis of HIV

In 2014, universal testing versus targeted testing for pregnant women in low and concentrated HIV epidemics was examined⁴³ through a modelling analysis of health and cost outcomes for PPTCT services using the Costing Tool for Elimination Initiative (CTEI).^{44,45} Based on a case study of 'Country A', several scenarios for universal and targeted approaches were looked at. In the analysis, Country A was assumed to have 1 million annual births, HIV prevalence of 0.4 per cent, ANC coverage of 90 per cent and HIV testing coverage of 50 per cent. The country was divided into three categories based on HIV prevalence: high burden provinces with an HIV prevalence of 0.6 per cent; intermediate burden with a prevalence of 0.4 per cent; and low burden with a prevalence of 0.05 per cent. Sensitivity analysis was conducted on major variables including HIV prevalence, costs of HIV testing and antiretroviral drugs.

Analysis of the universal approach, with a sensitivity analysis of HIV prevalence between 0.9 per cent and 0.01 per cent, confirmed that PPTCT with universal testing provided the greatest cost savings by averting new HIV infections among children and thus reducing the cost of paediatric HIV treatment in the future even with an HIV prevalence of less than 0.1 per cent (see Figure 20). Scenario analysis

Figure 20: Cost savings from prevention of new paediatric HIV cases⁴⁶



of targeted approaches found similar cost-saving results with the achievement of a MTCT of HIV rate of 7 per cent with improved service coverage in both high and intermediate burden provinces. In contrast, the highly targeted approach that focused only on high burden provinces was not as effective as a targeted approach, reducing the MTCT rate to only 17 per cent (see Table 5). The cost per infection averted was roughly similar across scenarios, with the highly targeted approach having the lowest cost.

The universal approach is recommended for elimination of new paediatric HIV infections and for cost-savings in relation to future paediatric treatment costs. Where resources are limited, a targeted approach could be applied as an interim measure while additional resources are identified, provided that a thorough scenario analysis using reliable subnational data for effective targeting has been conducted.

Table 5: Health and cost outcomes of universal vs. targeted approach (per 1,000,000 annual births)⁴⁷

Current coverage (ANC 90%, HIV test 50%, ARV 30%)*			Better coverage (ANC 95%, HIV test 80%, ARV 70%)*			Best coverage (ANC 95%, HIV test 95%, ARV 95%)*		
Approach**								
Universal approach	Targeted approach	Highly targeted approach	Universal approach	Targeted approach	Highly targeted approach	Universal approach	Targeted approach	Highly targeted approach
Number of new infections								
1,197	1,200	1,260	619	637	922	251	278	706
Infections averted								
441	438	378	1,019	1,001	716	1,387	1,360	931
MTCT rate								
29%	29%	31%	15%	16%	22%	6%	7%	17%
PPTCT cost (US\$ thousands)								
\$ 906	\$ 842	\$ 662	\$ 1,709	\$ 1,573	\$ 1,078	\$ 2,183	\$ 2,008	\$ 1,327
Total cost (PPTCT + paediatric treatment***) (US\$ thousands)								
\$ 8,482	\$ 8,441	\$ 8,635	\$ 5,660	\$ 5,636	\$ 6,928	\$ 3,829	\$ 3,822	\$ 5,828
Cost saved (US\$ thousands)								
\$ 1,888	\$ 1,929	\$ 1,731	\$ 4,798	\$ 4,829	\$ 3,489	\$ 6,895	\$ 6,893	\$ 4,745
Cost per infection averted (US\$ thousands)								
\$ 2,053	\$ 1,923	\$ 1,752	\$ 1,677	\$ 1,571	\$ 1,504	\$ 1,574	\$ 1,477	\$ 1,424

*ANC and PPTCT coverage for targeted provinces.

**Targeted: focus on high and intermediate burden provinces. Highly targeted: focus on high burden provinces only.

***Cost of paediatric treatment for 20 years (Antiretroviral medicines, co-trimoxazole prophylaxis, laboratory monitoring, and clinic visits).

Cost analysis syphilis

Testing and treatment for syphilis during pregnancy was cost-effective even in resource-limited settings. Kahn et al. examined the cost and cost-effectiveness of scaling up screening and treatment for syphilis in pregnancy for generic country scenarios with varying syphilis prevalence, current ANC coverage for screening and treatment and cost of health services.⁴⁸ Even with a low HIV prevalence of 0.5 per cent among ANC attendees and a high cost of health services, the cost-effectiveness ratio was US\$35 per disability-adjusted life year (DALY) averted.

Combined approach

In China, the cost-effectiveness of integrated routine antenatal HIV and syphilis screening was modelled.⁴⁹ Four different approaches were analysed: no antenatal screening, screening for HIV only, for syphilis only, and for both HIV and syphilis. Prevalence of 0.07 per cent was assumed for HIV and 0.25 per cent for syphilis. Health outcomes and cost implications were compared. Integrated HIV and syphilis screening was found to be substantially more cost-effective than providing HIV testing alone, where the cost-effectiveness ratio was more than 15 times lower. Adding syphilis testing to existing HIV testing for pregnant women would be very cost-effective, with the incremental cost per additional DALY averted found to be US\$140.

ASIA-PACIFIC REGIONAL VALIDATION MECHANISM FOR THE ELIMINATION OF PARENT-TO-CHILD TRANSMISSION OF HIV AND SYPHILIS



Background

Elimination of parent-to-child transmission (EPTCT) of HIV and syphilis contributes to better maternal and child health. It is estimated that there are approximately 72,000 pregnant women living with HIV in Asia and the Pacific region in 2014, of those 38 per cent received antiretroviral drugs (ARVs) to prevent the parent-to-child transmission of HIV.⁵⁰ It is also estimated that the Asia Pacific region has a high burden of congenital syphilis with more than 200,000 adverse outcomes associated to syphilis in pregnancy.⁵¹

The Asia Pacific United Nations Prevention of Parent-to-Child Transmission (PPTCT) Task Force was established in 1998. The members of the task force include the World Health Organization (WHO), the United Nations Children's Fund (UNICEF), the United Nations Population Fund (UNFPA), and the Joint United Nations Programme on HIV/AIDS (UNAIDS), Member States, and technical partners. In 2010, the task force developed the conceptual framework for the EPTCT of HIV and syphilis in the Asia Pacific by 2015.⁵² The regional goal of EPTCT of HIV and syphilis was endorsed at the 8th PPTCT Task Force Meeting held in November 2010 in Vientiane, in the Lao People's Democratic Republic.

