DRAFT

Regional Framework for the Triple Elimination of Mother-to-child Transmission of HIV, Hepatitis B and Syphilis in Asia and the Pacific 2018–2030
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**Abbreviations**

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<th>Abbreviation</th>
<th>Description</th>
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<tbody>
<tr>
<td>ANC</td>
<td>antenatal care</td>
</tr>
<tr>
<td>ART</td>
<td>antiretroviral therapy</td>
</tr>
<tr>
<td>ARV</td>
<td>antiretroviral</td>
</tr>
<tr>
<td>EMTCT</td>
<td>elimination of mother-to-child transmission</td>
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<tr>
<td>EPI</td>
<td>Expanded Programme on Immunization</td>
</tr>
<tr>
<td>HBIG</td>
<td>hepatitis B immunoglobulin</td>
</tr>
<tr>
<td>HBsAg</td>
<td>hepatitis B surface antigen</td>
</tr>
<tr>
<td>HBV</td>
<td>hepatitis B virus</td>
</tr>
<tr>
<td>HIV</td>
<td>human immunodeficiency virus</td>
</tr>
<tr>
<td>MDG</td>
<td>Millennium Development Goal</td>
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<tr>
<td>MTCT</td>
<td>mother-to-child transmission</td>
</tr>
<tr>
<td>RMNCH</td>
<td>reproductive, maternal, newborn and child health</td>
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<tr>
<td>STI</td>
<td>sexually transmitted infection</td>
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<tr>
<td>SDG</td>
<td>Sustainable Development Goal</td>
</tr>
<tr>
<td>UHC</td>
<td>universal health coverage</td>
</tr>
<tr>
<td>UNICEF</td>
<td>United Nations Children’s Fund</td>
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<tr>
<td>UNAIDS</td>
<td>Joint United Nations Programme on HIV/AIDS</td>
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<tr>
<td>WHO</td>
<td>World Health Organization</td>
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</table>
Executive summary

Every child should be given the best chance to start a healthy life, free from preventable communicable diseases. However, significant numbers of infants each year in Asia and the Pacific are born with or infected early in life with the HIV, hepatitis B or syphilis.

The Regional Framework for the Triple Elimination of Mother-to-child Transmission of HIV, Hepatitis B and Syphilis in Asia and the Pacific 2018–2030 offers a coordinated approach towards achieving the triple elimination of mother-to-child transmission (EMTCT) of HIV, hepatitis B and syphilis and provides guidance for decision-makers, managers and health professionals working in programmes addressing reproductive, maternal, newborn and child health (RMNCH), HIV, hepatitis, sexually transmitted infections and immunization.

The Global Strategy for Women’s, Children’s and Adolescents’ Health 2016–2030 aims for the highest attainable standards of health and well-being. Similarly, the Global Health Sector Strategies on HIV, Viral Hepatitis and Sexually Transmitted Infections 2016–2021 set specific goals for the EMTCT of HIV by 2020 and the EMTCT of hepatitis B and syphilis by 2030. These goals can only be achieved when access to quality RMNCH services is ensured for all women, children and their families in the context of universal health coverage.

Mother-to-child transmission of HIV, hepatitis B and syphilis can be effectively prevented and eliminated by similar interventions, including the prevention of new infections among people of reproductive age, prevention of unintended pregnancies, antenatal screening, treatment and vaccination through the RMNCH platform. The similarity of interventions also provides an opportunity for efficient service delivery and better outcomes.

However, these interventions are not always provided as standard components of RMNCH services. The planning, implementation, reporting and monitoring of these interventions do not always occur in coordination, resulting in gaps or duplications – thus making services less accessible to women, their partners, children and families. This also results in missed opportunities to use available resources efficiently and limits the impact of the interventions.

This Regional Framework proposes an integrated and coordinated approach towards triple elimination – emphasizing the principle of mother-newborn-and-child-centred care and a human-rights-based approach for every child, mother, her partner and their family. It also presents potential new interventions for EMTCT of hepatitis B, building upon the successful vaccination programmes to achieve ≤ 0.1% hepatitis B surface antigen (HBsAg) prevalence among children by 2030.
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1. Background

1.1 Global goals for elimination of mother-to-child transmission of HIV, hepatitis B and syphilis

HIV, hepatitis B and syphilis can be transmitted from infected mothers to their infants, causing significant morbidity and mortality. However, transmission of these infections can be prevented by simple and effective interventions, including the prevention of new infections among people of reproductive age, prevention of unintended pregnancies, antenatal screening, treatment and vaccination.

