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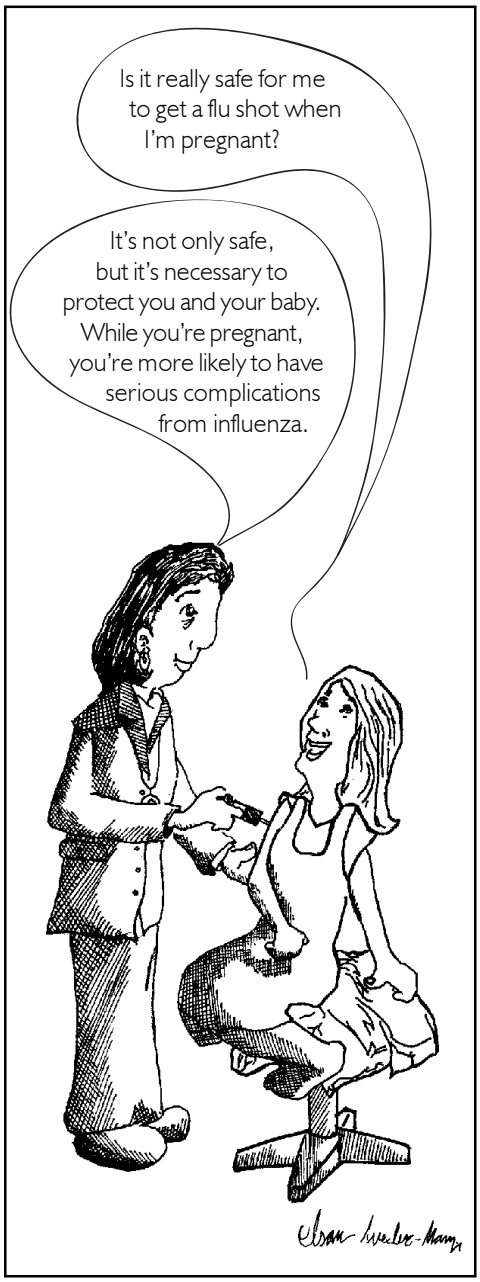
VACCINATE WOMEN

A periodical for obstetrician/gynecologists from the Immunization Action Coalition

Highlighting the latest developments in routine adult immunization and hepatitis B prevention



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Ask the Experts

Editor's note: The Immunization Action Coalition thanks William L. Atkinson, MD, MPH; Stephen C. Hadler, MD; and Linda A. Moyer, RN, of the Centers for Disease Control and Prevention (CDC) for answering the following questions for our readers. Dr. Atkinson, medical epidemiologist at the National Immunization Program, serves as CDC liaison to the Coalition. Dr. Hadler was acting director of the Division of Viral Hepatitis during Dr. Margolis's special assignment. Ms. Moyer is an epidemiologist at the Division of Viral Hepatitis.

General vaccine questions

by William L. Atkinson, MD, MPH

Is the tetanus-diphtheria (Td) vaccine shortage over yet?
Yes. The recommended schedule of Td and booster doses should be reinstituted. All patients for whom a routine booster dose of Td was deferred during the shortage should be recalled and vaccinated.

For routine prenatal screening for rubella, exactly which lab test should I order?
Order IgG antibody to rubella virus.

If a pregnant woman tests rubella "not immune" but she has a documented MMR on her chart from a previous pregnancy, does she need revaccination postpartum?
A negative serologic test for rubella antibody in a person with documented vaccination could represent either failure to respond to the vaccine or an antibody level too low to be detected by the screening test. The Centers for Disease Control and Prevention's Advisory Committee on Immunization Practices (ACIP) does not provide guidance for this situation. Since the person may have failed to respond to the first dose, repeating the MMR vaccine after delivery is a reasonable approach.

If a woman comes in for pre-pregnancy counseling and does not know if she's had chickenpox in the past, which lab test is appropriate to order to determine this?
Antibody testing is not required for persons with an uncertain history of chickenpox. Because up to 90% of adults who do not have a reliable history of varicella are actually immune, serologic testing before vaccination may be cost effective. Providers may also vaccinate without testing. Administration of varicella vaccine to a person who is already immune from disease or had prior vaccination is not harmful. If you decide to do serologic testing, you should order IgG antibody to varicella zoster virus (VZV). Persons whose antibody test is negative or equivocal should be given 2 doses of varicella vaccine separated by at least 4 weeks. (A woman should avoid pregnancy for 4 weeks following varicella or MMR vaccination.)