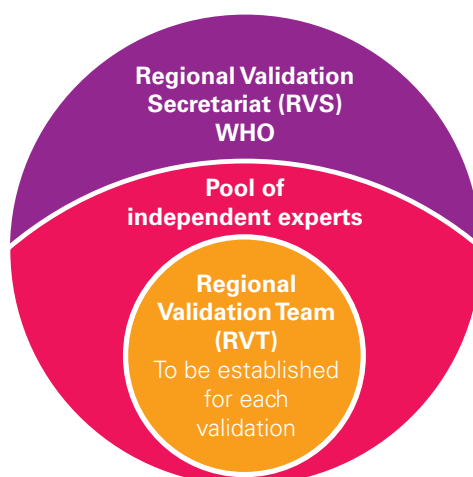
There is a commitment for the elimination of mother-to-child transmission (EMTCT) of HIV and syphilis, globally and regionally. An initiative for the global elimination of congenital syphilis which was launched in 2007 by WHO⁵³ and *the global plan towards the elimination of new HIV infections among children by 2015 and keeping their mothers alive was launched by UNAIDS and the President's Emergency Plan for AIDS Relief (PEPFAR)* in June 2011.⁵⁴

As Member States progress towards EPTCT, there is a need to establish a mechanism to validate elimination. WHO in collaboration with UNICEF, UNFPA, and UNAIDS developed a *Global guidance on criteria and processes for validation: elimination of mother-to-child transmission (EMTCT) of HIV and syphilis*.⁵⁵ This guidance outlines the minimum processes and criteria for validation in a country; provides a description of global EPTCT validation targets and indicators; explains the operation of validation committees and secretariats; and reviews the validation procedure.

Regional mechanism of validation in Asia and the Pacific

The regional validation mechanism will be operated through the Regional Validation Secretariat (see *Figure 21*). Below is a brief description of roles and structures of the mechanism. Detailed description of criteria for validation will be found in *Global guidance on criteria and processes for validation*.⁵⁵

Figure 21. Regional mechanisms of validation in the Asia-Pacific



- **REGIONAL VALIDATION SECRETARIAT**

The Regional Validation Secretariat (RVS) coordinates and supports the regional validation process. The RVS is provided by the WHO regional offices for South-East Asia and the Western Pacific and its functions will be performed in partnership with UNICEF and UNAIDS. The RVS establishes and convenes the Regional Validation Team (RVT). The RVS will develop, maintain and regularly update a roster of independent experts, which will be used to identify RVT members.

- **REGIONAL VALIDATION TEAM**

A RVT will be formed each time a country submits a validation request. The RVT advises the RVS on whether candidate countries' achievements in EPTCT of HIV and syphilis can be recommended for global validation.

A RVT will review the national validation report; conduct in-country validation visits with the National Validation Team (NVT) and the National Validation Committee (NVC); and prepare a regional validation report.

1) Functions:

1. Review national validation reports.
2. Conduct in-country validation missions and determine the national compliance with global criteria for validation in consultation with the NVC.
3. Prepare a regional validation report that will advise the RVS on whether the country meets global criteria for validation and submit to the RVS.
4. Ensure that the regional report includes clear explanations and suggestions for the areas requiring improvement if a candidate country does not meet the validation criteria.
5. Advise RVS to improve validation tools.

2) Members of RVT:

1. Independent experts with following expertise shall be nominated through the RVS after consultation with countries and stakeholders to create a roster of experts:
 - Epidemiologists and/or statisticians;
 - Public health practitioners including national managers and programme officers for maternal and child health, HIV and sexually transmitted infections (STI);
 - Laboratory scientists;
 - Representative of civil society and non-governmental organizations including and women, and men living with HIV, and community members;
 - Experts on HIV and other STIs; and
 - Human rights expert.

2. Members of a RVT shall be appointed by the RVS for each country validation.
3. A team consists of six or seven independent experts. The team's activities are supported by the RVS and regional partners.
4. Optimum diversification in terms of professional background, gender, geographical representation, international standing and affiliations will be considered.
5. A team leader will be appointed by the RVS, who will lead and coordinate the RVT.
6. Each member will be asked to sign a confidentiality and conflict of interest statement. The members should not have any salary, bonuses or other compensatory elements tied to their membership or actions.

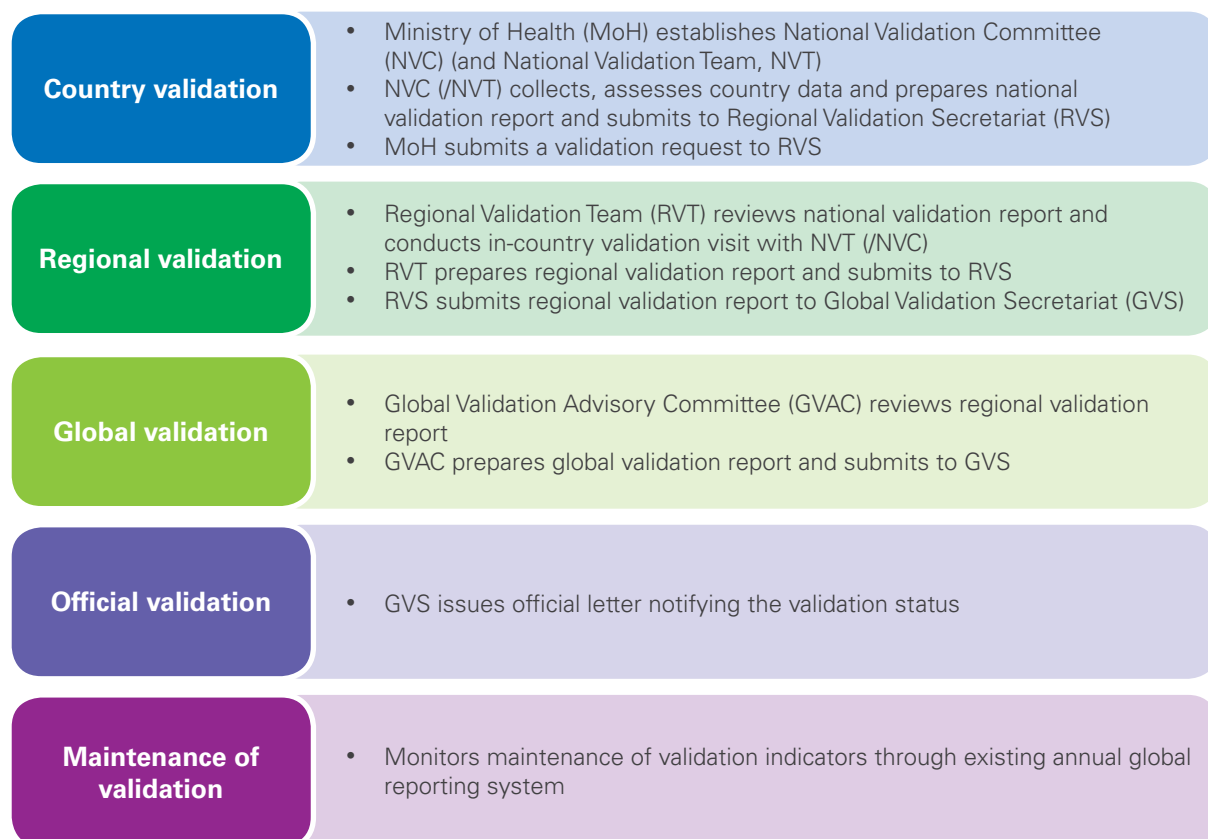
3) Frequency and cost of activities

1. The frequency of activities will depend on the progress made by countries and the number and timing of validation requests submitted by countries.
2. WHO, UNICEF, UNAIDS, and the other partners will mobilize resources to support operational costs for the validation, including travel costs of the RVT members.

