

CHAPTER 4. EDUCATION AND OUTREACH

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By the end of this chapter, you will be able to:

- List individuals and groups who might require education about perinatal hepatitis B prevention
 - Describe various methodologies for educating partners about perinatal hepatitis B prevention
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Perinatal hepatitis B coordinators fulfill numerous and eclectic duties. One of your many roles is that of educator, not only for external partners but also for staff in your agency and at the local health department. You might also be called on to educate parents and to increase awareness about hepatitis B among the public.

Overcoming knowledge deficits is an essential step in maintaining a successful program. Depending on the experience and skills of your participants, you might need to provide training or resources on a variety of topics related to perinatal hepatitis B prevention, including hepatitis B serology, hepatitis B vaccine issues, postexposure immunoprophylaxis, case management techniques, the VFC program, and state laws and regulations. Sources of information and teaching resources can be found at the Perinatal Hepatitis B Coordinator website at <http://www.cdc.gov/ncidod/diseases/hepatitis/resource/perinatalhepB.htm>.

EDUCATING STATE AND LOCAL STAFF

Because most state perinatal hepatitis B prevention programs are one- or two-person operations, you might need to coordinate your efforts with others in your agency to enhance your educational program. It is important for all state- and local-level staff to understand perinatal hepatitis B prevention policies and procedures, including case management.

Who?

Local health department staff will likely need the most assistance in developing and maintaining their hepatitis B knowledge. In many cases, they will be conducting case management for you. Given staff turnover and competing priorities, you should ensure that their knowledge and skill levels are up-to-date.

When possible, conduct in-service training for staff in each county. It is a good idea to include clerical staff members who give out information to patients. It is also important to invite county health administrators or directors because they determine which programs receive priority and resources.

Because time and resources are limited, it is not always realistic to conduct in-person trainings for every person working at the state and local levels. The next section describes some ways that you can convey information without traveling across the state to give personal lectures or demonstrations.

How?

One way to address the diverse information needs of staff throughout your state is to develop a program resource manual for state and local personnel (Box 4.1). One perinatal hepatitis B prevention program created a resource manual designed to equip any member of the staff to do the work of any other member. The manual contained protocols for each program activity, detailing the steps to be followed by staff or the information to be provided to those outside the program. The manual included perinatal hepatitis B prevention basics, frequently asked questions, important documents (e.g., the hepatitis B vaccine information statement), contact information of key stakeholders, sample correspondence, and Medicaid/VFC billing information. New York (http://www.health.state.ny.us/diseases/communicable/hepatitis/docs/hepb_manual.pdf) and Michigan (http://www.michigan.gov/mdch/0,1607,7-132-2942_4911_4914-162248--,00.html) are two states that have published their state manuals online.

You can also keep public health staff up-to-date on the perinatal hepatitis B prevention program by corresponding with them periodically through regular statewide meetings, mail, a group e-mail list or listserv, or by adding information to existing employee communications vehicles.

Box 4.1. Potential Contents of a Perinatal Hepatitis B Resource Manual

- Background information on perinatal hepatitis B prevention
- List of local health departments and the names and telephone numbers of the appropriate contact at each health department
- List of all hospitals with obstetric units, the county in which each hospital is located, and the contact information for each facility
- List of all providers participating in the program
- Internal protocol for administering the perinatal hepatitis B prevention program
- Protocols for providers to prevent perinatal hepatitis B
- Copy of the vaccine information statement for hepatitis B vaccine
- Up-to-date hepatitis B vaccine dosage information
- Serology table for interpreting various HBV-related serologic markers
- Medicaid and VFC billing information
- Case management tools, such as letters and educational materials for parents
- Sample hospital standing orders
- Information about applicable state laws and regulations
- Frequently asked questions

EDUCATING PROVIDERS

Prevention of perinatal HBV transmission depends on providers' understanding and implementation of standards of practice for treating pregnant women and their infants. Education and outreach activities should target providers in hospitals, prenatal care settings, and pediatric care settings.

