



The Viral Hepatitis Prevention Board (VHPB) supports the continued recommendation for universal hepatitis B vaccination of all newborns within 24 hours of birth

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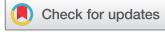
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EDITORIAL

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The Viral Hepatitis Prevention Board (VHPB) supports the continued recommendation for universal hepatitis B vaccination of all newborns within 24 hours of birth

In this Editorial, the Viral Hepatitis Prevention Board (VHPB) expresses its strong support for the continued recommendation for universal hepatitis B vaccination of all newborns within 24 hours of birth, followed by completion of the three dose vaccine series. This policy is essential to sustain the progress made toward eliminating hepatitis B virus (HBV) infection and its devastating health consequences.¹

For more than three decades, the VHPB has promoted evidence-based policies and strategies for hepatitis B prevention and control across Europe with global outreach. Since its establishment in 1992, the Board has collaborated with national immunization programs, health authorities, and international partners to strengthen hepatitis B vaccination policies and improve coverage, particularly for newborns and infants, who are the persons at the highest risk of developing chronic HBV infection and a one-in-four risk of premature mortality from HBV-related liver disease and liver cancer in later life.²⁻⁸

The scientific and public health evidence supporting universal hepatitis B birth dose vaccination is unequivocal.^{7,9} Infants born to hepatitis B positive mothers have a 25–90% risk of acquiring the infection at birth, depending on the maternal HBV DNA level.^{1,7,10,11} Of newborns infected with HBV, 80%–90% become chronically infected with the virus. Universal newborn vaccination prevents HBV infection along with HBV-related morbidity and mortality.⁷ Hepatitis B vaccine is the world's first vaccine to prevent an infection that can lead to cancer. Globally, primary liver cancer, which is often caused by chronic HBV infection, is the third leading cause of cancer-related deaths.

Timely administration of the hepatitis B birth dose within 24 hours for exposed newborns is key to prevention. As the child has already become exposed to the virus, the vaccine must be immediately delivered to the newborn to rapidly develop antibodies to prevent HBV infection. A delay in the hepatitis B birth dose by a day or more weakens protection needlessly increasing the risk of HBV infection, chronic incurable disease and premature mortality for exposed newborns.¹²

Experience from the United States, Europe and around the world demonstrates that selective vaccination strategies alone, such as screening all pregnant women and vaccinating (at birth) only newborns of hepatitis B-positive mothers, are insufficient to prevent perinatal and early childhood HBV infection.¹³⁻¹⁸ While antenatal HBV screening can help identify pregnant women living with HBV and guide newborn vaccination, it is not consistently implemented, and test results are not always available at the time of delivery.^{17,19,20} In addition, there are access issues to such screening programs (including health literacy, health insurance coverage, and financial barriers, among others).^{21,22}

In the European Union/European Economic Area (EU/EEA), all countries report implementation of universal antenatal HBV screening. However, only 12 of 30 currently meet the WHO 2025 interim target of 90% coverage of antenatal screening or have data on it.²³

Both the EU and the United States have a higher burden of hepatitis B among at-risk populations where routine HBV screening for pregnant women is not always accessible.^{24,25} These system gaps that threaten access to prenatal care highlight the importance of maintaining a universal birth dose of hepatitis B vaccine as the safety net that protects every child, regardless of maternal screening status or healthcare setting. For these reasons, countries like Australia and Canada have provided the evidence supporting the move from selective to universal hepatitis B birth dose implementation.^{26,27}

The safety and effectiveness of the hepatitis B vaccine offered at birth have been confirmed through decades of research, continuous pharmacovigilance, and billions of doses administered globally. The vaccine has an excellent safety profile, with rare adverse reactions and overwhelming evidence of benefit

in preventing infection, cirrhosis, and liver cancer.^{7,28–32} Besides its proven effectiveness, there is important evidence from modeling that birth dose and infant HBV vaccination can be not only cost-effective but even cost-saving, providing value for money.²⁷ For decades the ACIP's transparent, evidence-based decision-making process has contributed to the remarkable success of hepatitis B prevention in the United States. Revising or weakening the universal newborn vaccination policy could risk reversing decades of progress and expose new generations to preventable infection and disease including cancer.

