A woman with dark hair, wearing a red patterned top, is holding a baby wrapped in a white blanket. She is looking off to the side with a thoughtful expression. The background is filled with lush green foliage and some orange flowers. The text is overlaid on a semi-transparent dark green shape on the right side of the image.

WHO Guidance on Vertical Transmission Prevention Strategies: Where Are We?

Dr. Akudo Ikpeazu
WHO AFRO

Outline

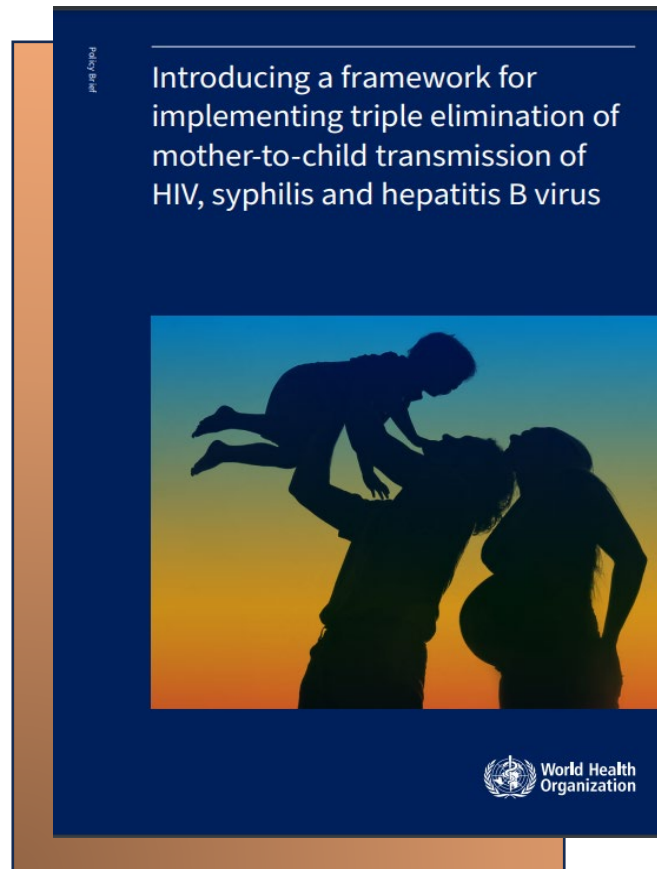
Framework for triple elimination

Progress: adoption of WHO guidance on triple elimination

Progress: Path to Elimination (PTE)



Why triple elimination?



Are transmitted sexually and vertically

Often silent, long latency period & mothers may have no symptoms

Can be identified at ANC & treated to prevent vertical transmission

Can cause significant maternal and child morbidity and mortality

Builds on PMTCT for HIV...

I

Prevention of HIV among women of reproductive age

II

Counselling, support, & addressing unmet family planning needs for women living w/HIV

III

For pregnant women living with HIV, ensure HIV testing and access to antiretroviral drugs

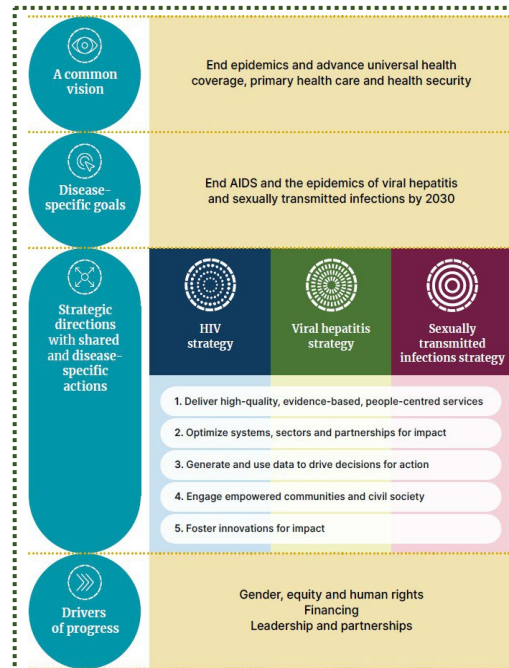
IV

HIV care, treatment and support for women, children living with HIV and their families

Original 2002 UN promoted

- *'four-prong strategy'* for prevention of mother-to-child transmission of HIV
- Was developed **prior** to widespread implementation of the **HIV 'Treat All' strategy**.
- **Did not include**
- interventions for *syphilis or HBV*
- HIV testing services were not included as a prong, but an **essential service** to initiate PMTCT interventions.

