PREVENTING MOTHER TO CHILD TRANSMISSION OF hepatitis B

Recommendations for preventing mother to child transmission of hepatitis B virus with hepatitis B birth dose

HEPATITIS B® FOUNDATION
A World Free of Hepatitis B, Hepatitis D and Liver Cancer

ABAC
African Hepatitis B Advocacy Coalition
Est. by the Hepatitis B Foundation

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About Hepatitis B



Many pregnant women may not know they are infected with hepatitis B.

This leads to the transmission of the hepatitis B virus to their children without their knowledge.

In highly endemic countries where the HBV prevalence is > 8%, HBV infection is commonly transmitted from mother to child at birth or during early childhood.

Key facts about HBV mother-to-child transmission include:

- Occurs primarily at birth through infected blood
- Risk of transmission from infected mother to newborn is up to 90%
- In utero transmission is rare
- HBV is not transmitted by breastfeeding
- Caesarean section does not prevent transmission

Newborns and young children have the highest risk of acquiring chronic HBV infection. If exposed, newborns have up to 90% risk of chronic infection.

1. WHO: A Guide for Introducing and Strengthening Hepatitis B Birth DoseVaccination http://apps.who.int/iris/bitstream/10665/208278/1/9789241509831_eng.pdf

About Hepatitis B

Hepatitis B virus is a lifelong infection with no cure. Hepatitis B virus can lead to liver damage and liver cancer over time, if the individual is not aware of his/her infection. Below shows what can happen to the liver over time if chronic hepatitis B infection is not managed.



Healthy liver

Mild inflammation can lead to "Fibrosis"

A lot of inflammation can lead to a scarred liver or "Cirrhosis"

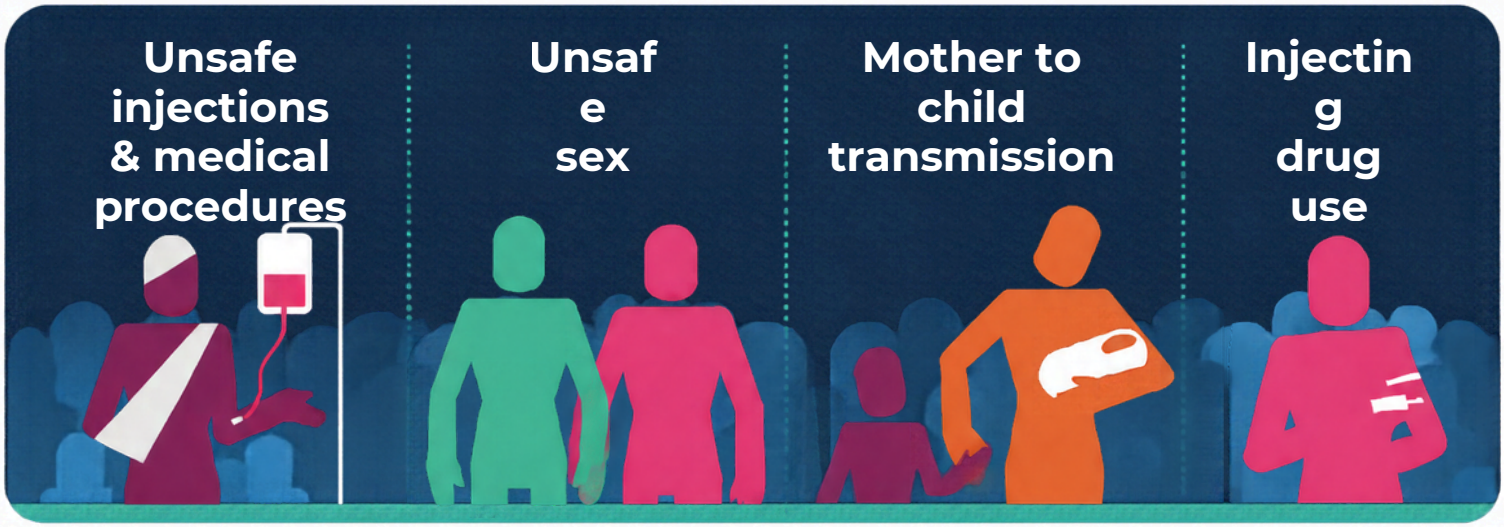
Long-term infection with hepatitis B can lead to liver cancer

The best way to prevent hepatitis B infection and liver cancer is to give the hepatitis B birth dose within the first 24 hours of birth to all infants



About Hepatitis B

Hepatitis B can be transmitted in the following ways:



Did you know?