Every child should be given the best chance to start a healthy life, free from preventable communicable diseases. This can only be possible when access to quality reproductive, maternal, newborn and child health (RMNCH) services is ensured for all women, children and their families in the context of universal health coverage (UHC). The Sustainable Development Goals (SDGs) strive to end poverty and hunger and ensure that all human beings can fulfil their potential in dignity and equality and in a healthy environment. SDG 3 strives to ensure healthy lives and promote well-being for all at all ages by addressing health priorities, including reproductive, maternal and child health, and communicable diseases (1). Similarly, the Global Strategy for Women’s, Children’s and Adolescents’ Health 2016–2030 (2) aims for the highest attainable standards of health and well-being, and its implementation is supported by the Every Woman Every Child movement (3).

With specific targets for elimination of mother-to-child transmission (EMTCT) of HIV, hepatitis B and syphilis, the Global Health Sector Strategy on HIV 2016–2021 (4), the Global Health Sector Strategy on Viral Hepatitis 2016–2021 (5) and the Global Health Sector Strategy on Sexually Transmitted Infections 2016–2021 (6) set global goals to end the AIDS and sexually transmitted infections (STIs) epidemics and to eliminate viral hepatitis as a public health threat by 2030. Supported by the endorsement by Member States of these goals and targets in 2016, multiple calls, including the 2016 Political Declaration on HIV and AIDS (7), have also been established to support these control and elimination endeavours.

The World Health Organization (WHO) has defined EMTCT of HIV and syphilis and set the global criteria for elimination (8). The Global Health Sector Strategy on Viral Hepatitis 2016-2021 defines EMTCT of hepatitis B as achievement of a 90% reduction in new chronic infections, equivalent to 0.1% prevalence of hepatitis B surface antigen (HBsAg) among children. These elimination criteria and disease-specific targets are summarized in Table 1 and are also discussed in Section 3. Key Indicators. In order to achieve elimination, the following must be achieved: a reduction of the overall prevalence of HIV, hepatitis B and syphilis; the prevention of unintended pregnancies; the provision of EMTCT interventions during the antenatal, delivery and postnatal periods; and hepatitis B vaccination.
1.2 Regional progress in Asia and the Pacific

Reproductive, maternal, newborn and child health

The Asia and Pacific region has seen significant progress in achieving the Millennium Development Goal (MDG) 4 (reduce child mortality) and MDG 5 (improve maternal health). In the WHO Western Pacific Region and the South-East Asia Region, the maternal mortality ratios have decreased by 64% and 69%, respectively, between 1990 and 2015 (9). The decline is greater than the global rate. The dramatic increases in antenatal care (ANC) coverage (at least one visit), births attended by skilled birth attendants and improved quality of care are the main contributors to this success (9,10).

Challenges remain in addressing both inequities in access to health services, especially for vulnerable populations, and the persistence in inappropriate practices by health-care providers that contribute to poor quality of care. To address these concerns through the provision of evidence-based guidelines and interventions, Member States in the Western Pacific Region endorsed the Action Plan for Healthy Newborn Infants in the Western Pacific Region (2014–2020) (11). The South-East Asia Region is developing both the Regional Framework for Reproductive, Maternal, Newborn, Child and Adolescent Health and Strategic Guidance on Adolescent Health for Countries in the South-East Asia Region 2017–2020 to further accelerate RMNCH services.

Dual elimination of mother-to-child transmission of HIV and syphilis

HIV prevalence in Asia and the Pacific remains low at 0.2%, with 5.1 million people estimated to have been living with HIV in 2015 (12). In 2015, approximately 77 000 pregnant women were living with HIV, and 19 000 cases of new paediatric HIV infections (25% mother-to-child transmission rate) were estimated to have occurred in the region. Only 39% of pregnant women living with HIV received antiretroviral therapy (ART) in 2015, which was significantly lower than the global ART coverage of 77% (13). This was primarily due to low HIV testing coverage during ANC, which resulted in a significant gap in diagnosing pregnant women with HIV in many countries (Fig. 1).