Key Principles



- **Global Health Sector Strategies** on HIV, Viral Hepatitis and STIs
- Encourages countries to **simultaneously commit** to EMTCT of HIV, syphilis and HBV.
- Advances **integrated service delivery**.
- **Harmonized approach** to improving health for mother and children
- **Person-centered approach**
- Provision of testing, prevention treatment and care services for **HIV, syphilis, and HBV**
- Success requires **collaboration and consultation** with all actors
- Framework provides a **minimum package of interventions** for planning and implementation

Framework for the Implementation of Triple Elimination of mother to child transmission of HIV, syphilis and HBV

Pillar	 <p>01 Primary Prevention of Vertical Transmission</p> <p>Testing, case finding and primary prevention of HIV, HBV or syphilis infection in non-pregnant, pregnant and breastfeeding women and girls of childbearing age.</p>	 <p>02 SRH Linkages and Integration</p> <p>Appropriate counselling, care and support and linkages for SRH services for women and girls living with HIV or HBV or sero-positive for syphilis to (i) assess fertility intentions and support pregnancy planning and prevention and (ii) prevent, diagnose and treat STIs.</p>	 <p>03 Essential Maternal EMTCT Services</p> <p>Appropriate maternal testing, prophylaxis and treatment for pregnant and breastfeeding women and girls living with HIV or HBV or sero-positive for syphilis for prevention of transmission to infants.</p>	 <p>04 Infant, Child and Partner Services</p> <p>Timely testing, prevention, treatment, care and support for exposed infants, infected children, household contacts and partners of women and girls seropositive for HIV, HBV or syphilis.</p>
Target populations	Non-pregnant, pregnant and breastfeeding women and girls of childbearing age.	Women and girls living with HIV or HBV or sero-positive for syphilis.	Pregnant and breastfeeding women and girls living with HIV, HBV or sero-positive for syphilis.	Exposed infants, infected infants and children, household contacts and partners of women and girls living with HIV, HBV or sero-positive for syphilis.
Essential services	<ul style="list-style-type: none"> · Routine offer of testing services for HIV, HBV and syphilis, including partner services · Care and treatment for HIV, HBV and syphilis or linkage to care and treatment · PrEP for HIV-negative women and girls at increased or continued risk of infection; PEP for exposure to HIV · HBV vaccination, as appropriate · Condoms · Linkage to or referral for SRH services 	<ul style="list-style-type: none"> · Contraception, family planning and condoms · Prevention, testing and linkage to care for HIV, HBV and syphilis among people seropositive for one condition · Prevention, screening and treatment for other STIs, with linkage to appropriate care · Counselling, education and support for healthy living and minimizing infection transmission 	<ul style="list-style-type: none"> · Early antenatal testing for HIV, HBV and syphilis; catch-up testing where needed · Third trimester and postnatal re-testing for HIV and linkage to care where indicated · Treatment initiation and linkage to appropriate prevention, care and other clinical and support services · Immediate lifelong treatment for HIV · Adequate treatment for syphilis · HBV prophylaxis or treatment where eligible · Routine postpartum care and linkage to SRH services 	<ul style="list-style-type: none"> · Testing services for neonates and infants exposed to HIV, HBV and syphilis · HIV testing services for children past exposure period · Universal birth dose of HBV vaccine · 3-dose infant HBV vaccination series · Postnatal HIV prophylaxis · Follow-up, treatment and care for infants with HIV and congenital syphilis · Routine postnatal pediatric care · Partner and household testing and prevention, including HBV vaccination, treatment where required and care for HIV, HBV and syphilis · Partner and household HBV vaccination
Crossing-cutting implementation considerations	Health system strengthening to better provide effective person-centred care			
	Strategic information gathering and analysis			
	Leadership, community engagement, partnerships and cross-programmatic coordination			
	Identifying and addressing barriers			

Pillar One: Primary Prevention of Vertical Transmission

Focus on all women and girls of childbearing age, **whether not pregnant, pregnant or breastfeeding.**

Objective of this pillar is to **prevent incident** HIV, syphilis and HBV infections in women and girls.

Achieved through **delivery of testing services, infection prevention interventions and linkage to appropriate SRH services.**



Pillar

01

Primary Prevention of Vertical Transmission

Testing, case finding and primary prevention of HIV, HBV or syphilis infection in non-pregnant, pregnant and breastfeeding women and girls of childbearing age.

