

An overview of triple elimination in Asia and the Pacific

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Concurrent Session 1B: Ending Mother-to-Child
Transmission: triple elimination what's working

6 August 2025



Burnet
reach for the many



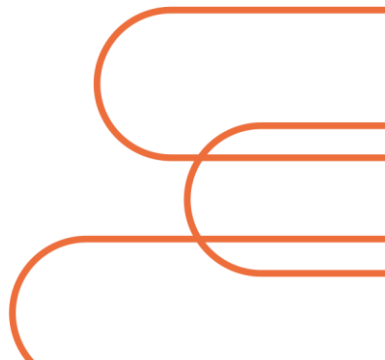
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Overview

- Overview of triple elimination
- Timeline of evolution
- Key regional documents
- Focus on Pacific Island Countries and Territories



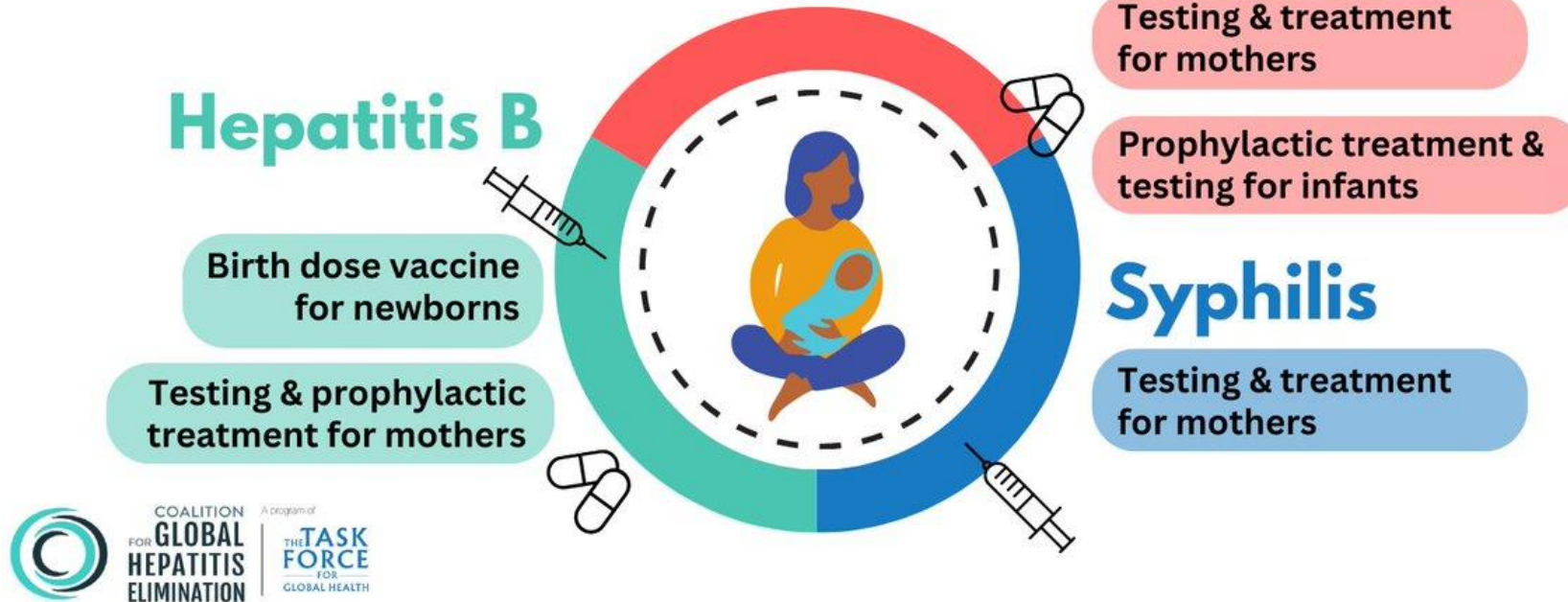


What is triple elimination?

Triple Elimination

Save this generation and the next with an integrated approach

Honoring World AIDS Day
December 1 





Evolution of Triple Elimination

Phase	Timeline	Scope Added	Asia-Pacific Highlights
HIV-only PMTCT	2000s–2010	HIV	China national PMTCT ~2010
Dual EMTCT HIV + Syphilis	~2009–2016	Added syphilis	Thailand validated dual EMTCT by 2016
Triple EMTCT HIV+Syphilis+HBV Framework	2018	Hepatitis B added	Regional Framework for Asia Pacific published; baseline report
Global validation & implementation guidance	2021–2023	Validation criteria for HBV added; Four Pillars implementation model	Botswana and Namibia begin PTE; Asia-Pacific pilots
Regional roadmap & acceleration	Apr 2025	Operational plan for 2024–2030	Thailand et al. dual-elimination; broader HepB integration across region



Triple Elimination in Asia and the Pacific – key policy documents





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Systematic review of data availability to report on indicators in the Regional Triple

This study aimed to:

- Assess availability of data required to report on indicators in the Regional Triple Elimination Framework
- Describe progress towards these targets
- Describe the epidemiology of HIV, hepatitis B, and syphilis infection in pregnant women and children in the Pacific

