

# 2014 Update

## Elimination of Mother-to-Child Transmission of HIV and Syphilis in the Americas

### Key messages

### HIV

- Mother-to-child transmission (MTCT) rate of HIV in Latin America and the Caribbean (LAC) has decreased from an estimated 18% in 2010 to 5% in 2013.
- Nine countries and territories in the Americas report data compatible with meeting HIV MTCT elimination goals in 2013, four more than in 2010.
- HIV testing and counseling among pregnant women in LAC has increased 19% from 2010 to 2013.
- In 2013, 93% of HIV-positive pregnant women in low and middle income countries in the Americas received antiretroviral drugs for prevention of MTCT (PMTCT) of HIV.
- 60% of countries and territories in the Americas have implemented perinatal surveillance systems for monitoring HIV-exposed infants.

### Syphilis

- Fifteen countries and territories in the Americas report data compatible with meeting syphilis MTCT elimination goals in 2013, four more than in 2010.
- Syphilis testing among pregnant women in LAC remains high at slightly over 80% in 2013.
- Treatment for syphilis-positive pregnant women in LAC remains unreported by most countries and territories. Among those reporting figures ranged from 13% to 100%.
- Systematic reporting of data on congenital syphilis and provision of services to pregnant women in the Region remains a challenge, despite the improvement of surveillance systems in some areas.

- Seven countries and territories in the Americas report data compatible with dual elimination of MTCT of HIV and syphilis.
- All countries and territories have progressed in PMTCT of HIV and availability of data for monitoring this progress has also increased.
- Limited progress has been made in regards to elimination of congenital syphilis.
- Closing service delivery gaps and achieving greater stability of country services and advancements are critical elements for meeting goals for elimination of MTCT of HIV and syphilis.

# Background

In 2010 Pan American Health Organization Member States approved the Strategy and Plan of Action for the Elimination of Mother-to-Child Transmission of HIV and Congenital Syphilis by Resolution 50/12 at the 50th Directing Council Meeting with goals by 2015 to:

- reduce MTCT of HIV to 2% or less,
- reduce the incidence of pediatric HIV cases to 0.3 or less per 1,000 live births, and
- reduce the incidence of congenital syphilis (CS) to 0.5 cases or less per 1,000 live births by 2015.

The program objectives are:

- coverage for prenatal care and births attended by skilled professionals  $\geq 95\%$ .
- coverage for detection of HIV and syphilis in pregnant women  $\geq 95\%$ .
- coverage of antiretroviral (ARV) use for PMTCT of HIV and treatment of syphilis among pregnant women and children  $\geq 95\%$ .
- first-level health care facilities providing services to prevent and diagnose HIV and sexually transmitted infection in an integrated way with other services (prenatal care, sexual and reproductive health, adolescent health, prevention of and treatment for gender based violence) in  $\geq 95\%$ .
- countries having information systems to monitor progress made towards eliminating MTCT of HIV and syphilis to support decision-making.

This document reports on progress towards elimination goals between 2010 and 2014. The results presented may assist policymakers and health care workers in their efforts to achieve elimination of MTCT of HIV and syphilis.

# Methods

- Data from 38 countries and 14 territories in the Americas including Member States, Participating States, or Associated Members of the Pan American Health Organization were included in this report<sup>1</sup>.

- 2013 data from the 2014 Global AIDS Response Progress Reporting from countries was the primary data source for this report.

- Data for 2010, 2011 and 2012 were compiled from the PAHO reports: 2010 Situation Analysis: Elimination of Mother-to-Child Transmission of HIV and Congenital Syphilis and 2012 Progress report: Elimination of Mother-to-Child Transmission of HIV and Syphilis in the Americas.

- Denominators for HIV testing and counseling among pregnant women and incidence rates of congenital syphilis and pediatric HIV were obtained from the UN Population Division (2013, the 2012 revision) and the U.S. Bureau of the Census estimates.

- Denominators for ARV coverage to prevent vertical transmission in pregnant women were derived from UNAIDS estimates.

<sup>1</sup> In line with the resolution of the 28th Pan American Sanitary Conference (CSP28/28), Aruba, Curacao, and Sint Maarten are considered separately, as well as the remaining Dutch territories (the islands of Bonaire, Saba, and Sint Eustatius).