Target populations

Non-pregnant, pregnant and breastfeeding women and girls of childbearing age.

Essential services

- Routine offer of testing services for HIV, HBV and syphilis, including partner services
- Care and treatment for HIV, HBV and syphilis or linkage to care and treatment
- PrEP for HIV-negative women and girls at increased or continued risk of infection; PEP for exposure to HIV
- HBV vaccination, as appropriate
- Condoms
- Linkage to or referral for SRH services

Pillar Two: SRH Linkages and Integration

Counselling, care, support and linkages to, or provision of SRH care for women and girls living with HIV/HBV/seropositive for syphilis.

Purpose: appropriate pregnancy planning and prevention of unintended pregnancy and to prevent, diagnose and treat other STIs.

Objective ensure women and girls receive, in addition to appropriate treatment for these infections, **other SRH care**

Pillar

02

SRH Linkages and Integration

Appropriate counselling, care and support and linkages for SRH services for women and girls living with HIV or HBV or sero-positive for syphilis to (i) assess fertility intentions and support pregnancy planning and prevention and (ii) prevent, diagnose and treat STIs.

Target populations

Women and girls living with HIV or HBV or sero-positive for syphilis.

Essential services

- Contraception, family planning and condoms
- Prevention, testing and linkage to care for HIV, HBV and syphilis among people seropositive for one condition
- Prevention, screening and treatment for other STIs, with linkage to appropriate care
- Counselling, education and support for healthy living and minimizing infection transmission

Pillar Three: Essential Maternal EMTCT Services

Focus on the **prevention of MTCT** to infants of pregnant and breastfeeding women and girls living with HIV and / or HBV and / or seropositive for syphilis.

Objective of this pillar is to ensure that people in this target population **receive early antenatal testing, appropriate (antenatal, intrapartum and postnatal) care and treatment to prevent MTCT**

Pillar

03

Essential Maternal EMTCT Services

Appropriate maternal testing, prophylaxis and treatment for pregnant and breastfeeding women and girls living with HIV or HBV or sero-positive for syphilis for prevention of transmission to infants.

Target populations

Pregnant and breastfeeding women and girls living with HIV, HBV or sero-positive for syphilis.

Essential services

- Early antenatal testing for HIV, HBV and syphilis; catch-up testing where needed
- Third trimester and postnatal re-testing for HIV and linkage to care where indicated
- Treatment initiation and linkage to appropriate prevention, care and other clinical and support services
- Immediate lifelong treatment for HIV
- Adequate treatment for syphilis
- HBV prophylaxis or treatment where eligible
- Routine postpartum care and linkage to SRH services

Pillar Four: Infant, Child and Partner services

Focus on **testing, treatment, care** (including immunization and well-child care) and **support** for exposed infants, infected children, household contacts and **partners** of women and girls living with HIV/HBV/seropositive for syphilis.

Objectives: 1) interventions for exposed infants and infected children, 2) interventions for household contacts and partners.



Pillar

04

Infant, Child and Partner Services

Timely testing, prevention, treatment, care and support for exposed infants, infected children, household contacts and partners of women and girls seropositive for HIV, HBV or syphilis.

Target populations

Exposed infants, infected infants and children, household contacts and partners of women and girls living with HIV, HBV or sero-positive for syphilis.

Essential services

- Testing services for neonates and infants exposed to HIV, HBV and syphilis
- HIV testing services for children past exposure period
- Universal birth dose of HBV vaccine
- 3-dose infant HBV vaccination series
- Postnatal HIV prophylaxis
- Follow-up, treatment and care for infants with HIV and congenital syphilis
- Routine postnatal pediatric care
- Partner and household testing and prevention, including HBV vaccination, treatment where required and care for HIV, HBV and syphilis
- Partner and household HBV vaccination

Resources (Pillar 1)