Main takeaways:

- Based on the available data, no Pacific Island Country or Territory collects and reports sufficient data to report on all indicators
- Where estimates are available, many are below the required levels
- It is unlikely that any PICTs are ready to apply for validation of elimination

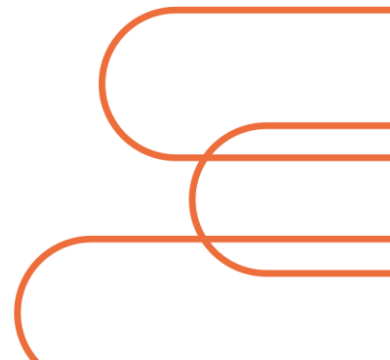
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Progress towards triple elimination of mother-to-child transmission of HIV, hepatitis B and syphilis in Pacific Island Countries and Territories: a systematic review

[Leila Bell](#)^{a,b,o}  · [Caroline van Gemert](#)^{a,c,d,o} · [Nicole Allard](#)^{e,f} · [Anne Brink](#)^g · [Po-Lin Chan](#)^h · [Benjamin Cowie](#)^{e,fi} et al. [Show more](#)

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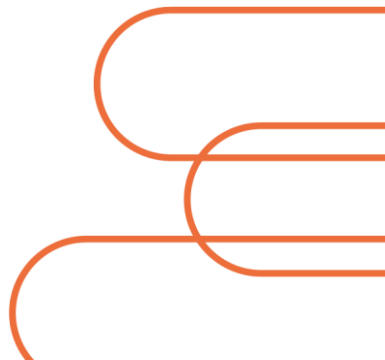




	Epidemiological data			Process indicators											Impact indicators				
	HBsAg among pregnant women	HIV positivity among pregnant women	Syphilis positivity among pregnant women	Antenatal care coverage at least once (ANCI)	Antenatal care coverage at least four times (ANC4)	Proportion of births attended by skilled health personnel	Antenatal HIV screening	Antenatal hepatitis B screening	Antenatal syphilis screening	Antenatal HIV treatment coverage	Antenatal syphilis treatment coverage	Stillbirth rate	Hepatitis B birth dose coverage (timely)	Hepatitis B birth dose coverage (ever)	Hepatitis B third dose coverage	Paediatric HIV infections per 100,000 live births	Mother-to-child transmission rate of HIV	HBsAg positivity among children	Congenital syphilis cases per 100,000 live births
American Samoa																			
Cook Islands	●		●					●		●	●	●●	●●	●●				●●	●
Federated States of Micronesia			●					●●		●●	●	●	●	●*				●	●●
Fiji	●		●		●	●		●●		●	●	●	●**	●●				●●	●●
French Polynesia													●	●				●	
Guam	●			●	●		●	●					●						●
Kiribati			●●	●	●	●		●●		●●	●	●	●	●				●●	
Marshall Islands			●●		●	●		●		●●	●	●	●*	●●				●	
Nauru			●					●		●●	●	●		●				●	●
New Caledonia		●	●																
Niue						●						●	●	●				●●	
Northern Mariana Islands														●*					●
Palau			●	●	●	●		●		●	●	●	●*	●●				●	
Papua New Guinea		●●	●●●	●	●●	●●●	●●	●●	●●	●●	●	●●	●	●			●●	●●	
Pitcairn Island																			
Samoa			●●	●●	●	●●		●●		●●	●●	●		●				●	
Solomon Islands	●		●	●	●	●		●		●	●	●		●				●	
Tokelau													●	●				●	
Tonga			●●	●	●	●		●●		●●	●	●		●				●	●●
Tuvalu			●●			●		●●		●●	●	●		●				●	●
Vanuatu			●●	●	●	●		●		●	●	●		●				●	
Wallis and Futuna													●	●				●	

- literature review
- database review
- grey literature

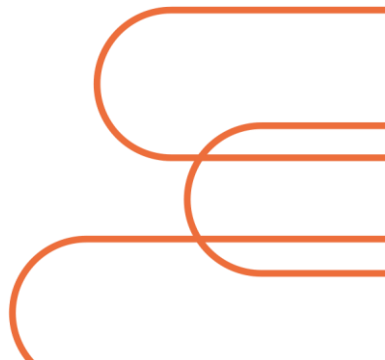
*BD within 3 days of birth
 **reports BD within 2 days