## HIV

### Policies

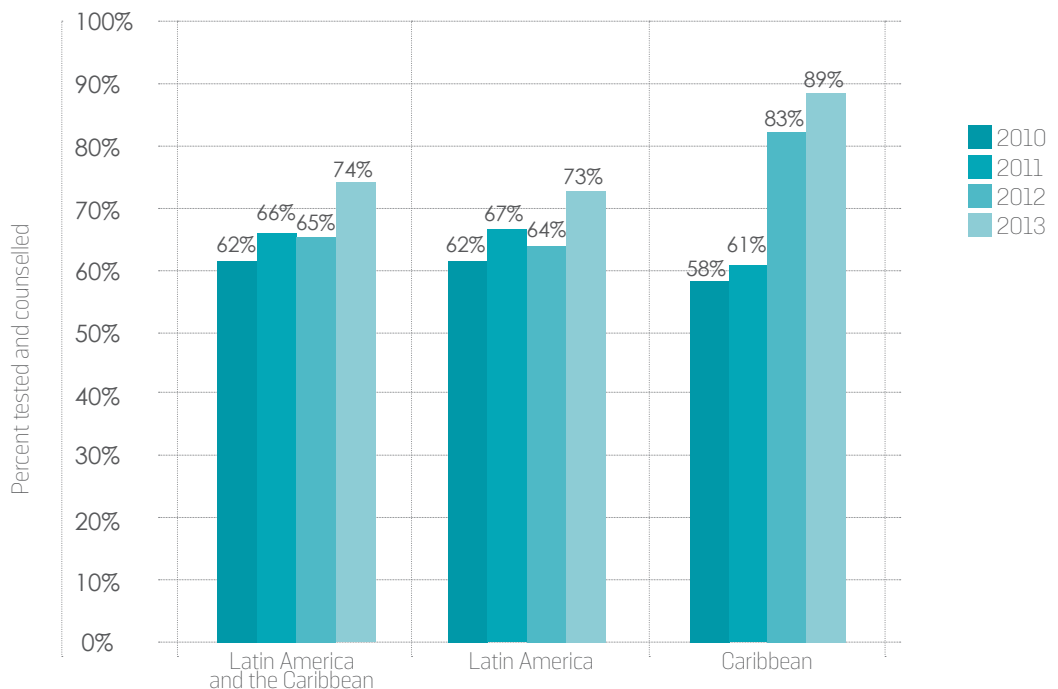
- The majority of countries and territories in the Americas have integrated national HIV and congenital syphilis elimination plans (29 out of 39 countries and territories reporting).
- The majority provide Option B+ to pregnant women (World Health Organization recommended life-long ARVs for all HIV-positive pregnant women) (36 out of 40 reporting).
- All countries and territories (37 out of 37 reporting) have a national recommendation on infant feeding for HIV-exposed infants.
- 60% of countries and territories (31 out of 53) in the Americas have implemented perinatal surveillance systems for monitoring HIV-exposed infants

### Provision of services

- HIV testing and counseling among pregnant women in LAC has continued to increase over time with 74% of pregnant women receiving an HIV test in 2013 (Figure 1)<sup>2</sup>.
- ARV coverage for PMTCT among HIV-positive pregnant women has also increased and is up to 93% in 2013 (Figure 2).

<sup>2</sup> Low HIV testing coverage coexisting with a high coverage of ARV for PMTCT may be due to several factors: 1) HIV testing services rendered by private practitioners may not be included in national information systems; 2) different sources for the denominators for each indicator; 3) targeted HIV testing may occur, in which HIV positive women have more chances of being tested; 4) repeat pregnancies among previously identified HIV-positive women.