Pillar 1: Essential service	
<ul style="list-style-type: none">• HIV, syphilis, and HBV testing• Partner services• Condoms• Care and treatment for HIV, syphilis, and HBV, including linkage to care and treatment• Linkage to or referral for SRH services• PrEP• PEP	<ul style="list-style-type: none">• WHO (2021). Consolidated guidelines on HIV prevention, testing, treatment, service delivery and monitoring: recommendations for a public health approach (24).• WHO (2022). Differentiated and simplified pre-exposure prophylaxis for HIV prevention: update to WHO implementation guidance: technical brief (28).• WHO (2022). Guidelines on long-acting injectable cabotegravir for HIV prevention (29).• WHO (2024). Guidelines for HIV post-exposure prophylaxis (30).
<ul style="list-style-type: none">• Care and treatment for syphilis	<ul style="list-style-type: none">• WHO (2016). WHO guidelines for the treatment of Treponema pallidum (syphilis) (25).• WHO (2021). Guidelines for the management of symptomatic sexually transmitted infections (27).
<ul style="list-style-type: none">• Care and treatment for HBV,• HBV vaccination• Linkage to or referral for SRH services	<ul style="list-style-type: none">• WHO (2024). Guidelines for the prevention, diagnosis, care and treatment for people with chronic hepatitis B infection (26).•
<ul style="list-style-type: none">• Harm reduction for women who inject drugs	<ul style="list-style-type: none">• https://www.who.int/publications/m/item/prevention-of-mother-to-child-transmission-of-hiv-hepatitis-b-and-c-and-syphilis• https://www.who.int/publications/i/item/9789240052390

Resources (Pillar 2)

Pillar 2: Essential service

- Prevention, testing and linkage to care for HIV, syphilis and HBV among people seropositive for one or more conditions
- Prevention, screening and treatment for other STIs, with linkage to appropriate care
- Contraception, family planning and condoms
- Counselling, education and support for healthy living and minimizing infection transmission

- WHO (2021). [Consolidated guidelines on HIV prevention, testing, treatment, service delivery and monitoring: recommendations for a public health approach](#) (24).
- WHO (2024). [Guidelines for the prevention, diagnosis, care and treatment for people with chronic hepatitis B infection](#) (26).
- WHO (2024). [Factsheet – Condoms](#) (32).
- WHO (2017). [Consolidated guideline on sexual and reproductive health and rights of women living with HIV](#) (35).
- CCP and WHO (2022). [Family Planning: A Global Handbook for Providers \(2022 update\)](#) (33).
- WHO (2023). [Factsheet – Family planning/contraception methods](#) (34).
- WHO (2017). [Consolidated guideline on sexual and reproductive health and rights of women living with HIV](#) (35).

Resources (Pillar 3)