Mother-to-child transmission is the most common way newborns are infected with hepatitis B virus.



Hepatitis B virus can be prevented with proper immunization with the hepatitis B birth dose.

Newborns and young children have the highest risk of getting chronic hepatitis B infection. Newborns have up to **90%** risk of chronic infection.



The hepatitis B vaccine is safe and effective!

The HepB vaccine is the most effective way to prevent HBV infection. The first dose of the hepatitis B vaccine (HepB-BD) given in the first 24 hours of birth followed by the pentavalent vaccination series can prevent HBV infection.

Steps to prevent Hepatitis B Transmission

1. **24 hours** of birth, administer monovalent hepatitis B birth dose vaccine
2. **6 weeks,** administer the first dose of pentavalent vaccine
3. **10 weeks,** administer the second dose of pentavalent vaccine
4. **14 weeks,** administer the third dose of pentavalent vaccine

Prevention

A monovalent hepatitis B vaccine (HepB-BD) is recommended for birth dose administration. Combination vaccines contain multiple antigens, such as DTP-HepB-Hib, should be given at a later age (earliest 4-6 weeks) to maximize their immunogenicity. HepB-BD is administered by intramuscular injection with a needle at a 90 degree angle in the anterolateral aspect of the thigh. The standard dose for a newborn is 0.5 mL.

Hepatitis B vaccine is very safe. Mild transient side-effects may occur after immunization, including soreness at the injection site, irritability and fever. There are no true contraindications to hepatitis B birth dose.

ADMINISTRATION & TIMING

- WHO recommends all infants receive their first dose of hepatitis B vaccine as soon as possible after birth, preferably within 24 hours, to prevent mother-to-child (perinatal) HBV transmission, followed by at least 2 subsequent doses of a hepatitis Bcontaining combination or pentavalent vaccine.
- HepB vaccine is most effective if given within 24 hours after birth; however, in some circumstances, delayed vaccination is unavoidable. The longer the delay, the more the vaccine becomes less effective in preventing perinatal transmission — though it will still interrupt other routes of transmission.
- HepB-BD alone cannot prevent mother-to-child infection, it must be followed by at least 2 subsequent doses that are given on-time. The two subsequent doses of hepatitis B vaccine should not be administered earlier than the recommended schedule.

NOT CONTRAINDICATIONS for hepatitis B birth dose administration

- Prematurity
- Low-birth weight
- Small for gestational age
- Mother or infant infected with HIV
- Jaundice

KEY MESSAGE

The hepatitis B vaccine is safe and effective!

The HepB vaccine is the most effective way to prevent HBV infection. The first dose of the hepatitis B vaccine (HepB-BD) given in the first 24 hours of birth followed by the pentavalent vaccination series can prevent HBV infection.

1. WHO: A Guide for Introducing and Strengthening Hepatitis B Birth DoseVaccination http://apps.who.int/iris/bitstream/10665/208278/1/9789241509831_eng.pdf

Hepatitis B Vaccination Schedule

Vaccine	Dose 1	Dose 2	Dose 3	Dose 4
3-dose infant series of less than 1 year	Within 24 hours of birth	1 month after dose 1	6 months after dose 1	
3-dose vaccine series for children less than 1 year	Now	1 month after dose 1	6 months after dose 1	
4 dose combination series (pentavalent vaccination)	Within 24 hours of birth (monovalent vaccine)	6 weeks (pentavelent vaccine)	10 weeks (pentavalent vaccine	14 weeks (pentavalent vaccine)

The World Health Organization (WHO) recommends a 0, 1, and 6-month vaccine schedule, though schedules may vary based on a country's national immunization program.



