

# Perinatal Hepatitis B Prevention Program Resource Manual



### Mission:

To protect, promote & improve the health of all people in Florida through integrated state, county & community efforts.



Rick Scott Governor

John H. Armstrong, MD, FACS State Surgeon General & Secretary

December 1, 2013

Dear Perinatal Hepatitis B Prevention Program Coordinators,

The Perinatal Hepatitis B Prevention Program Resource Guide is to assist you in your efforts to prevent the transmission of perinatal hepatitis B. This guide is available online for downloading at <a href="http://www.immunizeflorida.org">http://www.immunizeflorida.org</a>.

Sincerely,

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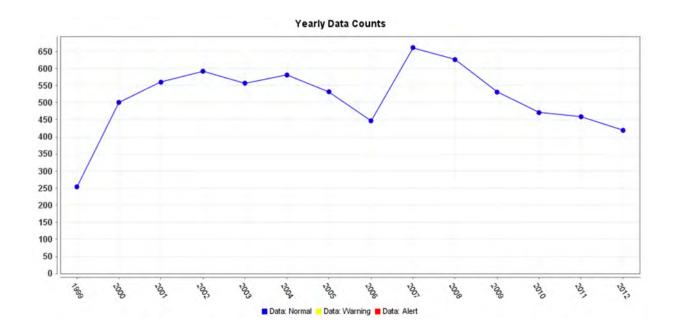


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### **History of the Florida Perinatal Hepatitis B Prevention Program**

### **Background and Overview**

The fundamental goal of the Perinatal Hepatitis B Prevention Program (PHBPP) is preventing perinatal hepatitis B virus (HBV) infection by identifying pregnant women who are hepatitis B surface-antigen (HBsAg) positive and ensuring proper immunoprophylaxis of their infants and household contacts. To accomplish this, one of the primary functions of the program is to assure that all women who present to a health care provider for prenatal health care services are screened for HBV infection. The effectiveness of the program is gauged by the thoroughness of reporting. However, prior to 1999, case reporting was solely based on Department of Health policy, which mandated county health departments (CHDs) report HBsAg-positive tests. In late 1993 and early 1994, CHDs began to divest themselves of prenatal health care services. Additional policy would be needed to both improve reporting and, ultimately, outcomes. The program received assistance from Section 64D-3.013 (6), Florida Administrative Code (FAC), *Procedures for Control of Specific Communicable Diseases - HBsAg screening and reporting rules*. As a result, Florida experienced a dramatic increase in reported cases.



Source: Essence-Florida Database 1999-2012 Essence Merlin Reportable Disease Data yearly Data Counts (July, 2013)



### **PHBPP Significant Events Timeline**

- On May 12, 1989, Florida's Department of Health implemented its first policy for the detection and prevention of perinatal transmission of the hepatitis B virus. This policy was expanded to include a mandate requiring CHDs to report positive HBsAg perinatal results to the Immunization Program. This resulted in a sharp increase in reporting from 1990 to 1991 (3 cases to 146 reported, respectively).
- 2. In 1991, two years following policy implementation, Florida received federal grant funds for the purpose of expanding perinatal hepatitis B prevention activities. A perinatal hepatitis B registry was developed, however, only positive HBsAg test results from the state laboratories were required for reporting. This meant that cases identified by other laboratories were not required to be reported.
  - On February 26, 1992, Florida passed a rule requiring all pregnant women be screened for HBsAg. In coordination with the expansion of the PHBPP, this rule had a positive impact for identifying new cases. From 1991 to 1992, Florida saw another increase in reported cases.
  - From 1994 to 1998 many of Florida's CHDs began contracting with private providers for prenatal health care services. These providers were not using state laboratories. Again, it can be concluded that outsourcing of services by CHDs led to the decrease in case reports for the years 1994-1998.
  - A significant impact on reporting was caused by a statutory amendment, Section 409.9122, Florida Statute (FS), Mandatory Medicaid Managed Care Enrollment. This amendment states that all Medicaid recipients (the traditional CHD client base) must be enrolled in a managed-care plan or in MediPass by January 1, 1997. The pregnant recipients are required to be tested for HBsAg early in pregnancy.
  - On July 5, 1999, Florida amended a reporting requirement into rule for hepatitis B, Section 64D-3.013 (6) FAC, HBsAg screening reporting rules. All positive HBsAg reports from private and public laboratories must be reported to the Department of Health. This rule alone spurred an 89% increase in reporting from 1999 compared to the previous year.
  - In 2000, the PHBPP data tracking transitions to the electronic tracking of all HBsAgpositive women, their infants and contacts using the Florida Merlin Communicable Disease Tracking System.
  - On December 24, 2002, Section 64D-3.019, FAC, Blood Testing of Pregnant Women, was amended to ensure that pregnant women are tested for HBsAg at initial provider visit and at 28-32 weeks of pregnancy. A blood sample is also taken from women who appear for delivery without a record of a test for HBsAg.
  - On December 23, 2005, recommendations by the Advisory Committee on Immunization Practices (ACIP) were published: A comprehensive immunization strategy to eliminate transmission of hepatitis B virus infection in the United State: recommendations of the Advisory Committee on Immunization Practices (ACIP), Part 1: Immunization of



Infants, Children, and Adolescents, MMWR 2005; 54(RR-16).

- On December 8, 2006, additional recommendations by the ACIP were published: 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 II: Immunization of Adults, MMWR 2006; 55(RR-16).
- On November 20, 2006, sections 64D-3.013, FAC and 64D-3.019, FAC were repealed and replaced with section 64D-3.040 (7), FAC and 64D-3.042, FAC, respectively.

Identifying expectant mothers who are HBsAg-positive is the first step in interrupting perinatal transmission. The second step is to immunize their infants as soon as possible. Hepatitis B vaccine and one dose of hepatitis B immune globulin (HBIG) administered within 12-24 hours after birth are 85%-95% effective in preventing both acute hepatitis B infection and chronic infection. Without prompt immunization, there are serious risks. We know that 90% of infants infected through perinatal transmission will become chronic carriers, infectious to others and at risk for development of serious liver disease later in life. Also, 25% or more will die from cirrhosis or primary liver cancer, usually in their productive adult life. Therefore, follow-up is crucial. Follow-up includes making sure that all infants receive one dose of HBIG, three doses of hepatitis B vaccine and post-vaccination testing.

Florida's PHBPP has provided hepatitis B prevention services to over 17,000 women, infants and their household contacts. Services are rendered through the 67 county health departments. Eight county health departments have PHB supplemental positions to assist with case management activities of these identified women, their infants and contacts.

In conclusion, we have come from a reported low of three perinatal hepatitis B cases in 1990 to 416 cases in 2012. Though we experienced some lulls in reporting over the years, the PHBPP has weathered changes and increased activities to improve outcomes.

Florida added a reporting requirement in July 1999 for all laboratories to report positive test results of HBsAg to the their local county health department. The efforts of laws, rules, Perinatal Hepatitis B Prevention Coordinators, Division of Disease Control and Health Protection collaborations (Bureaus of Communicable Disease and Epidemiology) and collaborations with other programs (i.e., WIC, Medicaid, Healthy Start and Maternal and Child Health) have paid dividends in guiding, informing and educating providers and the general public about requirements and changes to prevent the transmission of hepatitis B disease.



# The Role of a County PHBPP Coordinator A Case Management Guide

- 1. Become educated on the Perinatal Hepatitis B Prevention Program (PHBPP)
  - (A) See: History of the Florida PHBPP
  - (B) Utilize CDC website for resources, training and additional information
    - (1) http://www.cdc.gov/hepatitis/HBV/PerinatalXmtn.htm
- 2. Become aware of Department of Health Policies pertaining to Perinatal Hepatitis B Prevention
  - (A) DOHP 350-7-13 Detection and Prevention of Perinatal Hepatitis B
- 3. Educate area prenatal care providers and hospitals of Florida laws, reporting requirements and case management for hepatitis B surface antigen (HBsAg)-positive pregnant women.
  - (A) Become familiar with reporting guidelines and laws regarding prevention of perinatal hepatitis B.
    - See: Reporting Guidelines/Florida Laws Regarding Perinatal Hepatitis B Prevention
  - (B) Utilize PHBPP flyers for education on laws, reporting requirements and case management
    - (1) Every Woman, Every Time
    - (2) Prevent Infants From Becoming Infected With Hepatitis B
    - (3) Safe From the Start
    - (4) Be Proactive: Prevent Hepatitis B Transmission
    - (5) Hepatitis B Serology Nomenclature
    - (6) Testing for Hepatitis B Virus Infection During Pregnancy Flowchart for Prenatal Providers
- 4. Develop relationships with providers and hospital infection control personnel
  - (A) Assess current practices and policies regarding hepatitis B prevention
    - (1) Prenatal care providers are required to test hepatitis B status of all women at initial pregnancy visit, and again at 28-32 weeks gestation for every pregnancy regardless of past test results. If positive, they are required to report to the local Department of Health and planned delivery hospital.
    - (2) Birthing facilities are required to do the following when a woman presents for delivery:
      - (a) Obtain a copy of the original HBsAg lab from the prenatal care provider
      - (b) If a woman presenting for delivery has no prenatal care, no



- laboratory report confirming HBsAg status, or has unknown status, test for hepatitis HBsAg immediately
- (c) Give hepatitis B vaccine to all infants prior to discharge
- (d) Give HBIG and hepatitis B vaccine within 12 hours of birth for infants with HBsAg-positive mothers
- (B) If no policies or standing orders are used, or a deficiency is found in those documents, help prenatal care provider or birthing facility create/amend documents.
- (C) Action Coalition website offers guidelines and sample text for standing orders.
  - (1) <a href="http://www.immunize.org/standing-orders/">http://www.immunize.org/standing-orders/</a>
- 5. Educate area Pediatricians on case management of exposed infants.
  - (A) Pediatricians should know the hepatitis B status of mothers for all their infant patients.
  - (B) Infants with mothers who are HBsAg-positive should complete the hepatitis B series by six months of age and receive post vaccine serology (pvs) at 9-18 months.
    - (1) PVS determines if the exposed infant has developed disease or if immunity was induced by vaccine and ensures immunity for future exposure.
- 6. Perform case finding on a routine basis
  - (A) See: Merlin Case Finding
- 7. Contact provider who ordered testing to confirm woman is pregnant
  - (A) Introduce self as PHBPP coordinator and following up on HBsAg-positive test to obtain pregnancy status.
  - (B) Authority to obtain information
    - (1) Chapters 381.0031, 384.25, and 384.33, Florida Statutes (F.S.), Sections 64D-3.042, 64D-3.029 and 64D-3.040, Florida Administrative Code (F.A.C.)
  - (C) Obtain as much information as possible from prenatal care provider:
    - (1) Copy of original lab report for HBsAg during current pregnancy
    - (2) See: HBsAg-Positive Pregnant Woman Case Information Form for information necessary to complete case reporting
- 8. Report a HBsAg-positive pregnant woman case in Merlin
  - (A) See: Merlin Case Entering For HBsAg-Positive Pregnant Women
- 9. Interview patient
  - (A) Obtain information included on Case Information Form
    - (1) Document in Merlin



