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** NOTICE: This health alert provides written guidance for health care professionals and others who may need to take action to prevent or control a notifiable condition. It is not intended to provide guidance for the general public.*

Perinatal Hepatitis B Update

Requested Actions:

- Screen all pregnant people for Hepatitis B by testing for HBsAg during each pregnancy and ensuring that each HBsAg-positive pregnant person is tested for HBV DNA. Consider antiviral therapy for pregnant people. American Association for the Study of Liver Diseases (AASLD) guidelines recommend maternal antiviral therapy when standard indications for antiviral therapy are present and when HBV DNA is >200,000 IU/mL.
https://www.aasld.org/sites/default/files/2019-06/HBVGuidance_Terrault_et_al-2018-Hepatology.pdf
- Provide hepatitis B immune globulin (HBIG) and hepatitis B vaccine to infants born to infected mothers within 12 hours of birth.
- Screen all pregnant people for HBsAg at delivery. Vaccinate infants born to people whose Hepatitis B status is unknown within 12 hours of birth for Hepatitis B. Give infants weighing less than 2000 grams HBIG within 12 hours of birth. If the mother is determined to be HBsAg-positive, infants weighing at least 2,000 grams should also receive HBIG as soon as possible but no later than age 7 days.
- Vaccinate all infants with a complete series of Hepatitis B vaccination with the first dose administered within 24 hours of birth which may be 3 or 4 doses depending on exposure status and weight. Follow the Centers for Disease Control Hepatitis B vaccination guidelines for infants which can be accessed at <https://www.cdc.gov/vaccines/pubs/pinkbook/hepb.html>
- Test all infants born to HBsAg-positive mothers and infants born to mothers whose Hepatitis B status is unknown for anti-HBs and HBsAg 3-6 months after completion of the Hepatitis B vaccination series (between 9 and 12 months of age). For infants who do not develop an immune response to vaccination repeat the three dose series of Hepatitis B vaccine and retest 3-6 months after the second vaccination series for anti-HBs and HBsAg. Report all children who do not respond to six doses of Hepatitis B vaccine and test positive

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for HBsAg to Thurston County Public Health. The Washington State Department of Health Hepatitis B Guideline can be accessed at: <https://doh.wa.gov/sites/default/files/legacy/Documents/5100//420-040-Guideline-HepatitisB.pdf>

- Report all positive HBsAg results for children under age 2 born to mothers who have not been enrolled in the Perinatal Hepatitis B program to Thurston County Public Health.
- Please report all pregnant people who test positive to for HBsAg to Thurston County Public Health to initiate case management by the Perinatal Hepatitis B program.
- All Reports may be called into the Communicable Disease Reporting Line 360-786-5470 or faxed to (833) 499-1803.
- Case management of HBsAg-positive mothers and their infants is performed by Benjamin Bassett, TCPHSS Perinatal Hep B Coordinator, benjamin.bassett@co.thurston.wa.us, (360) 490-1213.

Background:

Perinatal Hepatitis B

Hepatitis B virus (HBV) infection in a pregnant woman poses a serious risk to her infant at birth. Without postexposure immunoprophylaxis, approximately 40% of infants born to HBV-infected mothers in the United States will develop chronic HBV infection, approximately one-fourth of whom will eventually die from chronic liver disease.

Perinatal HBV transmission can be prevented by identifying HBV-infected (i.e., hepatitis B surface antigen [HBsAg]-positive) pregnant women and providing hepatitis B immune globulin and hepatitis B vaccine to their infants within 12 hours of birth.

Recent Washington trends: Since 1987 when there were 1,126 acute cases, hepatitis B incidence has decreased to fewer than 50 acute cases per year with increased vaccination. On average, 1,122 cases of chronic hepatitis B were reported per year between 2005 and 2014. Between 2005 and 2013 3,060 babies born to HBsAg positive women were reported to local health jurisdictions. Of these (98%) received treatment within one day of birth and only 20 infants receiving all recommended treatment and follow-up testing developed chronic hepatitis B infections.

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Legal Reporting Requirements

Hepatitis B Surface Antigen Positive Pregnant Women (each pregnancy)

- *Health care providers*: notifiable to local health jurisdiction within 3 business days.
- *Health care facilities*: notifiable to local health jurisdiction within 3 business days.
- *Laboratories*: all hepatitis B virus by HBsAg (surface antigen), HBeAg (e antigen), or HBV DNA notifiable on a monthly basis.

Perinatal Hepatitis B

- *Health care providers*: notifiable (as acute hepatitis B) to local health jurisdiction within 3 business days of receiving confirming test result.
- *Health care facilities*: notifiable (as acute hepatitis B) to local health jurisdiction within 3 business days of receiving confirming test result.
- *Laboratories*: all hepatitis B virus by HBsAg (surface antigen), HBeAg (e antigen), or HBV DNA notifiable on a monthly basis.