	Antenatal care coverage at least once (ANC1)	Antenatal care coverage at least four times (ANC4)	Proportion of births attended by skilled health personnel	Antenatal HIV screening	Antenatal hepatitis B screening	Antenatal syphilis screening	Antenatal HIV treatment coverage	Antenatal syphilis treatment coverage	Stillbirth rate (per 1000 total births)	Hepatitis B birth dose coverage (timely)	Hepatitis B birth dose coverage (ever)	Hepatitis B third dose coverage
American Samoa											96.70	82.00
Cook Islands						100.00			5.18	>99.5	98.01	98.00
Federated States of Micronesia						94.50		70.00	11.7	70.00	53.50	84.00
Fiji		94.00	100.00			100.00		77.97	8.58	77.00	98.18	99.00
French Polynesia										87.61	91.25	97.83
Guam	88.99	73.26		68.88	98.08	93.53				100.00		
Kiribati	89.00	67.00	92.00			23.40		100.00	14.32	99.00		94.00
Marshall Islands		67.80	92.00			96.60		100.00	10.86	87.00	86.70	82.00
Nauru						61.80		61.80	13.12	>99.5		96.00
New Caledonia												
Niue			100.00						9.37	>99.5		>99.5
Northern Mariana Islands											97.50	62.10
Palau	90.00	81.00	100.00			100.00		100.00	7.71	>99.5	96.60	98.00
Papua New Guinea	76.00	55.00	53.00	19.30		25.60	81.40	79.60	16.09	21.00	95.54	40.00
Pitcairn Islands												
Samoa	93.00	73.00	83.00			89.40		100.00	8.75	78.00		68.00
Solomon Islands	89.00	69.00	86.00			4.90		100.00	10.06	66.00		94.00
Tokelau										76.84	94.74	100.00
Tonga	98.00	89.00	98.00			95.70		100.00	7.7	99.00		99.00
Tuvalu			100.00			100.00		100.00	11.87	98.00		92.00
Vanuatu	76.00	52.00	89.00			82.10		100.00	11.1	82.00		90.00
Wallis and Futuna											97.00	96.02

>95%
80%-94.9%
<80%





Epidemiological indicators

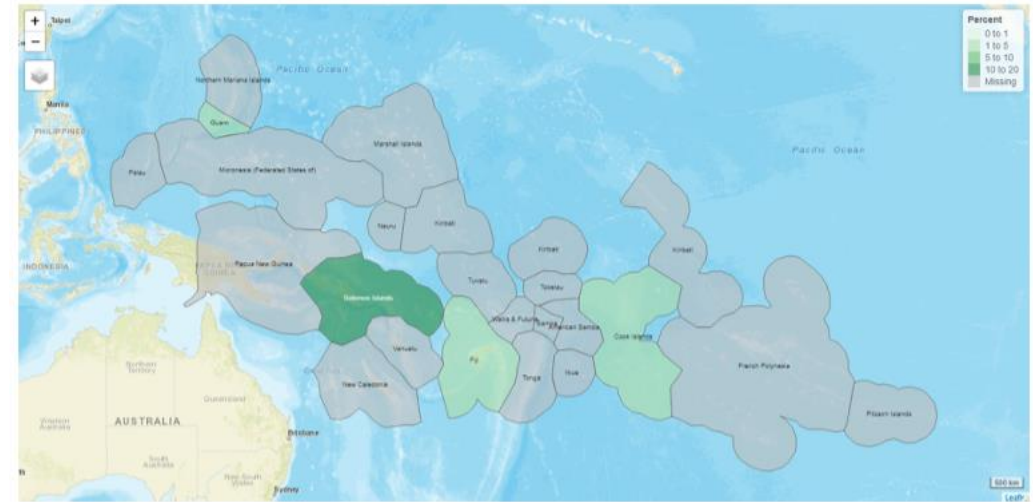


Fig. 4: Prevalence of HBsAg among ANC women.

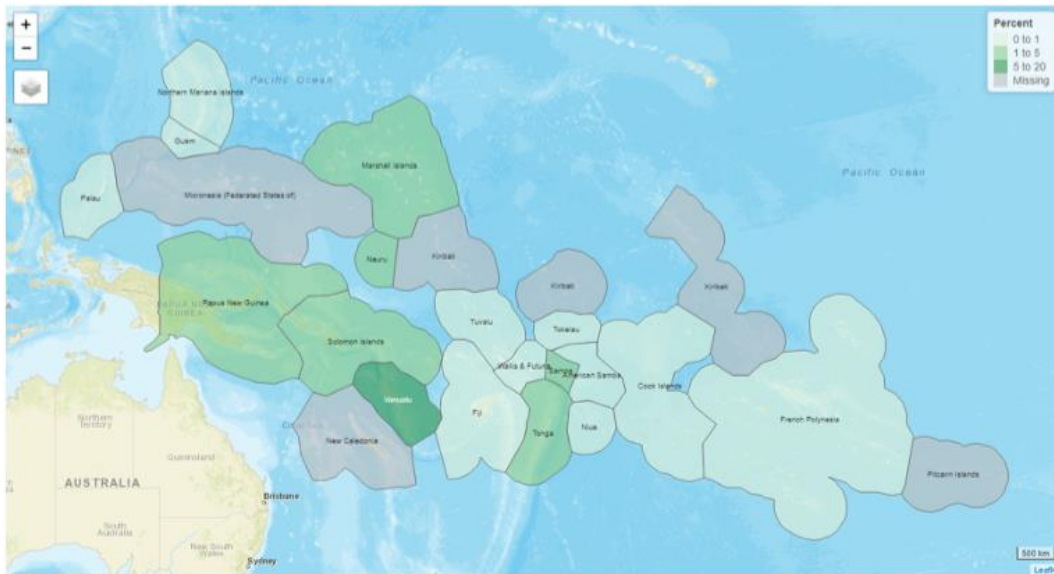


Fig. 3: Prevalence of HBsAg among children.