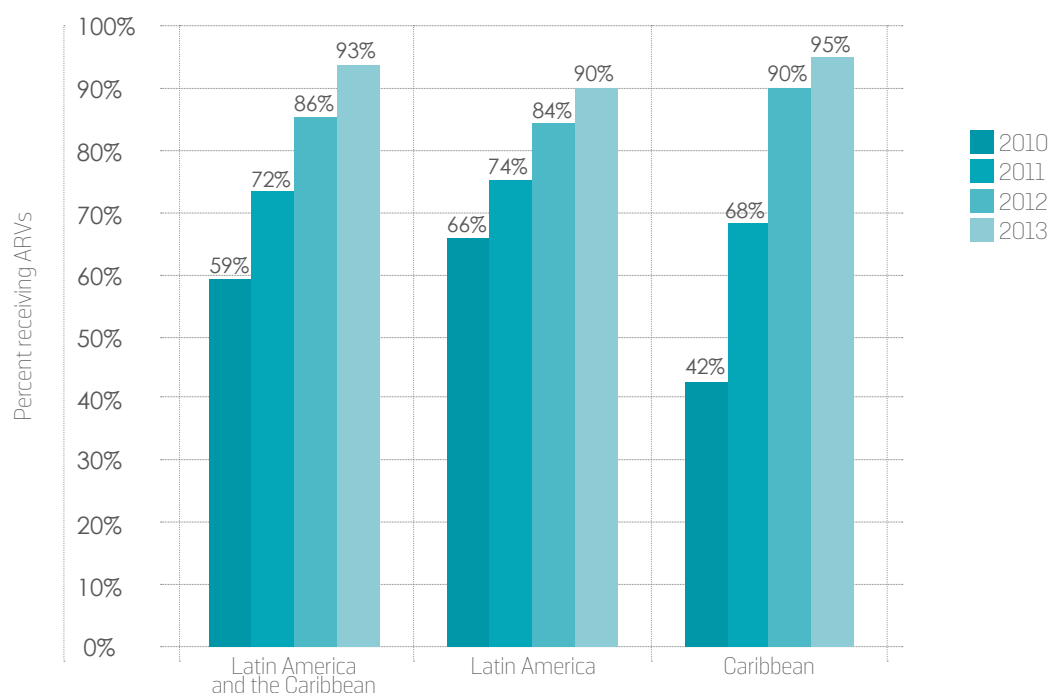
**Figure 1.**  
**Trends in HIV testing and counselling among pregnant women in Latin America and the Caribbean, 2010-2013.**



Source: UNAIDS/WHO country global AIDS response progress report 2014 (numerator) and UN Population Division (2013, the 2012 revision) and the U.S. Bureau of the Census estimates (denominator).

**Figure 2.**

## Trends in ARV coverage among HIV-positive pregnant women for PMTCT of HIV in Latin America and the Caribbean, 2010-2013.



Source: PAHO, Unpublished 2014 updated estimates, based on UNAIDS/WHO country global AIDS response progress reports 2014.

### Impact

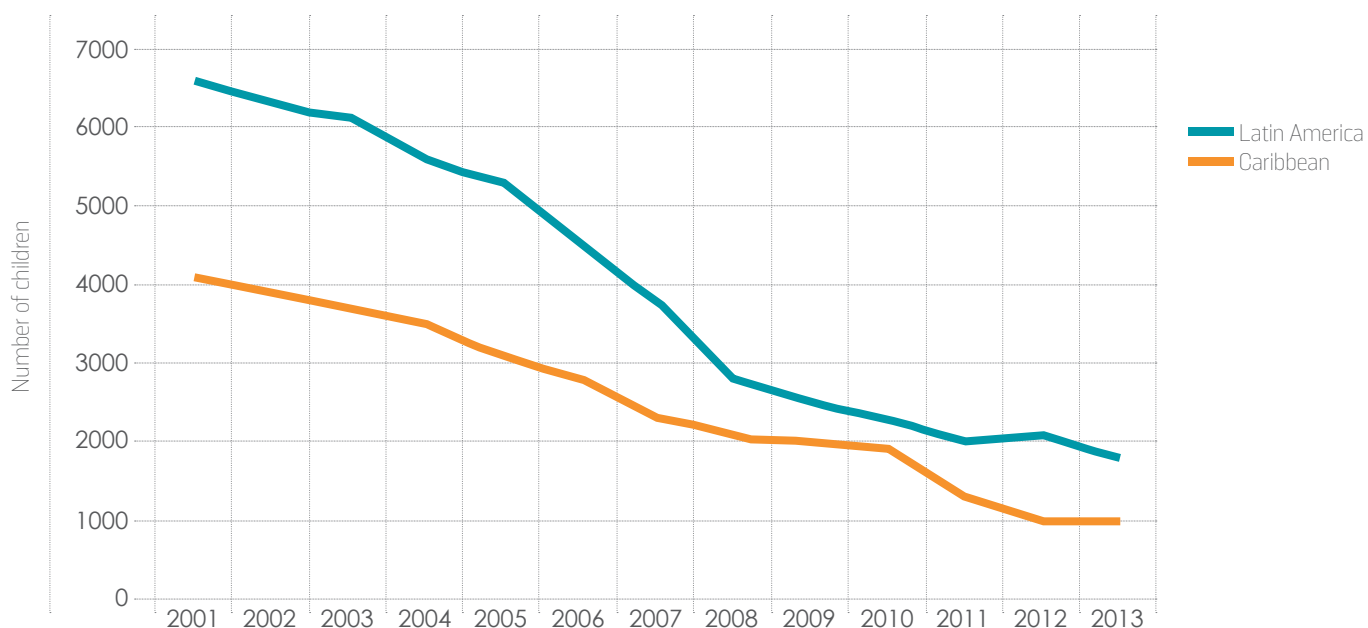
- The MTCT rate of HIV in LAC decreased from 18% in 2010 to 5% of HIV-exposed infants contracting HIV in 2013. Regional estimated transmission rates were obtained from a standard UNAIDS model and triangulated with country reported transmission rates.
- The MTCT HIV transmission rates in reporting countries and territories ranged from 0% to 8% in 2012.
- New HIV infections among children ages 0-14 years old declined significantly from 2001 to 2013 (Figure 3).
- In 2013, nine countries and territories in the Americas may have met the elimination goals ( $\leq 2\%$  MTCT of HIV and a pediatric HIV rate under 0.3 cases per 1,000 live births), four more than in 2010 (Table 1).