• NATIONAL VALIDATION COMMITTEE AND TEAM

Countries preparing for validation will establish a NVC. The NVC is responsible for the national validation process. The NVC is convened, chaired and led by the Ministry of Health. The NVC gathers evidence and prepares the national validation report; coordinates internal validation processes; and ensures strong communication with the Ministry of Health and stakeholders. The NVC may convene a NVT as a subset of the NVC membership to perform its tasks.

PROCESS OF VALIDATION



A more detailed description of each step is available in *Global guidance on criteria and processes for validation: elimination of mother-to-child transmission (EMTCT) of HIV and syphilis*.⁵⁵

CONCLUSIONS AND RECOMMENDATIONS

This progress report was prepared for the 10th Asia-Pacific United Nations Task Force Meeting held in Beijing, China, on 15-17 September 2015. The meeting's conclusions and recommendations are presented below.

Conclusions

High burden countries in the region are progressing towards EPTCT of HIV and syphilis while advances in other countries vary

- Thailand is committed to EPTCT and has initiated preparation towards validation.
- China is initiating a pre-validation exercise, building on the government's political and financial commitment towards EPTCT of HIV and syphilis and integrating control of HBV. Free testing for HIV, syphilis and HBV has been scaled up and is available at POC in all provinces as of 2015. By 2020, China plans to reduce PTCT of HIV to under 5 per cent and congenital syphilis to fewer than 15 cases/100,000 live births.
- Indonesia announced a policy to integrate PPTCT of HIV, syphilis and HBV in MNCH services, including ANC, in recognition that children have a right to be born free of these preventable diseases.
- India is scaling up its PPTCT response, which has been integrated into MNCH services, and plans to provide universal testing of HIV and syphilis for all pregnant women.
- Most countries have scaled up routine PITC. Some 17 out of 19 countries include HIV and syphilis testing in their ANC packages.
- Nepal and Thailand include retesting for HIV prior to ART initiation.
- Fifteen of the 19 countries plan to provide dual rapid POC testing, while Nepal has already piloted the use of dual rapid HIV/syphilis testing.

Most countries in the region have committed to EPTCT of HIV and syphilis and to integrate these services in MNCH programmes

- At the 10th Asia-Pacific United Nations Task Force Meeting, 12 out of 19 countries committed to EPTCT of HIV and syphilis by 2020 (*see Table 6*).
- Many countries agree that validation of EPTCT opens up opportunities for political advocacy and resource mobilisation and the inclusion of EPTCT goals in their national strategic plans.
- Many also agree that subnational validation processes serve as a starting point to reach national goals, especially where targeted testing is a national policy or currently recommended.
- All countries have adopted Option B+ (lifelong ART for all pregnant HIV-positive women), recognizing that careful planning is vital and that the retention of women and children in care is essential to ensure health benefits as well as the prevention of HIV drug resistance.
- Improved technology for tracking women and children is becoming increasingly available to facilitate the integration of services across platforms and increase retention of women and children in care.
- Most countries provide testing free of charge; one country provides free HIV screening with some costs for other tests in outpatient settings (tests are free when conducted for in-patient care).

Universal testing for HIV and syphilis as part of a standard ANC package is important for the EPTCT of HIV and syphilis because:

- A universal approach to HIV testing is cost-effective even in low burden settings.
- Universal syphilis testing is cost-effective even in low burden settings.
- Integrated provision of HIV and syphilis testing as well as other tests for pregnant women are more cost-effective than providing a single test on its own.
- All children have the right to be born free of preventable communicable diseases, and all women have a right to improved maternal health.

New technologies are being developed for dual HIV and syphilis POC testing and the tracking of women and infants to assist with retention

- Promising results with POC or rapid dual platform tests are noted, which enables the expansion of testing in hard-to-reach areas and populations.
- Novel methods for tracking women and children are available, which show promise towards increasing retention in care.
- Tools have been developed by WHO that enable the estimation of the syphilis burden to help countries forecast and plan EPTCT programmes.

Countries are offering universal HBV screening as part of the standard ANC package, and there is potential to expand the package to include screening for other infectious diseases such as tuberculosis

- Control of HBV through vaccination has been successful in the WHO Western Pacific Region.⁵⁶
- Ten out of 19 countries include HBV screening for pregnant women.
- The advantages of screening mothers and babies for tuberculosis and other coinfections as part of a MNCH package were discussed, and most of the countries do screen for tuberculosis in pregnant women living with HIV.

Gaps remain in progress towards EPTCT

- Many pregnant women are diagnosed with HIV and/or syphilis late, often at labour and delivery.
- Male partner involvement needs to be strengthened.
- Vertical programmes for ART still exist in most places.
- ART retention mechanisms for pregnant women after pregnancy are not clearly defined.
- Viral load testing is not available in 20 per cent of countries, and few countries offer viral load testing for women before delivery.
- Early infant diagnosis services are highly centralized, some countries send specimens outside the country for diagnosis, and turnaround times are a challenge for most healthcare facilities.

Recommendations for countries

- Advocate for the highest level of political commitment to EPTCT and ensure this goal is stated in national strategic plans.
- Reinforce calls for universal testing and treatment of HIV and syphilis for pregnant woman as part of an essential ANC package, to improve maternal child health outcomes and reach EPTCT goals.
- Define testing denominator based on WHO guidance to reach elimination goal and jointly evaluate the transmission risk and case rate even in low prevalence settings.
- Develop specific strategies to increase early ANC attendance (first trimester) for the implementation of early testing and treatment.
- Adapt WHO recommendations on HIV testing as per WHO consolidated HIV testing guidelines updated in July 2015.
- Integrate viral load assessment for pregnant women living with HIV into the overall implementation of WHO ART guidelines for monitoring. Opportunities accorded by new POC technologies should be tapped and maximized for improved testing coverage.

- Decentralize testing services.
- Scale up rapid POC testing platforms (including dual HIV and syphilis tests) and integrate them into MNCH services so that pregnant women need not travel long distances for testing.
- Make PPTCT programmes more inclusive of vulnerable and key populations.
- Reduce gaps in counselling and testing of couples and intimate partners.
- Plan and develop strategies to retain women and children in care in order to maximize the benefits of lifelong ART and prevent HIV drug resistance.
- Improve tracking mechanisms of mother-child pairs through active case management and optimizing the use of technology in the area of health.
- Improve follow-up services, including early infant diagnosis and routine immunization for HIV-exposed infants and children within the MNCH programme.
- Strengthen and scale up early infant diagnosis services to measure the impact of the PPTCT programme and ensure that infants and children are not excluded from efforts to initiate ART as quickly as possible.
- Improve tuberculosis screening and treatment of pregnant women and their exposed infants, and HBV immunization efforts in MNCH services.
- Strengthen the client-centred approach by integrating MNCH, SRH and immunization services.
- Strengthen surveillance and programme data, including interlinking patients' records to reduce loss to follow-up, and invest in interoperability of disparate health/disease information systems.
- Engage with the private sector to share data on pregnant women accessing private care for MNCH and PPTCT.
- Advocate for and ensure that HIV and syphilis testing and treatment are included in universal health care, both as part of care delivery systems and health insurance/benefit packages.
- Develop (for countries considering validation for EPTCT of HIV/syphilis) national processes to strengthen:
 - data management systems
 - laboratory systems
 - quality of programmes and services
 - human rights systems and links with civil society

Recommendations for partner organizations

- Implement and notify Member States of regional mechanisms to support the EPTCT national validation process.
- Monitor progress towards EPTCT in the region and document positive experiences and lessons learned in implementing EPTCT programmes.
- Provide platforms for the sharing of best practice and information exchange, and encourage cooperation between countries on the procurement of diagnostic test kits and ARV medicines.
- Continue to facilitate the stronger participation of civil society and women living with HIV in the drive to eliminate PTCT of HIV and syphilis.

