

Contact Investigation for Hepatitis B Virus-Infected Pregnant Person

Tip Sheet for Local Board of Health (LBOH) (Ver 2.0 July 14, 2025)

Hepatitis B Virus: Chronic infection with hepatitis B virus (HBV) is a common cause of death associated with liver failure, cirrhosis, and liver cancer. Worldwide, approximately 350 million persons have chronic HBV infection, and an estimated 620,000 persons die annually from HBV-related liver disease. Chronic infection occurs among 80%-90% of persons infected during infancy. Approximately 25% of those who become chronically infected during childhood will die prematurely of cirrhosis or liver cancer. Preventing perinatal infection transmission relies upon testing all pregnant people for HBsAg and administering timely postexposure prophylaxis to infants born to infected persons. Postexposure prophylaxis, comprised of hepatitis B vaccine and hepatitis B immunoglobulin (HBIG) at birth, followed by completion of the hepatitis B vaccine series is up to 99.3% effective at protecting infants born to HBV positive persons.

Prevention of Hepatitis B Virus Infection in the United States: Recommendations of the Advisory Committee on Immunization Practices (MMWR, 2018)

https://www.cdc.gov/mmwr/volumes/67/rr/rr6701a1.htm?s_cid=rr6701a1_e

Perinatal Hepatitis B Prevention Program (PHBPP): The Perinatal Hepatitis B Prevention Program was established by CDC in 1991 to prevent hepatitis B transmission from pregnant person to their infants and household and sexual contacts. Prevention of perinatal hepatitis B transmission requires the coordinated transfer of information between prenatal care providers, laboratories, hospitals, primary care providers, and the local/state health departments.

The PHBPP at DPH provides case management for pregnant people who test positive to HBV (lab testing usually done in the first trimester) and their infants. DPH case managers (Regional Immunization Nurses) provide educational information, support, and tracking of infants to ensure completion of the recommended post-exposure prophylaxis, hepatitis B vaccine series, and post-vaccination serologic testing is complete. The LBOH role is performing a follow up investigation of the pregnant person's household and sexual contacts.

(PHBPP MA [Perinatal Hepatitis B | Mass.gov](#); PHBPP CDC [Perinatal Hepatitis B Prevention Program | CDC](#))

Notification through MAVEN:

- LBOH Nurse will be tasked in MAVEN by the Regional Immunization Nurse to perform a contact investigation for HBV-infected person. This will also trigger an email to the LBOH nurse.

- After accessing your MAVEN account click on assignment on the MAVEN Homepage under Tasks (Figure 1) to access the Task Information (Figure 2)

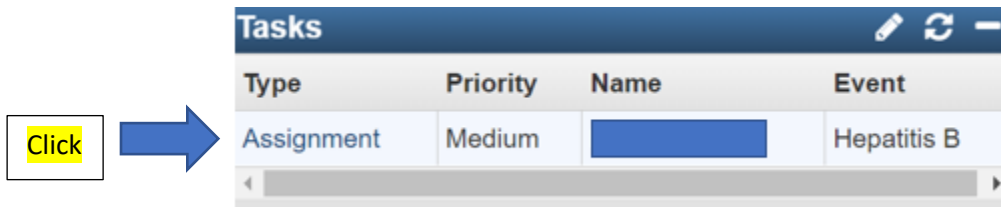


Figure 1: Task Workflow in MAVEN on homepage

Details	
Type:	Assignment
Status:	Completed
Priority:	Medium
Description:	HBV Close Contact Investigation
Assigned To:	Shuang Shen [ssh6]
Create Date:	03/19/2024
Created By:	Phyllis Schilp [pschilp3]
Last Update:	04/05/2024
Updated By:	Shuang Shen [ssh6]
Assigned Date:	03/19/2024
Due Date:	04/09/2024 12:00 AM
Start Date:	04/05/2024
Complete Date:	04/05/2024
Notes:	LBOH Please see Tip Sheet attached to Task event to complete a Close Contact HBV investigation.
Task Attachment:	LBOH Tip Sheet Nurse Current July 2023.docx