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Hepatitis B vaccine schedules for infants ($\geq 2,000$ g birthweight), by maternal HBsAg status

Maternal HBsAg Status	Single-antigen vaccine dose	Single-antigen vaccine age indications	Single-antigen + combination vaccine [†] dose	Single-antigen + combination vaccine [†] age indications
Positive	1	Birth (≤ 12 hrs)	1	Birth (≤ 12 hrs)
	HBIG [‡]	Birth (≤ 12 hrs)	HBIG [‡]	Birth (≤ 12 hrs)
	2	1-2 mos	2	2 mos
	3	6 mos [§]	3	4 mos
	N/A	N/A	4	6 mos [§]
Unknown*	1	Birth (≤ 12 hrs)	1	Birth (≤ 12 hrs)
	2	1-2 mos	2	2 mos
	3	6 mos [§]	3	4 mos
	N/A	N/A	4	6 mos [§]
Negative	1	Birth (≤ 24 hrs)	1	Birth (≤ 24 hrs)
	2	1-2 mos	2	2 mos
	3	6-18 mos [§]	3	4 mos
	N/A	N/A	4	6 mos [§]

* Mothers should have blood drawn and tested for HBsAg as soon as possible after admission for delivery; if the mother is found to be HBsAg positive, the infant should receive HBIG as soon as possible but no later than age 7 days.

[†] Pediarix and Vaxelis should not be administered before age 6 weeks.

[‡] HBIG should be administered at a separate anatomical site from vaccine.

[§] The final dose in the vaccine series should not be administered before age 24 weeks (164 days).

Courtesy of Hamborsky, Jennifer, and Andrew Kroger, eds. *Epidemiology and prevention of vaccine-preventable diseases, E-Book: The Pink Book*. Public Health Foundation, 2021. Accessed online at: <https://www.cdc.gov/vaccines/pubs/pinkbook/index.html>

Hepatitis B vaccine schedules for infants (<2,000 g birthweight), by maternal HBsAg status

Maternal HBsAg Status	Single-antigen vaccine dose	Single-antigen vaccine age indications	Single-antigen + combination vaccine [†] dose	Single-antigen + combination vaccine [†] age indications
Positive	1	Birth (≤12 hrs)	1	Birth (≤12 hrs)
	HBIG [‡]	Birth (≤12 hrs)	HBIG [‡]	Birth (≤12 hrs)
	2	1 mos	2	2 mos
	3	2-3 mos	3	4 mos
	4	6 mos [§]	4	6 mos [§]
Unknown*	1	Birth (≤12 hrs)	1	Birth (≤12 hrs)
	HBIG [‡]	Birth (≤12 hrs)	HBIG [‡]	Birth (≤12 hrs)
	2	1 mos	2	2 mos
	3	2-3 mos	3	4 mos
	4	6 mos [§]	4	6 mos [§]
Negative	1	Hospital discharge or age 1 mo	1	Hospital discharge or age 1 mo
	2	2 mos	2	2 mos
	3	6-18 mos [§]	3	4 mos
	N/A	N/A	4	6 mos [§]

[†] Pediarix and Vaxelis should not be administered before age 6 weeks.

[‡] HBIG should be administered at a separate anatomical site from vaccine.

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For more perinatal hepatitis B resources, please visit:

- [Washington State Department of Health Perinatal Hepatitis B program](#)
- [Washington State Department of Health Notifiable Conditions Guideline for Hepatitis B](#)
- [Perinatal Transmission of Hepatitis B virus | CDC](#)
- [Screening and Referral Algorithm for Hepatitis B Virus \(HBV\) Infection Among Pregnant Women \(cdc.gov\)](#)
- [CDC HepatitisB SerologicTest FactSheet9.indd](#)
- [CDC Epidemiology and Prevention of Vaccine-Preventable Diseases](#)

THANK YOU FOR REPORTING

TO REPORT A NOTIFIABLE CONDITION IN THURSTON COUNTY

Voice mail for reporting non-immediately reportable conditions (24 hours a day)	Phone: 360-786-5470 Fax: 360-867-2601
Day time immediately reportable conditions – Call detailed information to the 24-hour Notifiable Condition Reporting Line at 360-786-5470. Messages are picked up hourly. If a call back can't wait call 360-867-2500 and ask staff to locate a Communicable Disease staff.	Phone: 360-786-5470
After hours immediately and 24-hour reportable conditions or a public health emergency	Call 1-800-986-9050
No one is available with Thurston County Public Health and condition is immediately notifiable	1-877-539-4344

Communicable Disease Updates are posted online at: <http://bit.ly/CDUpdatePHSS>