At the Task Force Meeting, each country committed to a series of 'next steps' to move towards the dual elimination goals, as described below. The Meeting concluded with an announcement that the Asia-Pacific United Nations Regional Task Force on the Prevention of Parent-to-Child Transmission of HIV and Syphilis would no longer operate in its current form. Partner organizations remained firmly committed to supporting countries in their elimination efforts and plan to hold smaller focused meetings around specific topics as the need arises.

NEXT STEPS

Table 6: Next steps towards the EPTCT of HIV and syphilis, by country, Asia-Pacific

Country	EPTCT HIV target	EPTCT syphilis target	Preparation toward validation	Improving HIV and syphilis testing in concentrated epidemics	Addressing late presenters	Male partner testing – increase male involvement
Afghanistan						
Bangladesh			Advocate for commitment from policy makers on the inclusion of HIV, syphilis and HBV into the ANC package in the new National Health Sector Plan 2017-2022.	Organize a coordination meeting among the directorates of HIV, MCH and family planning, and establish a working group.	<ul style="list-style-type: none"> - Improve overall access to ANC through increased advocacy/ community awareness of importance of ANC. - Increase MCH mobile outreach to promote early testing. - Strengthen the village health volunteer programme to identify pregnant women to access ANC and get tested. - Develop a PLHIV database. - Use of mobile phone ICT for tracking and bringing mothers in. 	Organize social mobilization to encourage male participation in ANC/MCH.
Bhutan				- Include the EPTCT of HIV and syphilis goal into the National Strategic Plan for 2016.	- Develop internet/ cloud-based mother tracking systems using an electronic recording system.	<ul style="list-style-type: none"> - Institute the counselling of couples. - Hire male MCH counselling staff to engage male partners. - Include peer counsellors to encourage male testing. - Social mobilization to encourage male participation in ANC/MCH.

Country	EPTCT HIV target	EPTCT syphilis target	Preparation toward validation	Improving HIV and syphilis testing in concentrated epidemics	Addressing late presenters	Male partner testing – increase male involvement
Cambodia	2020	2020	Advocate for the validation goals to be incorporated into the National Strategic Plan, create a validation sub-committee.	<ul style="list-style-type: none"> - Scale up testing. - Request WHO and CDC assistance to advocate for a MoH focal point for HBV. - Plan to cost dual HIV/syphilis test versus two single tests. - Plan to hold a discussion on how to reach the syphilis screening target (dual testing might help) and reduce the burden on providers. 	<ul style="list-style-type: none"> - Institute ANC outreach through community involvement to increase HIV and syphilis testing at ANC and increase efforts for remote provinces. - Scale up labour/delivery HIV testing to catch those missed at ANC or those not attending ANC. 	<ul style="list-style-type: none"> - Scale up Partner Notification Testing and Tracking (PNTT) approach. - Community advocacy for male participation in ANC and encouraging testing.
China	2020	2020	Set up a National Validation Committee, collect data, announce elimination plan in 2017.	<ul style="list-style-type: none"> - More proactive health promotion of specific high-risk populations. - Strengthen capacity building at grass-roots level. - Communication and information exchange between MCH and CDC, and within MCH system. - Decentralize testing services and make them available at the township level. - Strengthen ANC services and the management of pregnant women using maternal and children's handbook. - Continue providing services for infant follow-up based on the MCH platform. - Health education to encourage male partner testing. 	<ul style="list-style-type: none"> - Conduct community campaign and mobilization to encourage pregnant women to attend ANC early and to deliver at health facility. - Community mobilization. - Pre-marriage testing. - Advocacy to reduce stigmatization to improve testing. - Improve accessibility and acceptability of testing facilities and ANC. 	<ul style="list-style-type: none"> - Advocate for policy and increased funding/resources for male partner testing. - Health promotion and stigma reduction to increase partner testing.

Country	EPTCT HIV target	EPTCT syphilis target	Preparation toward validation	Improving HIV and syphilis testing in concentrated epidemics	Addressing late presenters	Male partner testing – increase male involvement
Fiji	2020	2020	Add HBV to ANC package of services.	<ul style="list-style-type: none"> - Build the capacity of service providers in providing POC testing, both at the divisional and sub-divisional levels. - Enhance the reporting and recording system for MCH, HIV, syphilis and hepatitis. 	<ul style="list-style-type: none"> - Offer triple testing: HIV, syphilis, HBV. - Train healthcare workers to promote attendance at ANC. - Launch a safe motherhood initiative. - Aim to target younger populations, single mothers and adolescents. - Early ANC booking. - Provide two HIV tests during ANC. 	<ul style="list-style-type: none"> - Increase testing access for males.
India	2020	2020	Plan for sub-national validation, advocate for efforts to expand screening to all 22 million pregnant women.	<ul style="list-style-type: none"> - Step up HIV and syphilis testing for mothers presenting in labour to increase the coverage of prenatal testing. - Advocate for dual HIV and syphilis test introduction. 	<ul style="list-style-type: none"> - Mapping and delivery points, and integrated counselling/testing centre couples mapping. - Provide transport support to pregnant women at ANC/ post antenatal to minimize loss to follow-up/improve adherence. - India short stay home (SSH) scheme for all pregnant women, including those at high risk. - Different colour card issued for high risk. - Mother and child tracking system to also capture various parameters where they can be identified as high risk. 	