REMEMBER to administer hepatitis B birth dose within 24 hours of birth!

Tips to improve timely (within 24 hours) HepB-BD vaccination at your facility:

1. Integrate hepatitis B birth dose vaccination with essential newborn care. Assign the responsibility of HepB-BD vaccination to the person who delivers the baby and store the vaccination near the delivery ward, so every child is reached every day, not only on immunization days.
2. Collaborate with traditional birth attendants (TBAs) and private health facilities to ensure and improve access to HepB-BD.
3. Ensure all doses of the vaccine administered are reported accurately.
4. Educate caregivers about the importance of HepB-BD vaccination and encourage them to bring their baby to a health facility for vaccination as soon as possible after birth.
5. Integrate HepB-BD vaccination in postnatal care outreach session and
6. Increase the capacity of community volunteers and mobilizers to educate pregnant women about the importance of HepB-BD vaccination and to link pregnant women to a health facility for antenatal care and vaccination.

Page 12 includes training modules that review the following concepts: 1) hepatitis B virus, 2) HBV prevention with timely immunization. 3) strategies to improve timely HepB-BD administration, 4) vaccine handling and storage, and 50 accurate immunization recording and reporting.

Additional resources such as posters, flipcharts, and palm cards can be found toward the end of this guidance document.

Training



Health care workers are at the center of preventing hepatitis B transmission and need adequate knowledge on how to prevent hepatitis B transmission from mother to child. Below are training modules on 1) hepatitis B virus, 2) HBV prevention with timely immunization, 3) strategies to improve timely HepB-BD adminsstration, 4) vaccine handling and storage, and 5) accurate immunization recording and reporting.

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Module 1: Overviers of Hepatitis B Virus

https://www.dropbox.com/s/11auf3ys5qzkx127/Module%202_HepB%20Project%20Overview.pptx?dl=0

2



Module 2: Hepatitis B Virus Prevention

https://www.dropbox.com/s/3khhfeyrflgr3/Module%203%20-%20HBV%20Infection%20and%20Importance%20of%20Immunization_24th%20August%202021.pptx?dl=0

3



Module 3: Strategies to Improve Timely Hepatitis B Administration

https://www.dropbox.com/s/coua2yu3q2reczh/Module%205_Strategies%20to%20implementing%20timely%20HepB%20BD%20vaccination.pptx?dl=0

4



Module 4: Hepatitis B Vaccine Management

https://www.dropbox.com/s/3khjznfg04niore/Module%206%20-%20Management%20of%20Hep%20B%20Vaccine_24th%20August%202021.pptx?dl=0

5



Module 5: Hepatitis B Recording and Reporting

https://www.dropbox.com/s/r62uzmapdbah8ay/Module%209%20-%20RI%20Data%20Tools.pptx?dl=0

Resources



The following pages have helpful resources for you to print, download and use in your health facility to improve the uptake of timely hepatitis B birth dose administration. Resources include a checklist for health care workers in the labor ward, posters that can serve as reminders to administer timely hepatitis B birth dose, flip charts to aid in educating pregnant women and the community about the importance of timely hepatitis B birth dose, palm cards to distribute as reminders to pregnant women, and digital stories told by people living with hepatitis B.

Checklist	A checklist for health care workers in the labor ward.
Posters	Posters that can serve as reminders to administer timely hepatitis B birth dose.
Flip Charts	Flip charts to aid in educating pregnant women and the community about the importance of timely hepatitis B birth dose.
Palm Cards	Palm cards to distribute as reminders to pregnant women.
Digital Stories	Digital stories told by people living with hepatitis B.