The incidence of STIs is higher in Asia and the Pacific as compared to the other regions (6, 14). While quality data are rather limited for STIs, a modelling study estimated the regional prevalence of maternal syphilis as 0.24% for the Western Pacific Region and 0.32% for the South-East Asia Region in 2012 (15), with a reported increasing trend of syphilis infections among key populations and young people in several countries. The same study also indicated that 167 000 cases of maternal syphilis have occurred in Asia and the Pacific, resulting in 65 800 adverse outcomes including early fetal deaths. Yet, coverage of syphilis screening during ANC and treatment remains low in many countries.

The United Nations Asia-Pacific Prevention of Parent-to-Child Transmission of HIV and Syphilis Task Force has been providing technical support on dual EMTCT of HIV and syphilis. Building on this effort, the WHO regional offices for South-East Asia and the Western Pacific jointly established Regional Validation Secretariat in 2015 to support countries seeking validation of EMTCT of HIV and syphilis in partnership with the United Nations Children’s Found (UNICEF)
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and the Joint United Nations Programme on HIV/AIDS (UNAIDS) (16). The Regional Secretariat works closely with the Global Validation Advisory Committee, which declared in June 2016 that Thailand had become the first country in Asia and the Pacific to achieve the EMTCT of HIV and syphilis.

**Fig. 1.** Elimination of Mother-to-child transmission cascade for HIV in Asia and the Pacific (2015)

PMTCT = prevention of mother-to-child transmission, ARV = antiretroviral (drugs)

*Source: From [www.aidsdatahub.org](http://www.aidsdatahub.org) based on Global AIDS Response Progress Reporting 2016*

**Hepatitis B control through vaccination**

Asia and the Pacific bear a significant burden of hepatitis B. In the Western Pacific Region, 115 million people are estimated to be living with chronic hepatitis B, which accounts for 45% of infections worldwide (17, 18). In the South-East Asia Region, 39 million people, representing 15% of global infections, are estimated to have chronic hepatitis B infection (17, 19).

As a result of successful hepatitis B vaccination programmes in the Western Pacific Region, 18 countries and areas have been verified as meeting the 2017 goal of reducing prevalence to < 1% among 5-year-old children as of June 2017, with an estimated regional prevalence of 0.93% among children born in 2012. It is estimated that more than 37 million cases of chronic hepatitis B infection and 7 million deaths have been averted among children born between 1999 and 2014 (20). The *Regional Action Plan for Viral Hepatitis in the Western Pacific 2016–2020* (21) provides a systematic approach for reducing the impact of viral hepatitis aligned with the global goals of reducing the prevalence of HBsAg to equal or below 0.1% by 2030. The Western Pacific Region achieved 84% birth-dose coverage and 94% third-dose coverage among countries reporting on the 2015 WHO/UNICEF Joint Reporting Form (Fig. 2).

In the South-East Asia Region, hepatitis B vaccine third-dose coverage reached 87% in 2015. A birth dose is currently provided in six countries and in one region of Thailand; however, the birth dose continues to be a challenge in countries with low rates of facility deliveries or births attended by skilled birth attendants. The WHO Regional Committee for the South-East Asia endorsed *Regional action plan for viral hepatitis in the South-East Asia: 2016-2021* in 2016, followed by the recommendation from the Regional Immunization Technical Advisory Group to adopt the global target of HBsAg < 1% among children under 5 years of age.
Fig. 2. Prevalence of chronic hepatitis B in the Western Pacific Region among children born each year after hepatitis B vaccine introduction

* Hepatitis B vaccine third dose refers to the three-dose series of hepatitis B vaccine. In addition to receiving the hepatitis B birth dose within 24 hours, at least two additional hepatitis B-containing vaccinations should be given with at least four weeks between each dose.


Uncoordinated approach among programmes

Review of the current situation in Asia and the Pacific revealed that EMTCT interventions for HIV, hepatitis B and syphilis were not necessarily provided as standard components of RMNCH services. While they share a common RMNCH-care platform, the planning, implementation, reporting and monitoring of these discrete but related interventions do not always occur in coordination – resulting in gaps or duplications, thus making services less accessible to women, their partners, children and families. This also results in missed opportunities to use available resources efficiently and prevents achieving maximum impact. Better collaboration and synergy among programmes are urgently needed to improve accessibility, effectiveness and efficiency of EMTCT interventions.

