

Perinatal Hepatitis B



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Perinatal Case Management



- Importance of Birth Dose to End Hepatitis B in Newborns was addressed yesterday
- Goals:
 - Identify perinatal cases
 - Ensure newborns receive Hepatitis B Immune Globulin (HBIG) and Hepatitis B vaccine within 12 hours of birth
 - High-risk infants complete valid Hepatitis B vaccine series
 - Correct Post Vaccination Serology Testing

Case Management Process



- **Case management starts with the receipt of a lab report**
 - Alaska Statute 18.15.370 Hepatitis B is a mandatory reportable condition in Alaska
- **Lab reports are from AK Stars & facsimiles**
 - Inclusion criteria:
 - ✦ Female
 - ✦ Childbearing age 10-50 years
 - ✦ Lab – Hepatitis B surface antigen (HBsAg) positive
 - Exclusion criteria:
 - ✦ Male
 - ✦ Outside of age range
 - ✦ All other labs

Prenatal Process



- Once inclusion criteria is met provider is contacted
- Information requested:
 - Pregnancy
 - Estimated date of confinement (EDC)
 - Delivery hospital
 - Pediatrician
 - Insurance status
 - Demographics

Delivery Process



- **Delivery hospital is notified of the case**
 - Fairbanks
 - ✦ Fax to labor and delivery 3 weeks prior to EDC
 - All other birthing hospitals
 - ✦ Fax to labor and delivery on date of EDC
- **Infant should receive HBIG & Hepatitis B vaccine within 12 hours of birth**

Infant Process



- **Run weekly HBIG report**
 - Identifies all infants provided HBIG in the past week
- **A release of information request is faxed to medical records**
 - Information requested:
 - ✦ Mother's discharge summary & labs
 - ✦ Infant(s) birth & discharge summary & medical administration record
 - Purpose:
 - ✦ Identify if HBIG recipient is a true perinatal case
 - Unknown maternal HBsAg status infants should receive HBIG
 - ✦ Provide documentation on:
 - Time of birth
 - Birth weight
 - Time of HBIG & Hepatitis B vaccination
 - ✦ Identify pediatrician
 - ✦ Insurance status

Hepatitis B Vaccine Process



- Provider is notified 2-3 weeks prior to vaccine being due
 - 4 dose series with Pediarix
 - ✦ Birth, 1-2 months, 4 months & 6 months of age
 - Since, the third immunization at 4 months of age falls outside the recommended interval, this dose is not considered valid for Hepatitis B series completion
 - 3 dose series with stand-alone Hepatitis B vaccines
 - ✦ Birth, 1-2 months & 6 months of age
- Please note the last dose of the series must be on or after 6 months of age (24 weeks)

High-Risk Low Birth Weight Infants



- If mother's Hepatitis B status is positive or unknown and infant weighs less than ≤ 2 kg (4.4 lbs) at birth
 - Administer HBIG and pediatric Hepatitis B vaccine within 12 hours of birth
- Because of potentially reduced immunogenicity 3 additional doses of Hepatitis B vaccine should be administered whenever the infant reaches the chronological age of one month
 - Administer at birth, 1 month, 2 months and 6 months of age

Post Discharge Process



- Pediatrician is contacted to identify patients under Perinatal Hepatitis B case management
- Prevention checklist is faxed to provider

Post Vaccination Serology Testing



- **Requirements**

- Must be a minimum of 9 months of age, **and**
- Must be 1 month after last Hepatitis B vaccine

- **Laboratory tests**

- Hepatitis B Surface Antigen (HBsAg), **and**
- Hepatitis B Surface Antibody (Anti-HBs)

PVST



- **Testing should not be done before 9 months of age**
 - Minimizes likelihood of detecting passively transferred anti-HBs from HBIG **and**
 - Maximizes likelihood of detecting late HBsAg-positive infections
 - Recommend testing be done between 9 and 12 months of age
- **Total Hepatitis B core antibody (anti-HBc) testing is not generally recommended for PVST**
 - Passively acquired maternal anti-HBc might be detected up to 24 months of age

PVST Follow Up Process



- **Close case:**
 - HBsAg – negative
 - Anti-HBs – positive
- **Active case:**
 - If both labs were not completed infant remains a case
 - ✦ Provider contacted to complete serology
 - HBsAg (-) & Anti-HBs (-)
 - ✦ Revaccinate with second series of pediatric Hepatitis B
 - 3 dose interval - 0, 1 & 6 months
 - ✦ Perform HBsAg & Anti-HBs testing 1-2 months after vaccine completion

Barriers



- **Lack of notification for Hepatitis B**
 - Chronic disease with subsequent pregnancy
- **Undefined contact staff**
 - Provider office
 - Hospital
- **Time delay**
 - Receipt of medical records - varied turn around time
- **Transient population**
- **Language barrier**

Solutions



- **Open lines of communication**
 - Key staff member at provider facilities and hospitals identified
 - case management
- **Improved turn around time for requested records**
- **Education**
 - Webinars
 - Site visits

Resources



- <http://www.immunize.org/protect-newborns/>
- <http://www.epi.hss.state.ak.us/id/iz/hbv/default.htm>
- <http://www.cdc.gov/hepatitis/B/PatientEduB.htm>
- <http://hepbunited.org/>
- <http://www.hepbmoms.org/>

Questions?