- Eight countries and territories in the Americas are close to meeting the goals (Table 1).

Accurately determining progress is complex and requires comprehensive and sensitive surveillance and monitoring systems. Fluctuations in transmission rates occur particularly in countries and territories with small populations of HIV-positive pregnant women which may move them away or towards the goal. In such cases, multiple years of data may be used to better determine whether elimination goals have been met or not<sup>3</sup>.

<sup>3</sup> For validation purposes special considerations will be applied to countries with small numbers of HIV positive pregnant women, including pooling of data from multiple years (e.g. 3-5 years), calculating the transmission rate based on the pooled data, and in-depth review of each case of vertical transmission. If it is documented that all possible PMTCT measures were applied but transmission occurred anyway, such a case should not count against a country's achievement of elimination.

**Figure 3.**  
**Estimated number of children (0-14 years old) newly infected with HIV in Latin America and the Caribbean, 2001-2013.**



Source: 2014 UNAIDS HIV estimates

**Table 1.**  
**Classification of countries and territories in the Americas regarding achievement of HIV MTCT elimination goals, 2013.**

Met HIV MTCT elimination goal ( $\leq 2\%$ HIV estimated MTCT rate)*	Close to HIV MTCT elimination goal (estimated $> 2$ to $\leq 5\%$ HIV MTCT rate)	Progressing to elimination goal (estimated $> 5\%$ MTCT rate)	Insufficient information to ascertain progress
Anguilla Barbados Canada Cuba Jamaica Montserrat Puerto Rico St. Kitts and Nevis United States of America	Bahamas Brazil Chile Costa Rica Guyana Nicaragua Suriname Trinidad and Tobago	Antigua and Barbuda Argentina Belize Bolivia (Plurinational State of) Colombia Ecuador El Salvador Guatemala Haiti Honduras Mexico Panama Paraguay Peru Saint Vincent and the Grenadines Uruguay	Aruba Bermuda British Virgin Islands Bonaire Cayman Islands Curaçao Dominica Dominican Republic French Guyana Grenada Guadeloupe Martinique Saba Saint Lucia Sint Eustatius Sint Maarten Turks and Caicos Islands United States Virgin Islands Venezuela (Bolivarian Republic of)

Source: PAHO indicators reported by countries in 2014 as part of the Global AIDS reporting process / Notes: Based on 2012-2013 data  
 \*Also meets pediatric HIV rate  $< 0.3$  per 1,000 live births

# Syphilis

## Policies

- Rapid test technologies for syphilis diagnostic algorithms in antenatal care settings are currently available in 15 countries and territories out of 28 reporting. In addition two countries have plans for incorporating this new technology.