Is influenza vaccine recommended for pregnant women?
The ACIP and the American College of Obstetricians and Gynecologists (ACOG) recommend that because of the increased risk for influenza-related complications, women who will be beyond the first trimester of pregnancy (>14 weeks of gestation) during the influenza season be vaccinated. Certain providers prefer to administer influenza vaccine during the second trimester (rather than the first) to avoid a coincidental association with spontaneous abortion, which is common in the first trimester, and because exposures to vaccines traditionally have been avoided during the first trimester. Pregnant women who have chronic medical conditions that increase their risk for complications from influenza should be vaccinated before the influenza season, regardless of the stage of pregnancy.

How often should temperatures be recorded for refrigerator and freezer compartments where vaccines are stored?
Temperatures should be recorded for refrigerator and freezer compartments used to store vaccine at least twice a day. Immediate action must be taken if the temperature falls outside the recommended range for either compartment. This is particularly important for refrigerator temperatures ≤32°F. Contact your local or state health department or the vaccine manufacturer with your questions.

Editor's note: Obtain IAC's new temperature logs online at www.immunize.org/news.d/fahren.pdf or www.immunize.org/news.d/celsius.pdf

What's new in the ACIP statement "General Recommendations on Immunization" and how do I obtain a copy?
New or revised material in the 2002 revision of the *General Recommendations on Immunization* in-

(continued on page 2)

Immunization questions?

- E-mail nipinfo@cdc.gov
- Call CDC's Immunization Information Hotline at (800) 232-2522
- Call your state health department

VACCINATE WOMEN

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Hepatitis B Coalition

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IAC EXPRESS is the Coalition's email immunization news service. To sign up for this free service, send an email message to express@immunize.org with the word SUBSCRIBE in the "Subject:" field.

The Immunization Action Coalition (IAC), a 501(c)3 nonprofit organization, publishes practical immunization information for health professionals to help increase immunization rates and prevent disease.

The Hepatitis B Coalition, a program of IAC, promotes hepatitis B vaccination for all children 0–18 years; HBsAg screening for all pregnant women; testing and vaccination for high-risk groups; and education and treatment for people chronically infected with hepatitis B.

cludes an expansion of the discussion of vaccine spacing and timing; recommendations for vaccines administered by an incorrect route or site; an expanded discussion of contraindications and precautions; and a discussion of latex allergy. The document can be downloaded from the CDC website at www.cdc.gov/mmwr/pdf/rr/rr5102.pdf or a hard copy can be ordered from the NIP website at www.cdc.gov/nip/publications or by calling CDC's Immunization Information Hotline at (800) 232-2522.

Hepatitis A and B

by Linda Moyer, RN, and Stephen Hadler, MD

For routine prenatal screening for hepatitis B, exactly which lab test should be ordered?
Order hepatitis B surface antigen (HBsAg). Do NOT order HBsAb (hepatitis B surface antibody). HBsAb is an antibody test that indicates *immunity* to hepatitis B. HBsAb differs from HBsAg by a single letter and for this reason, it is often confused with HBsAg and the wrong test may be ordered. Make sure you're ordering the correct test for your patients.

What was the rationale for ACIP's change in their recommendations (now in agreement with AAP's policy) that every infant receive hepatitis B vaccine prior to hospital discharge?
The birth dose is a safety net to ensure optimal protection of infants of women at high risk for HBV infection. Many medical errors have been documented in prenatal HBsAg screening including ordering the wrong test, misinterpreting the test result, mistranscribing the result, otherwise miscommunicating test results to the newborn nursery, and/or not testing at all. In addition, some women acquire HBV later in pregnancy and the infection often is not clinically detected in time to administer the birth dose to their infants. Other infants whose mothers are HBsAg negative are exposed to HBV-infected caregivers once they arrive home. Administering the birth dose provides protection in all these instances.

The ACIP recommendation is found in the *2002 Recommended Childhood Immunization Schedule* (approved by ACIP, AAP, and AAFP). Copies are available online at: www.cdc.gov/mmwr/preview/mmwrhtml/mm5102a4.htm or by calling (800) 232-2522.