Pillar 3: Essential service

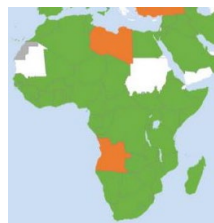
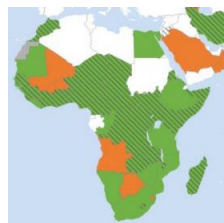
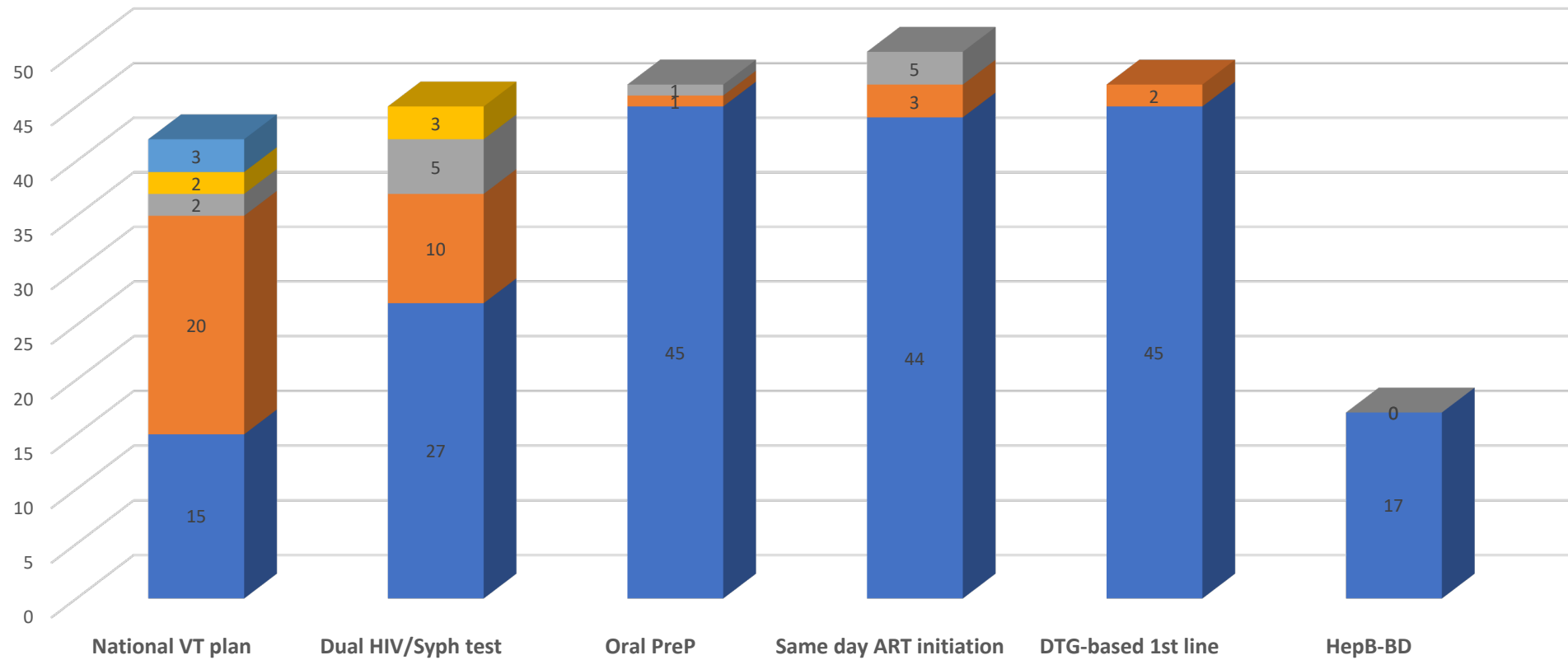
- Early antenatal testing for HIV, syphilis, and HBV; catch-up testing where needed
- Third trimester and postnatal re-testing for HIV and linkage to care where indicated
- Treatment initiation and linkage to appropriate prevention, care and other clinical and support services
 - a. Immediate lifelong treatment for HIV
 - b. Adequate treatment for syphilis
 - c. HBV prophylaxis or treatment where eligible
- Routine antenatal, intrapartum, and postnatal care and linkage to SRH services

- WHO (2019). [Dual HIV/syphilis rapid diagnostic tests can be used as the first test in antenatal care: policy brief](#) (1).
- WHO (2016). [WHO recommendations on antenatal care for a positive pregnancy experience](#) (15).
- WHO (2021). [Consolidated guidelines on HIV prevention, testing, treatment, service delivery and monitoring: recommendations for a public health approach](#) (24).
- WHO (2024). [Guidelines for the prevention, diagnosis, care and treatment for people with chronic hepatitis B infection](#) (26).
- WHO (2023). [Laboratory and point-of-care diagnostic testing for sexually transmitted infections, including HIV](#) (36).
- WHO (2017). [WHO guideline on syphilis screening and treatment for pregnant women](#) (37).
- WHO (2015). [Pregnancy, childbirth, postpartum and newborn care: a guide for essential practice, 3rd edition](#) (38).
- WHO (2018). [WHO recommendations on adolescent sexual and reproductive health and rights](#) (39).

Resources (Pillar 4)

Pillar 4: Essential service	
• Prevention of HBV infection	• WHO (2017). Hepatitis B vaccines: WHO position paper – July 2017 (40).
• Post-exposure services for neonates and infants	• WHO (2021). Consolidated guidelines on HIV prevention, testing, treatment, service delivery and monitoring: recommendations for a public health approach (24).
• Post-exposure services for neonates and infants exposed to HIV	
• Post-exposure services for neonates and infants exposed to syphilis:	• WHO (2017). WHO guideline on syphilis screening and treatment for pregnant women (37).
• Post-exposure services for neonates and infants exposed to HBV:	• WHO (2024). Guidelines for the prevention, diagnosis, care and treatment for people with chronic hepatitis B infection (26).