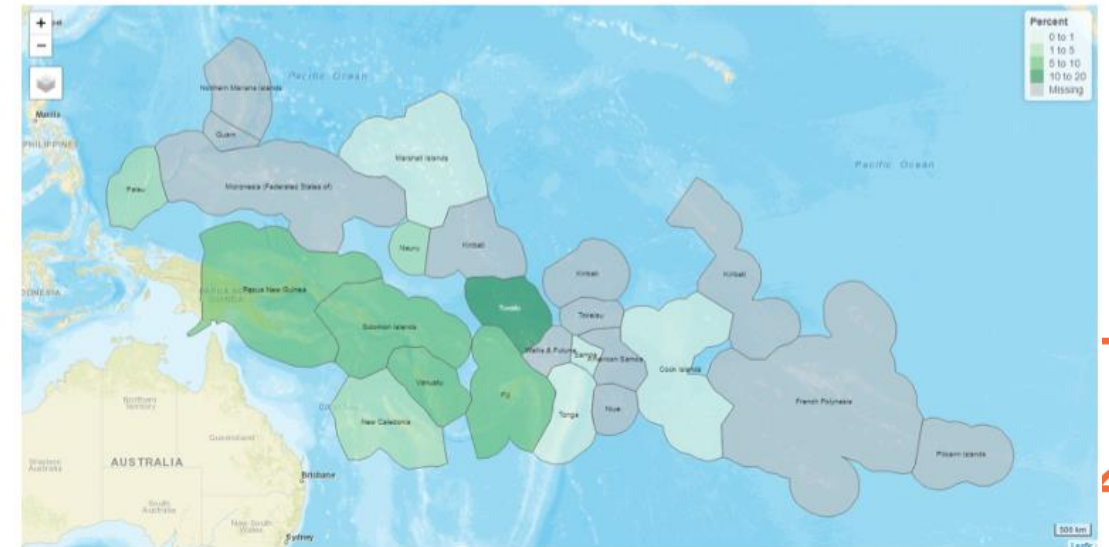
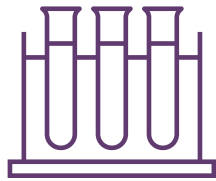


Fig. 5: Prevalence of syphilis among ANC women.



Major challenges to triple elimination of hepatitis B in Pacific Island Countries



Diagnosis

- Cost of tests
- Test stockouts
- Centralised testing
- Limited use of point-of-care testing
- ANC guidelines slow to update



Treatment

- Poor linkage to care and referral pathways
- No HBeAg testing and limited access to HBV DNA viral tests
 - Treatment stockout
 - Treatment adherence
- Sub-optimal antenatal care visits

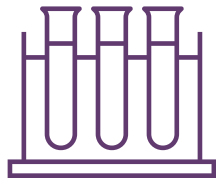


Vaccination

- Vaccine stockouts
- High rates in out of facility births
 - Cold chain
- Vaccine hesitancy



Major challenges to triple elimination of hepatitis B in Pacific Island Countries



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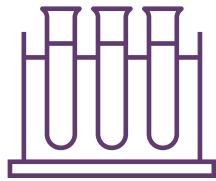
Vaccination

- Vaccine stockouts
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- Cold chain
- Vaccine hesitancy

- Limited access to HBV DNA viral tests
- Treatment stockout
- Treatment adherence
- Sub-optimal antenatal care visits



What works to achieving triple elimination of hepatitis B in Pacific Island Countries?



Diagnosis

- Rapid diagnostic testing at the point-of-care
- Nurse and midwife led testing
 - Integration with RMNCAH
- Addressing barriers to HIV testing
 - Pooled procurement (?)
 - All inclusive test kits
 - Repeat testing



Treatment

- Midwife and nurse led care
- Decentralised treatment
 - Pooled procurement
 - Global ceiling price (HBV)
- Weekly check ins to increase adherence (HBV)
- Strategies to increase health literacy



Vaccination

- Vaccine delivered outside the cold chain
 - Vaccine champions
 - ? Recall systems
 - ? Targeted vaccination



What next? How to increase coverage of Triple Elimination essential services in the Pacific

Testing

- Scale up of testing
- New tests? Multiplex POC?
- Decentralization of services (including laboratory and treatment)

Treatment

- Consideration of new guidelines on TDF prophylaxis
- Explore barriers to adherence

Vaccination

- Alternative approaches for delivery of hep B birth dose (out of cold chain, prefilled auto-disable devices, microarray patches)

Environment

- Enhanced integration with ANC
- Improved data collection and reporting systems
- Disaggregated data analysis at sub-national level
- Opportunities to share lessons learnt