Country	EPTCT HIV target	EPTCT syphilis target	Preparation toward validation	Improving HIV and syphilis testing in concentrated epidemics	Addressing late presenters	Male partner testing – increase male involvement
Indonesia	2020	2020	Integrate HIV services into MCH services.	<ul style="list-style-type: none"> - Universal testing for pregnant women for HIV, syphilis and HBV. - Review and update guidelines. 	<ul style="list-style-type: none"> - Strengthen information system through a technical assistance programme to better capture late presenters and improve follow-up. - Engage private sector. 	<ul style="list-style-type: none"> - Integrate male involvement approach into ANC programme. - Bring in expert technical assistance to review and propose strengthening measures for a male involvement programme in ANC.
Lao PDR	2020	2020	<ul style="list-style-type: none"> - Push the implementation of universal testing and expanded pre-natal care. - Raise the priority of MCH within Government and donor planning. 	<ul style="list-style-type: none"> - Hold a dissemination meeting upon return. - Work with external and internal counterparts to expand PMTCT services nationwide and integrate HIV, syphilis and HBV into routine services. 	<ul style="list-style-type: none"> - Share recommendations from the PPTCT Meeting to stakeholders to get buy in. 	<ul style="list-style-type: none"> - Conduct an advocacy meeting to get additional support and involvement with community, mobile outreach and better data recording and reporting.
Malaysia	2018	2018	Advocate for higher levels of political commitment to EPTCT HIV and syphilis.	<ul style="list-style-type: none"> - Prepare for the validation of EPTCT of syphilis and HIV with support from regional partners. - Conduct a site visit to Cuba to learn from their experience on validation. - Government requests regular support and consultative progress reviews with the UNICEF country office to ensure they remain on track. 	<ul style="list-style-type: none"> - More efforts to identify high risk mothers and their partners. 	<ul style="list-style-type: none"> - Make clinics partner friendly to encourage participation and testing.

Country	EPTCT HIV target	EPTCT syphilis target	Preparation toward validation	Improving HIV and syphilis testing in concentrated epidemics	Addressing late presenters	Male partner testing – increase male involvement
Maldives			Develop a strategy and evaluate current systems.	<ul style="list-style-type: none"> - Work on information systems. Patients all have a national ID card, the MoH is working on a new system to register patients in a general practice system so that all citizens fall into the catchment area of a GP. Has online HIV and STI reporting system. - Validation of the EPTCT of syphilis (no reported HIV). Want to use validation as chance to strengthen programme – will connect with regional WHO and UNICEF focal points to discuss. 	<ul style="list-style-type: none"> - Capacity strengthening for primary healthcare workers to identify and track late attendees and motivate them to continue HIV care. - Expand and strengthen youth-friendly health services to ensure adolescent/unplanned pregnancies are brought into ANC and the continuum of care. 	
Mongolia	2020	2020	Develop a strategic plan to include syphilis and HIV testing in ANC.	<ul style="list-style-type: none"> - Integrate MCH and HIV, STI and HBV at the policy and service delivery level. - Expand throughout the country the one-stop shop of integrated service delivery that includes MCH, HIV, STI and HBV. - Strengthen recording and reporting system for MCH, HIV, STI and Hepatitis. 	<ul style="list-style-type: none"> - Develop operational plan for PPTCT. - Developing student health programme with HIV/syphilis PITC in universities for students who are at higher risk and not accessing services. 	<ul style="list-style-type: none"> - Advocacy and availability of male health services (because they are currently very weak). - Counselling of family/couples. - Family visits.

Country	EPTCT HIV target	EPTCT syphilis target	Preparation toward validation	Improving HIV and syphilis testing in concentrated epidemics	Addressing late presenters	Male partner testing – increase male involvement
Myanmar	2020	2020	Pre-assessment (for validation) in 2016 and the scale-up of screening.	<ul style="list-style-type: none"> - Step up the counselling of couples, awareness raising and community mobilization. - Scale up community-based HIV testing to reach more key populations. - High-level advocacy and fund mobilization for the country to move from focused HTC to universal HTC approach. 	<ul style="list-style-type: none"> - Strengthen coordination at the township level with the rural health centre. - Strengthen early infant diagnosis monitoring. - Link health management information system (HMIS) data to HIV data to improve tracking. - Strengthen involvement of the community and CSOs in tracking process. - Promote HCT coverage with basic health services and CSOs. - Use the PLHIV network to follow up mother-baby pairs. 	<ul style="list-style-type: none"> - Improve quality of data recording for male partners, move towards e-Health systems - Want to include pre-exposure prophylaxis (PrEP) and learn from neighbouring countries to implement.

Country	EPTCT HIV target	EPTCT syphilis target	Preparation toward validation	Improving HIV and syphilis testing in concentrated epidemics	Addressing late presenters	Male partner testing – increase male involvement
Nepal			Include EPTCT goals in new National Strategic Plan.	<ul style="list-style-type: none"> - Conduct cost effective analysis of universal HIV testing. - Scaling up dual HIV and syphilis rapid tests to increase coverage of ANC clients with both of these services. - Include HIV, syphilis and HBV in the basic healthcare package. Roll it out at all health facility levels. - Include universal HIV testing in the new HIV and AIDS strategy 2016-2021 (on-going review). - Set up a referral laboratory for viral diagnostic testing so that dried blood spot samples are tested in-country. 	<ul style="list-style-type: none"> - Mobilize following community groups and awareness of their existence: - Female community volunteers. - Community MCH workers. - Counselling and awareness through media - Tracking through community group. - Tracking through mobile information technology. - Increasing accessibility of birthing facilities. - Institute universal coverage with an incentive programme for insurance coverage. - Strengthen HMIS for community-based tracking. 	<ul style="list-style-type: none"> - Awareness through community health networks and media. - Involvement of civil society and health management committee.

Country	EPTCT HIV target	EPTCT syphilis target	Preparation toward validation	Improving HIV and syphilis testing in concentrated epidemics	Addressing late presenters	Male partner testing – increase male involvement
Pakistan			Add HIV and HBV to routine testing, build infrastructure to provide universal testing and include it in the national policy.	<ul style="list-style-type: none"> - Conduct a cost analysis of the various HIV and syphilis testing approaches. - Advocate for most appropriate testing approach based on the recommendations from the cost analysis. - PWID and expatriates are key populations. Develop approaches for accessing them with services. - Linkage and partnerships with the private sector as they manage a significant (30 per cent) number of ANC clients. - Improve equitable access to MCH services. Advocate with NGOs, providing services for vulnerable populations like the urban poor and slum dwellers for EPTCT of HIV and syphilis as part of the ANC package. 	- Awareness campaign at ANC clinics to encourage female partners of male PLHIV to present early at ANC.	- Increase male involvement through the improved counselling of HIV-positive males.

Country	EPTCT HIV target	EPTCT syphilis target	Preparation toward validation	Improving HIV and syphilis testing in concentrated epidemics	Addressing late presenters	Male partner testing – increase male involvement
Philippines			Plan to have administrative order on EPTCT of HIV and syphilis by 2016.	<ul style="list-style-type: none"> - Meet with STI and HIV programme managers to discuss and make a plan. - Integration of syphilis and HIV tests in the maternity care package (social health scheme: philhealth). - Fast track HIV testing results (geographic prioritization – region 7 and Metro Manila). - High Five (high burden areas) 60 per cent HIV testing coverage; 50 per cent syphilis testing coverage among pregnant women. - Expanding testing facilities – (procurement of commodities to address the problem). 	<ul style="list-style-type: none"> - Have a joint meeting of MCH, HIV programme and surveillance programme to determine how to better track late presenters and high-risk women and reduce this gap. 	<ul style="list-style-type: none"> - The Philippines does not have a strong PPTCT programme, has geographic variation, especially in some areas high rates of injecting drug use among males who have females that are uninfected, many PWID are not on ART, considering PREP.
Papua New Guinea			In the next five years build infrastructure to expand testing.	<ul style="list-style-type: none"> - Address stock-out issues from the periphery. - Explore options to make both HIV and syphilis test kits in the same facility at the same time. - Strengthen the capacity of service providers in health facilities to adhere to the guidelines. - Strengthen coverage on ANC first booking and increase facility delivery. 	<ul style="list-style-type: none"> - Increase ANC accessibility through increased MCH mobile outreach and awareness of the importance of ANC services. - Strengthen identification of high- risk HIV- positive pregnant women through strengthened skills of village health volunteers. 	<ul style="list-style-type: none"> - Training of health care workers in the counselling of couples.