Adoption of WHO Recommendations... (July 2024)



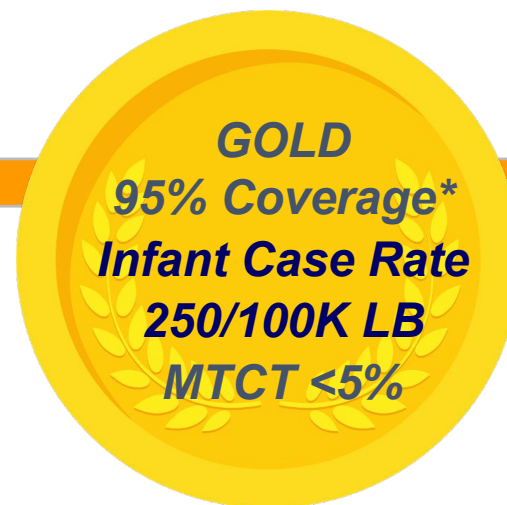
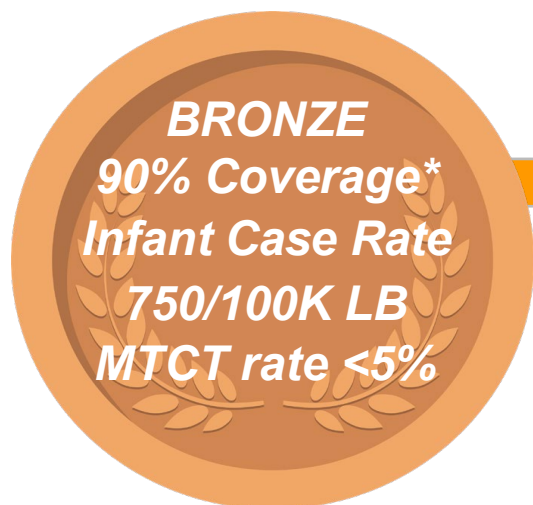
Towards validation of triple elimination

	EMTCT of HIV	EMTCT of Syphilis	EMTCT of HBV
2030 Global Health Sector Strategy (GHSS) direct and related targets	'Zero' new infections among infants	≤50 cases of congenital syphilis per 100 000 live births in 80% of countries	95% reduction in incidence of chronic viral hepatitis B infections
IMPACT TARGETS	New paediatric HIV infections population case rate ≤50 cases per 100 000 live births	A case rate of congenital syphilis of ≤50 per 100 000 live births	<0.1% prevalence* HBsAg in ≤5-year-olds
Impact criteria must have been met for one year	MTCT rate of HIV of <2% in non-breastfeeding populations OR <5% in breastfeeding populations		In countries using targeted birth dose, an additional impact target of MTCT rate of ≤2%
PROGRAMMATIC TARGETS	ANC coverage (at least one visit) (ANC-1) of ≥95%	ANC coverage (at least one visit) (ANC-1) of ≥95%	<u>With universal birth dose (BD)</u> >90% HepB3 vaccine coverage >90% HepB BD coverage
Process criteria must have been met for two years	Coverage of HIV testing (pregnant women) of ≥95%	Coverage of syphilis testing of pregnant women of ≥95% (attended at least one ANC visit)	<u>With targeted BD or without universal BD</u> >90% HepB3 vaccine coverage >90% HepB BD coverage >90% coverage of maternal HBsAg testing >90% coverage with antivirals for eligible
	ART coverage (HIV-positive pregnant women) of ≥95%	Adequate treatment (syphilis - seropositive pregnant women) of ≥95%	

Path to Elimination (PTE)

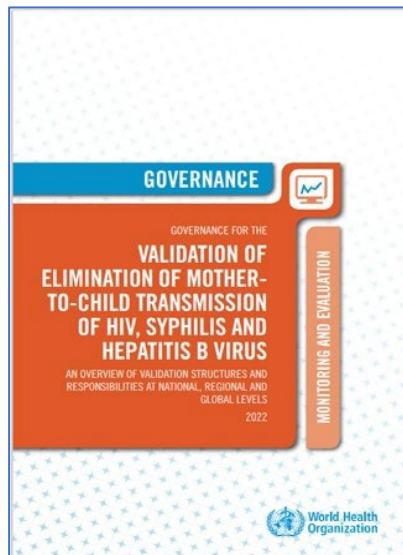
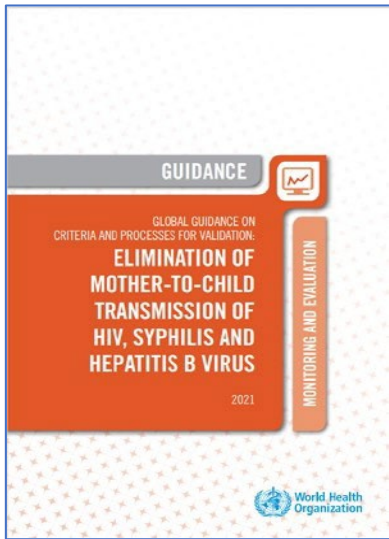
Path to Elimination Validation