Thank you

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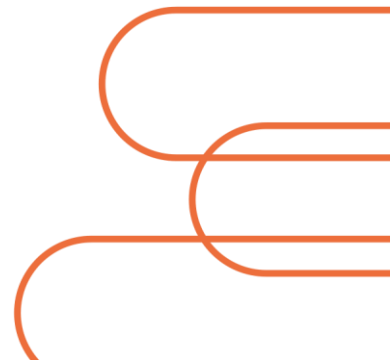
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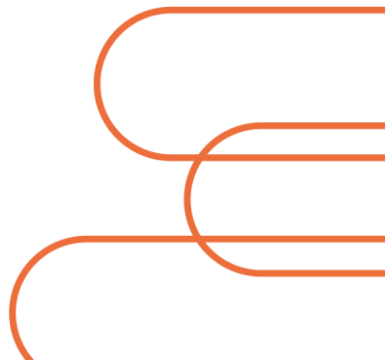
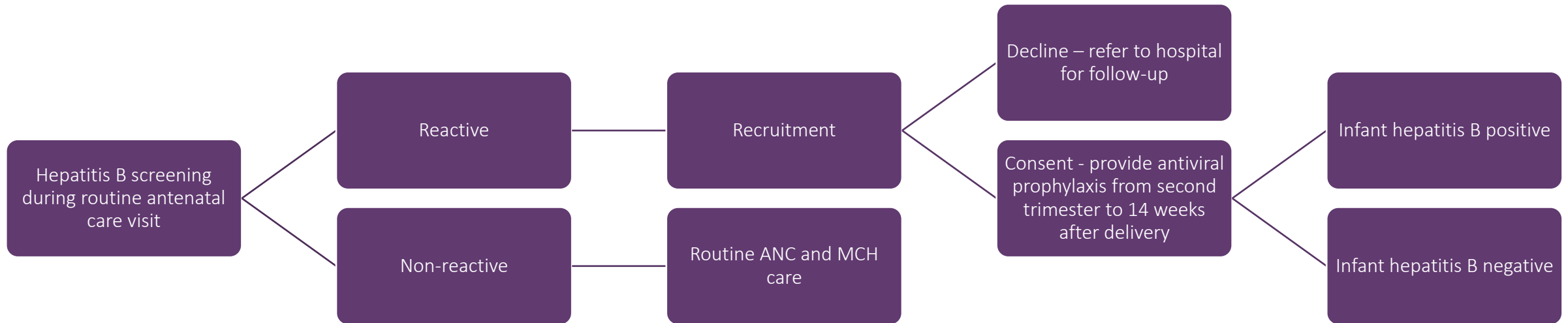
Protektem Pikinini Blong Yu Trial in Vanuatu

- WHO updated their guidelines for the use of antiviral prophylaxis in pregnancy to prevent mother-to-child transmission of hepatitis B in 2024
 - In settings where HBV DNA or HBeAg testing is available, high DNA-driven care is recommended
 - In settings where HBV DNA or HBeAg testing is not available, treating all pregnant women with hepatitis B recommended (universal peripartum antiviral prophylaxis – PAP)
 - This recommendation is conditional, based on low-certainty evidence
- This field trial aims to evaluate the effectiveness of universal PAP – participants in the intervention arm receive TDF from week 28 of pregnancy until 14 weeks after delivery
- A nested qualitative study is exploring the acceptability of midwife-delivered care for hepatitis B during pregnancy
- Current recruitment: 56 participants recruited (46 in intervention arm) and 23 babies born