- (B) Educate
  - (1) See: Counseling and Education of HBsAg-Positive Pregnant Women
- (C) Refer to a Gastrointestinal specialist for follow-up of chronic hepatitis B
- 10. Submit Merlin case for review (submit CRF)
- 11. Notify planned delivery hospital of HBsAg-positive pregnant woman
  - (A) Send copy of original lab
  - (B) Ask to flag chart for infant to receive HBIG and Hepatitis B vaccine within 12 hours of birth.
    - (1) See: Delivery Facility Alert Form/Infant Birth Data Request
- 12. Investigate and interview contacts
  - (A) May elicit assistance of STD program staff
  - (B) Question hepatitis B status and immunization status
    - (1) See STD program technical assistance guidelines (TAG-355-2-13, 355-19-12) for information on partner notification and confidentiality.
    - (2) See: Follow-up Protocol for Household and Sexual Contacts
  - (C) Hepatitis 09 program can be used to screen adult contacts for hepatitis, and provide vaccine
    - (1) Order vaccine directly through pharmacy using 09 program code
    - (2) Send specimens directly to state lab indicating 09 program code
  - (D) Children in household should be up to date on vaccine and post vaccination screening (pvs) should be offered, since risk for transmission in households is high.
  - (E) Document contact information in Merlin
- 13. Once reviewed and accepted, case will appear on follow up task list when case management is due.
- 14. Cases needing additional information will be sent back by reviewer
  - (A) Update information and re-submit case.
- 15. Perform follow up with planned delivery hospital infection control staff or L&D unit around delivery date or estimated date of confinement (EDC) to obtain infant information
  - (A) Name
  - (B) Date and time of birth
  - (C) Birth weight
  - (D) Date, time, manufacturer, and dose of HBIG and hepatitis B vaccine



- (E) Pediatric provider information
- (F) Infant Insurance status: private, public, un-insured or unknown
  - (1) This is not currently a field in Merlin, but due to new CDC requirements is expected to be added as a required field in 2014.
- 16. Perform case management to ensure exposed infant receives prophylaxis and a complete hepatitis B vaccine series
  - (A) See: Vaccination Schedule for Infants Born to HBsAq-Positive Pregnant Women
  - (B) Around the time 2<sup>nd</sup> vaccine is due, contact pediatric provider
    - (1) If pediatric provider is unknown, contact case to remind of timely vaccination
    - (2) Alert that exposed infant will need timely vaccine and pvs
    - (3) If pvs is done prior to one year of age and individual is Medicaid-eligible, testing can be covered by Medicaid.
  - (C) If infant is late for vaccines, alert provider and mother
    - (1) May need to use additional resources to find infant such as HMS record search etc., WIC search to identify new address
  - (D) Utilize Florida SHOTS to verify vaccination information
  - (E) Document all hepatitis B vaccines received in Merlin
- 17. Perform Case Management to ensure exposed infant receives pvs
  - (A) Must be a least 9 months of age
  - (B) If vaccines are late and third vaccine is given after 9 months, pvs can be done 1-2 months after third dose.
  - (C) Provider must perform HBsAg qualitative screen and anti-HBs (quanatative) screen to verify if infant is protected or has disease
    - (1) Infant is protected if: anti-HBs is > 10mg/dl and HBsAg is negative
      - (a) Close case as complete
    - (2) Infant is susceptible if: anti-HBs is less than 10mg/dl and HBsAg is negative
      - (a) Second series of hepatitis B vaccine is needed at same intervals followed by additional serology
        - If not protected after additional series and no disease present, infant is considered susceptible. No additional doses will be administered.
  - (D) Document pvs date and results in Merlin



### **Special Circumstances**

Case closures-(Miscarriage, false positive, lost to follow ups, completed, service refusals) case transfers.

### 1. Case closure

- (A) Miscarriage
  - (1) Close the Merlin case in the mother information screen under the Other section as "miscarriage"
- (B) False positive
  - (1) If the first lab test received indicates a positive HBsAg and a subsequent lab indicates a negative HBsAg:
    - (a) More testing should be done
    - (b) Further testing should include a repeat HBsAg, hepatitis B surface antibody and hepatitis B core antibody total (HBcAb, total).
      - (1) Will determine if the individual was ever exposed to hepatitis and if the exposure has resulted in immunity.
  - (2) See: Hepatitis B Serology Nomenclature
- (C) Lost to follow up
  - (1) The case may be closed as lost to follow-up, if:
    - (a) At least three unsuccessful attempts to contact case including a certified letter and/or home visit and;
    - (b) Attempts to locate the client must include contacts with other departments or agencies that provide services to the client, such as private providers, WIC, Healthy Start, Healthy Families, STD Program, Department of Children and Families, or other community agencies.
  - (2) Document contact methods attempted in the case notes section prior to case closure.
    - (a) Cases will need to be closed in the mother or infant information screen, depending on which one has required follow-up at that time.
- (D) Refusal of Services
  - (1) If a case or contact refuses health department case management or followup, document in the appropriate information screen (mother, contact, infant)
  - (2) A parent may refuse services for a child. The CHD can decide to report parental refusal of recommended services to the Department of Children and Families.



### Case Transfer

- (A) Transfer from a Florida county to another Florida county
  - (1) Notify the CHD PHBPP Coordinator in the county where the case is moving or has moved.
  - (2) Update the address/phone number and case jurisdiction in the Merlin Tracking System as necessary.
- (B) Transfer from Florida to another state
  - (1) Notify the Florida statewide PHBPP Coordinator of the transfer and updated address and phone number, if applicable.
  - (2) The statewide PHBPP Coordinator will complete a CDC case transfer form and forward all case details to the appropriate state PHBPP Coordinator in a confidential manner.
  - (3) The CHD PHBPP Coordinator will then close the case in the Merlin Tracking System.
- (C) Transfer from another state to Florida
  - (1) The statewide PHBPP Coordinator will notify the appropriate CHD PHBPP Coordinator and forward case details in a confidential manner.
  - (2) The CHD PHBPP Coordinator will enter case details in the Merlin Tracking System and perform all follow-up and case management duties as necessary. The case should be entered with a jurisdiction of "U.S., non-Florida case." The case should not be marked for deletion, as the jurisdiction assignment notates that it is not a Florida case.
- (D) Moved to another country
  - (1) Individuals who have moved to another country will need to be closed as moved out of the country.

### **Perinatal Hepatitis B Cases**

- (A) Disease code (07744) applies to
  - (1) Infants 0-24 months who are HBsAg+
  - (2) Born in the U.S.
  - (3) Exposure source is a mother who is also HBsAg+.
- (B) All perinatal hepatitis B cases should have:
  - (1) HBsAg lab attached
  - (2) One acute or chronic hepatitis B case attached to the case profile
  - (3) Epi-linked mother that is HBsAg+
  - (4) Complete data



- (a) Basic Information
- (b) Profile Information
- (c) Extended data
- (C) Submit Case for Review
- (D) Refer infant to gastrointestinal specialist
- (E) Educate mother on transmission, prevention methods, and need to be followed by a specialist due possible complications or cancers.
- (F) Refer to local support groups, assistance with medications, and other resources.
  - (1) Hep B Moms website: <a href="http://hepbmoms.org/">http://hepbmoms.org/</a>
  - (2) Asian Liver Center: <a href="http://liver.stanford.edu/">http://liver.stanford.edu/</a>
  - (3) Hepatitis B Foundation: <a href="http://www.hepb.org/resources/">http://www.hepb.org/resources/</a>
  - (4) Hepatitis Foundation International: http://www.hepatitisfoundation.org/RESOURCES/Links.html



# Merlin Case Finding Methods for HBsAg-Positive Pregnant Women

### <u>Chronic Hepatitis B & C Task List common criteria search (perform weekly)</u> To find:

- Individuals who have a positive electronic report of: HBsAg, HBcAb, HBV DNA, or HBeAg
- Individuals who already have a chronic case reported and have an additional Hepatitis B lab reported
  - Merlin will not report another chronic case, but will update an existing chronic case
- 1. Go to county Task List
- 2. Under, "Cases" select Chronic Hepatitis B and C Task List
- 3. Do a common criteria search (to narrow search)
  - Filter for Hepatitis B, chronic
  - Add additional filter of, "females of childbearing age (15-44)"
  - Both cases and labs
- 4. Investigate any positive hepatitis B lab to obtain pregnancy status

### ELR search (perform weekly)

### To find:

- Individuals who may be pregnant and hepatitis B tests other than HBsAg have been done
- Acts as a safety net for cases/labs that do not appear on any task list
- 1. Go to county Task List
- 2. Click on ELR Task List
- 3. On left hand tool bar, click on ELR search
- 4. At bottom of search, select date, perform weekly
- 5. For disposition choose, "all"
- 6. Search for any hepatitis B lab results
- 7. Investigate hepatitis B positive females to obtain pregnancy status

\*The Merlin help desk can also set up alerts for coordinators for specific ELR reports, such as those for hepatitis B cases or labs

- Merlin.Helpdesk@FLHealth.gov
- 850-245-4444 x2450



# HBsAg-Positive Pregnant Woman Case Information Form

\*This information is needed to completely report all cases of HBsAg-positive pregnant women. The headers in **bold** correspond to Merlin case entry screens.

### **Profile Detail**

- 1. Name
- 2. Date of Birth
- 3. Race
  - (A) White
  - (B) Black
  - (C) American Indian/Alaskan Native
  - (D) Asian/Pacific Islander
  - (E) Other
  - (F) Unknown
- 4. Ethnicity
  - (A) Hispanic
  - (B) Non-Hispanic
  - (C) Unknown
- 5. Current Address
- 6. Home Phone, Other Phone, Emergency Phone

### Case-Basic Data

Case Information

- 1. Imported
  - (A) Acquired in Florida
  - (B) Acquired Outside of the United States
  - (C) Acquired in United States, Not in Florida
  - (D) Unknown
- 2. Origin
  - (A) Origin refers to the most specific geographic location (country, state, county, and/or city) where the case acquired the disease
- 3. Outbreak
  - (A) Outbreak Associated-Cases should be marked as <u>outbreak associated</u> if two or more cases are epidemiologically linked to one another



- (B) Sporadic
- (C) Unknown
- 4. How CHD first notified
  - (A) ELR
    - (a) Yes
    - (b) No
  - (B) How First Notified
    - (a) Paper Lab
    - (b) Electronic Lab Result
    - (c) Essence Query
    - (d) Hospital
    - (e) Physician
    - (f) Self/Family Member/Individual
    - (g) Other
    - (h) Clinic
    - (i) Unattached Lab List
- 5. Reporter Name

### Clinical Information

- 6. Investigated
  - (A) Yes
  - (B) No
- 7. Interviewed
  - (A) Yes
  - (B) No
- 8. Inpatient Hospitalization
  - (A) Yes
  - (B) No
  - (C) Unknown
- 9. Date Onset (first date exhibited symptoms)
- 10. Lab Report Date
- 11. Date Investigated
- 12. Date Diagnosis
- 13. CHD Notified Date (Date reported to CHD and one other date is required)



### Profile Information at Time of Diagnosis

- 14. Jurisdiction
  - (A) Florida
  - (B) U.S., Non-Florida
  - (C) Outside of U.S.
- 15. Zip Code
- 16. City
- 17. State
- 18. County Assigned

### Sensitive Employment/Attendance Information

- 19. Daycare
  - (A) Attendee
  - (B) Staff
  - (C) No
  - (D) Unknown
- 20. Occupation
  - (A) Food Handler
  - (B) Health care Worker
  - (C) No or non-sensitive occupation
  - (D) Unknown

### **Case Details**

Mother Information

- 1. Contact information including address and phone number
- 2. Has mother tested HBsAg positive before
  - (A) Yes
  - (B) No
  - (C) Unknown
- 3. Medicaid eligible\*
  - (A) Yes
  - (B) No
  - (C) Unknown

<sup>\*</sup>Changes to this field are expected to occur in 2014. These changes are a result of new CDC requirements. Information regarding insurance status of mother will be required and choices will include: private, public, uninsured, and unknown. The same information will also be required when documenting infant birth information.