1.3 A new approach to EMTCT of hepatitis B

A comprehensive package of interventions is needed to achieve the goal of 0.1% HBsAg prevalence among children. This should be built on a strong hepatitis B vaccination programme and strengthened RMNCH services, and includes prevention of infection in young women, screening and care of pregnant women with chronic hepatitis B infection, the possible use of antiviral drugs and the use of hepatitis B immunoglobulin (HBIG) among infants born to HBsAg-positive mothers (5).
WHO recommends that HBsAg testing be routinely offered to all pregnant women in antenatal clinics with linkages to prevention, care and treatment services in settings with a $\geq 2\%$ (intermediate) or $\geq 5\%$ (high) HBsAg seroprevalence in the general population (23). With an estimated prevalence of hepatitis B virus (HBV) infection of 6.2% in the Western Pacific Region and 2.0% in the South-East Asia Region (17), antenatal screening plays an important role. It is reported that more than 14 countries have already included HBsAg screening in ANC packages in Asia and the Pacific (24).

Recently, some countries have included hepatitis B in their EMTCT plans, by integrating HIV, syphilis and hepatitis B antenatal screening, prevention and treatment interventions into their RMNCH package of services. Some countries face challenges of limited capacity and resources for their RMNCH programmes – and more broadly capacity and resource constraints on their entire health system – that present barriers to the introduction of new interventions. With this regard, a tiered approach (Fig.3.) is proposed in order to introduce a comprehensive package of interventions for EMTCT of hepatitis B, considering various levels of health system capacities. As of June 2017, WHO guidance on the use of antiviral drugs for HBsAg positive pregnant women with high HBV DNA level was not available.

**Fig. 3.** Tiered approach to introduction of additional interventions for EMTCT of hepatitis B

### 1.4 Rationale and scope of the Framework

The objective of this Framework is to suggest a coordinated approach towards achieving triple EMTCT and provide guidance for decision-makers, managers and health professionals working in programmes addressing RMNCH, HIV, hepatitis, STIs and immunization.

EMTCT interventions for HIV, hepatitis B and syphilis are essential components of quality RMNCH care. The similarity of these interventions to prevent mother-to-child transmission of these three infections through the common platform of reproductive, antenatal, childbirth, postnatal and child care provides a unique opportunity for coordination and integration of services and maximizes their accessibility, effectiveness, efficiency and sustainability (Fig. 4). This also aligns with and support an effort towards achieving SDGs within a context of declining external funding for health in some countries in the region.

In order to provide every child the best chance to start a healthy life free of preventable communicable diseases and recognizing the scope of the problem across the Asia and Pacific
region, the WHO Regional Office for the Western Pacific, the WHO Regional Office for South-East Asia and their partners joined forces to develop this Regional Framework for the Triple Elimination of Mother-to-Child Transmission of HIV, Hepatitis B and Syphilis, in close consultation with Member States and experts. Member States have provided input to this Framework over the past year, and a consultation on the Framework brought together national, regional and global experts in Manila in February 2017. (25)

Aligning with the existing global and regional strategies, action plans and goals for RMNCH and control of HIV, STIs and hepatitis B, this Framework is intended to propose an integrated and coordinated approach towards triple elimination, emphasizing the principle of mother-newborn-and-child-centred care and a human-rights-based approach for every child, mother, her partner and their family. This Framework also discusses potential new interventions for EMTCT of hepatitis B, building upon successful vaccination programmes to achieve ≤ 0.1% HBsAg prevalence among children by 2030.

**Fig. 4.** Elimination of mother-to-child transmission interventions for HIV, hepatitis B and syphilis

<table>
<thead>
<tr>
<th>Antenatal care</th>
<th>Delivery</th>
<th>Postnatal care</th>
<th>Well-child visit</th>
</tr>
</thead>
<tbody>
<tr>
<td>8th week</td>
<td>2nd trimester</td>
<td>3rd trimester</td>
<td>3rd trimester</td>
</tr>
<tr>
<td>26 weeks</td>
<td>26 weeks</td>
<td>30 34 36 38 40</td>
<td>Day 0-1</td>
</tr>
</tbody>
</table>

ARV=antiretroviral (drug), HBeAg=hepatitis B e antigen, HBIG=hepatitis B immunoglobulin, HBsAg=hepatitis B surface antigen, HBV=hepatitis B virus

Note: Screening tests are recommended at the first ANC visit, ideally before 20 weeks gestation; for women presenting after 20 weeks, screening tests and treatment should be done as soon as possible.

