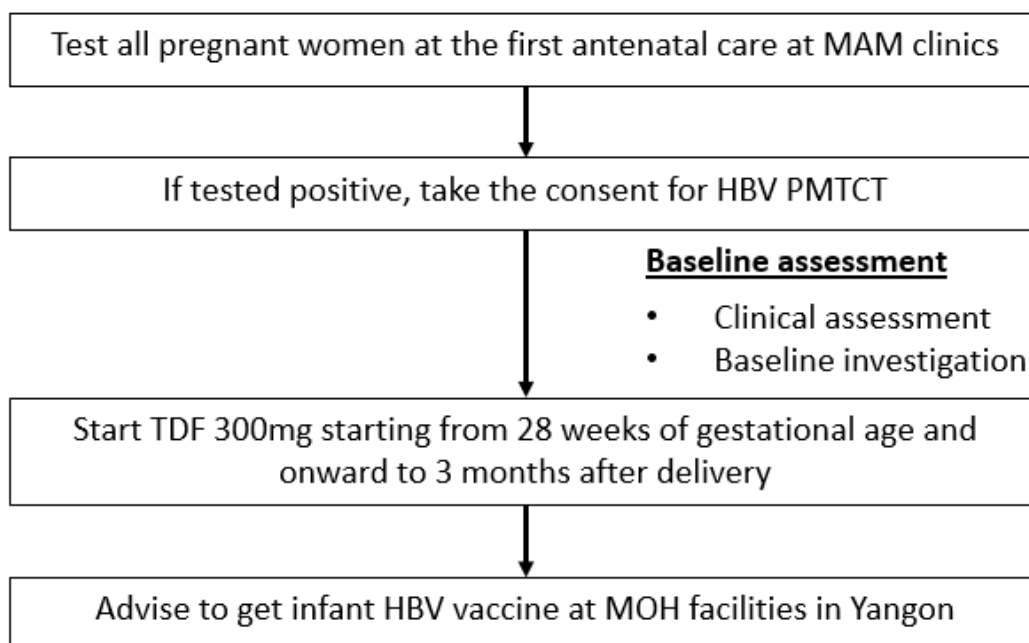


Prevention of mother-to-child transmission of Hepatitis B

Hep B PMTCT management Prophylaxis Flow Chart



If available, advise women to seek **ongoing TDF and follow-up** after the prophylaxis period ends, and advise them how and where to receive TDF and continued care, if they have **one or more of the following**:

- Advanced liver disease/cirrhosis: clinical features and/or APRI score >0.5 or fibro scan/ transient elastography value >7 kPa.
- Coinfections/ comorbidities including HIV, hepatitis D, hepatitis C, immunosuppression (e.g., long-term steroids), diabetes or metabolic liver disease; extrahepatic manifestations (e.g., glomerulonephritis/vasculitis)
- Family history of liver cancer or cirrhosis.
- If HBV DNA testing is available: HBV DNA >2000 IU/mL plus raised ALT (>19 U/L in women) indicates eligibility. For adolescents, this should be based on at least 2 ALT levels over 6-12 months.
- If HBV DNA testing is NOT available, two elevated ALT values (>19 U/L) over 6-12-months indicates eligibility.

NOTE: Raised ALT may temporarily normalize in pregnancy, so pregnancy ALT levels are not a good marker for deciding about long-term treatment – these

should be re-checked after delivery. If the client has decompensated cirrhosis or HCC, refer them to specialist center.

1. Clinical assessment

History Taking

- Proper Antenatal History Taking
- Duration of HBsAg positivity
- Family history of HCC and other liver diseases
- Social History to identify household contacts
- Risk of transmission (sexual partners or PWID)
- Assessment and counseling on alcohol and drug use, smoking, betel chewing
- Presence of comorbid conditions such as Diabetes Mellitus, HCV, HIV infection

Physical Examination

- Routine antenatal examination (e.g., fundal height (FH), fetal heart sounds (FHS), etc.)
- Signs of chronic liver insufficiency such as spider naevi, palmar erythema, white nails, muscle wasting (sarcopenia)
- Complications of cirrhosis and portal hypertension, such as hepatic encephalopathy, leg edema, jaundice, ascites, and esophagogastric varices

2. Baseline and Follow up Investigation Table

	Examination	Baseline (28 weeks of pregnancy)	3 months after delivery ¹	6 months after delivery	9 months after delivery
HBsAg positive	Clinical evaluation	X	X	X	X

¹ This is when TDF prophylaxis should be stopped.

pregnant woman	HIV Ab (ANC)	X			
	HCV Ab	X			
	ALT	X	X	X	X
	Creatinine	X			
	Platelets (CBC)	X			
	AST	X			
Infant	HBsAg				x ²

APRI Calculation Example.