Tr	reatment
4.	Is mother being monitored by a physician for hepatitis B? If yes, obtain monitoring MD name and contact information
	(A) Yes
	(B) No
	(C) Unknown
5.	Is mother receiving anti-viral treatment for her chronic hepatitis B infection during this pregnancy? If yes, obtain medication history.
	(A) Yes
	(B) No
	(C) Unknown
6.	Did health department assist in referral of care of mother for treatment?
	(A) Yes

### Background

<ol><li>Is mother a refug</li></ol>	ee.
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(B) No

- (A) Yes
- (B) No
- (C) Unknown
- 8. Mother's country of birth
- 9. Mother's primary language
- 10. Can the mother read in her primary language?
  - (A) Yes
  - (B) No
  - (C) Unknown
- 11. Pregnant woman's mother's country of birth
- 12. Was translator needed for interview?
  - (A) Yes
  - (B) No
  - (C) Unknown



### Delivery

- 13. Estimated date of delivery
- 14. Delivery hospital name
- 15. Date hospital notified of delivery
- 16. Is this a multiple birth
  - (A) Yes
  - (B) No
  - (C) Unknown

### Other

- 17. Initial source of case report to the CHD
  - (A) Prenatal Care Provider
  - (B) Infection Control
  - (C) Hospital Nursery
  - (D) Laboratory
  - (E) Pediatric Provider
  - (F) Health Department Staff

### Case Symptoms

- 1. Abdominal pain
- 2. Anorexia/loss of appetite
- 3. Clay colored stool
- 4. Jaundice
- 5. Dark urine
- 6. Nausea
- 7. Vomiting

### Contact Information

- 1. Household, sexual and needle sharing contacts
  - (A) Name
  - (B) Gender
  - (C) Address and phone number
  - (D) Relationship type
  - (E) Vaccination history or known disease status, if unknown recommend pre-vaccination screening and vaccination if necessary



### Counseling and Education for HBsAg-Positive Pregnant Women

The case interview is crucial to the case management process. It includes educating the case on her condition, reassuring her that competent health care workers will coordinate case management services for her infant, household and sexual contacts, and that personal information shared will be kept in confidence. The initial interview must include the following:

- Introduce yourself
- If the case is in the company of another party, request a one-on-one meeting.
- Inform the case that you are a trained public health care professional and have experience assisting persons with hepatitis B in understanding and managing their disease.
- Inform the case that part of your job is to ensure that her medical information remains confidential.

### **Education, Assessment, and Counseling**

The purpose for assessment and education is to establish rapport, get the case accustomed to talking, address concerns so it does not interfere with the rest of the process, gather information that can be used in later sessions, and give sufficient information that support disease intervention behaviors.

- Ask the case what she knows about hepatitis B.
- Ask the case if she has problems or questions regarding hepatitis B and offer clarification on misconceptions.
- Discuss the meaning of the test result(s), and the possible need for additional testing.
- Address concerns, even if they are involved in other elements of the process.
- Question the case in a conversational manner about where she lives, her telephone number, alternate locating information, who lives with her and employment.
- Question the case about current employment (if applicable) and / or jobs she may have had in the past in which she had to handle blood or other body fluids.
- Explain the reasons for all your questions if the client shows signs of concern.
- Educate that hepatitis B is serious, and people usually don't know they have the infection until it is at an advanced disease stage. In addition, routine tests may not discover the disease and it is often transmitted to others unintentionally.



- Explain the availability of appropriate health services for her infant and her contacts.
- Encourage to seek appropriate medical care for her condition from a liver specialist. She will need routine care from a liver specialist for the rest of her life.
- Inform that HBV is not spread by breastfeeding, kissing, hugging, coughing, ingesting food or water, sharing eating utensils or drinking glasses, or casual contact.
- Persons should not be excluded from school, play, child care, work or other settings on the basis of their HBsAg status unless they are prone to biting.
- Involvement with a support group might help case cope with chronic hepatitis B infection.

### Contact Identification

To assure identification, examination, and follow-up of household and sexual contacts:

- Review the medical facts discussed earlier and clearly indicate the need for her household and sexual contacts to be tested as soon as possible.
- Request the names and birthdays of all the children in the home.
- Explain that adults in the home need to be notified they have been exposed to someone with a serious disease.
- Explain the testing and vaccination process.
- Request the names and dates of birth for all adults in the home.
- Explain that her sex partners need to be notified privately of their exposure to a serious disease.
- Work together to devise a plan for notifying her sex partners.
- If the case seems hesitant about talking about sex partners, then problem solve. Explain the different plans, and the different methods to handle referrals.
- Request names of each sex partner(s) for the communicability period defined as 6 months
  prior to the date of the initial report. Do not be concerned if the case does not supply the full
  name, but emphasize that you want to discuss every partner during that period regardless of
  how much or how little they know about them. Use other identifier for sex partners if the client
  cannot remember a name or nickname.
- After asking about sex partners, ask and record the last date of exposure beside each partner's name.
- Gather locating information including full name, nicknames, address, telephone numbers, living-with status, employment, age, race, gender, marital status, physical descriptions (if necessary), and directions to home.



- Determine methods of referral for each sex partner and agree on the best approach with the case.
- Coach the case on contact referrals they prefer to make on their own and give guidelines and deadlines.

### **Risk Reduction**

To reduce the risk of further hepatitis B transmission, the case, household and sexual contacts must be educated on risk reduction behaviors. The case should be instructed that it is possible for her and her infected contacts to spread the virus to others. The following information must be shared with clients and contacts:

- Household articles that could become contaminated with blood, such as toothbrushes and razors, should not be shared.
- Cuts or skin lesions should be covered to prevent the spread of infectious secretions or blood.
- When seeking medical or dental care, inform provider of HBsAg status.
- If sex partners are not immune to hepatitis B, the partners should be advised to take precautions, including practicing safe sex (using condoms) and vaccination, if warranted.
- In addition to the prevention of hepatitis B transmission, safe-sex precautions should be taken to prevent other sexually transmitted diseases, including syphilis, gonorrhea, chlamydia, and HIV / AIDS.
- Persons infected with hepatitis B should not donate blood, plasma, body organs, sperm, and other tissue.
- If using illicit drugs, enroll in or stay in a drug treatment program.
- Limit the number of sex partners.
- · Abstain from unprotected anonymous or casual sexual behavior.
- Hepatitis B vaccine and HBIG given to an infant at birth, as well as completion of the hepatitis B vaccine series, can prevent perinatal hepatitis B transmission.
- Vaccination of all household contacts can prevent the spread of hepatitis B infection.

### **Preventing Progressive Liver Damage**

To protect the liver from further damage, HBsAg-positive persons should be advised to:

- Avoid or limit alcohol consumption because of the effects of alcohol on the liver.
- Refrain from beginning to take any new medicines, including over-the-counter and herbal



medicines, without consulting their health care provider.

- If chronic liver disease is present, obtain vaccination against hepatitits A.
- Medical follow-up is needed for evaluation and supportive care of chronic hepatitis B infection.
  Persons who have chronic HBV infection require medical evaluation and regular monitoring.
  Therapeutic agents approved by the Food and Drug Administration (FDA) for treatment of chronic hepatitis B can achieve sustained suppression of HBV replication and remission of liver disease in certain persons.

### **Response to Disease Suspicion**

The case should be informed of the signs that indicate worsening hepatitis B infection. If the client's infection has worsened, the client should understand how to respond to signs that the infection has worsened.

- · Discuss the clinical symptoms of hepatitis B
- If symptoms appear, instruct the case to return to her health care provider immediately.

### **Program Compliance**

It is important that the case understands that contacts require vaccination and post vaccine screening to prevent hepatitis B infection. The coordinator should verify that the case understands and intends to comply with the program.

- Emphasize the need for all exposed individuals to complete the vaccine series, especially the newborn and other children in the household. Remind the case that she is directly responsible for the health of her newborn and children in her household.
- Instruct the case to remind the clinic nurses and pediatric provider that she is a carrier of the hepatitis B virus and that her baby needs to receive HBIG and vaccine at birth.
- Inform of hepatitis B vaccine schedules specific to her baby and other children in the household.
- Encourage to keep scheduled appointments and to notify the case manager when it is necessary to cancel or reschedule appointments.
- To contact the coordinator when address, employment, or contact information changes occur.
- Identify and discuss potential compliance problems and help the case trouble-shoot methods for compliance.



### **Concluding the Interview**

- Ask the case what questions or problems remain.
- Briefly review and reinforce all components of the compliance plan.
- Reinforce commitments to communicate information.

### **Educating Mother and Father**

To protect the newborn from perinatal hepatitis B infection, the case's understanding of the serious consequences of hepatitis B transmission will determine the successful vaccine prophylaxis of the infant. It is very important that the coordinator recognizes barriers the parents may have on vaccinating their infant and address their concerns. The following information should be included when educating the parents:

- · What the lab results mean;
- Possible course of the disease;
- Health promotion and maintenance;
- · How to prevent transmission of the disease to others;
- · Adverse effects of hepatitis B in infants and children; and
- How the infant will be managed.

Printed educational materials should be given to the case for later review. The interview can be a stressful time, and she may not recall all information presented by the program staff. The pamphlet facilitates her recall of information as well as an opportunity to understand the disease.

Reminder letters should also be sent when the baby is born, before each vaccine is due in the baby's vaccine series, and before the post-vaccine serology test. Reminder letters are a great tool to increase completion rates among infants born to HBsAg-positive mothers.



### **Eliciting Contacts of a HBsAg+ Pregnant Woman**

In order to succeed in the goal to prevent transmission of the hepatitis B virus (HBV), it is essential to inquire about the household, sexual and needle sharing contacts of a hepatitis B positive pregnant woman. This information is voluntary. No person can be forced to disclose the names of his/her household, needle sharing or sexual contacts. You can encourage clients to participate by fostering rapport and an atmosphere of trust and mutual respect. People are most likely to willingly participate when they understand the process and appreciate the benefits to themselves and their contacts.

Confidentiality must be protected at all times. Some individuals may be reluctant to name contacts because of concerns over the ability of the health care system to maintain their confidentiality. People who may be especially concerned about the privacy of their information include those who are in sensitive occupations or leadership positions, married clients, and those who fear their behavior may be a violation of laws or regulations. You should ensure that privacy will be strictly protected.

All attempts to notify contacts should be confidential. This is often difficult because other community members might ask the purpose of the coordinators call or visit and why he or she is attempting to make contact. You should not reveal to others why you are trying to find a particular person. You should never leave a note or message that mentions a STD exposure as the reason for attempting to make contact. In addition, no other information should be revealed that might lead to others learning the reason for the contact or that might otherwise lead to disclosure of sensitive information or to a breach of confidentiality. As each contact is located, he or she should be informed privately and face-to-face, if at all possible. The original infected client will sometimes inquire about the results of the partner service activities regarding his or her partners. The coordinator, when requested, can reveal whether a particular partner has been informed of his or her exposure, but must not reveal any confidential information about that partner, including whether the partner decided to be tested or whether he or she is infected. Of equal importance is not revealing any identifying information about the original case to the partner, including the person's sex, name, locating information, and physical description as well as time, type, and frequency of exposure.

### **Contact Methods**

### **Face-to Face**

### **Telephone (including cell phones)**

- 1. Telephone calls concerning confidential information must be made in an area where conversations cannot be **overheard**.
- 2. Coordinators must reasonably ascertain that phone contacts are legitimate before discussing confidential information on the phone.
- 3. On the telephone, coordinators will only share the appropriate amount of confidential information needed to accomplish the surveillance or epidemiological objective of the call.



- 4. Confidential information must never be left on voicemail systems unless they are secure systems (cell phone voice mail systems are generally not secure) or there is authorization from the call recipient to leave confidential information.
- 5. Outgoing voicemail messages on telephones with non-secure voicemail, must ask the caller to leave only their name and number.
- 6. If a person is on a confidential call and they can hear other conversations over the line (often called cross talk) or experience similar issues, the conversation must end immediately.