If a mother's HBsAg test result is not available at the time of birth, how should the infant be managed?
Infants born to women who lack an HBsAg test result at the time of delivery should receive the first dose of hepatitis B vaccine within 12 hours of birth. HBsAg testing of women with unknown status should be performed ASAP following hospital admission. Women without prenatal care are more likely to be HBsAg-positive than women who receive prenatal care, underscoring the importance of timely vaccination for their infants. If, upon testing, the mother is later found to be HBsAg-positive, her infant should receive the additional protection of HBIG as soon as possible but not more than 7 days after birth. Premature infants less than 2kg at birth who are born to women of unknown HBsAg status should be given HBIG in addition to hepatitis B vaccine within 12 hours of birth.

Does being chronically infected with HBV preclude one from becoming a health professional?
No. All health professionals should practice standard precautions! However, there is one caveat concerning HBV-infected health professionals. Those who are HBsAg-positive *and* HBeAg-positive should not perform exposure-prone procedures (e.g., gynecologic, cardiothoracic surgery) unless they have sought counsel from an expert review panel and been advised under what circumstances, if any, they may continue to perform these procedures. Such circumstances might include notifying prospective patients of the health professional's seropositivity before they undergo exposure-prone invasive procedures. For more information on this issue, see the *MMWR Recommendations and Report* "Recommendations for Preventing Transmission of Human Immunodeficiency Virus and Hepatitis B Virus to Patients During Exposure-Prone Invasive Procedures." This document is available at www.cdc.gov/mmwr/preview/mmwrhtml/00014845.htm

Does giving hepatitis B vaccine to a chronically infected person cause any harm?
No, it will neither harm nor help the person.

Are hepatitis A vaccine brands interchangeable?
Yes, a number of studies indicate that the two brands of hepatitis A vaccine are interchangeable.

Will one dose of hepatitis A vaccine protect a person who is unable to receive dose #2 prior to travel to a hepatitis A–endemic country?
One month after receiving the first dose of hepatitis A vaccine, 94-100% of adults and children will have protective antibodies. Many persons will have protective antibodies by 2 weeks after the first vaccine dose. However, to receive optimal protection, the first dose of hepatitis A vaccine should be given 4 weeks prior to travel. Those travelers who need optimal protection earlier than 4 weeks after the first dose of vaccine should also receive immune globulin. The second dose of vaccine in 6–12 months is necessary to assure long term protection. If the second dose is delayed, do not start the series over again. ♦

Immunization record card for adults!

Give all your adult patients a permanent vaccination record card from IAC. With this card, they'll always know their vaccination status—and next-dose due dates.

The bright canary yellow card comes pre-folded to fit in a wallet alongside other important cards. Printed on rip-proof, smudge-proof, water-proof paper, it's meant to last.

Finally, a high-quality vaccination record card for adults

To view a full-color version of both sides of this card visit:
www.immunize.org/adultizcards/pictures.htm

How to Order

Adult Immunization Record Cards are available by the box, 250 cards/box.
(Includes a 30-day money back guarantee for your first order of a 250-card box)

There are three ways to order:

1. Order online at https://www.immunize.org/adultizcards
2. Complete this form and fax your order to (651) 647-9131.
3. Complete this form and mail to: **Immunization Action Coalition, 1573 Selby Ave., Suite 234, St. Paul, MN 55104**

Circle the quantity you wish to order.

1 box (250 cards)–$25	2 boxes (500 cards)–$45	3 boxes (750 cards)–$60	4 boxes (1000 cards)–$70

(Please minimize use of abbreviations and print clearly.)

Name: _____

Organization: _____ Dept: _____

Address: _____

City: _____ State: _____ Zip: _____

Telephone: ( ) _____ E-mail: _____

Make checks or money orders payable to: **Immunization Action Coalition**

Method of payment: ❑ **Check enclosed** ❑ **Purchase order #** _____

❑Visa ❑Mastercard ❑Am. Express ❑Discover **Exp. date** _____

Card # | | | | | | | | | | | | | | | | |

Questions? Call (651) 647-9009.

Give the birth dose . . .

Hepatitis B vaccine at birth saves lives!

By ***Deborah L. Wexler, MD,*** *Executive Director, Immunization Action Coalition*

On October 17, 2001, the Advisory Committee on Immunization Practices (ACIP) voted to recommend a birth dose of hepatitis B vaccine for all U.S. infants. (Only for infants of mothers whose HBsAg test is assured to be negative does ACIP now approve giving the first dose as late as two months of age.)