Hospital Staff

With limited resources and time, priorities must be set for provider education. You should give first priority to the hospital labor/delivery and nursery unit because it is the easiest to access and is where key perinatal hepatitis B prevention activities take place. Try to visit each delivery hospital in your jurisdiction at least once every 5 years.

A potential venue for educating hospital staff is during regular staff meetings for OB/GYNs, pediatricians, midwives, nurse practitioners, and delivery room staff. Be sure to schedule in-service presentations for staff on all shifts, and make your materials and content available to those who cannot attend. Tailor your presentation as much as possible to the hospital's data and needs. Make them fully aware of the ACIP, ACOG, AAP, and AAFP recommendations and encourage them to identify key actions that are needed to implement the recommendations. Follow up with the hospital approximately 1 month after your presentation to check on progress.

Encourage hospitals to implement written standing orders for critical perinatal hepatitis B prevention activities (summarized in Chapter 1). The Immunization Action Coalition has developed a document entitled *Guidelines for Standing Orders in Labor & Delivery and Nursery Units to Prevent Hepatitis B Virus Transmission to Newborns*, a useful two-page sheet that hospitals can use to establish standing orders; the document is available at <http://www.immunize.org/catg.d/p2130per.pdf>.

Be sure to stress to hospital staff that 1) an infant born to an HBsAg-positive mother has been exposed to HBV, 2) an infant born to a mother with unknown HBsAg status might have been exposed to HBV, and 3) postexposure immunoprophylaxis is urgent. Stress that postexposure immunoprophylaxis is not the same as routine vaccination of other children and that timeliness is crucial.

Obstetric/Gynecologic Providers

Obstetric/gynecologic providers play a key role in preventing perinatal transmission of HBV. Efforts to educate obstetric/gynecologic providers should reinforce the following messages:

- The need for universal screening of pregnant women for HBsAg during an early prenatal visit in each pregnancy, regardless of the woman's hepatitis B vaccination status
- The need to refer HBsAg-positive pregnant women to the health department for case management
- The importance of communicating the mother's HBsAg status to all levels of providers (e.g., delivery site, newborn nursery, pediatrician) to ensure that infants born to HBsAg-positive mothers receive appropriate immunoprophylaxis and follow-up

- The importance of sending the delivery hospital a copy of the original HBsAg laboratory report (for both HBsAg-positive mothers and HBsAg-negative mothers) along with the mother's other prenatal information
- The need for HBsAg-positive women to be provided with or referred for appropriate counseling and medical management of chronic HBV infection
- The need to provide information to HBsAg-positive pregnant women about modes of HBV transmission, perinatal concerns (e.g., infants born to HBsAg-positive mothers may be breastfed), the importance of postexposure immunoprophylaxis for the infant beginning at birth, and prevention of HBV transmission to contacts
- The need to vaccinate pregnant women who are at risk for HBV infection during pregnancy and who are not already HBsAg positive (hepatitis B vaccination initiated during pregnancy but not completed by delivery can be completed during postpartum visits)
- The need for prenatal care education to include information about the rationale and importance of newborn hepatitis B vaccination

Pediatricians and Family Practitioners

The care of an infant born to an HBsAg-positive mother does not end after the baby is discharged from the hospital. Pediatricians and family practitioners must understand the importance of follow-up care for these newborns, particularly the need to administer the remaining doses of hepatitis B vaccine to all infants, to conduct post-vaccination serologic testing for infants born to HBsAg-positive women, and to appropriately manage these infants on the basis of serologic test results.

Conducting Provider Training

Although written communication with hospital staff or office-based clinicians can be effective, person-to-person delivery is best. When designing a perinatal hepatitis B prevention educational/in-service program in a hospital or outpatient setting, consider scheduling programs that are accessible to all shifts and staff members. This extra effort fosters increased awareness and appreciation of your prevention messages. Some sites have the capacity to videotape presentations for later viewing.