## Provision of services

- Syphilis testing among pregnant women has remained stable in LAC, from 2011 to 2013, at around 80% (Figure 4).
- Treatment for syphilis-positive pregnant women in the Americas remains unreported by most countries and territories. Among those reporting, figures range from 13% to 100% with seven countries and territories reporting >95% treatment (Figure 5).

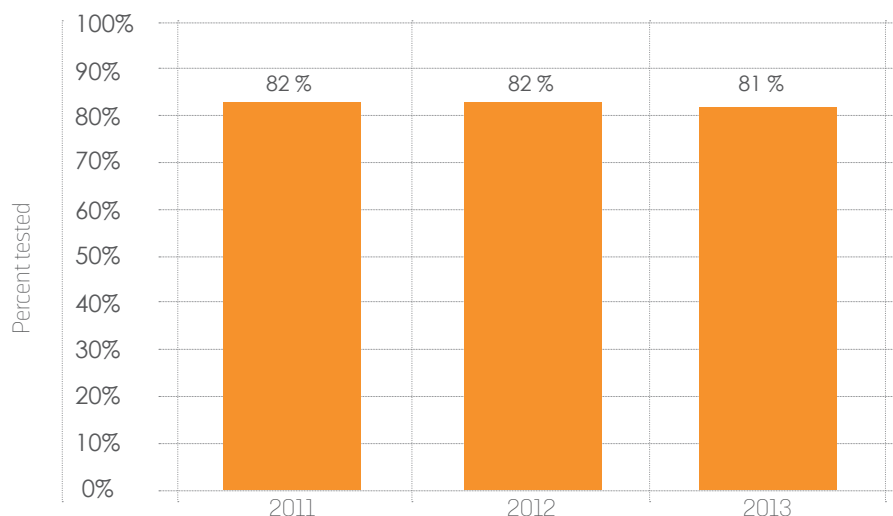
- Limited progress towards elimination of CS has been made, but services are still insufficient to achieve necessary levels. Challenges to scale-up of services include: loss to follow up of pregnant women for syphilis testing, late access to antenatal care, frequent visits needed to health centers for diagnosis and treatment of syphilis, and limited use of rapid tests in point-of-care settings.
- Systematic reporting of data on CS and provision of services to pregnant women remains a challenge, despite improvement of surveillance systems.

## Impact

- In 2013, fifteen countries and territories in the Americas report meeting the congenital syphilis elimination goal of  $\leq 0.5$  cases per 1,000 live births (Table 2).

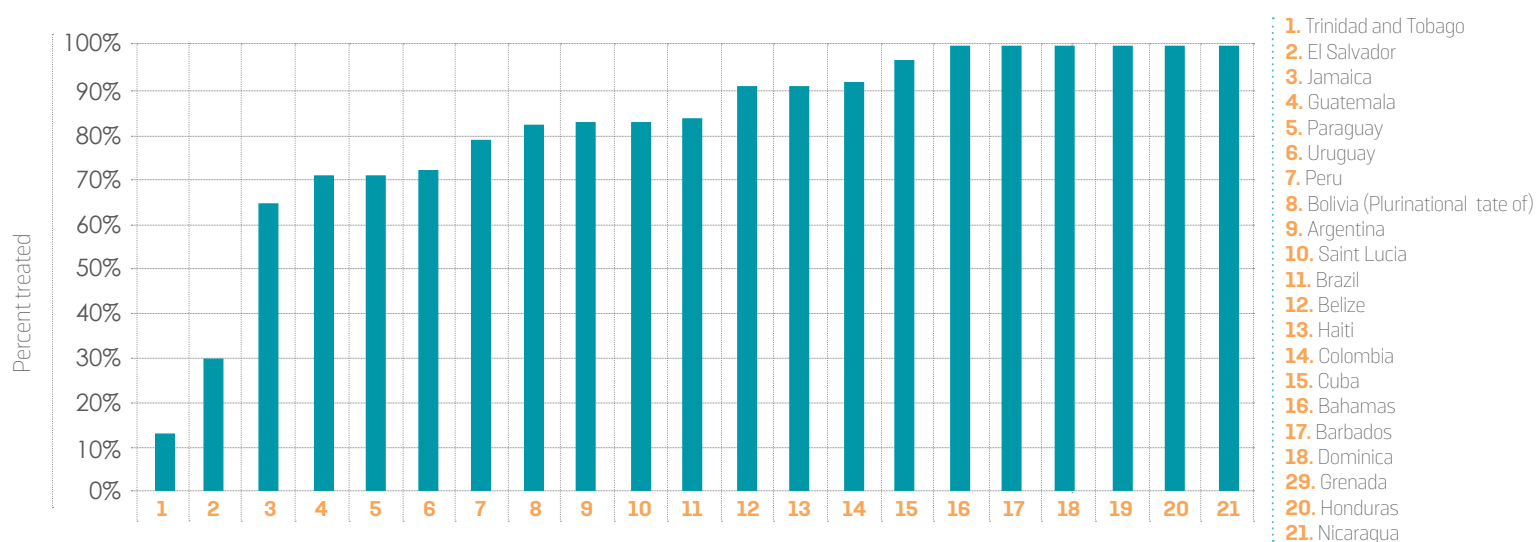
Congenital syphilis rates are triangulated with program coverage indicators (i.e. antenatal care coverage, syphilis testing and treatment among pregnant women) and quality of surveillance system indicators as part of the assessment for reaching the syphilis MTCT elimination goal.