### **Outgoing Mail**

- All confidential information sent using the mail system must be double enveloped and must first be
  placed in a sealed, taped non-addressed envelope marked "CONFIDENTIAL"; that envelope is then
  placed in a second sealed and taped envelope marked "CONFIDENTIAL" and "TO BE OPENED BY
  ADDRESSEE ONLY."
- 2. The outer envelope must contain the return address of the sender. Departments or personnel positions must not appear in the body of the address or return address. This includes address stamps and/or pre-addressed envelopes.



### Reporting Guidelines/Florida Laws for Prevention of Hepatitis B

Chapters 381.0031, and 384.33, Florida Statutes (F.S.), Sections 64D-3.042, 64D-3.029 and 64D-3.040, Florida Administrative Code (F.A.C.)

### Florida Statutes (F.S.)

### 1. Chapter 381.0031

Any practitioner licensed in this state to practice medicine, osteopathic medicine, chiropractic medicine, naturopathy, or veterinary medicine; any hospital licensed under part I of chapter 395; or any laboratory licensed under chapter 483 that diagnoses or suspects the existence of a disease of public health significance shall immediately report the fact to the Department of Health.

The department may obtain and inspect copies of medical records, records of laboratory tests, and other medical-related information for reported cases of diseases of public health significance described in subsection (4). The department shall examine the records of a person who has a disease of public health significance only for purposes of preventing and eliminating outbreaks of disease and making epidemiological investigations of reported cases of diseases of public health significance, notwithstanding any other law to the contrary. Health care practitioners, licensed health care facilities, and laboratories shall allow the department to inspect and obtain copies of such medical records and medical-related information, notwithstanding any other law to the contrary. Release of medical records and medical-related information to the department by a health care practitioner, licensed health care facility, or laboratory, or by an authorized employee or agent thereof, does not constitute a violation of the confidentiality of patient records. A health care practitioner, health care facility, or laboratory, or any employee or agent thereof, may not be held liable in any manner for damages and is not subject to criminal penalties for providing patient records to the department as authorized by this section.

### 2. Chapter 384.33

The department may adopt rules pursuant to ss. 120.536 (1) and 120.54 to implement the provisions of this chapter. The rules may include requirements for methods of contacting a physician to determine the need for follow up services related to sexually transmissible diseases; standards for screening, treating, and performing contact investigations to control the spread of sexually transmitted diseases; and requirements for maintaining the security of confidential information.

### Florida Administrative Code (F.A.C.)

### 1. 64D-3.029

Practitioners and Laboratories should report Hepatitis B surface antigen (HBsAg)-positive in a pregnant woman or a child up to 24 months old, by the next business day (report before the closure of the County Health Department's next business day following suspicion or diagnosis).



### 2. 64D-3.040

- (1) Perinatal Hepatitis B.
  - (a) Infants born to HBsAg-positive mothers shall receive hepatitis B immune globulin and hepatitis B vaccine once physiologically stable, preferably within 12 hours of birth, and complete the hepatitis B vaccine series according to the recommended vaccine schedule. Testing infants for HBsAg and antibody to hepatitis B surface antigen (anti-HBs) six (6) months after the completion of the hepatitis B vaccine series is recommended to monitor the success or failure of therapy.
  - (b) Household members, sexual and needle-sharing partners of HBsAg-positive prenatal/ postpartum hepatitis B women should be tested to determine susceptibility to the hepatitis B virus, and, if susceptible should receive the hepatitis B vaccine series.

### 3.64D-3.042

- (1) Practitioners attending a woman for prenatal care shall cause the woman to be tested for chlamydia, gonorrhea, hepatitis B, HIV and syphilis as follows:
  - (a) At initial examination related to her current pregnancy; and again
  - (b) At 28 to 32 weeks gestation.
- (2) Exceptions to the testing outlined in subsection (1) above are as follows:
  - (a) A woman, who tested positive for hepatitis B surface antigen (HbsAg) during the initial examination related to her current pregnancy, need not be re-tested at 28-32 weeks gestation.
  - (b) A woman, with documentation of HIV infection or AIDS need not be re-tested during the current pregnancy.
- (3) Women who appear at delivery or within 30 days postpartum with:
  - (a) No record of prenatal care; or
  - (b) Prenatal care with no record of testing;
  - (c) Prenatal care with no record of testing after the 27th week of gestation shall be considered at a high risk for sexually transmissible diseases and shall be tested for hepatitis B surface antigen (HBsAg), HIV and syphilis prior to discharge
- (4) Emergency Departments of hospitals licensed under Chapter 395, F.S., may satisfy the testing requirements under this rule by referring any woman identified as not receiving prenatal care after the 12th week of gestation, to the county health department.
  - (a) The referral shall be in writing; and
  - (b) A copy shall be submitted to the county health department having jurisdiction over the area in which the emergency department is located.
- (5) Prior to any testing required by this rule, practitioners shall:
  - (a) Notify the woman which tests will be conducted;



- (b) Inform the woman of her right to refuse any or all tests;
- (c) Place a written statement of objection signed by the woman each time she refuses required testing in her medical record specifying which tests were refused. If the woman refuses to sign the statement, the provider shall document the refusal in the medical record. No testing shall occur for the infections specified in the refusal statement of objection.
- (6) Women who had a serologic test for syphilis during pregnancy that was reactive, regardless of subsequent tests that were non-reactive shall be tested as soon as possible at or following delivery.
- (7) Specimens shall be submitted to a laboratory licensed under Part I, Chapter 483, F.S., to perform tests for chlamydia, gonorrhea, hepatitis B surface antigen (HBsAg), HIV and syphilis.
  - (a) The practitioner submitting the specimens for testing to a licensed laboratory shall state that these specimens are from a pregnant or postpartum woman.
- (8) Practitioners required by law to prepare birth and stillbirth certificates shall document on the certificate if chlamydia, gonorrhea, hepatitis B, HIV, syphilis infections or genital herpes or genital human papilloma virus were present and/or treated during this pregnancy.
- (9) Nothing in this rule shall prohibit a practitioner from testing these women for other sexually transmissible diseases in accordance to prevailing national standards, community disease distribution or the professional judgment of the practitioner.



### Provider Roles and Responsibilities for Perinatal Hepatitis B Prevention

Hepatitis B virus (HBV) infection in a pregnant woman poses a serious risk to her infant. In the U.S., without post-exposure treatment, approximately 40% of infants born to HBV-infected mothers will develop chronic HBV infection, approximately one-fourth of whom will eventually die from chronic liver disease.

The prevention of HBV infection consists of several vital steps and includes case identification, reporting, treatment, and follow-up procedures. Because case management of these pregnant women and infants can become complicated and include health care providers in several settings, errors may arise and lead to unidentified and untreated infants. Here are some measures to ensure that errors do not occur in your practice or hospital.

### If you provide prenatal care:

- Test every pregnant woman during each pregnancy for hepatitis B surface antigen (HBsAg), regardless of her hepatitis B vaccination status, risk factors, or results of previous tests.
- Notify the County Health Department of any positive HBsAg test result in a pregnant woman.
   Both the laboratory testing the specimen and the provider ordering the testing must report every positive test.
- Send a copy of the original lab report, along with other prenatal records, to the hospital where the woman will deliver.
- Counsel the pregnant woman about the implications of her positive HBsAg test result. This
  includes the need for her to receive ongoing medical evaluation and the need for household
  and sexual contacts to be tested and vaccinated.
- Communicate the woman's HBsAg-positive status to the clinician who will provide pediatric care to the newborn.

### If you work in a hospital labor and delivery unit or newborn nursery:

- Know the HBsAg status of every woman giving birth in your facility. A copy of the original lab
  report should be part of the prenatal record. If the HBsAg status of a woman is unknown when
  she presents for delivery, the delivery hospital must test immediately.
- Don't let any infant slip through the cracks. Administer hepatitis B immune globulin (HBIG) and hepatitis B vaccine to exposed infants within 12 hours of birth and the first dose of hepatitis B vaccine before hospital discharge to all other newborns. Administering the first dose of hepatitis B vaccine soon after birth to all infants acts as a safety net, reducing the risk for perinatal infection when maternal HBsAg status is either unknown or incorrectly documented at delivery.



- Develop hospital policies to ensure that all mothers are screened for HBsAg and all newborns are appropriately managed to prevent HBV infection.
- Share information with the appropriate County Health Department representative regarding infants' delivery and vaccinations received. Case management activities regarding the HBsAgpositive pregnant woman and her children are exempt from the usual Health Insurance Portability and Accountability Act (HIPAA) restrictions (Chapter 381.0031, *Florida Statutes*).

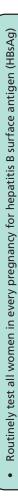
### If you provide pediatric care to newborns:

- Know the HBsAg status of the mothers of all infants for whom you provide care.
- Help ensure that no babies are infected by HBV due to a medical error. Make sure that all newborns under your care receive the first dose of hepatitis B vaccine prior to discharge.
- Know that the usual schedule consists of 3 intramuscular doses of hepatitis B vaccine at 0, 1 to 2 months, and 6 to 18 months. Infants whose mothers are HBsAg-positive should receive the last (third or fourth) dose by 6 months of age (12 to 15 months if Comvax® is used).
- Help ensure that infants receive their hepatitis B vaccines on schedule. Another reason to
  vaccinate in a timely manner is that post-vaccination testing can be costly, and most infants
  are covered by Medicaid until 1 year of age. If the recommended vaccine schedule is used,
  post-vaccination testing could occur as early as 9 months of age. Post-vaccination testing is
  recommended 3 to 12 months after completion of at least 3 doses of the hepatitis B vaccine
  series, but no earlier than 9 months of age.
- Be aware that exposed infants should be tested for immunity using HBsAg and hepatitis B surface antibody (anti-HBs) (quantitative) 1 to 2 months after completion of at least 3 doses of vaccine. Testing is used to determine immunity or vaccine non-response. Infants found to have anti-HBs levels of less than 10 mIU/mL after the primary vaccine series should be revaccinated. A second series of 3 doses on an appropriate schedule, followed by anti-HBs testing 1 to 2 months after the third dose, should be performed. If the infant is non-responsive after the second series is completed, no additional vaccine is necessary and the infant is considered susceptible.

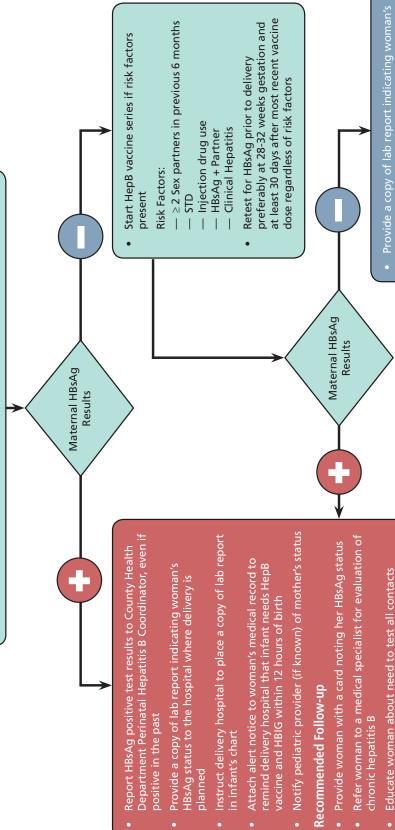
If you have any questions re	egarding the in	formation	above or	the Perinatal	Hepatitis B	Prevention
Program in general, please	contact				at ###-###-	####.



# Testing for Hepatitis B Virus Infection During Pregnancy for Prenatal Care Providers



- Test in the first trimester, if possible
- Test regardless of past testing status



# FOR MORE INFORMATION ABOUT THE PERINATAL HEPATITIS B PREVENTION PROGRAM, PLEASE CALL 850-245-4342 OR VISIT WWW.IMMUNIZEFLORIDA.ORG OR SEND AN E-MAIL TO PHBPP@FLHEALTH.GOV.