During each training session, be clear about what you are asking providers to do. Offer to review written hospital policies and standing orders regarding perinatal hepatitis B prevention and provide assistance if these need to be developed or changed. Suggest the use of quality assurance to improve receipt of prenatal records and copies of maternal HBsAg test results. Also provide information about follow-up care of HBsAg-positive mothers.

Make it as simple as possible for hospitals and health-care providers to adopt your recommendations. Come to trainings/meetings armed with sample policies, forms, and other resources. At the end of your presentation, make sure everyone knows who you are and how to reach you with questions. It is very important to convey the message that you cannot solve the problem of perinatal HBV transmission without the cooperation of the people who actually identify and treat these mothers and infants: "*I am not the prevention program, WE are.*"

Training sessions can be an opportunity to team up with state/local obstetric and pediatric professional societies. Having their support can lend credibility to your educational program. They might also be able to help you provide continuing medical education or continuing nursing education accreditation for your training, if possible.

Another area you might want to address during provider education is your state's laws and regulations on testing, reporting, and immunization. Laws and regulations have been shown to be an effective means for ensuring a high level of immunization against many diseases. For viral hepatitis, they can be the basis for opening a dialogue with health-care professionals. They can also give you a foundation for those rare times when you must take a legal stance. For a discussion of laws and regulations regarding perinatal hepatitis B prevention, see Chapter 1.

EDUCATING PARENTS

If parents are not convinced of the need for immunization, health department interventions will not be successful in administering vaccine protection to their infants. Thus, case managers will need to spend a major portion of their time on patient education. Ideally, information should be available in the mother's first language. Essential information includes the following:

- The meaning of the HBsAg test result
- The typical course of HBV infection
- The seriousness of HBV infection in children and in adults
- How the infant will be managed to prevent HBV infection
- Perinatal concerns (e.g., infants born to HBsAg-positive mothers can be breastfed)
- The need for the mother to see a physician for medical evaluation and monitoring of chronic hepatitis B
- How the mother can take care of herself
- How the mother can avoid transmitting HBV to others
- The importance of identifying and vaccinating the mother's household contacts and sex partners

When providing information to parents, use pamphlets with good visual presentation of information. Leave the information with the mother for later review. The interview is often a stressful time for a mother, and she will appreciate having information to review on her own.

Sending letters directly to mothers is one way to reinforce information provided during an information session or in educational materials. You can send letters immediately after the initial interview and also just before the infant's expected birth, just before each shot is due in the infant's vaccine series, and just before the follow-up serology is due. These will remind the parents at each step and show them the importance of completing the immunoprophylaxis regimen.

Jane E. Corrarino, RN, MS, Assistant Director of Nursing in the New York's Suffolk County Department of Health, with assistance from CDC, has developed an educational program for parents in PowerPoint presentation and booklet formats. This program, *Hepatitis B and You*, informs HBsAg-positive pregnant women about the virus, the disease, and the prevention of

perinatal HBV transmission. It is available in English, Chinese, Hmong, Korean, Spanish, and Vietnamese at <http://www.cdc.gov/ncidod/diseases/hepatitis/b/education/index.htm>.

EDUCATING THE PUBLIC

Well-placed public awareness messages can enhance awareness of perinatal hepatitis B prevention programs. Helpful contacts include health reporters at local newspapers, radio, and television stations. You might provide public service announcements and press releases. Testimonies from patients with hepatitis B can add human interest to your message. If you can coordinate the release of public awareness information with a perinatal hepatitis B prevention meeting, the media might be more interested in covering the issues. Any success in acquiring media coverage can lead to public demand for the necessary testing and vaccination.