CHECKLIST FOR HEALTH CARE WORKERS IN LABOR WARD

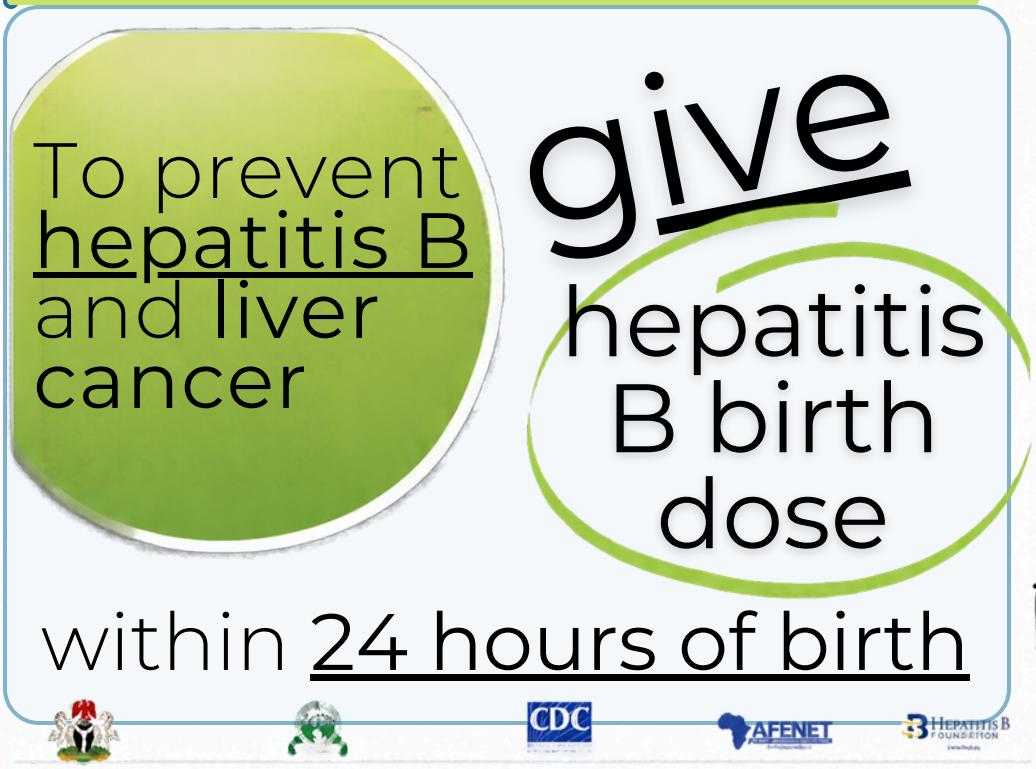
1. ○ Make sure hepatitis B birth dose is available in labor ward
2. ○ Make sure hepatitis B birth dose is stored appropriately
3. ○ Give hepatitis B birth dose **IMMEDIATELY** after birth
4. ○ Record it on the child health card
5. ○ Tally it on the tally sheet in the appropriate column
6. ○ Give immunization register details on birth dose administration
7. ○ Administer other birth vaccines (e.g., BCG and OPV)

QUICK TIP



Post checklist in the maternity ward as a friendly reminder to administer hepatitis B birth dose within the **first 24 hours** of birth.

Posters



Posters can be printed by going to the link below or QR code and downloading. Posters can be hung up in Labor Wards, and throughout the Antenatal Care Clinic

https://www.canva.com/design/DAE3Sceu2XY/544r5J099DhBoY5wj16Q6w/view?utm_content=DAE3Sceu2XY&utm_campaign=designshare&utm_medium=link2&utm_source=sharebutton

