

Hepatitis B Business Rules for Perinatal Case Management Investigation and Reporting in NC EDSS

1. Required investigation and documentation in NC EDSS for:
 - A. Females 14-50 regardless of prior events must be investigated to determine pregnancy status. Pregnancy status should be determined for **ALL** positive HBV lab results received for women of childbearing age (**14-50 years**) and documented in NC EDSS within 30 days of lab notification. (Note: There may be occasions in which newly identified cases of hepatitis B will be reported in females younger than 14. Consult with the provider to determine why testing was done. If the exposure was through sexual intercourse and the female is sexually active, then pregnancy status should be determined through conversations with the provider.)
 1. With reports of Acute or an initial Chronic Carrier, LHDs will document pregnancy status. If pregnant:
 - a. Document the estimated date of delivery (EDD), pregnancy information and insurance status in the Clinical Package.
 - b. Complete the Risk History Package to assist with providing Control Measures.
 - c. Provide and document control measures were given in the Clinical Package.
 - d. Assign to the State Disease Registrar for initial reporting to CDC and reassignment to PCM for follow-up within 30 days of notification to the LHD.
 2. For previously reported women the LHD will need to create a lab condition report (LCR) or edit the electronic lab report (ELR) generated LCR with the patient's current pregnancy status, EDD and insurance information in the subsequent report package. Leave these events as LCR's and assigned to Perinatal Case Management for follow-up (ensure that the admin trail has the correct classification each time it's re-assigned).
 1. LHDs will initiate PCM for all pregnant females that are HBsAg, HBeAg, HBV DNA and IgM anti-HBc (+) as well as HBsAg (unknown) lab results.
 - a. LHDs will follow pregnancies until the infant is delivered. Once delivered LHDs will update events with delivery information and re-assign the mother's event to PCM for closure.

- b. LHDs will create a linked Hepatitis B Perinatally Acquired event for the infant to the mother's event and assign event to PCM for follow-up within 30 days of delivery.
 - c. If the pregnancy is terminated or the mother leaves NC to reside in another state or country, both the date and reason for termination along with new address will need to be documented and re-assigned to PCM.
 - 3. For pregnant women with HBsAg unknown results and/or testing cannot be performed by LHD or by patient's provider the LHD will follow persons until delivery and continue tracking the infant once delivered per ACIP guidelines.
 - 4. Household, sexual and needle sharing contacts to Hepatitis B positive women *who are currently pregnant or women that have given birth in last 24 months* must be entered into NC EDSS as linked contacts to the woman's event. The events should contain vaccination and testing data and be assigned to state Prenatal Case Management (PCM). If one of these contacts is found through testing to be HBsAg, HBV DNA, HBeAg (+), the case must be reported to the State Disease Registrar as a new event.
 - 5. Household, sexual and needle sharing contacts need only be added for all other events if they are tested and found to be either HBsAg, HBeAg or HBV DNA positive and must be linked to their contacts events.
- B. Infants born to Hepatitis B infected mothers will be followed post-delivery (usually for 9-12 months) to ensure:
 - 1. The infant's event will be created and linked to the mother's event within 30 days of birth. Effectively tracking EDDs and coordinating with local birthing hospitals helps ensure that infant(s) receive appropriate PEP at birth and that the HBV series and PVST can be initiated and completed per ACIP recommendations.
 - 2. Post exposure prophylaxis (PEP) with HBIG & Hep B vaccine were administered within 12 hours of delivery.
 - 3. Control Measures were provided to the parents or guardians for the infant. Document when and what control measures were reviewed with the mother or guardian in this infant's event.
 - 4. HBIG is documented in the Clinical package under the Treatment section.

5. Hep B vaccines are documented in the Vaccine Information package.
6. Documentation that birth dose of Hepatitis B vaccine is given within 12 hours of birth in the Vaccine Information Package.
7. If the HBIG and/or the birth dose of Hep B vaccine were not administered within 12 hours of birth, the LHD will conduct an investigation with the birthing hospital to determine why PEP were not administered as recommended. The LHD will assist the hospital with guidance and education to ensure it does not reoccur and ensure hospital policies and procedures are in place that reflect ACIP recommendations. Document all these steps in the notes section on the Dashboard of the infant's event.
8. For preterm infants weighing <2,000 g, the initial vaccine dose (birth dose) should not be counted as part of the vaccine series because of the potentially reduced immunogenicity of hepatitis B vaccine in these infants; 3 additional doses of vaccine (for a total of 4 doses) should be administered beginning when the infant reaches age 1month.
9. Once vaccine series is complete Post Vaccine Serologic Testing (PVST) is recommended to be completed at 9 – 12 months of age or 1-2 months after the last dose of vaccine if the infant does not complete the series on schedule.
10. When a paper lab is received the labs should manually be added in the Lab Results tab to the existing perinatal event.
11. LHD will reassign event to PCM for closure once vaccine series is complete and PVST is completed (HBsAg & anti-HBs only).