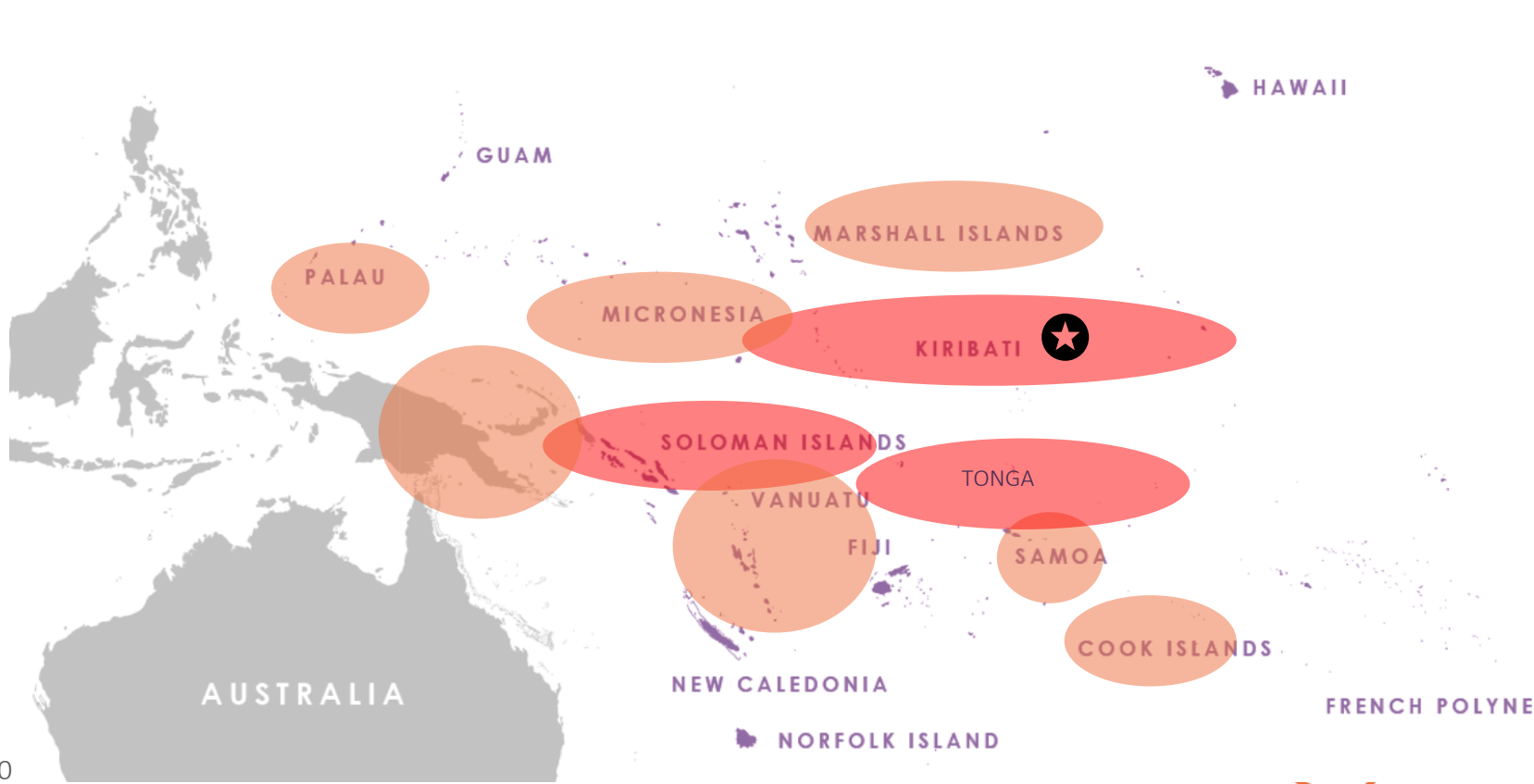
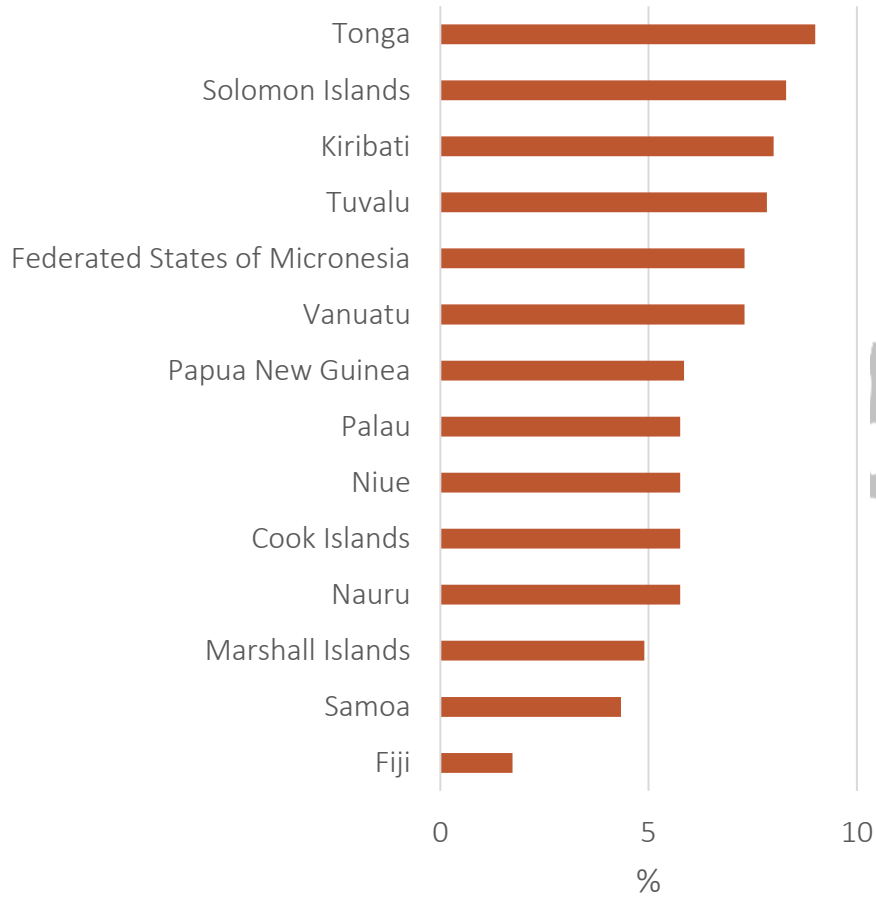