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2. Regional Framework

2.1 Vision, goal and principles

Vision

Every infant free of HIV, hepatitis B and syphilis

Goal

Achieve and sustain elimination of mother-to-child transmission of HIV, hepatitis B and syphilis and achieve better health for women, children and their families through a coordinated approach and efforts by 2030 in Asia and the Pacific

Principles

- **Mother-newborn-child-centred care**: RMNCH services including essential EMTCT interventions should be provided in the best interests of women, their partners, children and their families, putting them at the centre of care.

- **Universal health coverage (UHC) for quality and equitable care**: quality RMNCH services including essential EMTCT interventions should be available, accessible and affordable without the risk of financial hardship to all women, their partners, children and their families.

- **Sustainable mechanisms**: efforts for triple elimination should be built into existing health systems and further strengthen them to ensure sustainability.

- **Promotion of human rights, gender equity and equality**: the rights of women, their partners, children and their families should be respected, and gender equity and equality need to be ensured.

- **Multi-stakeholder involvement including individuals, families and communities**: all stakeholders should be involved in planning, implementation, and monitoring and evaluation of efforts towards triple elimination, in particular affected communities and vulnerable populations.

Fig. 5. Structure of the Regional Framework for triple EMTCT
2.2 Pillars: priority actions to achieve triple elimination

This section proposes priority actions for a coordinated approach to triple elimination, supported by the three pillars of: 1) policy; 2) service delivery; and 3) monitoring and evaluation. Targets and milestones are set for each pillar to support coordinated approaches. Member States are encouraged to consider and implement suggested actions reflecting country-specific contexts and health system capacities.

Pillar 1. Coordinated national policy and strategy

Proposed priority actions for Member States

1. Advocate high-level political commitment for the achievement of triple EMTCT of HIV, hepatitis B and syphilis.

2. Develop coordinated policy and strategy for triple EMTCT that are built into national and subnational RMNCH policies, strategies, plans and guidelines, aligning with related programmes with defined roles and responsibilities of each programme and stakeholders.

3. Establish a mechanism for coordination, implementation and monitoring, building on existing systems and stakeholders including affected communities.

4. Strengthen RMNCH and other related programmes by ensuring adequate and sustainable financial and human resources and by developing capacities to provide quality services including interventions for triple EMTCT.

5. Ensure that interventions for triple EMTCT are included in essential health services packages and access to services are ensured and covered by public funding.

6. Address and remove social and financial barriers for all women, children and their families, including vulnerable and marginalized populations, to access services for triple EMTCT within reproductive, antenatal, childbirth, postnatal and child care.

7. Respect human rights of all women, their partners, children and families; ensure protection of their privacy and confidentiality; and address stigma and discrimination associated with implementation of interventions.

8. Consider possibility to expand the synergies within the RMNCH platform to include other health issues as appropriate in view of potential benefits.

Proposed priority actions for WHO and partners

1. Support Member States to advocate high-level political commitment for triple EMTCT, including development of communications materials and tools.

2. Support Member States to develop coordinated policies and strategies for triple EMTCT of HIV, hepatitis B and syphilis within reproductive, antenatal, childbirth, postnatal and child care.

3. Ensure coordination across programmes among WHO and partners to provide coordinated support to Member States.
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4. Support Member States to estimate and allocate adequate resources and develop capacities of the RMNCH and other related programmes to provide quality RMNCH services, including interventions for triple EMTCT.

5. Support Member States to include triple EMTCT interventions in essential health services packages covered by public funding and to ensure the access to services by addressing and removing social and financial barriers.

6. Facilitate intercountry and regional partnerships, sharing of best practices and lessons learnt, and mentoring among countries and regions.

7. Support Member States to ensure a human-rights-based approach and to address ethical aspects related to implementation of interventions.

8. Support Member States to consider inclusion of other health issues in the RMNCH platform.

**Pillar 2. Seamless quality care for women, newborns, children and their families**

**Proposed priority actions for Member States**

1. Assess and map where and how EMTCT interventions are currently being provided within reproductive, antenatal, childbirth, postnatal and child care services, and identify gaps and opportunities for coordination and integration.