In summary, the Viral Hepatitis Prevention Board urges ACIP to maintain its current recommendation for universal hepatitis B birth dose vaccination of newborns as a cornerstone of hepatitis B elimination. Sustaining this recommendation ensures that the United States continues to lead by example in protecting the health of children and preventing hepatitis B – related disease and death.

Disclosure statement

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References

1. Schillie S, Vellozi C, Reingold A, Harris A, Haber P, Ward JW, Nelson NP. Prevention of hepatitis B virus infection in the United States: recommendations of the Advisory Committee on Immunization Practices. *MMWR Recomm Rep.* 2018;67(1):1–31. doi: [10.15585/mmwr.rr6701a1](https://doi.org/10.15585/mmwr.rr6701a1).
2. Okada K, Kamiyama I, Inomata M, Imai M, Miyakawa Y, Mayumi M. E antigen and anti-e in the serum of asymptomatic carrier mothers as indicators of positive and negative transmission of hepatitis B virus to their infants. *N Engl J Med.* 1976;294(14):746–749. doi: [10.1056/NEJM197604012941402](https://doi.org/10.1056/NEJM197604012941402).
3. Beasley RP, Trepo C, Stevens CE, Szmuness W. The e antigen and vertical transmission of hepatitis B surface antigen. *Am J Epidemiol.* 1977;105(2):94–98. doi: [10.1093/oxfordjournals.aje.a112370](https://doi.org/10.1093/oxfordjournals.aje.a112370).
4. Hallauer J. VHPB: Summary of strategies and recommendations. *Vaccine.* 1995;13(1):61–63. doi: [10.1016/0264-410X\(95\)93551-J](https://doi.org/10.1016/0264-410X(95)93551-J).
5. Khetsuriani N, Mosina L, Van Damme P, Mozalevskis A, Datta S, Tohme R. Progress toward hepatitis B control: World Health Organization European Region, 2016–2019. *MMWR Morb Mortal Wkly Rep.* 2021;70(30):1029–1035.
6. Razavi-Shearer D, Gamkrelidze I, Nguyen MH, Chen D-S, Van Damme P, Abbas Z, Abdulla M, Abou Rached A, Adda D, Aho I, et al. Global prevalence, treatment, and prevention of hepatitis B virus infection in 2016: a modelling study. *Lancet Gastroenterol Hepatol.* 2018;3(6):383–403. doi: [10.1016/S2468-1253\(18\)30056-6](https://doi.org/10.1016/S2468-1253(18)30056-6).
7. Van Damme P, Ward JW, Shouval D, Zanetti A. Hepatitis B. In: Plotkin S, Orenstein W, Offit P, Edwards K, editors. *Plotkin's vaccines.* 7th ed. Philadelphia (PA): Elsevier; 2018. p. 342–374.
8. Hall E, Wodi AP, Hamborsky J, et al., editors. *Centers for Disease Control and Prevention. Epidemiology and prevention of vaccine-preventable diseases,* 14th; Washington, DC: Public Health Foundation; 2021. <https://www.cdc.gov/vaccines/pubs/pinkbook/hepb.html>.
9. Nelson N, Easterbrook P, McMahon B. Epidemiology of hepatitis B virus infection and impact of vaccination on disease. *Clin Liver Dis.* 2017;20(4):607–628. doi: [10.1016/j.cld.2016.06.006](https://doi.org/10.1016/j.cld.2016.06.006).
10. World Health Organization. Hepatitis: preventing mother-to-child transmission of the hepatitis B virus [Internet]. Geneva: WHO; [accessed 2025 Oct 28]. <https://www.who.int/news-room/fact-sheets/detail/hepatitis-b>.
11. Brubaker SD, Ward J, Hiebert L, Morgan RL. Developing an evidence base for the delivery of hepatitis B virus birth dose vaccination: an evidence map and critical appraisal of systematic reviews and guidelines. *Clin Liver Dis (Hoboken).* 2021;17(5):375–381. doi: [10.1002/cld.1103](https://doi.org/10.1002/cld.1103).
12. Marion SA, Pastore M, Pi DW, Mathias RG. Long-term follow-up of hepatitis B vaccine in infants of carrier mothers. *Am J Epidemiol.* 1994;140(8):734–746. doi: [10.1093/oxfordjournals.aje.a117321](https://doi.org/10.1093/oxfordjournals.aje.a117321).
13. Fischer G, Wang S, Ahring S, Fowler K, Hainline S, Chinglong M, Jacques-Carroll L, Bell B, Williams I. An investigation of perinatal hepatitis B virus infections among a high risk population: the delivery hospital as a safety net. *Pediatr Infect Disease J.* 2009;28(7):593–597. doi: [10.1097/INF.0b013e318196bf5c](https://doi.org/10.1097/INF.0b013e318196bf5c).
14. de Villiers MJ, Nayagam S, Hallett TB. The impact of the timely birth dose vaccine on the global elimination of hepatitis B. *Nat Commun.* 2021;12(1):6223. doi: [10.1038/s41467-021-26475-6](https://doi.org/10.1038/s41467-021-26475-6).
15. Kolasa MS, Tsai Y, Xu J, Fenlon N, Schillie S. Hepatitis B surface antigen testing among pregnant women, United States 2014. *Pediatr Infect Disease J.* 2017;36(7):e175–e180. doi: [10.1097/INF.00000000000001516](https://doi.org/10.1097/INF.00000000000001516).
16. Koneru A, Fenlon N, Schillie S, Williams C, Weng MK, Nelson N. National perinatal hepatitis B prevention program: 2009–2017. *Pediatrics.* 2021;147(3):e20201823. doi: [10.1542/peds.2020-1823](https://doi.org/10.1542/peds.2020-1823).