Country	EPTCT HIV target	EPTCT syphilis target	Preparation toward validation	Improving HIV and syphilis testing in concentrated epidemics	Addressing late presenters	Male partner testing – increase male involvement
Sri Lanka	2017	2017	Programme strengthening to improve services.	<ul style="list-style-type: none"> - Conduct programme review and identify areas of improvement - Apply for the validation of EPTCT of HIV in 2017. Will use the existing steering committee to double as the country validation team. - Provide feedback to MCH counterparts who were not able to participate in this meeting. - Advocate for subsidized or free HIV and testing services. 	<ul style="list-style-type: none"> - Scale up ANC HIV testing to 95 per cent by end of 2015. - Address late testing at delivery, but still offer it to make sure those who were not tested at ANC get tested. - Identify mothers who may need a second HIV test during second trimester. - Improve the content of counselling training to STI staff and nurse counsellors at ANC to encourage partner testing. 	<ul style="list-style-type: none"> - Need to introduce HIV testing in partners at parent meetings in ANC settings.
Thailand	2015	2015	Pre-validation for EPTCT of HIV underway.	<ul style="list-style-type: none"> - Discuss the issues of HBV and tuberculosis screening for pregnant women. - Strengthen partner counselling and testing and encouragement for early ANC (first trimester). - Move forward to quality births. 	<ul style="list-style-type: none"> - Areas to improve: develop a standard operating procedure for follow-up; better M&E. - Involve HIV-positive women from ANC clinics in peer community support groups and set up mother groups for sharing information, experience and providing social support to other HIV-positive pregnant women. 	<ul style="list-style-type: none"> - Strengthen the training of staff to encourage partner testing.

Country	EPTCT HIV target	EPTCT syphilis target	Preparation toward validation	Improving HIV and syphilis testing in concentrated epidemics	Addressing late presenters	Male partner testing – increase male involvement
Viet Nam	2020	2020	Pre-assessment for validation at the country level.	<ul style="list-style-type: none"> - Development of national guidelines on linkages of SRH and HIV and national guidelines on reproductive health services (integrating HIV, syphilis and HBV into antenatal care). - Ensure health insurance coverage of HIV, syphilis and HBV at ANC. - Include HIV, syphilis and HBV testing in HMIS under the MCH component. - Capacity building for maternal and child health workers on HIV, syphilis and HBV testing. 	<ul style="list-style-type: none"> - Expand services to the community level. - Provide outreach services for mobile/ marginalized populations. - Develop national and sub-national policies for these hard-to-reach groups. - Improve data collection for the private sector. - Develop an operational plan for PPTCT. - Classify high-risk groups geographically, including residents versus migrants. 	

ANNEX: GUIDELINES AND GUIDANCE

Global documents

Elimination of Mother-to-Child Transmission (EMTCT) of HIV and Syphilis – Global Guidance on Criteria and Processes for Validation (WHO, June 2014), at <http://www.who.int/reproductivehealth/publications/rtis/9789241505888/en/>

This document outlines minimum global processes and criteria for the validation of EMTCT of HIV and/or syphilis in a country; provides a description of global EMTCT validation targets and indicators; explains the operation of validation committees and secretariats; and reviews the validation procedure itself, including maintenance of the validation status.

Consolidated Guidelines on the Use of Antiretroviral Drugs for Treating and Preventing HIV Infection (WHO, June 2013), at <http://www.who.int/hiv/pub/guidelines/arv2013/en/>

These provide guidance on antiretroviral regimens for adults, adolescents and children, including pregnant and breastfeeding women.

March 2014 Supplement to the 2013 Consolidated Guidelines on the Use of Antiretroviral Drugs for Treating and Preventing HIV infection (WHO), at http://www.who.int/hiv/pub/guidelines/arv2013/arvs2013supplement_march2014/en/

This supplement to the 2013 guidelines provides information on early infant diagnosis.

Consolidated guidelines on HIV testing services: 5Cs: consent, confidentiality, counselling, correct results and connection (WHO, July 2015), at <http://www.who.int/hiv/pub/guidelines/hiv-testing-services/en/>

The guidelines provide recommendations relevant to the provision of HIV testing services and a new recommendation to support these services by trained lay providers. The guidelines consider the potential of HIV self-testing to increase access to, and coverage of, HIV testing, and outline focused and strategic approaches to testing services that are needed to support the new UN 90-90-90 global HIV targets.

Guideline on when to start antiretroviral therapy and on pre-exposure prophylaxis for HIV (WHO), at http://apps.who.int/iris/bitstream/10665/186275/1/9789241509565_eng.pdf This guideline is an update to the 2013 guidelines recommending that all people diagnosed with HIV should receive ART, and provides advice on pre-exposure prophylaxis.

Regional documents

Elimination of New Paediatric HIV infections and Congenital Syphilis in Asia-Pacific 2011-2015: Conceptual Framework & Monitoring and Evaluation Guide (UNAIDS, UNICEF, UNFPA, WHO, August 2011), at http://www.wpro.who.int/hiv/documents/paediatric_hiv_syphilis/en/

This document provides a common, systematic approach to the elimination of new paediatric HIV infections, congenital syphilis, and the improvement of maternal and child health and survival in the context of HIV/STIs. It also serves as a tool to advocate for government endorsement of the elimination initiative.

Regional core group meeting for the validation of the elimination of parent-to-child transmission of HIV and syphilis in Asia and the Pacific (WHO, UNICEF, February 2015), at http://www.wpro.who.int/hiv/documents/topics/PPTCT/regional_validation_emptct/en/

Health at a Glance: Asia/Pacific 2014: Measuring Progress towards Universal Health Coverage (OECD, WHO), at http://dx.doi.org/10.1787/health_glance_ap-2014-en

Toolkits

Global toolkits

Toolkit, Expanding and Simplifying Treatment for Pregnant Women Living with HIV - Managing the Transition to Option B/B+ (IATT, UNICEF, WHO, March 2013), at http://www.who.int/hiv/pub/mtct/iatt_optionBplus_toolkit/en/

Costing Tool for Elimination Initiative (CTEI) (August 2013), at www.unicef.org/rosa/eMTCT_costing_tool_2012.xlsx This tool supports countries to estimate the costs of eliminating new paediatric HIV infections and congenital syphilis and improve the health and survival of mothers and children.

Tool for estimating disease burden of congenital syphilis (WHO), at http://www.who.int/reproductivehealth/topics/rtis/syphilis/measurement_tool/en/ This toolkit is helpful for evaluating the burden of disease of congenital syphilis for progress and programmatic purposes.