2. Update, refine and link national policies, guidelines and training on reproductive, antenatal, childbirth, postnatal and child care to provide the latest evidence-based quality of care for all pregnant women, newborns and children, including EMTCT interventions.

3. Develop a plan for strengthening or scaling up of coordinated interventions for EMTCT, including universal screening for HIV, syphilis and, as appropriate, hepatitis B surface antigen (HBsAg) for women and their partners, linkages to appropriate care and treatment, timely hepatitis B birth dose and follow-up vaccination.

4. Provide guidance and tools for health workers and those to be involved in service provision related to EMTCT within RMNCH care, through pre-service education and on-the-job training.

5. Engage communities and related sectors and provide information to all women, their partners and families to improve awareness and demand for quality RMNCH care including triple EMTCT, remove barriers to access services and increase utilization.

6. Apply a tiered approach to introduce additional interventions for EMTCT of hepatitis B including antenatal screening, the possible use of antiviral drugs and the use of hepatitis B immunoglobulin (HBIG) among infants born to HBsAg-positive mothers based on evolving evidence and recommendations.

7. Consider application of new interventions and technologies that support the achievement of EMTCT of HIV, hepatitis B and syphilis and other communicable diseases, including the use of new diagnostic assays such as dual HIV/syphilis rapid test kits.
8. Ensure the quality of services provided for triple EMTCT, including laboratory services and those delivered by private health facilities, by building upon existing quality-assurance mechanisms and approaches.

**Proposed priority actions for WHO and partners**

1. Provide support for Member States for mapping and identification of gaps and opportunities for coordination and integration for EMTCT interventions.

2. Provide support for Member States to update national policies, guidelines and training on reproductive, antenatal, childbirth, postnatal and child care to reflect the latest evidence-based WHO recommendations through coordinated approaches across programmes and expertise.

3. Support Members States to review progress on EMTCT of HIV, hepatitis B and syphilis, determine additional steps and develop a plan for strengthening or scaling up of coordinated interventions to achieve elimination.

4. Develop guidance and tools for health workers and those involved in service provision on interventions related to EMTCT including screening, referral, treatment and follow-up within reproductive, antenatal, childbirth, postnatal and child care.

5. Provide support to Member States to develop communications materials and tools to provide information to women and their partners.

6. Develop guidance on a tiered approach for additional interventions for EMTCT of hepatitis B and provide support to Member States for its implementation.

7. Provide support to Member States for the introduction of new interventions and technologies related to EMTCT through necessary analysis and the use of new diagnostic assays.

8. Provide support to Member States to improve and ensure the quality of interventions, including laboratory services for triple EMTCT.

**Pillar 3. Coordinated monitoring and evaluation of elimination**

**Proposed priority actions for Member States**

1. Standardize key indicators to be monitored based on global and regional recommendations and set national and subnational milestones and targets for EMTCT.

2. Review and map key indicators and determine how these key indicators are collected, analysed and used by national programmes and stakeholders to identify any duplications or gaps and develop a plan to improve data quality.

3. Refine and link existing data collection systems, including those in the private sector, to support better linkages and the monitoring of EMTCT progress by national programmes and stakeholders.

4. Monitor EMTCT indicators and report progress regularly through a coordinating mechanism to prepare for validation of elimination and the maintenance of elimination status after validation.
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5. Conduct research to inform and adjust policy and improve implementation of EMTCT interventions

6. Share experiences of implementation and lessons learnt with stakeholders within and outside of country.

Proposed priority actions for WHO and partners

1. Obtain consensus on key indicators building into existing global, regional and national reporting mechanisms and contribute to global discussions on setting interlinked elimination criteria for EMTCT of hepatitis B and updating the HIV and syphilis component.

2. Provide clear guidance for Member States on the validation process and data requirements, and provide support to standardize indicators, link existing data collection systems, improve data quality and assess EMTCT progress.

3. Identify potential areas for coordination and integration of regional mechanisms for validation of EMTCT and support Member States for validation through existing mechanisms, including the network created by the United Nations Asia-Pacific Prevention of Parent-to-Child Transmission of HIV and Syphilis Task Force, the Hepatitis B Immunization Expert Resource Panel, the Regional Immunization Technical Advisory Group and the biennial meeting on accelerating progress in Early Essential Newborn Care.