Trial design





Prevalence of chronic HBV

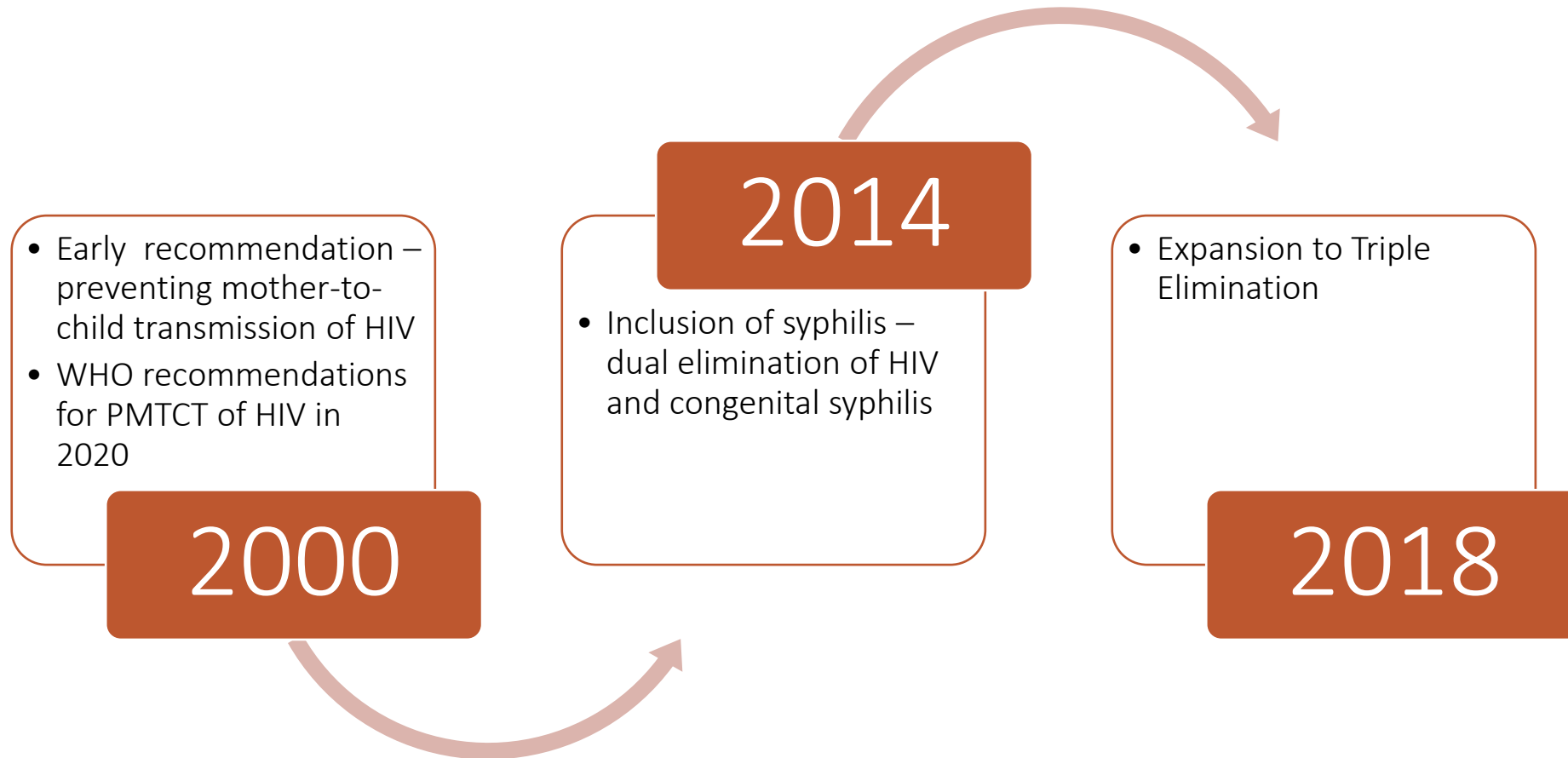


>8% High prevalence

2%-7% Intermediate prevalence

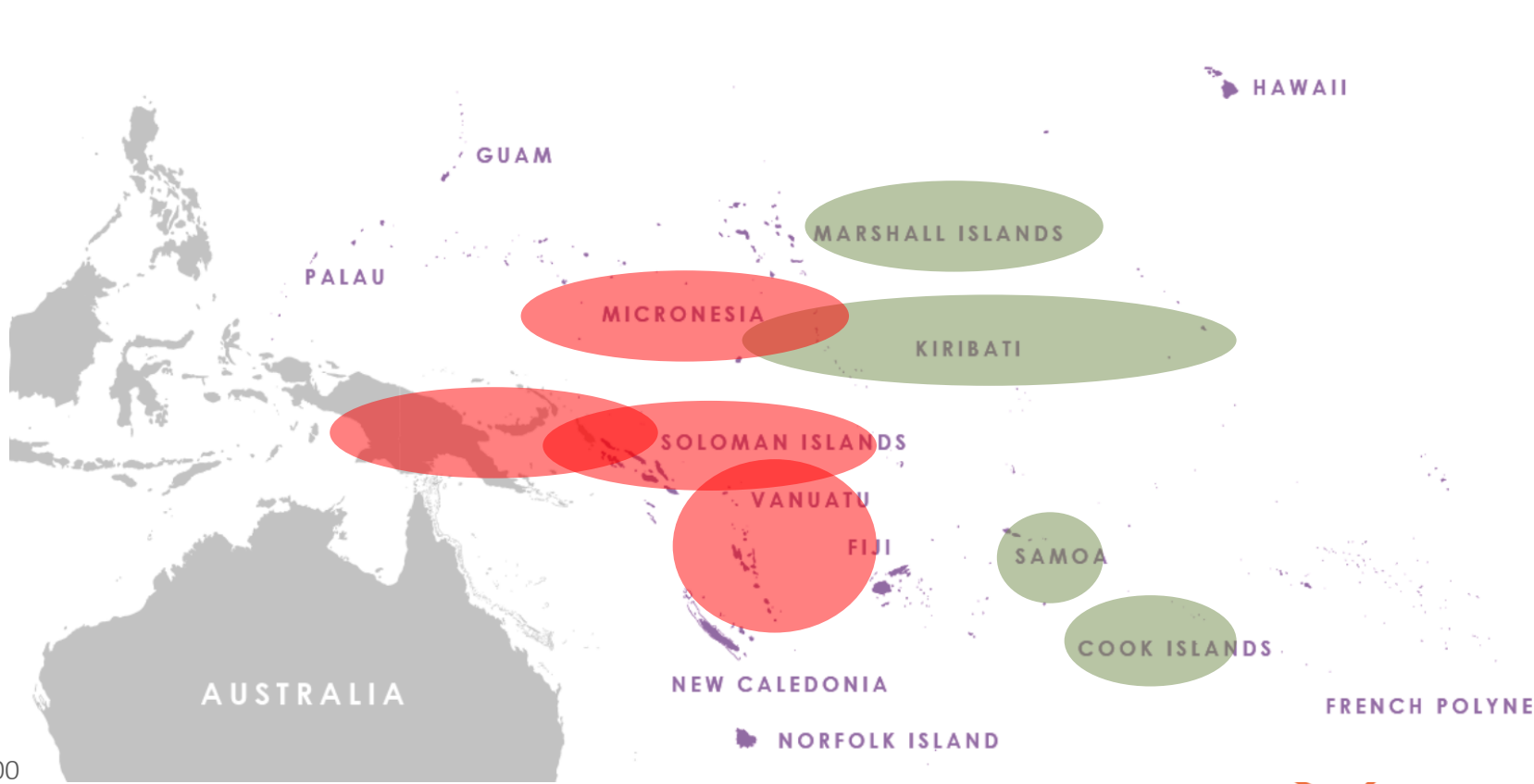