17. Willis BC, Wortley P, Wang SA, Jacques-Carroll L, Zhang F. Gaps in hospital policies and practices to prevent perinatal transmission of hepatitis B virus. *Pediatrics*. 2010;125(4):704–711. doi: [10.1542/peds.2009-1831](https://doi.org/10.1542/peds.2009-1831).
18. Martin JA, Osterman MJK. Changes in prenatal care utilization: United States, 2019–2021. *Natl Vital Stat Rep*. 2023;72(4):1–14.
19. Nelson NP, Jamieson DJ, Murphy TV. Prevention of perinatal hepatitis B virus transmission. *J Pediatr Infect Dis Soc*. 2014;3 Suppl 1(Suppl 1):S7–S12. doi: [10.1093/jpids/piu064](https://doi.org/10.1093/jpids/piu064).
20. Centers for Disease Control and Prevention. A comprehensive immunization strategy to eliminate transmission of hepatitis B virus infection in the United States: recommendations of the Advisory Committee on Immunization Practices (ACIP); part 1: immunization of infants, children, and adolescents. *MMWR*. 2005;54: RR-16. <https://www.immunize.org/wp-content/uploads/protect-newborns/guide/birth-dose.pdf>.
21. Al-Obaid L, Roediger R, Lisker-Melman M. Pregnancy and hepatitis B immunization: a commentary on maternal knowledge and vertical transmission risks. *Arch Gastroenterol Res*. 2021;2(2):48–54.
22. Lisker-Melman M, Khalili M, Belle SH, Terrault NA, Lin HS, Smith CI, Chung RT, Tsai N, Bzowej NH, Tran TT, et al. Maternal knowledge of the risk of vertical transmission and offspring acquisition of hepatitis B. *Ann Hepatol*. 2020;19(4):388–395. doi: [10.1016/j.aohep.2020.04.006](https://doi.org/10.1016/j.aohep.2020.04.006).
23. European Centre for Disease Prevention and Control (ECDC). ECDC evidence brief: prevention of hepatitis B and C in the EU/EEA [Internet]. Stockholm: ECDC; 2024 [accessed 2025 Oct 28]. <https://www.ecdc.europa.eu/en/publications-data/evidence-brief-prevention-hepatitis-b-c-eueea>.
24. Pham TTH, Maria N, Cheng V, Nguyen B, Toy M, Hutton D, Conners EE, Nelson NP, Salomon JA, So S. Gaps in prenatal hepatitis B screening and management of HBsAg positive pregnant persons in the U.S. 2015–2020. *Am J Preventative Med*. 2023;65(1):52–59. doi: [10.1016/j.amepre.2023.01.041](https://doi.org/10.1016/j.amepre.2023.01.041).