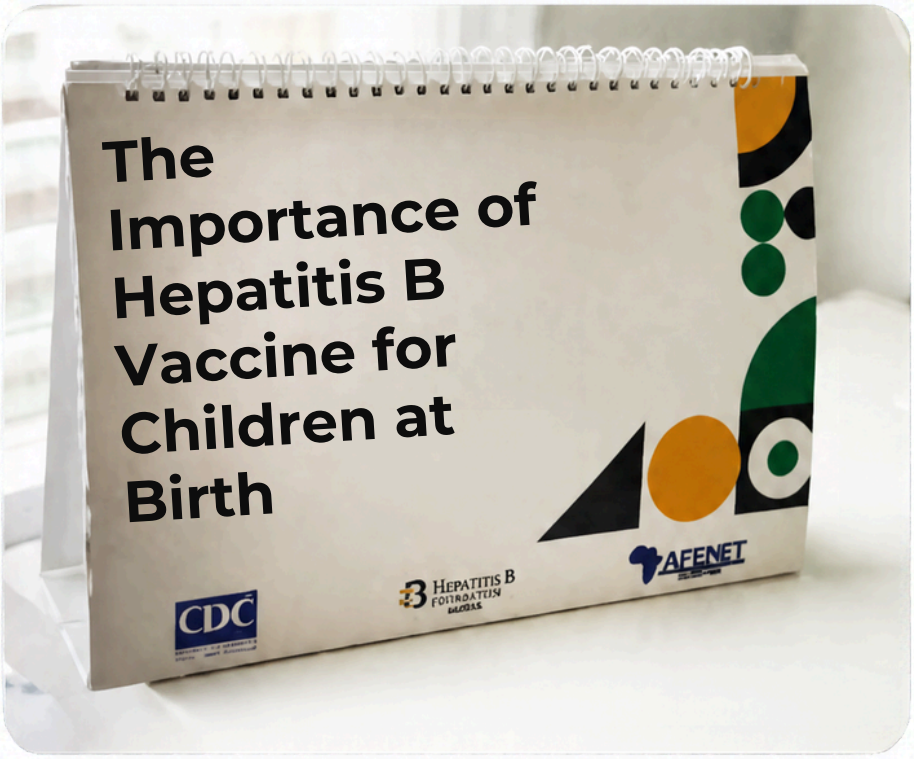


QUICK TIP

You can hang a poster here as a reminder about hepatitis B birth dose

Flip Charts

QUICK TIP



Flip Charts can be printed by going to the link below or QR code and downloading. Flip Charts can be used during Antenatal Care education sessions

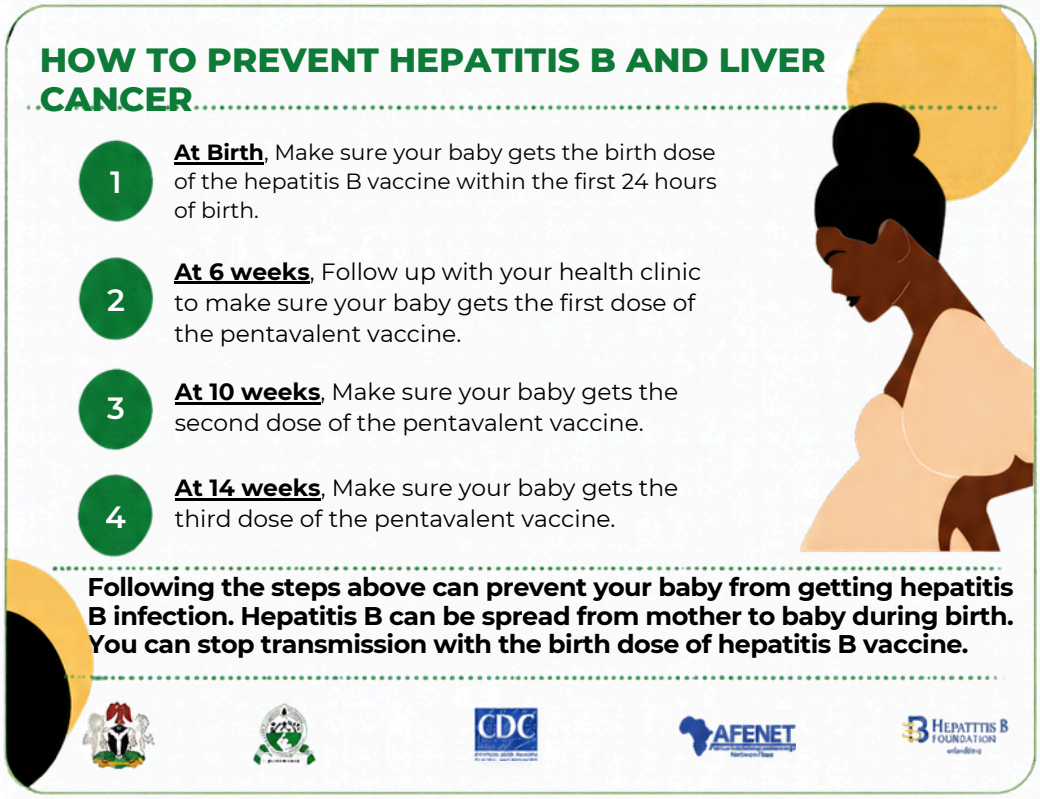
https://www.canva.com/design/DAF6KyYUVIk/KHfYyIAjwy5-aoYeAHhlUQ/edit