The following article is adapted from an open letter to ACIP, American Academy of Pediatrics, American Academy of Family Physicians, American College of Obstetricians and Gynecologists, National Medical Association, and other medical professional organizations.

The birth dose recommendation for hepatitis B is published by CDC, AAP, and AAFP in the "Recommended Childhood Immunization Schedule–U.S., 2002."

To obtain a copy, visit www.cdc.gov/mmwr/preview/mmwrhtml/mm5102a4.htm

The Immunization Action Coalition (IAC) urges all health professionals and hospitals to protect all infants from hepatitis B virus (HBV) infection by administering the first dose of hepatitis B vaccine to every infant at birth and no later than hospital discharge.

Approximately 19,000 women with chronic hepatitis B infection give birth in the United States each year. Ninety percent of perinatal infections can be prevented by postexposure prophylaxis given within 12 hours of birth. Tragically, many babies are exposed to HBV at birth but do not receive appropriate postexposure prophylaxis.

Because thimerosal has been removed from all pediatric hepatitis B vaccines in the United States, concerns about thimerosal should no longer be an obstacle for practitioners in enacting a universal birth dose policy.

The primary advantage of giving the first dose at birth is that IT SAVES LIVES.

Why is such a policy necessary? Following are some of the ways infants who are not vaccinated at birth become infected:

- The pregnant woman is tested and found to be hepatitis B surface antigen (HBsAg) positive, but her status is not communicated to the newborn nursery. The infant receives neither hepatitis B vaccine nor HBIG protection at birth.
- A chronically infected pregnant woman is tested but with the wrong test, HBsAb (antibody to hepatitis B surface antigen), instead of HBsAg. This is a common mistake since these two test abbreviations differ by only one letter. Her incorrectly ordered test result is "negative," so her doctor wrongly believes her infant does not need postexposure prophylaxis.
- The pregnant woman is HBsAg positive, but her test results are misinterpreted or mistranscribed into her prenatal record or her infant's chart. Her infant does not receive HBIG or hepatitis B vaccine.
- The pregnant woman is not tested for HBsAg either prenatally or in the hospital at the time of delivery. Her infant does not receive hepatitis B vaccine in the hospital, even though it is recommended within 12 hours of birth for infants whose mothers' test results are unknown.
- The woman is tested in early pregnancy for HBsAg and is found to be negative. She develops HBV infection later in pregnancy, but it is not detected, even though it is recommended by CDC that high-risk women be retested later in pregnancy. Because the infection is not clinically detected by her health care provider, her infant does not receive hepatitis B vaccine or HBIG at birth.
- The mother is HBsAg negative, but the infant is exposed to HBV postnatally from another family member or caregiver. This occurs in two-thirds of the cases of childhood transmission.

While there are advantages to giving the first dose at a later well-baby visit, these are advantages of administrative convenience. The primary advantage of giving the first dose at birth is that **it saves lives.**

IAC recently asked hepatitis coordinators at every state health department as well as at city and county CDC projects to express their views about providing hepatitis B vaccine in the hospital. Their responses contained many examples of children who were unprotected or inadequately protected because health professionals failed to order or misordered the hepatitis B blood test or misinterpreted, mistranscribed, or miscommunicated the test results of the children's mothers.

These state coordinators' reports tell us that no matter how well health care providers think they are doing with HBsAg screening of all pregnant women, serious mistakes continue to occur; children are unnecessarily being exposed without the benefit of postexposure prophylaxis, and at least one baby has died. In order to overcome these failures, all 50 state hepatitis coordinators overwhelmingly endorse providing a birth dose.

We must vaccinate every baby in the hospital prior to discharge regardless of the HBsAg status of the mother. Those providers who choose to use hepatitis B-containing combination vaccine, i.e., Comvax, may do so. However, since this vaccine cannot be given at birth, monovalent hepatitis B vaccine must be given at birth and then the hepatitis B vaccine series can be completed with three doses of the combination vaccine. (Giving four doses of hepatitis B vaccine has been shown to be safe in several clinical studies.)

All 50 state hepatitis coordinators overwhelmingly endorse providing a birth dose.