Educate woman about importance of completing infant's vaccine series and post vaccination serology

(household, sexual, and/or needle sharing)



HBsAg status to hospital where delivery is planned

Educate pregnant woman about importance of

HepB vaccine birth dose for infant



## **Hepatitis B Serology Nomenclature**

Test	Synonyms	Test Definition
Hepatitis B Surface Antigen	<ul> <li>HAA</li> <li>HBsAg</li> <li>Hepatitis-associated Antigen</li> </ul>	Surface antigen usually appears in the serum after an incubation period of 1 to 6 months following exposure to Hepatitis B virus (HBV) and peaks shortly after onset of symptoms. It typically disappears within 1 to 3 months. Persistence of Hepatitis B surface antigen for greater than 6 months is a prognostic indicator of chronic Hepatitis B infection.
Hepatitis B Surface Antibody	<ul> <li>Anti-HBs</li> <li>Antibody to Hepatitis B Surface Antigen</li> <li>HBsAB</li> <li>Hepatitis Bs Antibody</li> </ul>	A marker of immunity. The presence of anti-HBs is an indicator of clinical recovery and subsequent immunity to HBV. Can also represent an immune response to vaccination.
Hepatitis B Core Antibody, Total	<ul> <li>Anti-HBc</li> <li>Antibody to Hepatitis B Core Antigen</li> <li>Core Antibody</li> <li>HBcAb, Total</li> </ul>	A nonspecific marker of acute, chronic, or resolved HBV infection. Its presence indicates previous exposure to HBV.
Hepatitis Be Antibody	<ul> <li>Anti-HBe</li> <li>Antibody to Hepatitis Be antigen</li> <li>HBeAb</li> </ul>	May be present in an infected or immune person. In persons with chronic HBV infection, its presence suggests a low viral titer and low degree of infectivity.
Hepatitis B Core Antibody, IgM	<ul> <li>Anti-HBc, IgM</li> <li>Antibody to Hepatitis B Core Antigen, IgM</li> <li>HBcAb, IgM</li> </ul>	Indicates recent infection with HBV (within the last 6 months).
Hepatitis Be Antigen	• HBeAg	A marker of a high degree of HBV infectivity. It correlates with a high level of HBV replication. It is used to help determine the clinical management of patients with chronic HBV infection.
Hepatitis B Virus DNA	HBV-DNA	A marker of viral replication. It correlates well with infectivity. It is used to assess and monitor the treatment of patients with chronic HBV infection.

FOR MORE INFORMATION ABOUT THE PERINATAL HEPATITIS B PREVENTION PROGRAM, PLEASE CALL 850-245-4342 OR VISIT WWW.IMMUNIZEFLORIDA.ORG OR SEND AN E-MAIL TO PHBPP@FLHEALTH.GOV.



### Mission:

To protect, promote & improve the health of all people in Florida through integrated state, county & community efforts.



Rick Scott Governor

John H. Armstrong, MD, FACS State Surgeon General & Secretary

Date:

### To:

I want to take this opportunity to inform you of our Prevention Program and provide you with information that is important for your review.

Please call at your earliest convenience regarding this significant matter. Interpreters are available on the phone for any given language.

Please call me at ###-###. If I am not present, please leave a message and I will contact you as soon as possible.

Sincerely,

Name, Title Organization



# Follow-up Protocol for Contacts of Hepatitis B Surface Antigen-Positive (HBsAg-positive) Women

Assess:

Immunization status for all contacts to determine if hepatitis B vaccine or testing is needed. Those with a partially completed hepatitis B vaccination series should complete the vaccine series and then have follow-up serology 1-2 months later.

Test:

Exposed household contacts and sexual partners of women who test positive for hepatitis B surface antigen (HBsAg) to determine their hepatitis B status. The following tests should be completed:

- HBsAg: Determines if contact(s) is infected with the hepatitis B virus (HBV)
- Anti-HBs: Hepatitis B surface antibody, determines if contact(s) has protection against HBV
- If both tests are **NEGATIVE**, the contact is susceptible to infection and should receive hepatitis B vaccine
- If HBsAg is POSITIVE, the patient is infected and should be reported to the county health department and referred for medical follow-up
- If anti-HBs is **POSITIVE**, and the contact had three valid doses of hepatitis B vaccine, they are considered immune and are protected from getting HBV.

**Vaccinate:** All unvaccinated susceptible contacts with three doses of hepatitis B vaccine.

- The first dose should be given at the same visit, but after the blood draw to determine disease status.
- The second dose should be given ONE MONTH after the first dose.
- The third dose should be given FOUR-SIX MONTHS after the first dose (at least eight weeks after the second dose, and at least sixteen weeks after the first dose).

Treat:

If there has been a sexual exposure within the last 14 days to an acutely infected HBsAg-positive woman, or a blood exposure within the last 7 days to a HBsAg-positive woman, the contact should also receive one dose of hepatitis B immune globulin (HBIG), calculated at 0.06 ml/kg of body weight.

Test:

Post-vaccine serology (HBsAg and anti-HBs) should be completed for all contacts one to two months after the third dose of hepatitis B vaccine is administered.





# Screening Requirements for Hepatitis B in Pregnant Women

In an effort to eliminate transmission of the hepatitis B virus, The Florida Department of Health, Immunization Section, would like to remind prenatal care practitioners of Florida Laws relating to screening for hepatitis B in pregnant women.

### Rule 64D-3.042, Florida Administrative Code

Florida Administrative Code requires practitioners to screen all pregnant women for hepatitis B surface antigen (HBsAg), at initial prenatal visit related to the current pregnancy and again at 28-32 weeks gestation, regardless of previous results. The practitioner submitting the specimens for testing to a licensed laboratory shall state that these specimens are from a pregnant or postpartum woman. If positive, providers are required to report to their local county health department.

Source: https://www.flrules.org/gateway/RuleNo.asp?title=CONTROL OF COMMUNICABLE DISEASES AND CONDITIONS WHICH MAY SIGNIFICANTLY AFFECT PUBLIC HEALTH&ID=64D-3.042

### Rule 64D-3.029, Florida Administrative Code

Florida Administrative Code requires that both practitioners and laboratories report a HBsAg-positive result in a pregnant woman by the next business day (report before the closure of the County Health Department's next business day following suspicion or diagnosis). The Florida Department of Health is aware that a number of laboratories report diseases such as hepatitis B electronically, however both the practitioner and laboratory must report.

Source: https://www.flrules.org/gateway/RuleNo.asp?title=CONTROL OF COMMUNICABLE DISEASES AND CONDITIONS WHICH MAY SIGNIFICANTLY AFFECT PUBLIC HEALTH&ID=64D-3.029

Contact Cristina Dusek, RN, at 850-245-4342 if you have questions about hepatitis B screening for pregnant women.

To protect, promote & improve the health of all people in Florida through integrated state, county & community efforts.



Rick Scott Governor

John H. Armstrong, MD, FACS State Surgeon General & Secretary

Vision: To be the Healthiest State in the Nation

	Date:
Dear Colleague,	
This letter is to introduce myself and to explain B Prevention Program (PHBPP) of C Health in County Perinatal Hepatitis Health is responsible for ensuring that all hepatipregnant women are reported to the state in adwomen, their sexual partner(s), any household	County. I am the Florida Department of s B Coordinator. The Department of titis B surface antigen (HBsAg)-positive Idition to case management of the
As a provider of obstetrical care in our county, identification of HBsAg-positive pregnant wome according to Chapter 64D-3.013 Florida Admin pregnant women and all HBsAg-positive childre reportable regardless of the presence of illness report these cases regardless of whether or no	en. As I am sure you are aware, istrative Code, all HBsAg-positive en less than 25 months of age are . Prenatal care providers are required to
The information needed for each report is basic HBsAg-positive lab work and any other related appropriate. This can be called in to me at ###	labs such as liver function studies as
I will be happy to answer any questions and loc partnership to prevent transmission of perinata	
	Sincerely,
	Name PHBPP Coordinator

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Rick Scott Governor

John H. Armstrong, MD, FACS State Surgeon General & Secretary

# **ALERT FORM**

Name of HBsAg-positive mother:
Date of Hepatitis screening:
EDC:
Name of Prenatal Care Provider:
Within 12 Hours of birth, infant(s) born to this woman need(s):
♦ Hepatitis B Immune Globulin (HBIG)
AND
♦ Hepatitis B Vaccine
Note: Remember to document both HBIG and hepatitis B vaccine (manufacturer, lot #, microgram dosage, and time) administered to the infant. Send documentation home with mother and/or forward to designated pediatric provider. Additional hepatitis B vaccine doses are due at 1 and 6 months of age. For guidelines and recommendations regarding perinatal hepatitis B transmission and immunoprophylaxis and vaccine for exposed infants, please refer to the Centers for Disease Control and Prevention website at <a href="http://www.cdc.gov/vaccines/hcp/acip-recs/vacc-specific/hepb.html">http://www.cdc.gov/vaccines/hcp/acip-recs/vacc-specific/hepb.html</a> .
Document sent by the Perinatal Hepatitis B Prevention Program Coordinator at Florida Department of Health in County.
Name, Title: Date: Telephone: Fax:

To protect, promote & improve the health of all people in Florida through integrated state, county & community efforts.



II Ammetment MD FACC

Rick Scott

Governor

John H. Armstrong, MD, FACS State Surgeon General & Secretary

### **Infant Birth Data Request**

Date:

Dear Colleague,

This letter is being sent to notify you that a woman who is hepatitis B positive is expected to deliver at your facility. As you may know, the Department of Health provides case management to these individuals to ensure their infants receive appropriate prophylaxis at time of delivery. The case management continues until the infant receives the full series of hepatitis B vaccine and post-vaccine screening to confirm immunity.

Enclosed is confidential information regarding the individual and a request for infant information once delivery occurs. Please notify the Labor and Delivery unit of the pending delivery so that Hepatitis B Immune Globulin (HBIG) and hepatitis B vaccine can be administered to the infant within 12 hours of birth. It is essential that the woman also receives records indicating that HBIG and hepatitis B vaccine were given so this information can be documented in the infants shot record. After delivery, please complete the enclosed form with the infant delivery data and fax to the number indicated below. Thank you for your cooperation in helping to eliminate hepatitis B virus transmission.

Sincerely,

Name, Title Organization Contact Information

To protect, promote & improve the health of all people in Florida through integrated state, county & community efforts.



Rick Scott Governor

John H. Armstrong, MD, FACS State Surgeon General & Secretary

**Vision**: To be the **Healthiest State** in the Nation

### Delivery Information for Infant of Hepatitis B Surface Antigen-Positive Pregnant Woman

wother's informa	<u></u>				
1. Last Name:		First	First Name:		
2. Date of Birth (Ma	/D/YY):				
3. HBsAg Lab and	Date Result Repor	rted:			
4. Address/Apt #: _		City/S	State/Zip:		
5. Phone:		_ Social Security	ecurity Number:		
Infant Information	<u>ı:</u>				
6. Last Name:		First Name:		Middle Initial:	
7. Date of Birth (Ma	/D/YY):	Time	of Birth:		
8. Gender: □Fem	ale □Male				
9. Infant Weight at	Birth (grams):				
10. Infant Address	: □ Check here if	same as mother's, th	nen skip to #10		
If address r	not same as mothe	rs:			
Address/ A	pt #:	City/\$	State/Zip:		
11. *Pediatrician I	Name:				
12. Pediatrician C	ity:	Zip: _			
13. *Pediatrician I	Phone:				
14. Infant Vaccina	tion History:				
Vaccine	Date Admin (M/D/YY)	Time of Admin	Dosage (mcg)	Manufacturer	
HBIG □ Not Given					
Hep B Vaccine 1					
15. If HBIG was no	ot given list reason	here:			

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Rick Scott Governor

John H. Armstrong, MD, FACS State Surgeon General & Secretary

# IMPORTANT MESSAGE

### Recommendations for Management of Infants Exposed to Hepatitis B

Pediatric heathcare providers are responsible for providing necessary vaccine to thousands of Florida infants and children. Some of these infants need special management. The Florida Department of Health's Immunization Section would like to remind our immunization providers of the recommendations for management of infants exposed to hepatitis B.