A Health Care Worker using flipchart to educate to women during antenatal care

Palm Cards

QUICK TIPS



Palm Cards can be printed by going to the link below or QR code and downloading.

Palm Cards can be given to women and remind them to get birth dose and hep B vaccine for their children.

https://www.canva.com/design/DAF6KyYUVIk/KHffYylAjwy5-aoYeAHH1UQ/edit

A women holds up her reminder palm card she brought with her to the health facility



Digital Stories

Digital stories can be helpful to share with the community and highlight the impact that hepatitis B has had on people living with it. You can view some hepatitis B stories by using the links or QR codes below.

Gold's Story

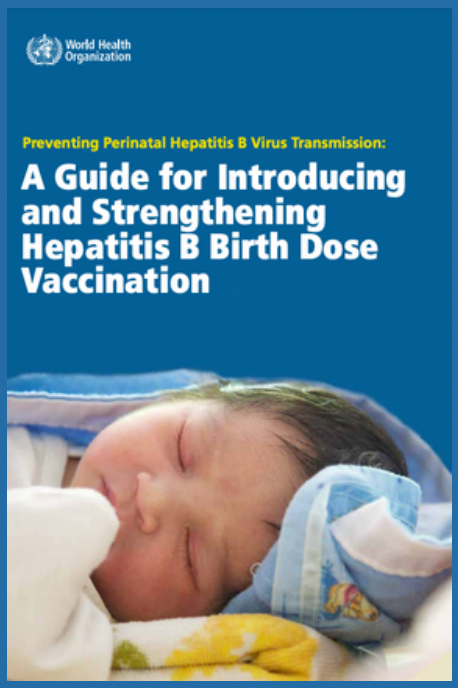
Gold found out she had hepatitis B at the height of the pandemic. She was really scared about her diagnosis and started doing research. She did tests to see if she had any liver damage and to determine her viral load to determine what medication she needed. Her medication is hard to get and she has to place an order for it and it is expensive. She says, “I wish I knew then what I know now about hepatitis B because I would have made sure that every child born in my family would get vaccinated at birth.”It’s very important to know your hepatitis B status, because when you know, you know how to manage it. You can still live a very normal happy life.

https://www.facebook.com/watch/?v=996573547686203

Sonia's Story

Sonia is from Nigeria. She discusses how important it was for her to vaccinate her children at birth and the hurdles she faced in receiving the birth dose vaccine in Nigeria. It was costly, and unavailable in her town, so they had to travel to get the dose. She also discusses to issues with stigma and discrimination and admits that she has not told many people outside of the medical community. She stresses the need for understanding of the virus and states, "It does not make you less than a person."

OTHER HELPFUL RESOURCES



Preventing Perinatal Hepatitis B Infection. A Guide for Introducing and Strengthening Hepatitis B Birth Dose Vaccination. World Health Organization. 2015. file:///Users/catherinefreeland/Downloads/9789241509831_eng.pdf