Full Validation



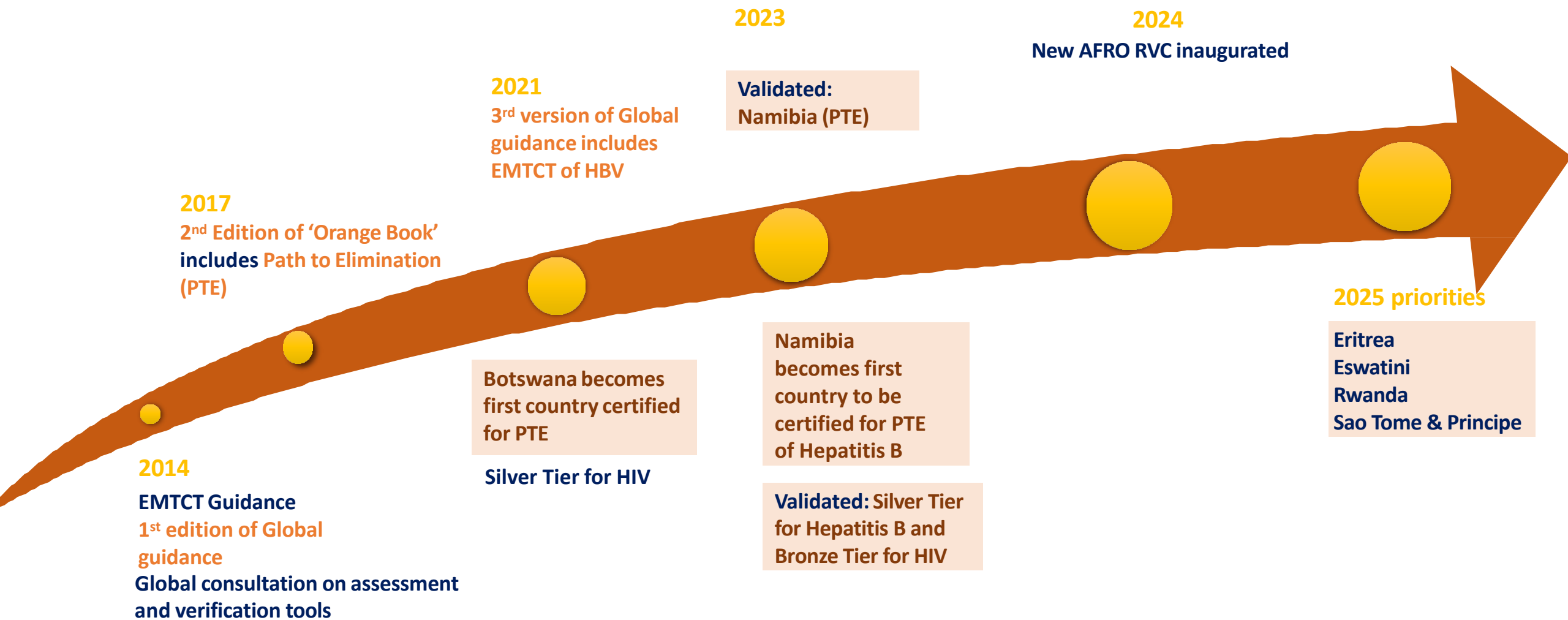
95%
Coverage*
≤50/100k
cases,
MTCT
<5%

Path to Elimination (PTE)



- For many countries with strong programmes, high ANC prevalence makes it virtually impossible to achieve the case rate criterion for validation (<50 cases per 100,000 live births).
- Qualifying prevalence requirements for PTE indicators & targets for HIV, syphilis, &/or HBV
 - Maternal HIV prevalence >2%
 - Maternal syphilis prevalence >1%
 - HBsAg prevalence >1% among ≤5-year-olds and/or general population prevalence >5%.
- Criteria, Process and Tools
 - Same MTCT rate <5% impact criteria; Same process and tools used for elimination assessment
 - Different infant case rate impact criteria: >50/100,000 live births (from 750-250 LB/100K LB); Different ANC testing and treatment process criteria: advancing from 90% to 95%

Progress on Path to Elimination (PTE)





Call to Action

Acknowledgments: WHO HHS Colleagues



World Health
Organization

African Region