Hepatitis B vaccine is one of the most effective vaccines available. Studies have shown that infants of the most highly infectious mothers (women who are both HBsAg and HBeAg positive) who receive postexposure prophylaxis with hepatitis B vaccine alone (without HBIG) at birth are protected in 90–95% of cases, essentially the same level of protection afforded by administering hepatitis B vaccine in addition to HBIG. Even higher rates of protection with postexposure prophylaxis have been demonstrated in infants born to less infectious mothers (those who are HBsAg positive and HBeAg negative).

Please read the hepatitis coordinators survey results (see the web address box at left), including descriptions of their experiences with failures of the current system—failures that largely can be prevented by administering hepatitis B vaccine to infants before they go home from the hospital.

Your support for providing a birth dose of hepatitis B vaccine to infants while still in the hospital will protect and save lives that are now being put at risk. ♦

www.immunize.org/catg.d/p2125.pdf • Item # P2125 (9/02)

Here's more information about why to give the birth dose

To read the results of IAC's survey of state health department hepatitis coordinators, visit:
www.immunize.org/birthdose/survey.htm

For more information about why all babies should receive the first dose of hepatitis B vaccine in the hospital, go to the Birth Dose page of IAC's website at:
www.immunize.org/birthdose

Labor & Delivery and Nursery Unit Guidelines to Prevent Hepatitis B Virus Transmission

The following guidelines may be used to help your hospital establish standing orders for preventing perinatal hepatitis B virus (HBV) transmission in your Labor & Delivery and Nursery Units. They have been reviewed for technical accuracy by the Centers for Disease Control and Prevention (CDC). ***NOTE:*** *Procedures* ***must be*** *in place to (1) review the hepatitis B surface antigen (HBsAg) test results of all pregnant women at the time of hospital admission and (2) give immunoprophylaxis within 12 hours after birth to infants of HBsAg-positive mothers and infants of mothers who do not have documentation of HBsAg test results in their charts. Administration of hepatitis B (HepB) vaccine at birth to all infants is recommended by CDC's Advisory Committee on Immunization Practices, the American Academy of Pediatrics, the American Academy of Family Physicians, and the American College of Obstetricians and Gynecologists.*

Labor & Delivery Unit Guidelines

1. Upon admission, review the HBsAg* lab report and copy the test result onto (1) the labor and delivery record and (2) the infant's delivery record. It is essential to examine a copy of the *original* lab report instead of relying only on the handwritten prenatal record due to the possibility of transcription error, misinterpretation of test results, or misordering of the test.
2. If the HBsAg result is not available, order the test ASAP. Instruct the lab to call the nursery with the result ASAP.
3. Alert the nursery if the mother is HBsAg positive or if the mother's HBsAg result is unknown. These infants require immunoprophylaxis within 12 hours of birth with HepB vaccine (and HBIG if the mother is HBsAg positive).
4. If the woman's HBsAg test result is positive or unknown at the time of admission, notify her of the need to give immunoprophylaxis to her infant within 12 hours of birth.

Nursery Unit Guidelines

♦ Infants born to HBsAg-negative mothers

1. Give HepB vaccine (0.5 mL, IM) before discharge from the nursery.§†
2. Give the mother an immunization record card that includes the HepB vaccination date. Remind the mother to bring this personal record card with her each time she brings her baby to the doctor or clinic.
3. Instruct the mother about the importance of her baby's completing the entire HepB vaccination series.
4. Make sure that the infant's hospital record clearly indicates the date of HepB vaccine administration and that the hospital record is *always* forwarded to the infant's primary care provider.

♦ Infants born to mothers with unknown HBsAg status

1. Give HepB vaccine (0.5 mL, IM) within 12 hours of birth.§ *Do not wait for test results before giving vaccine*. (For infants weighing <2kg, see special recommendations in item 6 of this section.)
2. Give the mother an immunization record card noting HepB vaccine date and explain the need for further doses to complete the series.
3. Confirm that the lab has drawn a serum specimen from the mother for an HBsAg test, and verify when the result will be available and that it will be reported to the nursery ASAP. If the nursery does not receive the report at the expected time, call the lab for the result.
4. If the mother's HBsAg report comes back positive:
   a. Give HBIG (0.5 ml, IM) to the infant ASAP and alert the mother's and infant's physician(s) of the test result. There is little benefit in giving HBIG if >7 days have elapsed since birth.
   b. Follow instructions in the section **Infants born to HBsAg-positive mothers.**
5. If infant must be discharged before mother's HBsAg result is known:
   a. Clearly document how to reach the parents (addresses, telephone numbers, emergency contacts) as well as the infant's primary care provider, in case further treatment is needed.
   b. Notify the mother's and infant's doctor(s) that the HBsAg result is pending.
6. For infants weighing <2 kg, administer HepB vaccine *and* HBIG within 12 hours of birth. Do not count this as the first dose. Then initiate the full HepB vaccine series at 1–2 mos. of age.