If you provide pediatric care to newborns, make sure you know the hepatitis B surface antigen (HBsAg) status for the mothers of all infants for whom you provide care. All newborns should receive the first dose of hepatitis B vaccine at birth to help prevent infection. The usual schedule consists of 3 intramuscular doses of hepatitis B vaccine at 0, 1 to 2 months, and 6 to 18 months. If you find that the infant was exposed to hepatitis B (mother is infected), please follow the recommendations below from the Advisory Committee on Immunization Practices (ACIP):

- The infant should receive Hepatitis B Immune Globulin (HBIG) within 12 hours of birth and 3 intramuscular doses of hepatitis B vaccine at 0, 1 to 2 months, and 6 months of age (12 to 15 months if Comvax® is used).
- It is very important that exposed infants receive timely vaccination with their final hepatitis B dose at 6 months of age if at all possible. Do not wait to complete the series when other vaccinations are due since those not infected at birth are at high risk of becoming infected through household exposure until they have completed a full series of vaccine.
- Once exposed infants have completed the series, post-vaccination testing is recommended to
  ensure immunity from future exposure. If the recommended vaccine schedule is used (complete
  by 6 months), post-vaccination testing could occur as early as 9 months of age.
- Post-vaccination testing is recommended 3 to 12 months after completion of at least 3 doses of the hepatitis B vaccine series, but no earlier than 9 months of age. Generally, testing that occurs prior to the child turning one year of age can be covered by Medicaid.
- The post-vaccination testing should include HBsAg and hepatitis B surface antibody (anti-HBs) (quantitative). Testing is used to determine immunity or vaccine non-response.



• Infants found to have anti-HBs levels of less than 10 mIU/mL after the primary vaccine series should be revaccinated. A second series of 3 doses on an appropriate schedule, followed by anti-HBs testing 1 to 2 months after the third dose, should be performed.

These recommendations can be found on the CDC website at  $\underline{\text{http://www.cdc.gov/vaccines/hcp/acip-recs/vacc-specific/hepb.html}}$ .

Contact Cristina Dusek, RN, at 850-245-4342 if you have questions about recommendations for management of infants exposed to hepatitis B.

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### Vaccine and Follow-up Serology Schedule

Date:
RE (BABY): D.O.B.: Mother: Hospital:
Dear Dr:
This is to inform you that the above baby was reported to the Florida Department of Health in County as an infant born to a HBsAg-positive mother. Exposed infants that do not receive appropriate prophylaxis and a full vaccine series are at increased risk for acquiring chronic hepatitis B. Timely vaccination is essential for exposed infants as they remain at risk for acquiring hepatitis B from long-term interpersonal contact with their infected mothers.
As a local health care provider you play an integral part in the prevention of hepatitis B virus transmission. As the pediatrician of record, we will be contacting you to request dates of hepatitis B vaccine and follow-up serology for infants exposed to hepatitis B. The recommended hepatitis B vaccination schedule for exposed infants is birth, one month of age, and six months of age. The post-vaccination serology (HBsAg and Anti-HBs) can be done between 9 and 15 months of age (or 3-9 months after third dose of vaccine).
According to the above hospital, the baby received hepatitis B immune globulin (HBIG) and hepatitis B vaccine dose #1 on Please follow the schedule referenced above to complete the additional vaccine doses and post vaccination testing. You may be contacted in the future so that we may ensure the exposed infant has received the necessary vaccine doses in a timely manner.
If you have any questions, please contact me at ###-###.
Sincerely,
Name, Title Organization

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### Vaccine and Follow-up Serology Schedule for Infant Exposed to Hepatitis B

	Date:
RE (Infant Name): D.O.B.: Mother: Delivery Hospital:	
Dear Dr:	
	e above infant was reported to the Florida Department of Health in infant born to a HBsAg-positive mother.
According to the above hos vaccine dose #1 on	pital, the baby received Hepatitis B Immune Globulin and Hepatitis E
and follow-up serology. The of age, and six months of age	d, we will be contacting you to request dates of hepatitis B vaccine e recommended hepatitis B vaccination schedule is birth, one month ge. The post-vaccination serology (HBsAg and Anti-HBs) can be nths of age (or 3-9 months after third dose of vaccine).
If you have any questions, p	please contact me at ###-####.
	Sincerely,
	Name, Title Organization

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**Rick Scott** Governor

John H. Armstrong, MD, FACS State Surgeon General & Secretary

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# Reminder: Perinatal Hepatitis B Prevention Program Vaccine or Serology Due

	Date:
То:	
According to our records, your patient,is due for:	D.O.B.:
Hepatitis B Vaccine Dose 1 Hepatitis B Vaccine Dose 2 Hepatitis B Vaccine Dose 3 Follow-up Serology (HBsAg	i i
I will contact you in the near future requesting date serology.	es of vaccine and/or results of
If you have any questions regarding the hepatitis E	3 follow-up, please contact me at
	Sincerely,
	Name, Title Organization

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Post-Vaccination Serology Due		
RE (Infant Name): D.O.B.:		
Dear Dr:		
Thank you for providing us with the dates of your patients' hepatitis B vaccine series. Now that the series is complete, a serologic specimen must be drawn to test for hepatitis B surface antigen (HBsAg) and hepatitis B surface antibody (Anti-HBs quantitative) to ensure your patient is protected from continued exposure to the hepatitis B virus.		
Obtaining post-vaccination serology for children born to HBsAg-positive mothers is an integral part of patient management. Children who are not infected at birth remain at risk from long-term interpersonal contact with their infected mothers. In addition, children living with any chronically infected persons are at risk for becoming infected through percutaneous or mucosal exposures to blood or infectious body fluids (e.g., sharing a toothbrush, contact with exudates from dermatologic lesions, contact with hepatitis B virus (HBV) contaminated surfaces). Since these children are at risk of exposure to the HBV, it is paramount that they successfully respond to vaccination (seroconvert). For those infants who do not seroconvert, three additional doses of vaccine should be administered and post-vaccination testing for the serologic response should occur. There may also be some instances when an exposed infant who receives appropriate vaccinations is found to be infected with hepatitis B. Post-vaccination serology will help to determine if the infant is infected so that the infant may receive follow-up and treatment.		
If you have any questions or concerns, please contact me at ###-###.		
Sincerely,		
Name, Title Organization		

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Vision: To be the Healthiest State in the Nation

	Date:
То:	
RE:	
This letter is in reference to your child and his/her be given at birth, one month of age and six mortest at nine to twelve months of age.	
My records show that at this time, your child has newhich was due on	ot received Hepatitis B vaccine dose #,
The Florida Departmen of Health inat any one of our clinics on a first come, first serve clinic hours. If you have any questions or concerns contact me at ###-###.	d basis. Please call ###-###-### to confirm
Thank you for your cooperation and for your continuous of your child and all children in Florida.	nued support of efforts to maintain the health
	Sincerely,
	Name, Title Organization Phone Number

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	Date:
То:	
RE:	
I am sending this letter as a reminder that at this tivaccine testing (blood draw) after completing the hif the lab work has been completed so we may disc	epatitis B vaccine series. Please contact me
This important test is to determine if your child which will ensure that he/she is protected again than three doses of vaccine to be protected again protected have increased risk for getting the vian infected person. Making sure your child is power than infected person.	nst the virus. Some children need more ainst the virus. Children who are not rus if they are living in a household with protected can keep them from getting the
You may call your child's private physician for testi completed. If you choose to use your own doctor, your child is tested for hepatitis B surface antigen((Anti-HBs)).	please take this letter with you to ensure that
If you have any questions or concerns please cont you in the future to ensure that your infant complet	
	Sincerely,
	Name, Title Organization
am sending this letter as a reminder that at this tile vaccine testing (blood draw) after completing the higher the lab work has been completed so we may disconfine the lab work has been completed so we may disconfine the lab work has been completed so we may disconfine the lab work has been completed so we may disconfine the lab which will ensure that he/she is protected against that three doses of vaccine to be protected against that three doses of vaccine to be protected against the lab work for getting the view infected person. Making sure your child is point from close contact with an infected person of the lab work of the la	lepatitis B vaccine series. Please contact me cuss the results.  I has antibodies for the hepatitis B virus, nst the virus. Some children need more ainst the virus. Children who are not rus if they are living in a household with protected can keep them from getting the on.  In a protected can keep them from getting the on.



### What is Hepatitis B?

Hepatitis B is a virus, or infection, that causes liver disease and inflammation of the liver. Viruses can cause sickness. For example, the flu is caused by a virus. People can pass viruses to each other.

Inflammation is swelling that occurs when tissues of the body become injured or infected.

### What is the Liver?

The liver is an organ that does many important things. You cannot live without a liver.

#### The liver:

- removes harmful chemicals from your blood
- · fights infection
- · helps digest food
- · stores nutrients and vitamins
- stores energy

### Who Gets Hepatitis B?

Anyone can get hepatitis B, but those more likely to are people who:

- were born to a mother with hepatitis B
- are in contact with blood, needles, or body fluids at work
- live with someone who currently has an active hepatitis B infection
- have had more than one sex partner in the last 6 months or have a history of sexually transmitted disease
- are on kidney dialysis—the process of filtering wastes and extra water from the body by means other than the kidneys
- are taking medicines that suppress the immune system, such as steroids or chemotherapy medicines
- have lived in or travel often to parts of the world where hepatitis B is common
- · are from Asian and Pacific Island nations
- · are infected with HIV or hepatitis C



- · have injected illegal drugs
- · work or live in a prison
- had a blood transfusion or organ transplant before the mid-1980s
- men who have sex with men are more likely to get hepatitis B.

### **How Could I Get Hepatitis B?**

You could get hepatitis B through contact with an infected person's blood, semen, or other body fluid. This contact could occur by:

- being born to a mother with hepatitis B
- getting an accidental stick with a needle that was used on an infected person
- having unprotected sex with an infected person
- having contact with blood or open sores of an infected person
- sharing drug needles or other drug materials with an infected person
- being tattooed or pierced with unsterilized tools that were used on an infected person
- using an infected person's razor, toothbrush, or nail clippers
- having unprotected sex with an infected person

### **You Cannot Get Hepatitis B From:**

- shaking hands or holding hands with an infected person
- being coughed or sneezed on by an infected person
- hugging an infected person
- sitting next to an infected person
- sharing spoons, forks, and other eating utensils
- drinking water or eating food
- a baby cannot get hepatitis B from breast milk



### What are the Symptoms of Hepatitis B?

Most people do not have any symptoms of hepatitis B. Adults and children ages 5 and older may have one or more of the following symptoms:

- · feeling tired
- · muscle soreness
- upset stomach
- stomach pain
- fever
- loss of appetite
- diarrhea
- dark-yellow urine
- light-colored stools
- yellowish eyes and skin, called jaundice

When symptoms occur, they can begin 2 to 5 months after coming into contact with the virus. See a doctor right away if you or a child in your care has symptoms of hepatitis B.

### What is Acute Hepatitis B?

Acute hepatitis B is a short-term infection with the hepatitis B virus. Symptoms usually last several weeks but they can last up to 6 months. The infection sometimes clears up because your body is able to fight off the infection and get rid of the virus. Most healthy adults and children older than 5 who have hepatitis B get better without treatment.