C. Responsibility for Investigation:

- a. Reported cases of communicable disease are to be investigated and reported by the county health department in which the patient currently resides.
- b. For previously reported chronic carrier cases, the original county of residence shall be maintained in the original reported event. The current county of residence will create a LCR to update classification, pregnancy status, conduct perinatal/contact tracking and/or reinforce control measures. The event should then be assigned to Perinatal Case Management as a LCR if the woman is pregnant.

D. Deduplication of Hepatitis B Events:

- a. **Deduplication/merging of Hepatitis B events is to be done at the state level only.** LHDs with events that need deduplication/merging should contact the Viral Hepatitis Surveillance Nurse.
- b. The State Disease Registrar will routinely merge LCRs into the previously reported event at the time the event is assigned to the state for closure. This will result in one complete event with a chronological listing of labs and subsequent events, such as pregnancies.

E. Data Correction in Previously Reported Events:

- a. LHDs can provide updates to a previously reported case by creating a LCR, entering the additional information into the Subsequent Report package, and assigning the event to the State Disease Registrar. The State Disease Registrar will then merge the LCR into the original event.
- b. Other requests for corrections to closed events should be made to the State Registrar.

F. State Case Management Functions for Prevention of Perinatal Transmission:

- a. The Immunization Branch will perform case management activities to prevent perinatal transmission of Hepatitis B.
 1. Events for Perinatal Hepatitis B contacts will be assigned to the State Disease Registrar for reporting and closure when complete. State Disease Registrar will close the event using the final case classification indicated by PCM.
 2. All case management activities will be recorded in the event assigned to PCM. The event will remain open until reassigned to the State Disease Registrar for merging, reporting, and closure as appropriate.
- b. Events requiring assignment to a LHD during case management will be assigned by PCM with directions for the LHD to reassign the event to PCM when the event is complete.

- c. Interstate referrals of currently pregnant Hepatitis B positive females or infants being followed for perinatal exposure to Hepatitis B will be entered into NC EDSS and assigned to LHDs for case management.
- d. A detailed Perinatal Hepatitis B Report will be given to the LHD at every Immunization Monitoring Visit by the Regional Immunization Nurse.

G. Hepatitis B Events – Best Practice Guidelines:

- a. Complete information must be provided in the designated packages.
 - 1. Demographic package
 - a. First and last name of patient
 - b. Date of birth
 - c. Address
 - d. County of residence for the event & Zip code
 - e. Race & Ethnicity
 - f. Gender
 - 2. Clinical package...complete all sections, with emphasis on the following:
 - a. Is/was patient symptomatic for this disease? If YES, check all symptoms that apply.
 - b. Pregnancy status for all females aged 14-50. If currently pregnant, provide EDD, OB information and insurance information.
 - c. Reason for testing
 - d. Document that control measures were given, if applicable. For additional guidance, see “Documenting Hepatitis B Control Measures” in the Hepatitis B Manual.
 - 3. Risk History package...Please list all known possible exposures.
 - a. Risk information that was not asked should be left blank/missing.
 - 4. Vaccine Information package...provide complete documentation of all vaccinations received, if applicable.
 - a. Patients assumed to have false positive HBsAg due to recent vaccination must have vaccines entered.
 - 5. Administrative package
 - a. Initial source of report to public health
 - b. Date of initial report to public health
 - c. NC county of residence for the event

6. Correct assignment of the event in the Administrative Package, as follows:
 - a. Assign all hepatitis B events to the State Disease Registrar once case investigation is complete.
 - b. Assign all Perinatally-Acquired Hepatitis B events to state Perinatal Hep B Case Management.
 - c. If an event has been assigned to you by the State Disease Registrar, please provide the requested information, and return the event to the State Disease Registrar.
 - d. If an event has been assigned to you by PCM, please provide the requested information, and return the event to PCM.

NOTE:

- All Hepatitis B events with pregnancies resulting in live births must have a linked Hepatitis B Perinatally Acquired event for each infant.
- **NEVER** merge Hepatitis B events (this is also known as deduplication).