♦ Infants born to HBsAg-positive mothers

1. Give HBIG (0.5 mL, IM) and HepB vaccine (0.5 mL, IM) at separate sites within 12 hours of birth.§ (For infants weighing <2 kg, see special recommendations in item 7 of this section.)
2. Give the mother an immunization record card that includes the dates of the HepB vaccine and HBIG, and instruct her to bring this personal record card with her each time her baby sees a provider.
3. Encourage mothers who wish to breastfeed to do so, including immediately following delivery, even if the infant has not yet been vaccinated.
4. Provide the mother with educational and written materials regarding:
   a. the importance of having her baby complete the HepB vaccination schedule on time (1–2 and 6 mos. for monovalent vaccine, and 2, 4, 12 mos. for Comvax);
   b. the importance of postvaccination testing for the infant following the HepB series to assure immunity;
   c. the mother's need for ongoing medical follow-up for her chronic HBV infection; and
   d. the importance of testing household members for hepatitis B and then vaccinating if susceptible.
5. Notify your local or state health department that the infant has been born and has received postexposure prophylaxis (include dates of receipt of HBIG and HepB vaccine).
6. Obtain the name, address, and phone number of the infant's primary care clinic and doctor. Notify them of the infant's birth, the receipt of postexposure prophylaxis, and the importance of additional on-time vaccination and postvaccination testing.
7. For infants weighing <2 kg, administer HepB vaccine and HBIG within 12 hours of birth. Do not count this dose as the first dose. Then initiate the hepatitis B vaccine series at 1–2 mos. of age.

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*Do not confuse the **HBsAg** test result with any of the following tests:
1. HBsAb or anti-HBs = antibody to hepatitis B surface antigen
2. HBcAb or anti-HBc = antibody to hepatitis B core antigen

Make sure you order the **hepatitis B surface antigen (HBsAg)** test for your patient, and that this test result is accurately recorded on the labor and delivery record and on the infant's delivery summary sheet.

§Federal law requires that you give parents a HepB Vaccine Information Statement (VIS) *prior* to vaccine administration. To obtain VISs, call CDC's Immunization Information Hotline at (800) 232-2522, call your state health department, or download them from IAC's website at: www.immunize.org/vis

†Delaying the initial HepB vaccination until up to 2 months of age may *only* be considered for infants of mothers whose HBsAg test is assured to be negative. As of October 17, 2001, the CDC's recommendation is now consistent with the American Academy of Pediatrics (AAP) policy. Since 1992, AAP has recommended a birth dose for all infants and has referred to an alternative schedule beginning with a dose at 2 months as "acceptable."

www.immunize.org/catg.d/p2130per.pdf • Item #P2130 (07/02)

Hepatitis B Facts: Testing and Vaccination

Who needs hepatitis B vaccine?

People in the groups listed below are at moderate or high risk for hepatitis B virus (HBV) infection and should be vaccinated.

- Immigrants/refugees from areas of high HBV endemicity (Asia, Sub-Saharan Africa, Amazon Basin, Eastern Europe, Middle East) as well as children born in the United States to persons from these areas
- Alaska Natives and Pacific Islanders
- Household contacts and sex partners of people with chronic HBV infection
- People who have had a sexually transmitted disease
- People with more than one sex partner in six months
- Men who have sex with men
- Users of illicit injectable drugs and their sex partners
- Health care workers and public safety workers who have contact with blood
- Adopted children from countries where HBV is endemic
- Hemodialysis patients
- Recipients of certain blood products
- Clients and staff of institutions for the developmentally disabled
- Inmates in long-term correctional facilities
- Certain international travelers

Hepatitis B vaccination is recommended for all children 0–18 years of age.