**Figure 4.** Syphilis testing among pregnant women attending antenatal care in Latin America and the Caribbean, 2011-2013.



Sources: UNAIDS/WHO country global AIDS response progress report 2014. PAHO, 2010 Situation Analysis: Elimination of Mother-to-Child Transmission of HIV and Congenital Syphilis, 2011; PAHO 2012 Progress report: Elimination of Mother-to-Child Transmission of HIV and Syphilis in the Americas, 2012.  
Notes: Regional estimates based on data from 21 countries.

**Figure 5.**  
**Percentage of syphilis-positive pregnant women with documented appropriate treatment in Latin America and the Caribbean, 2013.**



Source: UNAIDS/WHO country global AIDS response progress report 2014.

**Table 2.**  
**Classification of countries and territories in the Americas regarding syphilis MTCT elimination goal, 2013.**

Met CS elimination goal ( $\leq 0.5$ per 1,000 live births)	Progressing but not meeting CS elimination goal*	Insufficient information to ascertain progress
Anguilla Antigua and Barbuda Bahamas Barbados Bermuda British Virgin Islands Canada Chile Cuba Dominica Montserrat Nicaragua Puerto Rico United States of America United States Virgin Islands	Argentina Belize Bolivia (Plurinational State of) Brazil Colombia Costa Rica El Salvador Grenada, Guatemala Guyana Haiti Honduras Jamaica Mexico Saint Lucia Paraguay Peru Uruguay	Aruba Bonaire Cayman Islands Curaçao Dominican Republic Ecuador French Guiana Guadeloupe Martinique Panama Saba Saint Kitts and Nevis Saint Vincent and the Grenadines Sint Eustatius Sint Maarten Suriname Trinidad and Tobago Turks and Caicos Islands Venezuela (Bolivarian Republic of)

Sources: UNAIDS/WHO country global AIDS response progress report 2014; PAHO, 2010 Situation Analysis: Elimination of Mother-to-Child Transmission of HIV and Congenital Syphilis, 2011; PAHO, 2012 Progress report: Elimination of Mother-to-Child Transmission of HIV and Syphilis in the Americas, 2012.

Notes: \*CS rate  $\geq 0.5$  per 1,000 live births and/or syphilis testing among pregnant women < 95% and/or treatment < 95%. Categories are based on analysis using 2011–2013 data. Congenital syphilis rates are contrasted with program coverage (antenatal care coverage, syphilis testing and treatment among pregnant women) and quality of surveillance system indicators as part of the assessment for reaching the congenital syphilis elimination goal.

# Dual elimination of MTCT of HIV and syphilis

○ In 2013, seven countries and territories in the Americas, including Anguilla, Barbados, Canada, Cuba, Montserrat, Puerto Rico, and the United States of America, report data compatible with dual elimination of MTCT of HIV and syphilis.