25. US Preventive Services Task Force, Owens DK, Davidson KW, Krist AH, Barry MJ, Cabana M, Caughey AB, Doubeni CA, Epling JW Jr, Kemper AR, et al. Screening for hepatitis B virus infection in pregnant women: US Preventive Services Task Force reaffirmation recommendation statement. *JAMA*. 2019;322(4):349–354. doi: [10.1001/jama.2019.9365](https://doi.org/10.1001/jama.2019.9365).
26. Australian Government Department of Health. Australian Immunisation Handbook: Hepatitis B [Internet]. Canberra: Australian Government; [accessed 2025 Oct 28]. <https://immunisationhandbook.health.gov.au/contents/vaccine-preventable-diseases/hepatitis-b>.
27. Biondi M, Estes C, Razavi-Shearer D, Sahdra K, Lipton N, Shah H, Capraru C, Janssen HLA, Razavi H, Feld JJ. Cost-effectiveness modelling of birth and infant dose vaccination against hepatitis B virus in Ontario from 2020 to 2050. *CMAJ Open*. 2023;10(11):E24–32. doi: [10.9778/cmajo.20210284](https://doi.org/10.9778/cmajo.20210284).
28. World Health Organization. Hepatitis B vaccines: WHO position paper – July 2017 [Internet]. Geneva: WHO; 2017 [accessed 2025 Oct 28]. <https://iris.who.int/server/api/core/bitstreams/c55eb2dd-3b78-452d-b93c-a4471b2bdfed/content>.
29. Eriksen EM, Perlman JA, Miller A, Marcy SM, Lee H, Vadheim C, Zangwill KM, Chen RT, DeStefano F, Lewis E, et al. Lack of association between hepatitis B birth immunization and neonatal death: a population-based study from the Vaccine Safety Datalink project. *Pediatr Infect Dis J*. 2004;23(7):656–662. doi: [10.1097/01.inf.0000130953.08946.d0](https://doi.org/10.1097/01.inf.0000130953.08946.d0).
30. Haber P, Moro PL, Ng C, Lewis PW, Hibbs B, Schillie SF, Nelson NP, Li R, Stewart B, Cano MV. Safety of currently licensed hepatitis B surface antigen vaccines in the United States, vaccine adverse event reporting system (VAERS), 2005–2015. *Vaccine*. 2018;36(4):559–564. doi: [10.1016/j.vaccine.2017.11.079](https://doi.org/10.1016/j.vaccine.2017.11.079).
31. Woo EJ, Miller NB, Ball R, VAERS Working Group. Adverse events after hepatitis A and B combination vaccine. *Vaccine*. 2006;24(14):2685–2691. doi: [10.1016/j.vaccine.2005.10.049](https://doi.org/10.1016/j.vaccine.2005.10.049).
32. Lewis E, Shinefield HR, Woodruff BA, Black SB, Destefano F, Chen RT, Ensor R. Safety of neonatal hepatitis B vaccine administration. *Pediatr Infect Dis J*. 2001;20(11):1049–1054. doi: [10.1097/00006454-200111000-00009](https://doi.org/10.1097/00006454-200111000-00009).

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