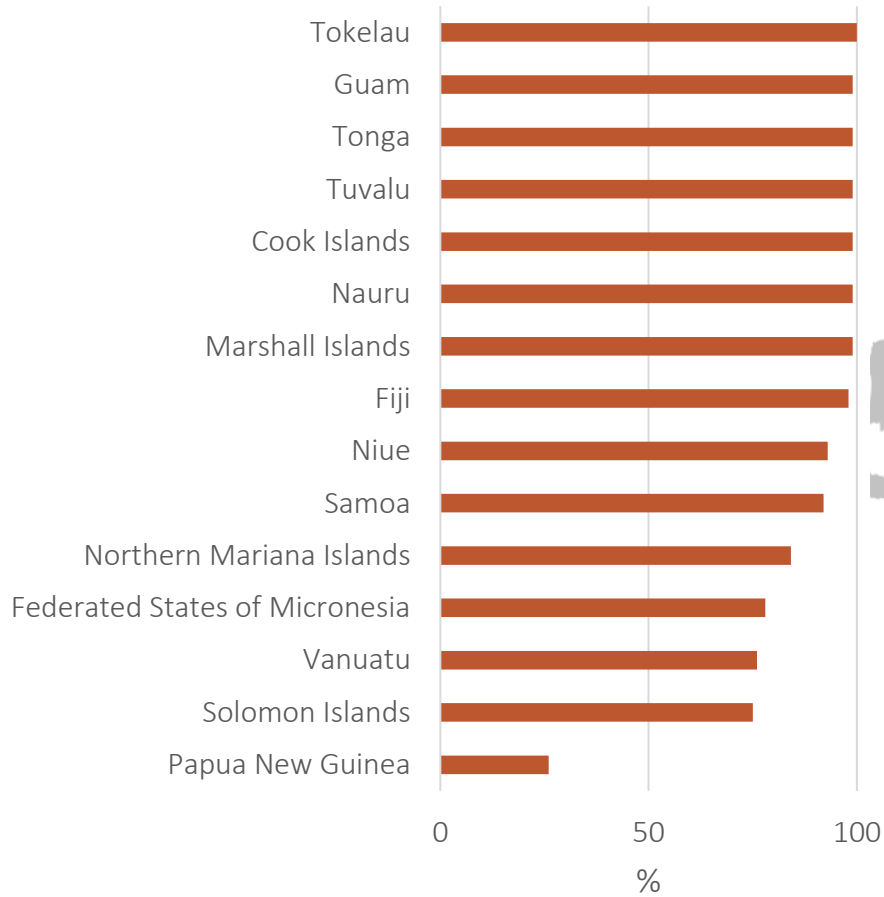



Evolution of Triple Elimination

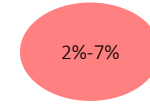




Coverage of hepatitis B birth dose (2023)



 >8% >80% coverage

 2%-7% <80% coverage