## Next steps

- Countries reporting figures compatible with meeting HIV and syphilis MTCT elimination goals should consider initiation of the validation process through development of a country report. This process is also useful for countries further away from the targets, as this may help identify and address bottlenecks and gaps in service delivery.
- Countries should review data on women living with HIV to provide services addressing their sexual and reproductive health needs, and improve strategies to identify and reach underserved groups.
- Analysis of results at subnational levels and by specific sub-populations could help address the needs of vulnerable women, such as young women, indigenous women, sex workers, and women who use drugs or are homeless, who are more likely to fall through the cracks of the existing health services.
- Countries with slower progress should accelerate efforts and political support to improve maternal and child health services and expand HIV and syphilis testing and treatment and follow-up of exposed infants.
- Countries with information systems that are challenged to provide adequate monitoring of MTCT of HIV and syphilis (19 countries and territories respectively) should conduct adaptations and/or enhance systems in order to generate information to monitor progress and ensure highly sensitive surveillance systems.
- Targeted technical cooperation will be needed to accelerate progress and, where appropriate, to facilitate validation. PAHO will intensify resource mobilization efforts to continue this technical cooperation.

## Acronyms

**ANC:** antenatal care  
**ARV:** antiretrovirals  
**CS:** congenital syphilis  
**HIV:** human immunodeficiency virus  
**LAC:** Latin America and the Caribbean  
**MTCT:** mother-to-child transmission  
**PMTCT:** prevention of mother-to-child transmission



## Annex Table 1.

### Antenatal care and deliveries by trained personnel, HIV and syphilis testing among pregnant women, syphilis treatment among pregnant women, syphilis and HIV MTCT transmission rate in the Americas, 2013.

	Pregnant women attended by trained personnel during ANC (≥ 1 visit) (2013)* (%)	Deliveries attended by trained personnel (%)*	Reported syphilis testing coverage among pregnant women that attending ANC. (2013) (%)	Reported pregnant women diagnosed with syphilis receiving appropriate treatment (2013) (%)	Estimated congenital syphilis rate per 1,000 live births (2013)*	Estimated HIV testing coverage among pregnant women (2013) (%)	HIV MTCT transmission rate, approximated/ uncorrected figure (2012) (%)	Country reported modeled HIV transmission rate (2013) (%)
<b>North America</b>								
Canada	100 (2002)	100 (2011)	...	...	0.01	...	0	...
Mexico	98 (2012)	96 (2012)	73	...	0.04	69	...	6.6
United States of America	99 (2011)	...	...	...	0.08 (2012)	98 <sup>a</sup>	2.0 <sup>a</sup>	...
<b>Central America</b>								
Costa Rica	94 (2010)	100	...	...	1.13	84	2.9	5.3
El Salvador	77	85 (2009)	91	30	0.05	>95	7.8	24.8
Guatemala	93 (2012)	59 (2012)	47	71	0.03	35	...	24.7
Honduras	97 (2012)	83 (2012)	63	>95	1	63	5.1	19.7
Nicaragua	100	94	98	>95	0.01	>95	4.5	3.6
Panama	94 (2011)	94 (2012)	47	14	1.76 (2012)	92	5.0	5.5
<b>Andean region</b>								
Bolivia (Plurinational State of)	84	74	60	79	...	82	5.2	8.7
Colombia	97 (2010)	99 (2011)	83 (2012)	92	2.11	62	4.8	4.8
Ecuador	73 (2011)	93 (2012)	...	...	...	87	...	7.4
Peru	98 (2010)	90	79 (2012)	72	0.57 (2012)	61	7.0	9.2
Venezuela (Bolivarian Republic of)	47 (2012)	96 (2012)	...	...	0.05	60	...	21.9
<b>Southern cone and Brazil</b>								
Argentina	88 (2005)	100 (2012)	98	83	1.05	>95	5.2	4.3
Brazil	96 (2012)	99 (2012)	90	83	3.76 (2012)	80	4.5	3.6

