

2004 Statewide Survey of Birthing Hospitals on Perinatal Hepatitis B Practices

Background:

Even though Advisory Committee on Immunization Practices (ACIP), American Academy of Pediatrics (AAP) and Centers for Disease Control and Prevention (CDC) experts recommend administration of the hepatitis B vaccine at birth prior to hospital discharge several Oregon hospitals do not routinely give the vaccine. Department of Human Services (DHS), Immunization Program, Local Health Departments (LHD), and health care professionals have been proactive in encouraging proper immunization against hepatitis B, beginning at birth. In this atmosphere Immunization Program DHS, conducted a survey with all birthing hospitals in Oregon to determine areas of concern and identify focal points of interventions.

Methods:

A survey questionnaire was mailed and electronically sent to the local health departments in Spring 2004 to distribute and collect from birthing hospitals in their county. The survey explored each birthing hospital's practices and hepatitis B policies for universal infant immunization and maternal HBsAg screening in Oregon. The survey also asked hospitals if they participated in the VFC program, and whether they were reporting screening and birth dose data through the electronic birth certificate (EBC) program. The final overall response rate was 100%.

Highlights of findings:

Birth dose:

- 58% of the respondents reported having a written policy or standing order to administer hepatitis B vaccine and HBIG to infants whose mothers are HBsAg-UNKNOWN at time of delivery.
- 77% the respondents reported having a written policy or standing order to administer hepatitis B vaccine and HBIG to infants whose mothers are HBsAg-POSITIVE at time of delivery.

- Results of the survey showed that hospitals with more than 100 beds are more likely to routinely administer the first dose of hepatitis B vaccine and HBIG to infants whose mothers are HBsAg-POSITIVE ($p < 0.05$).
- 44 % of the birth hospitals in Oregon do not have a written policy or a standing order in place to offer and administer the first dose of hepatitis B to all newborns before discharge from the hospital. 25% of Oregon birthing hospitals reported they have a policy to administer the hepatitis B birth dose vaccine; 31% indicated they have written standing order.
- Barriers ranked highest to lowest for not having a policy to administer the first dose of hepatitis B vaccine to all newborns before discharge included: no support and inconsistent practice by physicians, physicians preference to give the first dose in the office using combination vaccine, administrative problems and cost of doing so.

Screening:

90% of the time the mother's HBsAg-status is known at the time of delivery, and 65% of the respondents have a written policy or standing order requiring the screening of pregnant women who had no prenatal care or whose HBsAg is unknown or undocumented at time of delivery.

16% of the hospitals need more information regarding reporting of HBsAg-positive mothers to the LHD.

86% of the Oregon hospitals reported completing the hepatitis B questions on the EBC, while 8% of the hospitals are not using or do not know how to use EBC.

37% of Oregon hospitals reported being enrolled in the VFC program. Of those birthing hospitals not enrolled in the VFC Program, 10% indicated they would be interested in receiving additional information regarding the program.

Discussion:

The majority of the hospitals have a policy or standing order in place to administer the hepatitis B birth dose vaccine immunization.

Data from other states show that establishment of hospital policies, and more importantly, written standing orders for administration of the hepatitis B birth dose vaccine correlates with significantly higher hepatitis B birth dose immunization rates.

Participating in VFC program can further promote use of birth dose. In Oregon, approximately 62% of newborns are eligible for VFC.

Electronic birth certificates (EBC) are an effective way to keep track and report which babies have received the hepatitis B vaccine. The birth dose data from the EBC is transferred to the ALERT Registry typically within 1-2 weeks. This data is then available to immunization providers in the community.

According to EBC data, screening for HbsAg status ranges from 26-100% in birthing hospitals in Oregon.

We have specific information for hospitals from EBC reporting regarding screening and birth dose offered in hospital, and we can share it individually with hospitals.

Of concern are the hospitals that do not have standing orders and do not vaccinate against hepatitis B routinely.

Why is such a policy necessary?

- ✓ Administering the first dose of hepatitis B vaccine soon after birth to all infants acts as a safety net and reduces the risk of perinatal infection in infants whose mothers' HBsAg status is either unknown or incorrectly documented at the time of delivery. (*Immunization Action Coalition*)
- ✓ Childhood transmission of hepatitis B virus does occur in infants whose mothers are HBsAg-negative but who are exposed to persons in the household with chronic hepatitis B virus infection. Two out of three cases occur in infants who are exposed to persons in the household with chronic hepatitis B virus infection, and these children could be protected with a birth dose of hepatitis B vaccine. (*Immunization Action Coalition*)
- ✓ Initiating the hepatitis B vaccine series at birth has been shown to increase a child's likelihood of completing the vaccine series

according to the recommended childhood schedule. (*JAMA*. 2000; 284:978-983)

DHS and the Centers for Disease Control and Prevention (CDC) encourages all Oregon State birthing hospitals to adopt a universal hepatitis B birth dose policy in accordance with the Advisory Committee on Immunization Practices (ACIP) and the American Academy of Pediatrics (AAP) recommendations.

The DHS Immunization Program will remain a resource to physicians, hospitals, and other health care providers in implementing administration of the Hepatitis B birth dose vaccine prior to hospital discharge.