Regional toolkits

Elimination of New Paediatric Infections and Congenital Syphilis in Asia-Pacific, toolkits and guidance for validation, costing, laboratory assessment and gender, human rights and community engagement, available at <http://www.eptctasiapacific.org/tools-and-ressources/> These toolkits have been produced by the Asia-Pacific United Nations Prevention of Parents-to-Child Transmission of HIV Task Force to galvanize actions in countries towards elimination goals.

ENDNOTES

- ¹ United Nations Millennium Declaration, 8 September 2000, at <http://www.un.org/millennium/declaration/ares552e.htm>
- ² We can end poverty, millennium development goals and beyond 2015, at <http://www.un.org/millenniumgoals/>
- ³ United Nations, *The Millennium Development Goals Report 2015*, UN, New York, 2015, at [http://www.un.org/millenniumgoals/2015_MDG_Report/pdf/MDG 2015 rev \(July 1\).pdf](http://www.un.org/millenniumgoals/2015_MDG_Report/pdf/MDG%202015%20rev%20(July%201).pdf)
- ⁴ UNAIDS, *How AIDS Changed Everything – MDG6: 15 years, 15 lessons of hope from the AIDS Response*, UNAIDS, Geneva, 2015, at http://www.unaids.org/en/resources/documents/2015/MDG6_15years-15lessonsfromtheAIDSresponse
- ⁵ UNAIDS, *Global Plan towards the elimination of new HIV infections among children by 2015, and keeping their mothers alive, 2011-2015*, UNAIDS, Geneva, 2011, at: http://www.unaids.org/sites/default/files/media_asset/20110609_JC2137_Global-Plan-Elimination-HIV-Children_en_1.pdf
- ⁶ WHO, *Global incidence and prevalence of selected curable sexually transmitted infections – 2008*, Geneva, 2012, at: http://apps.who.int/iris/bitstream/10665/75181/1/9789241503839_eng.pdf
- ⁷ WHO, *The Global elimination of congenital syphilis: rationale and strategy for action*, WHO, Geneva, 2007, at: http://apps.who.int/iris/bitstream/10665/43782/1/9789241595858_eng.pdf
- ⁸ United Nations Department of Economic and Social Affairs, *Sustainable Development Goals 2015*, at: <https://sustainabledevelopment.un.org/>
- ⁹ United Nations General Assembly Sixty-Seventh Session, *Global Health and Foreign Policy*, adopted 12 December 2012, at: <http://universalhealthcoverageday.org/un-resolution/>
- ¹⁰ WHO, World Bank Group, Rockefeller Foundation, '500+ Organizations Launch Global Coalition to Accelerate Access to Universal Health Coverage' New York, 12 December 2014, at: http://www.who.int/universal_health_coverage/universal-health-coverage-access-pr-20141212.pdf?ua=1
- ¹¹ UNAIDS, *How AIDS Changed Everything – MDG6: 15 years, 15 lessons of hope from the AIDS Response*, UNAIDS, Geneva, 2015, at http://www.unaids.org/en/resources/documents/2015/MDG6_15years-15lessonsfromtheAIDSresponse
- ¹² WHO, *PMTCT strategic vision 2010–2015: preventing mother-to-child transmission of HIV to reach the UNGASS and Millennium Development Goals*, WHO, Geneva, 2010, at: http://www.who.int/hiv/pub/mtct/strategic_vision.pdf
- ¹³ UNAIDS, *Fast-Track: ending the AIDS epidemic by 2030*, UNAIDS, Geneva, 2014, at: http://www.unaids.org/sites/default/files/media_asset/JC2686_WAD2014report_en.pdf
- ¹⁴ WHO, *PMTCT Strategic Vision 2010–2015: Preventing mother-to-child transmission of HIV to reach the UNGASS and Millennium Development Goals*, WHO, Geneva, 2010, at: http://www.who.int/hiv/pub/mtct/strategic_vision.pdf
- ¹⁵ Siegfried, N., et al., 'Antiretrovirals for reducing the risk of mother-to-child transmission of HIV infection', *Cochrane Database Syst Rev*, 2011(7):CD003510.
- ¹⁶ WHO, *Consolidated guidelines on the use of antiretroviral drugs for treating and preventing HIV Infection, Recommendations for a public health approach*, WHO, Geneva, 30 June 2013, at: <http://www.who.int/hiv/pub/guidelines/arv2013/download/en/>

- ¹⁷ WHO, *Guidelines on when to start antiretroviral therapy and on pre-exposure prophylaxis for HIV*, WHO, Geneva, September 2015, at: <http://www.who.int/hiv/pub/guidelines/earlyrelease-arv/en/>
- ¹⁸ Tabernilla, A., and Poveda, E., 'The START Trial: Definitive Evidence to Treat All HIV-Positive Persons Regardless of CD4 Counts', *AIDS Rev*, 2015;17(3):187.
- ¹⁹ Schmid, G. P., et al., 'The need and plan for global elimination of congenital syphilis', *Sex Transm Dis.*, 2007;34(7 Suppl):S5-10.
- ²⁰ WHO, *Investment case for eliminating mother-to-child transmission of syphilis: Promoting better maternal and child health and stronger health systems*, WHO, Geneva, 2012, at: <http://www.who.int/reproductivehealth/publications/rtis/9789241504348/en/>
- ²¹ Ibid.
- ²² WHO, *The Global elimination of congenital syphilis: rationale and strategy for action*, WHO, Geneva, 2007, at: http://apps.who.int/iris/bitstream/10665/43782/1/9789241595858_eng.pdf
- ²³ Newman, L., et al., 'Global estimates of syphilis in pregnancy and associated adverse outcomes: analysis of multinational antenatal surveillance data', *PLOS Med*, 2013;10:e1001396, 20.
- ²⁴ WHO, *Report on global sexually transmitted infection surveillance 2013*, WHO, Geneva, June 2014, at <http://www.who.int/reproductivehealth/publications/rtis/stis-surveillance-2013/en>
- ²⁵ WHO, *Global Update on the Health Sector Response to HIV 2014*, WHO, Geneva, July 2014, at <http://www.who.int/hiv/pub/progressreports/update2014/en/>
- ²⁶ World Population Review 2015, at: <http://worldpopulationreview.com/continents/asia-population/>
- ²⁷ UNAIDS, *How AIDS Changed Everything – MDG6: 15 years, 15 lessons of hope from the AIDS Response*, UNAIDS, Geneva, 2015, at http://www.unaids.org/en/resources/documents/2015/MDG6_15years-15lessonsfromtheAIDSresponse
- ²⁸ AIDS Data Hub, Thailand country profile, at <http://www.aidsdatahub.org/Country-Profiles/Thailand>.
- ²⁹ UNICEF, UNAIDS, WHO, *Elimination of New Paediatric HIV Infections and Congenital Syphilis in the Asia-Pacific 2011-2015: Conceptual Framework and Monitoring and Evaluation Guide*, UNICEF East Asia and Pacific Regional Office, Bangkok, August 2011, at: https://www.google.co.th/url?sa=t&rct=j&q=&esrc=s&source=web&cd=1&ved=0ahUKEwj8x46XhbXLAhUKC44KHeHJD0EQFggbMAA&url=http%3A%2F%2Fwww.unicef.org%2Fepro%2FPPTCT_CF_and_ME_guide_17Aug11.pdf&usq=AFOjCNHafrF_CPJERJRNWWhwxdLUF3_KQw&sig2=Fh7yv4TiE4RD5EgfM2fYUA
- ³⁰ Ibid.
- ³¹ UNICEF, The 9th Meeting of the Asia-Pacific United Nations Task Force for the Prevention of Parents-to-Child Transmission, 'A generation of children free of HIV/AIDS and congenital syphilis is possible and achievable', 27-29 August 2013, Kathmandu, Conclusions and Recommendations 2013, at <http://www.emtct-iatt.org/wp-content/uploads/2013/10/CONCLUSIONS-AND-RECOMMENDATIONS-9th-PPTCT-Task-Force-Meeting-2013-Final-26Sept13.pdf>
- ³² WHO, *Global guidance on criteria and processes for validation: elimination of mother-to-child transmission (EMTCT) of HIV and syphilis*, WHO, Geneva, 2014, at <http://www.who.int/reproductivehealth/publications/rtis/9789241505888/en/>