- AST Level (IU/L) = 60
- AST Upper Limit of Normal (IU/L) = 40
- Platelet Count (109/L) = 133,000/mm³ (Ref: 150,000-400,000/mm³) = 133
- APRI = $\left[\frac{60}{40} \times 100\right] / 133$

APRI Score Interpretation

APRI score	Interpretation
> 1.5	Cirrhosis
0.5 - 1.5	Moderate Fibrosis, risk of cirrhosis
< 0.5	No Fibrosis

3. Hep B treatment

Regimen	Dosage per Tablet	Frequency
Tenofovir Disoproxil Fumarate (TDF)	300 mg Tablet	Once Daily

Most Common Adverse Effects of TDF

- Nausea, abdominal pain, diarrhea, headache, dizziness, fatigue

² HBsAg testing in the child can be conducted at 9 months of life or 1-2 months after the final vaccine dose if the series delayed

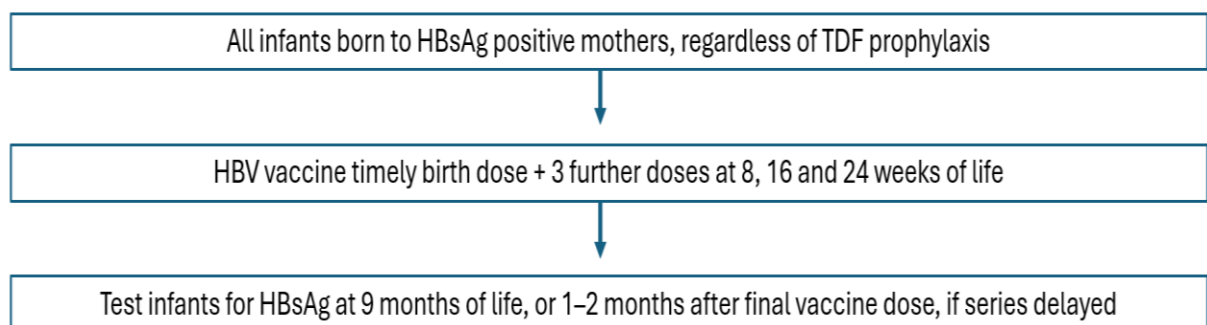
Dosage adjustments for TDF in renal impairment

CrCl >50 ml/min	One 300mg tablet a day
CrCl 30-49 ml/min	One 300mg tablet every 2 days. Consult with the technical team.
CrCl <30 ml/min	Do not start TDF. Consult with the technical team and refer to a specialist.

4. Follow up Timeline Table

	Baseline	Treatment Initiation	30 wks GA	36 wks GA	1-2 wk after delivery	3month h after delivery	6month h after delivery	9month h after delivery
MD	✓	✓	✓	✓	✓	✓	✓	✓
Counselor	✓	✓						✓
HV by OAS	Case by case if required and compulsory OAS Visit for Outcome Evaluation at 9 Months of Age							

5. Infant Hep B Immunization Flow



Hep B Flare up

- After stopping TDF prophylaxis (including women who stop TDF early), monitor for hepatitis flares for 6 months.
- This is due to the potential risk of flare after TDF discontinuation (approximately 8% risk), although this is similar to the risk in HBsAg positive women who do not receive prophylaxis (approximately 6% risk).
- Check for:
 - **At 6 and 9 months after delivery**, assess for jaundice, dark urine, clay-coloured stools, nausea, loss of appetite, abdominal pain, and fever.
 - Counsel women about these symptoms, and advise them to attend the clinic if they occur.
 - If available, also check ALT levels at 6 and 9 months after delivery.

Special Circumstances

- In pregnant PLHIV who are HBsAg positive, ensure the client's antiretroviral regimen contains TDF or TAF.
- If a pregnant woman declines antenatal HIV screening and HIV status is unknown,
 - Explain why HIV testing is important
 - do not initiate TDF prophylaxis for mother-to-child transmission prevention if HIV status is unknown
- If the client has decompensated cirrhosis or HCC, discuss the case with technical team.