4. Monitor EMTCT progress in Asia and the Pacific, and summarize and publish a regional report regularly.

5. Support Member States to conduct research to inform and adjust policy and improve implementation of EMTCT interventions.

6. Facilitate dissemination of best practices and experiences of countries for EMTCT.

2.3 Targets and milestones

Coordination targets and milestones

This Framework proposes triple elimination coordination targets and milestones under the each pillar to encourage coordination and collaboration among programmes and stakeholders to maximize impact.

Policy (Pillar 1)

2020 Milestone: A coordination mechanism is established to plan, implement and monitor EMTCT of HIV, hepatitis B and syphilis
**2030 Target:** The national policies and strategies for reproductive, maternal, newborn and child health (RMNCH) include plans and interventions for the elimination of mother-to-child transmission (EMTCT) of HIV, hepatitis B and syphilis as standard, integrated components of quality care for RMNCH.

**Service delivery (Pillar 2)**

**2020 Milestone:** A plan to provide quality and seamless services for every woman, newborn, child and their families to achieve triple EMTCT is developed through coordination and collaboration across concerned national programmes and stakeholders.

**2030 Target:** Core services for EMTCT of HIV, hepatitis B and syphilis are available through accessible, affordable and quality reproductive, antenatal, childbirth, postnatal and child care to every woman, newborn, child and their families.

**Monitoring and evaluation (Pillar 3)**

**2020 Milestone:** National health information includes priority indicators for EMTCT of HIV, hepatitis B and syphilis.

**2030 Target:** Key indicators are collected, analysed and used with effective communications among national programmes and stakeholders working in RMNCH, immunization, and the control of HIV, STIs and hepatitis through interlinked health information systems to monitor progress and guide actions towards triple elimination.

**Disease-specific elimination targets**

This *Regional Framework for the Triple Elimination of Mother-to-child Transmission of HIV, Hepatitis B and Syphilis in Asia and the Pacific 2018–2030* aligns its targets with the existing global and regional targets suggested by the *Global Health Sector Strategies on HIV, Viral Hepatitis and STI 2016–2021* (4, 5, 6) and the *Western Pacific Regional Action Plan for Viral Hepatitis 2016–2020* (21), which have been endorsed by Member States. It also aligns with the *Global Guidance on Criteria and Processes for Validation: Elimination of Mother-to-Child Transmission of HIV and Syphilis* (8).

Table 1. Disease-specific elimination impact and process targets

<table>
<thead>
<tr>
<th>Impact target</th>
<th>Process target</th>
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<tbody>
<tr>
<td>Reproductive, maternal, newborn and child health (RMNCH)</td>
<td>Antenatal care (ANC) coverage (at least one visit) ≥ 95% (8)</td>
</tr>
<tr>
<td>HIV (8)</td>
<td>≤ 50 new paediatric infections per 100 000 live births HIV testing coverage of pregnant women (pregnant women with known HIV status) ≥ 95%</td>
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<td></td>
<td>Mother-to-child transmission (MTCT) rate of &lt; 5% (breastfeeding populations) or &lt; 2% (non-breastfeeding populations) Antiretroviral therapy (ART) coverage of HIV-positive pregnant women ≥ 95%</td>
</tr>
<tr>
<td>Hepatitis B *</td>
<td>≤ 0.1 % prevalence of the hepatitis B surface antigen (HBsAg) among children (9) ≤ 100 cases/100 000 live births) Hepatitis B vaccine birth-dose coverage of ≥ 95% (21) **</td>
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<tr>
<td></td>
<td>Hepatitis B vaccine third-dose coverage ≥ 95% (21) **</td>
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<th></th>
<th>HBsAg testing coverage of pregnant women ≥ 95% (23)***</th>
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<tbody>
<tr>
<td>Syphilis</td>
<td>≤ 50 congenital syphilis cases per 100 000 live births ****</td>
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Syphilis testing coverage of pregnant women ≥ 95%
Treatment of syphilis-seropositive pregnant women ≥ 95%

* Targets may be added in due course based on evolving WHO guidance and recommendations on additional interventions required to eliminate mother-to-child transmission of hepatitis B.