Hepatitis B lab nomenclature

HBsAg: *Hepatitis B surface antigen* is a marker of infectivity. Its presence indicates either acute or chronic HBV infection.

anti-HBs: *Antibody to hepatitis B surface antigen* is a marker of immunity. Its presence indicates an immune response to HBV infection, an immune response to vaccination, or the presence of passively acquired antibody. (It is also known as ***HBsAb,*** but this abbreviation is best avoided since it is often confused with abbreviations such as HBsAg.)

anti-HBc: *Antibody to hepatitis B core antigen* is a marker of acute, chronic, or resolved HBV infection. It is *not* a marker of vaccine-induced immunity. It may be used in prevaccination testing to determine previous exposure to HBV infection. (It is also known as ***HBcAb,*** but this abbreviation is best avoided since it is often confused with other abbreviations.)

IgM anti-HBc: *IgM antibody subclass of anti-HBc.* Positivity indicates recent infection with HBV (≤6 mos). Its presence indicates acute infection.

IgG anti-HBc: *IgG antibody subclass of anti-HBc* is a marker of past or current infection with HBV. If it and HBsAg are both positive (in the absence of IgM anti-HBc), this indicates chronic HBV infection.

HBeAg: *Hepatitis B "e" antigen* is a marker of a high degree of HBV infectivity and correlates with a high level of HBV replication. It is primarily used to help determine the clinical management of patients with chronic HBV infection.

Anti-HBe: *Antibody to hepatitis B "e" antigen* may be present in an infected or immune person. In persons with chronic HBV infection, its presence suggests a low viral titer and a low degree of infectivity.

HBV-DNA: *HBV Deoxyribonucleic acid* is a marker of viral replication. It correlates well with infectivity. It is used to assess and monitor the treatment of patients with chronic HBV infection.

Who needs serologic testing?

Serologic testing prior to vaccination may be recommended depending on the specific level of risk and/or likelihood of previous exposure. If you decide to test, draw the blood first, and then give the first dose of vaccine at the same office visit. Vaccination can then be continued, if needed, based on the results of the tests. If you are not sure who needs screening, call your liver disease consultant or your state or local health department for details. It is especially important to screen individuals who have emigrated from endemic areas.

When people with chronic HBV infection are identified, offer them appropriate disease management. In addition, their household members and intimate contacts should be screened and, if found susceptible, vaccinated. General guidelines on hepatitis B risk groups, testing, and vaccination can be found in the ACIP statement "Hepatitis B Virus: A Comprehensive Strategy for Eliminating Transmission in the United States through Universal Childhood Vaccination: Recommendation of the ACIP." You can get a copy of the ACIP statement by calling CDC's Immunization Information Hotline at (800) 232-2522 or by visiting IAC's website at: www.immunize.org/acip A revised ACIP statement on hepatitis B vaccine, expected to be published in early 2003, will contain more information on this subject.

Interpreting the hepatitis B panel

Tests	Results	Interpretation
HBsAg anti-HBc anti-HBs	negative negative negative	susceptible
HBsAg anti-HBc anti-HBs	negative negative positive with ≥10mIU/mL*	immune due to vaccination
HBsAg anti-HBc anti-HBs	negative positive positive	immune due to natural infection
HBsAg anti-HBc IgM anti-HBc anti-HBs	positive positive positive negative	acutely infected
HBsAg anti-HBc IgM anti-HBc anti-HBs	positive positive negative negative	chronically infected
HBsAg anti-HBc anti-HBs	negative positive negative	four interpretations possible†

*Postvaccination testing, when it is recommended, should be performed 1–2 months following dose #3.

†1. May be recovering from acute HBV infection
2. May be distantly immune and the test is not sensitive enough to detect a very low level of anti-HBs in serum
3. May be susceptible with a false positive anti-HBc
4. May be chronically infected and have an undetectable level of HBsAg present in the serum

www.immunize.org/catg.d/p2110.pdf • Item # P2110 (7/02)

Vaccine Resources

Brochures, videos, and more

Before you order, remember . . .

All our materials are camera-ready, copyright-free, and reviewed by national experts! Some are in other languages as well as in English. You can order one of any item and make as many copies as you need (including videos).

Support the Coalition! With a contribution of $60 or more, we'll send you all the print and video materials listed on this page, as well as our brightly colored mousepad. Your contribution will keep you on our mailing list and help us produce future issues of ***VACCINATE WOMEN***.