- ³³ UNICEF, UNAIDS, WHO, *Elimination of New Paediatric HIV Infections and Congenital Syphilis in the Asia-Pacific 2011-2015: Conceptual Framework and Monitoring and Evaluation Guide*, UNICEF East Asia and Pacific Regional Office, Bangkok, August 2011, at: https://www.google.co.th/url?sa=t&rct=j&q=&esrc=s&source=web&cd=1&ved=0ahUKEWj8x46XhbXLAhUKC44KHeHJD0EQFggbMAA&url=http%3A%2F%2Fwww.unicef.org%2Fepro%2FPPTCT_CF_and_ME_guide_17Aug11.pdf&usq=AFOjCNHafrF_CPJERJRNWWhwxdLUF3_KQw&sig2=Fh7yv4TiE4RD5EgfM2fYUA
- ³⁴ UNAIDS, *How AIDS Changed Everything – MDG6: 15 years, 15 lessons of hope from the AIDS Response*, UNAIDS, Geneva, 2015, at http://www.unaids.org/en/resources/documents/2015/MDG6_15years-15lessonsfromtheAIDSresponse
- ³⁵ Ibid.
- ³⁶ Cambodia Ministry of Health, 'Standard Operating Procedure for Implementation of the Boosted Linked Response between HIV and SRH for Elimination of New Pediatric HIV Infections and Congenital Syphilis in Cambodia', 2013, at: http://www.nchads.org/SOPs/sop_boosted_LR_eng_09-04-13.pdf
- ³⁷ From country data reported at the 10th Asia-Pacific UN Task Force Meeting for EPTCT of HIV and syphilis, Beijing, 15-17 September 2015.
- ³⁸ UNICEF, *Promoting Male Involvement in Antenatal Care and PPTCT – Knowledge, Attitudes and Practices Study*, Papua New Guinea, October 2012. Note that information in the subsequent three paragraphs is sourced from this study.
- ³⁹ Aids info, at <http://aidsinfo.unaids.org/>
- ⁴⁰ UNAIDS, UNICEF, WHO, 2015 Global AIDS Response Progress Reporting and UNAIDS 2014 HIV and AIDS estimates, July 2015.
- ⁴¹ As reported at the 10th Asia-Pacific UN Task Force Meeting for EPTCT of HIV and syphilis, Beijing, 15-17 September 2015.
- ⁴² Ibid.
- ⁴³ Ishikawa, N., et al., 'Achieving elimination of mother-to-child transmission of HIV in low and concentrated epidemics: an analysis on health and cost outcomes of universal versus targeted approach', 7th International Workshop on HIV Pediatrics, 17-18 July 2015, Vancouver, Canada.
- ⁴⁴ National Centre for Global Health and Medicine, Asia-Pacific United Nations Task Force for the Prevention of Parents-to-Child Transmission of HIV, Pan American Health Organization, Costing Tool for Elimination Initiative, at: <http://www.eptctasiapacific.org/download/ctei-26aug2013-0-xlsx/>
- ⁴⁵ Ishikawa, N., et al., 'Health outcomes and cost impact of the new WHO 2013 guidelines on prevention of mother-to-child transmission of HIV in Zambia', *PIOS one*, vol. 9, 2014:e90991.
- ⁴⁶ Ishikawa, N., et al., 'Achieving elimination of mother-to-child transmission of HIV in low and concentrated epidemics: an analysis on health and cost outcomes of universal versus targeted approach', 7th International Workshop on HIV Paediatrics, 17-18 July 2015, Vancouver, Canada.
- ⁴⁷ Ishikawa, N., et al., 'Achieving elimination of mother-to-child transmission of HIV in low and concentrated epidemics: an analysis on health and cost outcomes of universal versus targeted approach', 7th International Workshop on HIV Paediatrics, 17-18 July 2015, Vancouver, Canada.
- ⁴⁸ Kahn, J. G., et al., 'The cost and cost-effectiveness of scaling up screening and treatment of syphilis in pregnancy: a model', *PIOS one*, 2014;9(1):e87510.
- ⁴⁹ Owusu-Edusei, K. Jr., et al., 'Cost-effectiveness of integrated routine offering of prenatal HIV and syphilis screening in China', *Sex Transm Dis*, 2014;41(2):103-10.

- ⁵⁰ UNAIDS 2015. How AIDS changed everything - MDG6: 15 years, 15 lessons of hope from the AIDS response http://www.unaids.org/en/resources/documents/2015/MDG6_15years-15lessonsfromtheAIDSresponse
- ⁵¹ Newman L, Kamb M, Hawkes S, Gomez G, et al. Global Estimates of Syphilis in Pregnancy and Associated Adverse Outcomes: Analysis of Multinational Antenatal Surveillance Data. PLoS Med 10(2): e1001396. doi:10.1371/journal.pmed.1001396, 2013.
- ⁵² http://www.unicef.org/eapro/PPTCT_CF_and_ME_guide_17Aug11.pdf
- ⁵³ WHO 2007. Global elimination of congenital syphilis: rationale and strategy for action.
- ⁵⁴ UNAIDS 2011. Global plan towards the elimination of new HIV infections among children by 2015 and keeping their mothers alive.
- ⁵⁵ WHO 2014. Global Guidance on Criteria and Processes for Validation: Elimination of Mother-to-Child Transmission of HIV and Syphilis <http://www.who.int/reproductivehealth/publications/rtis/9789241505888/en/>
- ⁵⁶ This region covers 37 countries and areas, listed at: <http://www.wpro.who.int/countries/en/>



UNICEF East Asia and Pacific Regional Office

19 Phra Atit Road
Bangkok 10200 Thailand
Tel: +(66 2) 356 9499
Fax: +(66 2) 280 3563
Email: eapro@unicef.org
www.unicef.org/eapro