** The Global Health Sector Strategy on Viral Hepatitis 2016–2021 sets the target of 90% vaccination coverage for hepatitis B vaccine birth dose and three-dose. The Western Pacific Regional Action Plan for Viral Hepatitis 2016–2020 sets the target at 95%

*** WHO recommends that HBsAg testing to be routinely offered to all pregnant women in antenatal clinics with linkages to prevention, care and treatment services in settings with a ≥ 2% or ≥ 5% HBsAg seroprevalence in the general population. A threshold of ≥2% or ≥5% seroprevalence was based on several published thresholds of intermediate or high seroprevalence. The threshold used will depend on other country considerations and epidemiological context. As the Regional Framework calls for coordinated screening for HIV, syphilis and hepatitis B, the proposed process target of HBsAg testing coverage of pregnant women ≥ 95% aligns with established validation criteria for HIV and syphilis screening. Hepatitis B looks to be incorporated into the global guidance for validating the elimination of mother-to-child transmission of HIV and syphilis.

**** The global surveillance case definition for congenital syphilis: 1) a livebirth, or fetal death at > 20 weeks of gestation or > 500 grams (including stillbirth) born to a woman with positive syphilis serology and without adequate syphilis treatment; or 2) a livebirth, stillbirth or child aged < 2 years born to a woman with positive syphilis serology or with unknown serostatus and with laboratory, and/or radiographic and/or clinical evidence of syphilis infection (regardless of timing or adequacy of maternal treatment).

3. Process of validation

WHO will establish a coordinated process and mechanisms for validation of EMTCT of HIV, hepatitis B and syphilis. It is anticipated that for a country to seek validation of EMTCT of HIV, hepatitis B and/or syphilis, it will be required to report focusing on a range of impact and programme indicators. An indicative list, most of which are already being collected by countries, is provided below for planning purposes. These indicators may be revised and/or added as new evidence and recommendations become available.

Policy indicator
1. National policy and plan for elimination and validation of mother-to-child transmission of HIV, hepatitis B and syphilis are in place

Impact indicators
1. Case rate of new paediatric HIV infections per 100 000 live births
2. Mother-to-child transmission (MTCT) rate of HIV
3. HBsAg prevalence among children
4. Case rate of congenital syphilis per 100 000 live births
Programme (process) indicators

1. Percentage of pregnant women visiting antenatal care (ANC) at least once
2. Percentage of pregnant women visiting ANC at least four times throughout pregnancy
3. Percentage of pregnant women with known HIV status (include both newly tested and those with known status)
4. Percentage of ANC attendees tested for HBsAg*
5. Percentage of women accessing ANC who were tested for syphilis
6. Percentage of pregnant women living with HIV who received antiretroviral therapy (ART)
7. Percentage of pregnant women with a positive syphilis serology who were treated adequately **
8. Proportion of births attended by skilled health personnel
9. Stillbirth rate (per 1000 total births)
10. Percentage of infants receiving a birth dose (disaggregate for timely birth dose within 24 hours of birth and outside of 24 hours)
11. Coverage of the third dose hepatitis B vaccine among infants

* WHO recommends that HBsAg testing to be routinely offered to all pregnant women in antenatal clinics with linkages to prevention, care and treatment services in settings with a \( \geq 2\% \) or \( \geq 5\% \) HBsAg seroprevalence in the general population

** at least one injection of 2.4 million units of intramuscular benzathine penicillin at least 30 days prior to delivery


References

3 Every Woman Every Child http://www.everywomaneverychild.org/
8 WHO (2014) Elimination of mother-to-child transmission (EMTCT) of HIV and syphilis: global guidance on criteria and processes for validation http://apps.who.int/iris/bitstream/10665/112858/1/9789241505888_eng.pdf?ua=1
12 UNAIDS. AIDSinfo http://aidsinfo.unaids.org/
Annex

16 Asia Pacific Regional Validation Mechanism for Elimination of Parent-to-Child Transmission of HIV and Syphilis. http://www.wpro.who.int/hiv/documents/topics/pmtct/asia_pacific_regional_validation_mechanism.pdf?ua=1
18 WHO Regional Office for the Western Pacific website http://www.wpro.who.int/hepatitis/en/
19 World Health Organization, Regional office for South-East Asia. Regional strategy for the prevention and control of viral hepatitis. New Delhi, 2013
24 Country report from Asia Pacific task force meeting on prevention of parent-to-child transmission of HIV and syphilis (2015, Beijing) and National HIV, hepatitis and STI programme managers meeting for selected Asian and Pacific island countries (2017, Manila)