Figure 2: MAVEN Task Information

Close Contact Investigation of HBV Index Case:

- View the task in MAVEN: (Figure 2). The Notes Section will include a description of the task.
- Access the event in MAVEN to read more detailed notes specific to the HBV case
- There is no need to add contacts to the case. Simply write a note in the notes section including:
 - Household and sexual contacts (e.g.- 1 husband, 1 daughter, 2 sons, or 1 sexual contact)
 - Explain HBV status of the household and sexual contacts (e.g.- vaccinated, chronic HBV, will follow up for testing and/or vaccination)
- When the investigation is complete, change “status” from “pending” to “complete” (Figure 2)

- Read notes section of the MAVEN event for details regarding the case. Follow-up will depend upon if this is a newly identified case, or a previously identified case
- Newly identified HBV case:
 - Identify all household and sexual contacts of the HBV positive pregnant person
 - Identify vaccination status of contacts:
 - Vaccinated
 - Vaccination series in progress
 - Not vaccinated: contact should follow up with provider, test for HBV, and vaccinate
 - Write a note in the note section of the MAVEN event identifying your conclusions of the investigation (e.g.- Contact investigation complete. 2 household members fully vaccinated against HBV. One sexual contact HBV status unknown. Will follow up with primary care provider for HBV testing and vaccination)
- Previously identified HBV case:
 - Identify any new household and sexual contacts of the HBV positive person since the last HBV investigation
 - Identify vaccination status (only new contacts).
 - Vaccinated
 - Vaccination series in progress
 - Not vaccinated: contact should follow up with provider, test for HBV, and vaccinate
 - Write a note in the note section of the MAVEN event identifying your conclusions of the investigation (if no new contacts since last pregnancy simply write in the notes section- Contact investigation complete for HBV and no new contacts identified since last pregnancy)
- There is no need to create and link Contacts events in MAVEN; the Notes are sufficient
- Be prepared to answer questions about HBV and provide education. Key messages below.

Educational Material for HBV Carriers:

- To prevent or reduce the risk for transmission to others, HBsAg-positive persons should be advised to:
 - cover cuts and skin lesions to prevent the spread of infectious secretions or blood
 - clean blood spills with bleach solution
 - use methods (e.g., condoms) to protect nonimmune sexual partners
 - refrain from donating blood, plasma, tissue, or semen
 - refrain from sharing needles
 - refrain from sharing household articles (e.g., toothbrushes, razors, or personal injection equipment) that could become contaminated with blood
- To protect the liver from further harm, HBsAg-positive persons should be advised to:

- seek health-care services from a provider experienced in the management of HBV
- avoid or limit alcohol consumption
- obtain vaccination against hepatitis A (2 doses, 6--18 months apart) if chronic liver disease is present.
- When seeking medical or dental care, HBV positive persons should be advised to inform those responsible for their care of their HBV status so they can be evaluated, and their care managed appropriately.

Other counseling messages include the following:

- HBV is not spread by breastfeeding, kissing, hugging, coughing, ingesting food or water, sharing eating utensils or drinking glasses, or casual touching.
- Persons should not be excluded from school, play, childcare, work, or other settings based on their HBV status, unless they are prone to biting.
- HBV-infected health-care workers should follow guidelines, applicable state laws, and regulations regarding recommended practices to reduce the risk of HBV transmission in the workplace.
- Involvement with a support group might help patients cope with chronic HBV infection.

For specific questions regarding Close Contact Investigation follow up please reach out to your MDPH Regional Immunization Nurse:

Madeline DePina, RN, BSN, MPH	Boston & Southeast Region	857-278-2652 madeline.depina@mass.gov
Sharon Leary, BS, RN	Worcester & Western Region	617-620-6152 sharon.leary@mass.gov
Ruth Mori, MSN, RN	Northeast Region	781-531-2984 ruth.mori@mass.gov
Phyllis Schilp, MSN, RN	MetroWest & Central Region	781-223-2336 phyllis.schilp@mass.gov
Christy Norton, RN, PhD, CNM	Specialty Case Manager	617-388-2257 christy/norton@mass.gov