### What is Chronic Hepatitis B?

Chronic hepatitis B is a long-lasting infection with the hepatitis B virus. Chronic hepatitis B occurs when the body can't get rid of the hepatitis B virus. Children, especially infants, are more likely to get chronic hepatitis B, which usually has no symptoms until signs of liver damage appear.

Without treatment, chronic hepatitis B can cause liver cancer or severe liver damage that leads to liver failure. Liver failure occurs when the liver stops working properly.

## How is Hepatitis B Diagnosed?

A blood test will show if you have hepatitis B. Blood tests are done at a doctor's office or outpatient



facility. A blood sample is taken using a needle inserted into a vein in your arm or hand. The blood sample is sent to a lab to test for hepatitis B.

If you are at higher risk of getting hepatitis B, get tested. If you are pregnant, you must be tested by your prenatal care provider. Many people with hepatitis B do not know they are infected. Early diagnosis and treatment can help prevent liver damage. A blood test will show if you have hepatitis B. Your doctor may suggest getting a liver biopsy if chronic hepatitis B is suspected. A liver biopsy is a test to take a small piece of your liver to look for liver damage. The doctor may ask you to stop taking certain medicines before the test. You may be asked to fast for 8 hours before the test.

During the test, you lie on a table with your right hand resting above your head. Medicine is applied to numb the area where the biopsy needle will be inserted. If needed, sedatives and pain medicine are also given. The doctor uses a needle to take a small piece of liver tissue. After the test, you must lie on your right side for up to 2 hours. You will stay 2 to 4 hours after the test before being sent home.

A liver biopsy is performed at a hospital or outpatient center by a doctor. The liver tissue is sent to a special lab where a doctor looks at the tissue with a microscope and sends a report to your doctor.

### **How is Hepatitis B Treated?**

Hepatitis B is not usually treated unless it becomes chronic. Chronic hepatitis B is treated with medicines that slow or stop the virus from damaging the liver.

### **Medicines for Chronic Hepatitis B**

Your doctor will choose medicines or a combination of medicines that are likely to work for you. The doctor will closely watch your symptoms and schedule regular blood tests to make sure treatment is working.

Medicines given by shots include:

- interferon
- peginterferon

Medicines taken by mouth include:

- adefovir
- entecavir
- lamivudine
- telbivudine
- tenofovir



The length of treatment varies. Talk with your doctor before taking other prescription medicines and over-the-counter medicines.

### **Liver Transplant**

A liver transplant may be necessary if chronic hepatitis B causes severe liver damage that leads to liver failure. Symptoms of severe liver damage include the symptoms of hepatitis B and:

- · generalized itching
- a longer than usual amount of time for bleeding to stop
- easy bruising
- · swollen stomach or ankles
- spiderlike blood vessels, called spider angiomas, that develop on the skin

Liver transplant is surgery to remove a diseased or injured liver and replace it with a healthy one from another person, called a donor. If your doctors tell you that you need a transplant, you should talk with them about the long-term demands of living with a liver transplant.

A team of surgeons—doctors who specialize in surgery—performs a liver transplant in a hospital. You will learn how to take care of yourself after you go home and about the medicines you'll need to take to protect your new liver. Medicines taken after liver transplant surgery can prevent hepatitis B from coming back.

### **Testing for Liver Cancer**

Having hepatitis B increases your risk for getting liver cancer, so your doctor may suggest an ultrasound test of the liver every 6 to 12 months. Finding cancer early makes it more treatable. Ultrasound is a machine that uses sound waves to create a picture of your liver. Ultrasound is performed at a hospital or radiology center by a specially trained technician. The image, called a sonogram, can show the liver's size and the presence of cancerous tumors.

# **How Can I Avoid Getting Hepatitis B?**

You can avoid getting hepatitis B by receiving the hepatitis B vaccine.

Vaccines are medicines that keep you from getting sick. Vaccines teach the body to attack specific viruses and infections. The hepatitis B vaccine teaches your body to attack the hepatitis B virus.

Since the 1980s, a hepatitis B vaccine has been available and should be given to newborns and children in the United States. Adults at higher risk of getting hepatitis B should also get the vaccine.



The hepatitis B vaccine is given in three shots over 6 months. You must get all three hepatitis B vaccine shots to be fully protected. You can avoid getting hepatitis B by receiving the hepatitis B vaccine.

If you are traveling to countries where hepatitis B is common, try to get all the shots before you go. If you don't have time to get all the shots before you travel, get as many as you can. Even one shot may provide some protection against the virus.

You can protect yourself and others from getting hepatitis B if you:

- use a condom during sex
- · do not share drug needles and other drug materials
- do not donate blood or blood products
- wear gloves if you have to touch another person's blood or open sores
- do not share or borrow a toothbrush, razor, or nail clippers
- make sure any tattoos or body piercings you get are done with sterile tools
- tell your doctor and your dentist if you have hepatitis B

If you are pregnant and have hepatitis B, tell the doctor and staff who deliver your baby. The hepatitis B vaccine and hepatitis B immune globulin should be given to your baby right after birth. The vaccine will greatly reduce the chance of your baby getting the infection.

## What Should I Do if I Think I Have Been in Contact With the Hepatitis B Virus?

See your doctor right away if you think you have been in contact with the hepatitis B virus. A dose of the hepatitis B vaccine taken with a medicine called hepatitis B immune globulin may protect you from getting sick if taken shortly after coming into contact with the hepatitis B virus.

### **Eating, Diet, and Nutrition**

If you have chronic hepatitis B, you should do things to take care of yourself, including eating a healthy diet. Avoid drinking alcohol, which can harm the liver. Talk with your doctor before taking vitamins and other supplements.

#### Points to Remember

• Hepatitis B is a virus, or infection, that causes liver disease and inflammation of the liver.



- Anyone can get hepatitis B, but some people are more likely to than others.
- You could get hepatitis B through contact with an infected person's blood, semen, or other body fluid.
- Most people do not have any symptoms of hepatitis B. Adults and children ages 5 and older may have symptoms.
- See a doctor right away if you or a child in your care has symptoms of hepatitis B.
- Acute hepatitis B is a short-term infection with the hepatitis B virus.
- Chronic hepatitis B is a long-lasting infection with the hepatitis B virus. Chronic hepatitis B occurs when the body can't get rid of the hepatitis B virus.
- Children, especially infants, are more likely to get chronic hepatitis B.
- A blood test will show if you have hepatitis B.
- If you are at higher risk of getting hepatitis B, get tested. If you are pregnant, you should also get tested.
- Many people with hepatitis B do not know they are infected. Early diagnosis and treatment can help prevent liver damage.
- Hepatitis B is usually not treated unless it becomes chronic. Chronic hepatitis B is treated with medicines that slow or stop the virus from damaging the liver.
- You can avoid getting hepatitis B by receiving the hepatitis B vaccine.
- Tell your doctor and your dentist if you have hepatitis B.
- If you are pregnant and have hepatitis B, tell the doctor and staff who deliver your baby.
- See your doctor right away if you think you have been in contact with the hepatitis B virus.



# **How to Prevent the Spread of Hepatitis B Virus (HBV)**

- Inform the people you live with and/or have sex with about your illness as soon as possible. If you have long-term (chronic) HBV infection, you can infect others with the virus even if you have no symptoms of illness.
- Do not donate blood or blood products, organs, semen, or eggs (ova).
- Stop all sexual activity or use latex condoms until your doctor has told you that you can no longer give HBV to others. People with chronic HBV infection should always use condoms during any sexual activity.
- Do not share your personal toiletry articles, such as razors, toothbrushes, towels, or nail files, with anyone else.
- Try to minimize chapped skin by using a moisturizer. Chapping can lead to breaks in the skin, which can expose others to your blood.
- Advise your doctor, dentist, and anyone else who may come in contact with your blood about your illness.
- If you are pregnant, tell the health care professional who will deliver your baby about your illness. Be sure your baby gets hepatitis B immunoglobulin (HBIG) and the first shot of the hepatitis B vaccination series within 12 hours after birth. Make sure your baby gets the rest of the hepatitis B vaccine shots on schedule.
- Children who have HBV should be taught not to bite or scratch others.
- Clean or carefully dispose of your clothing or other articles that become soiled with your blood.
- Clean toilet seats, countertops, floors, and other surfaces that have your blood or any other body fluid (semen and vaginal fluids, including menstrual blood) on them with a solution that is 1 part bleach to 10 parts water.

# Hepatitis B Vaccination Schedule for Infants Born to Hepatitis B Surface Antigen (HBsAg) Negative Women

### **Vaccination Schedule Options**

Dose	Single antigen vaccine*	PEDIARIX™	COMVAX <sup>®</sup>
1	Birth‡	Birth (single antigen)‡	Birth (single antigen)‡
2	1-2 months	2 months	2 months
3	6 months	4 months	4 months
4	NA	6 months	12-15 months

<sup>\*</sup>Single antigen vaccine: ENGERIX-B® or RECOMBIVAX HB®

#### **COMBINATION VACCINES**

After single antigen hepatitis B vaccine is given at birth, an additional 3 doses of a hepatitis B containing combination vaccine can be given to complete the series starting at  $\geq$ 6 weeks of age if the infant is also scheduled to receive the other components of the combination vaccine, and there are no contraindications to any of the components.

COMVAX : The combination hepatitis B and Haemophilus influenzae type b (Hib) vaccine

• Licensed for use as a 3-dose series beginning at ≥6 weeks- of age. **COMVAX** is not approved for the hepatitis B vaccine dose at birth, and cannot be given to infants <6 weeks of age. This vaccine may be used when administration of any component of this combination vaccine is indicated and if no components are contraindicated.

**PEDIARIX™:** The DTaP-hepatitis B-inactivated poliovirus vaccine (IPV) combination

Licensed for use as a 3-dose series beginning at ≥ 6 weeks of age. PEDIARIX<sup>™</sup> is not approved for the hepatitis B vaccine dose at birth and cannot be given to infants <6 weeks of age or individuals ≥7 years of age. This vaccine may be used when administration of any component of this combination vaccine is indicated and if no components are contraindicated.</li>

#### PRETERM INFANTS (Infants <2,000g)

Preterm infants of HBsAg negative mothers who weigh less than 2,000g at birth should receive the first dose of hepatitis B vaccine series when the infant is ≥1 month of age, including infants who remain hospitalized. Preterm infants discharged from the hospital before chronological age 1 month can also be administered hepatitis B vaccine at discharge, if they are medically stable and have gained weight consistently. Use of brand names is not meant to preclude the use of other comparable licensed hepatitis B-Hib or DTaP-hepatitis B-IPV combination vaccines.

Updated 7/2/2014

<sup>&</sup>lt;sup>‡</sup>Only a single antigen hepatitis B vaccine can be given at birth

# Immunoprophylaxis and Hepatitis B Vaccination Schedule for Infants Born to Women whose HBsAg Status is Unknown

### Vaccination Schedule Options

Dose	HBIG	Single antigen vaccine*	PEDIARIX™	COMVAX®
1	Birth**	Birth‡	Birth (single antigen) <sup>‡</sup>	Birth (single antigen) <sup>‡</sup>
2		1-2 months	2 months	2 months
3		6 months	4 months	4 months
4		NA	6 months	12-15 months

<sup>\*</sup>Single antigen vaccine: ENGERIX-B® or RECOMBIVAX HB®

#### **COMBINATION VACCINES**

After single antigen hepatitis B vaccine is given at birth, an additional 3 doses of a hepatitis B containing combination vaccine can be given to complete the series starting at ≥6 weeks of age if the infant is also scheduled to receive the other components of the combination vaccine, and there are no contraindications to any of the components.