Another way to reach persons in your target population is to distribute patient education pamphlets on perinatal hepatitis B prevention to doctors, hospitals, and health departments. Also consider placing education materials in non-clinical settings, such as grocery stores or pharmacies, to maximize their reach. Contact perinatal hepatitis B prevention coordinators in other states to see if they have materials that you can use or customize. The Perinatal Hepatitis B Coordinator website (<http://www.cdc.gov/ncidod/diseases/hepatitis/resource/perinatalhepB.htm>) provides a variety of educational materials that can be adapted for your program. Health education materials are also available from a variety of sources, including CDC's Division of Viral Hepatitis (<http://www.cdc.gov/hepatitis/index.htm>), Immunization Action Coalition (<http://www.immunize.org>), American Academy of Pediatrics (<http://www.aap.org>), Asian Liver Center (<http://www.liver.stanford.edu>), and vaccine manufacturers.

BOX 4.2. Developing Your Own Health Education Materials

- Before beginning to develop text, identify your intended audience. This decision will guide you in selecting the brochure's content and reading level.
- Base the content on current recommendations and the medical literature. If you develop a brochure on routine vaccination of infants, consider including a facsimile of the state immunization record. It can be used by hospitals as both an educational tool and an immunization record.
- Write at an 8th grade or lower reading level.
- Seek the assistance of graphic artists and designers early in the design process.
- Translate the text into the language of your intended audience.
- To increase the appeal of the materials, use photographs of real people who represent all of the major ethnic groups in your target population. Ensure that all photographs are licensed for use or have signed consents for release.
- Distribute a draft for comment to a wide variety of reviewers, including public health nurses, hospital nurses, patients, physicians, members of a hepatitis B advisory group, and members of your target population. Finally, have a focus group that includes members of the target population review your material.

EDUCATING YOURSELF

Your state is counting on you to be a perinatal hepatitis B prevention expert. One of your obligations is to stay current with the skills and knowledge required of your position. To educate others about viral hepatitis and case management, you must fully understand these topics yourself. Although this task might seem daunting, many resources are available to help you.

Viral Hepatitis and Immunization Information

CDC provides many educational resources and continuing education opportunities:

- CDC's Perinatal Hepatitis B Coordinator Information website (<http://www.cdc.gov/ncidod/diseases/hepatitis/resource/perinatalhepB.htm>) provides a variety of resources for coordinators.
- CDC's Division of Viral Hepatitis (DVH) website (<http://www.cdc.gov/ncidod/diseases/hepatitis/index.htm>) provides extensive information on hepatitis B. The Resource Center section (<http://www.cdc.gov/ncidod/diseases/hepatitis/resource/index.htm>) offers links to brochures and posters in English and other languages, slide sets, other hepatitis-related websites, state hepatitis prevention plans, and a collection of hepatitis-related recommendations and other CDC documents.
- DVH has developed an online viral hepatitis serology training module with continuing education credits (CME, CNE, CHEC, CEU) that are free of charge. HBV serology is one component of this interactive training. The training module is available at <http://www.cdc.gov/ncidod/diseases/hepatitis/serology/index.htm>.
- *Morbidity and Mortality Weekly Report (MMWR)* provides a summary of notifiable diseases (including hepatitis B), outbreak investigations, and recommendations for testing, vaccination, and treatment for various diseases. Continuing education credits are available for selected topics. Visit <http://www.cdc.gov/mmwr> to subscribe for free.

You should also be aware of several national conferences at which you can glean much information in a short time. Two important conferences are the National Viral Hepatitis Prevention Conference and the National Immunization Conference.

Public Health Interviewing Skills

To prepare yourself for interviews with HBsAg-positive women, you might benefit from training in the public health interview format. This format is an organized way to be sure that an interview covers all the information necessary to manage a case effectively. If you are not familiar with the public health interview format, you should attend a training course. Your state's STD program might offer these courses.

Another way to enhance interview skills is to have a new case manager "shadow" an experienced case manager to see how they collect information on contacts and educate the mother about the transmission of HBV. This method allows the new case manager to observe the interviewing skills of the experienced case manager, as well as to observe tips for case management. If your local health agencies are hesitant about allowing the training time, you might mention the usefulness of case management skills in all aspects of health department interaction.