	Pregnant women attended by trained personnel during ANC (≥ 1 visit) (2013)* (%)	Deliveries attended by trained personnel (%)*	Reported syphilis testing coverage among pregnant women that attending ANC, (2013) (%)	Reported pregnant women diagnosed with syphilis receiving appropriate treatment (2013) (%)	Estimated congenital syphilis rate per 1,000 live births (2013)*	Estimated HIV testing coverage among pregnant women (2013) (%)	HIV MTCT transmission rate, approximated/ uncorrected figure (2012) (%)	Country reported modeled HIV transmission rate (2013) (%)
Chile	96 (2008)	100(2012)	86	...	0.22 (2012)	68 <sup>b</sup>	3.9	5.3
Paraguay	93 (2012)	97 (2012)	59	61	2.3 (2011)	61	6.0	14.3
Uruguay	96	100	99	71	1.54	93	5.2	5.2
<b>The Caribbean</b>								
Anguilla	100 (2012)	100	100	NA**	0	87	0 <sup>c</sup>	...
Antigua and Barbuda	100	100	98	...	0 (2012)	59	50.0	33.3
Aruba	100 (2012)	100 (2012)	...	...	0	...	...	...
Bahamas	95	98	87	>95	0	72	3.3	2.9
Barbados	99(2012)	100 (2012)	83	>95	0	47 <sup>b</sup>	0	0
Belize	96	94	93	91	0	82	6.4	...
Bermuda	99	99	...	...	0 (2012)	...	...	...
Cayman Islands	99	100	...	...	...	...	...	...
Cuba	100	100	100	>95	0.03	>95	1.9	1.8
Dominica	100	100	99	>95	0	70	0	...
Dominican Republic	100	99	...	...	0.07	77	...	...
French Guiana	98(2010)	99 (2009)	...	...	...	...	...	...
Grenada	99	99	100	>95	4.40	87	...	...
Guadeloupe	97(2006)	...	...	...	...	...	...	...
Guyana	90 (2012)	96 (2009)	83	...	0	90	2.1	1.6
Haiti	97 (2012)	50	62	85	...	93	...	6.4
Jamaica	98 (2008)	99 (2012)	87	65	0.41 (2012)	67 <sup>b</sup>	1.8	4.3
Martinique	95 (2011)	100 (2011)	...	...	...	...	...	...
Montserrat	100	98	100	...	0	>95	0	...

	Pregnant women attended by trained personnel during ANC (≥ 1 visit) (2013)* (%)	Deliveries attended by trained personnel (%)*	Reported syphilis testing coverage among pregnant women that attending ANC, (2013) (%)	Reported pregnant women diagnosed with syphilis receiving appropriate treatment (2013) (%)	Estimated congenital syphilis rate per 1,000 live births (2013)*	Estimated HIV testing coverage among pregnant women (2013) (%)	HIV MTCT transmission rate, approximated/ uncorrected figure (2012) (%)	Country reported modeled HIV transmission rate (2013) (%)
<b>Puerto Rico</b>	100 (2012)	100 (2012)	...	...	0.02 (2012)	85 <sup>b</sup>	0	...
<b>Saint Kitts and Nevis</b>	99	100	73	...	...	75	0	...
<b>Saint Lucia</b>	99 (2009)	...	67	82	0.36	72	...	0
<b>Saint Vincent and the Grenadines</b>	100 (2012)	99	...	...	...	>95	7.1	...
<b>Sint Eustatius</b>	...	...	100	NA**	0	100	0 <sup>c</sup>	...
<b>Sint Maarten</b>	95	100	...	...	...	...	...	...
<b>Suriname</b>	95	90 (2010)	...	...	...	85	4.7	5.0
<b>Trinidad and Tobago</b>	100	100	...	13	...	69 <sup>b</sup>	0	6.3
<b>Turks and Caicos Islands</b>	99	98	...	...	...	...	...	...
<b>Virgin Islands (UK)</b>	100	100	...	...	...	...	...	...
<b>Virgin Islands (US)</b>	98 (2010)	...	...	...	0 (2012)	...	...	...

Sources: PAHO, Health Information and Analysis project. Regional Core Health Data Initiative. Washington DC, 2014. UNAIDS/WHO country global AIDS response progress report 2014.

Note: Excludes countries with no reported data: Bonaire, Curaçao, and Saba.

NA: Not applicable

\*2013 unless otherwise noted

\*\*No positive cases to treat

a Data from Centers for Disease Control and Prevention. Enhanced perinatal surveillance—15 areas, 2005–2008. HIV Surveillance Supplemental Report 2011;16 (No. 2).

b Numerator correspond to the public sector only. Barbados, Chile, Jamaica, and Trinidad and Tobago report >95% HIV testing coverage among pregnant women in the public sector.

c No HIV-positive pregnant women.



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