**COMVAX**<sup>®</sup>: The combination hepatitis B and *Haemophilus influenzae* type b (Hib) vaccine

Licensed for use as a 3-dose series beginning at ≥6 weeks of age. COMVAX<sup>®</sup> is not approved for the hepatitis B vaccine dose at birth, and cannot be given to infants <6 weeks of age. This vaccine may be used when administration of any component of this combination vaccine is indicated and if no components are contraindicated.</li>

PEDIARIX™: The DTaP-Hepatitis B-Inactivated Poliovirus Vaccine (IPV) combination

Licensed for use as a 3-dose series beginning at ≥6 weeks of age. PEDIARIX™ is
not approved for the hepatitis B vaccine dose at birth and cannot be given to infants
<6 weeks of age or individuals ≥7 years of age. This vaccine may be used when
administration of any component of this combination vaccine is indicated and if no
components are contraindicated.</li>

### PRETERM INFANTS (infants <2,000g)

For preterm infants who weigh < 2,000g at birth, the initial vaccine dose should not be counted as part of the vaccine series, and three doses of vaccine should be administered beginning when the infant is ≥1 month of age. Use of brand names is not meant to preclude the use of other comparable licensed hepatitis B-Hib or DTaP-Hepatitis B-IPV combination vaccines.

Updated 7/2/2014

<sup>&</sup>lt;sup>‡</sup> Single antigen hepatitis B vaccine should be given within 12 hours of birth.

<sup>\*\*</sup> Maternal blood should be drawn as soon as possible to determine the mother's HBsAg status. Hepatitis B vaccine should be administered within 12 hours of birth and HBIG (0.5 mL) should be given as soon as possible (no later than 7 days) if the mother tests HBsAg-positive. For infants weighing <2,000g administer hepatitis B vaccine plus HBIG within 12 hours of birth.

# Immunoprophylaxis and Hepatitis B Vaccination Schedule for Infants Born to Hepatitis B Surface Antigen (HBsAg)-Positive Women

### **Vaccination Schedule Options**

Dose	HBIG	Single antigen vaccine*	PEDIARIX™	COMVAX®
1	Birth**	Birth‡	Birth (single antigen) <sup>‡</sup>	Birth (single antigen)‡
2	NA	1-2 months	2 months	2 months
3	NA	6 months	4 months	4 months
4	NA	NA	6 months	12-15 months

<sup>\*</sup> Single antigen vaccine: ENGERIX-B® or RECOMBIVAX HB®

#### **COMBINATION VACCINES**

After single antigen hepatitis B vaccine is given at birth, an additional 3 doses of a hepatitis B containing combination vaccine can be given to complete the series starting at ≥6 weeks of age if the infant is also scheduled to receive the other components of the combination vaccine, and there are no contraindications to any of the components.

**COMVAX**<sup>®</sup>: The combination hepatitis B and *Haemophilus influenzae* type b (Hib) vaccine

• Licensed for use as a 3-dose series beginning at ≥6 weeks of age. COMVAX is not approved for the hepatitis B vaccine dose at birth, and cannot be given to infants <6 weeks of age. This vaccine may be used when administration of any component of this combination vaccine is indicated and if no components are contraindicated.

**PEDIARIX™:** The DTaP-Hepatitis B-Inactivated Poliovirus Vaccine (IPV) combination

Licensed for use as a 3-dose series beginning at ≥6 weeks of age. PEDIARIX™ is
not approved for the hepatitis B vaccine dose at birth and cannot be given to infants
<6 weeks of age or individuals ≥7 years of age. This vaccine may be used when
administration of any component of this combination vaccine is indicated and if no
components are contraindicated.</li>

### PRETERM INFANTS (Infants <2,000g)

For preterm infants who weigh < 2,000g at birth, the initial vaccine dose should not be counted as part of the vaccine series, and three doses of vaccine should be administered beginning when the infant is ≥1 month of age. Use of brand names is not meant to preclude the use of other comparable licensed hepatitis B-Hib or DTaP-Hepatitis B-IPV combination vaccines.

<sup>\*</sup> Single antigen hepatitis B vaccine should be given within 12 hours of birth.

<sup>\*\*</sup> A single dose of HBIG (0.5 mL) should be given as soon as possible after birth (no later than 7 days).



# **Hepatitis B Combination Vaccines**

Questions have arisen concerning the administration, intervals, and minimum ages with the administration of combination vaccines following the birth dose of hepatitis B vaccine.

Combination vaccines are often preferred by health care providers and parents over separate injections of the single-antigen vaccines, when medically appropriate. However, additional doses of certain antigens in the combination product may need to be administered to complete the vaccine series (e.g., a provider who uses DTaP-hepatitis B-IPV or hepatitis B-Hib vaccine will give an extra dose of single-antigen hepatitis B to complete the series).

### Routine Childhood Recommendations:

- The routine hepatitis B vaccine recommendation is birth, 1-2 months, and 6 months.
- Minimum age for dose #3 is 24 weeks of age.
- Minimum intervals between doses:
  - 4 weeks between dose #1 and #2
  - 8 weeks between dose #2 and #3
  - At least 16 weeks between dose #1 and #3

Preterm infant <2000 g, mother HBsAg+ or unknown status: birth dose does not count to complete series [0, 1, 2-3, 6-7 months (4 doses)].

Administration of a fourth dose of hepatitis B vaccine to an infant is permissible and safe with 3 subsequent doses of Comvax or Pediarix after the single-antigen hepatitis B birth dose that meet the minimum intervals for each vaccine.

### Following the birth dose, the series can be completed using:

Single-antigen hepatitis B vaccine: 2 doses at 1-2 months and 6 months of age following birth dose (total 3 doses)

OR

Comvax: 3 doses of Comvax at 2 months, 4 months, and 12-15 months following the birth dose (total 4 doses)

OR

Pediarix: 3 doses of Pediarix at 2 months, 4 months, and 6 months following the birth dose (total 4 doses)



### Resources:

Recommended Immunization Schedule for Persons Aged 0 Through 6 Years—United States • 2011: <a href="http://www.cdc.gov/vaccines/recs/schedules/downloads/child/0-6yrs-schedule-pr.pdf">http://www.cdc.gov/vaccines/recs/schedules/downloads/child/0-6yrs-schedule-pr.pdf</a>

### Ask the Experts:

http://www.immunize.org/askexperts/experts\_hepb.asp



# **Hepatitis 09 Program**

All county health departments can order hepatitis vaccine (A,B) for adults using the Hepatitis 09 program. Money is provided from the state Hepatitis Program directly to the state pharmacy. The county health department orders the adult hepatitis vaccine using the program component 09 code. The Hepatitis 09 program also provides funding to the state laboratory to screen for hepatitis A,B (includes HBsAg, HBsAb, HBcAb) and C, with no charge to the county health department as long as the specimen is marked for the Hepatitis 09 program. The program is intended for adults >18 years of age and allows for contacts of hepatitis B surface antigen-positive pregnant women cases to be screened for hepatitis and given vaccine.

In special circumstances and with prior approval, the program testing may be used for contacts <18 or infants, such as an infant who needs post-vaccination screening, but does not have insurance or Medicaid. This will need to be approved first by Phil Reichert, Hepatitis Prevention Program Manager. If you have further questions regarding the program you may contact Phil Reichert at 850-245-4334.



# **Hepatitis B Fact Sheets in Multiple Languages**

### **English**

http://www.cdc.gov/hepatitis/HBV/PDFs/HepBGeneralFactSheet.pdf

http://www.cdc.gov/hepatitis/TestingDay/PDFs/Poster-Dr Koh.pdf

http://www.cdc.gov/hepatitis/HBV/PDFs/HepBAtRisk.pdf

http://www.cdc.gov/hepatitis/HBV/PDFs/HepBWhenSomeoneClose.pdf

http://www.cdc.gov/hepatitis/HBV/PDFs/HepBSexualHealth.pdf

http://www.cdc.gov/hepatitis/HBV/PDFs/HepBPerinatal-ProtectWhenPregnant.pdf

http://www.cdc.gov/hepatitis/HBV/PDFs/HepBPerinatal-ProtectHepBYourBaby.pdf

### **Spanish**

http://www.cdc.gov/hepatitis/HBV/PDFs/HepBGeneralFactSheet sp.pdf

http://www.cdc.gov/hepatitis/HBV/PDFs/HepBSexualHealth\_sp.pdf

http://www.cdc.gov/hepatitis/HBV/PDFs/HepBPerinatal-ProtectHepBYourBaby\_sp.pdf

http://www.cdc.gov/hepatitis/HBV/PDFs/HepBPerinatal-ProtectWhenPregnant sp.pdf

### **Asian & Pacific Islanders**

http://www.cdc.gov/hepatitis/Populations/api.htm

http://www.youtube.com/watch?v=SgNCwn1V6N0&feature=plcp

### Chinese

http://www.cdc.gov/hepatitis/TestingDay/PDFs/Poster-Dr Koh Chi.pdf

http://www.cdc.gov/hepatitis/HBV/PDFs/HepBAtRisk\_chi.pdf

http://www.cdc.gov/hepatitis/HBV/PDFs/HepBWhenSomeoneClose chi.pdf

http://www.cdc.gov/hepatitis/HBV/PDFs/HepBPerinatal-ProtectWhenPregnant\_chi.pdf

#### **French**

http://www.cdc.gov/hepatitis/HBV/PDFs/HepBPerinatal-ProtectWhenPregnant fr.pdf

#### Korean

http://www.cdc.gov/hepatitis/TestingDay/PDFs/Poster-Dr Koh Kor.pdf

http://www.cdc.gov/hepatitis/HBV/PDFs/HepBPerinatal-ProtectWhenPregnant kor.pdf



## **Tagalog**

http://www.cdc.gov/hepatitis/HBV/PDFs/HepBPerinatal-ProtectWhenPregnant\_tag.pdf

### **Vietnamese**

http://www.cdc.gov/hepatitis/TestingDay/PDFs/Poster-Dr Koh Viet.pdf http://www.cdc.gov/hepatitis/HBV/PDFs/HepBPerinatal-ProtectWhenPregnant viet.pdf

### Russian

http://www.cdc.gov/hepatitis/HBV/PDFs/HepBPerinatal-ProtectWhenPregnant\_rus.pdf

Hepatitis B Vaccine Information Statements (available in multiple languages) <a href="http://www.immunize.org/vis/vis hepatitis b.asp">http://www.immunize.org/vis/vis hepatitis b.asp</a>



# **PHBPP Resources**

### **Patient Education Resources**

http://www.cdc.gov/hepatitis/B/index.htm

# Centers for Disease Control and Preventions, "When a Women Has Hepatitis B" Fact Sheet in Multiple Languages

http://www.cdc.gov/hepatitis/HBV/PerinatalXmtn.htm

### Websites

Asian Liver Center- <a href="http://liver.stanford.edu/">http://liver.stanford.edu/</a>
Hepatitis B Foundation- <a href="http://www.hepb.org/patients/">http://www.hepb.org/patients/</a>
Immunization Action Coalition- <a href="http://www.immunize.org/">http://www.immunize.org/</a>
Hepatitis B United- <a href="http://www.hepbunited.org">www.hepbunited.org</a>

# **Hepatitis B: What Hospitals Need to Know to Protect Newborns**

Immunization Action Coalition Complete Guide

http://www.immunize.org/protect-newborns

# **CDC Sample Standing Orders and Policies for Delivery Hospitals**

Guidelines for Developing Admission Orders to Prevent Hepatitis B Transmission to Newborns Delivery Hospital Policies and Procedures to Prevent Perinatal HBV Transmission <a href="http://www.cdc.gov/hepatitis/HBV/PerinatalXmtn.htm">http://www.cdc.gov/hepatitis/HBV/PerinatalXmtn.htm</a>