Languages: **En:** English **Sp:** Spanish **Ch:** Chinese **Hm:** Hmong **Tu:** Turkish **Vi:** Vietnamese

Qty.		Materials for your patients (order one, make copies)	Amt.
___	P4010	Immunizations for babies: ❑En ❑Sp ❑Tu $1	_____
___	P4012	Reliable sources of immunization information $1	_____
___	P4020	Are you 11–19? You need to be vaxed! ❑En ❑Sp ❑Tu $1/ea	_____
___	P4025	Questions parents ask about baby shots $1	_____
___	P4030	Vaccinations for adults: ❑En ❑Sp $1	_____
___	P4035	Immunizations . . . not just kids' stuff: ❑En ❑Sp $1/ea	_____
___	P4036	Do I need any vaccinations today? $1	_____
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An Open Letter to OB/GYNs from IAC's Executive Director

Deborah L. Wexler, M.D.
IAC Executive Director

Dear Colleagues:

This second issue of ***VACCINATE WOMEN (VW)*** is brought to you by the Immunization Action Coalition (IAC), the Centers for Disease Control and Prevention (CDC), and the American College of Obstetricians and Gynecologists with the goal of providing you accurate and practical immunization information. Our website www.immunize.org and our many educational materials give you further convenient ways to stay informed.

In our premiere issue (included with your February mailing of *ACOG Today*), we gave you the opportunity to order IAC's about-to-be-published "Adults Only Vaccination: A Step-By-Step Guide," a training manual for novices on how to provide immunization services, and also offered a survey postcard in assessing your impressions of ***VW***.

To the 800 of you who ordered "Adults Only Vaccination," we plan to mail them before the end of 2002. From the 400 of you who returned the mini-survey, this is what we learned:

- 72% of you thought ***VW*** was "very helpful."
- 25% said our publication was "moderately helpful."
- The most frequently administered vaccines to your *employees* are influenza, hepatitis B, MMR, and varicella (in that order).
- The most frequently administered vaccines to your *patients* are influenza, hepatitis B, MMR, Td, pneumococcal, and varicella (in that order).

Many of you also provided IAC with vaccination topics you would like to see covered in future issues. Of the many suggested topics we received, the three most frequent were vaccinations in pregnancy, reimbursement for vaccination, and travel vaccination. The following resources provide answers to a few of your most frequently asked questions.

Vaccinations in Pregnancy: Get a copy of "Guidelines for Vaccinating Pregnant Women," published by CDC in 1998. You can print the document at www.immunize.org/genr.d/pregguid.pdf or call (800) 232-2522 to request that a copy be mailed to you.

Reimbursement for Vaccination: The American College of Physicians-American Society of Internal Medicine has created an 11-page document called "Billing and Coding Adult Immunizations." It's free on their website at www.acponline.org/pmc/billvaccines.pdf

Travel vaccinations: The best place to go for up-to-date information about travel vaccinations is CDC's website at www.cdc.gov/travel For additional travel vaccination resources, visit IAC's travel information Web page at www.vaccineinformation.org/topics/travel.asp

Influenza vaccination information: "Prevention and Control of Influenza, Recommendations of the Advisory Committee on Immunization Practices" is CDC's official 2002 publication on the use of influenza vaccine. To download a copy, visit www.cdc.gov/mmwr/pdf/rr/rr5103.pdf To obtain CDC's official Vaccine Information Statement (VIS) on influenza (to give to your patients), visit www.immunize.org/vis/2flu.pdf If you would like to be mailed a hard copy of either, use CDC's online order form at www.cdc.gov/nip/publications or call (800) 232-2522.

Adding vaccination services to your practice: Order IAC's free, soon-to-be-published manual, "Adults Only Vaccination: A Step-By-Step Guide." You can order a copy online at www.immunize.org/freeguide, request a fax order form by calling (651) 647-9009, or email admin@immunize.org Only one copy per practice, please. (Please do not re-order the manual now if you completed the postcard in the last issue of ***VW*** or have already ordered online.)

Other indispensables for every practice:

- A new video, "Immunization Techniques: Safe, Effective, Caring," produced by the California Department of Health, is 35 minutes in length and covers vaccination for adults as well as children. You can order online at www.immunize.org/iztech or if you prefer, call (651) 647-9009 to request an order form by fax.
- To stay up to date on what's new in the world of immunization, subscribe to *IAC EXPRESS,* our free email immunization announcement service. To sign up, send an email message to express@immunize.org with the word SUBSCRIBE in the "Subject:" field.
- On page 7 of this issue, you'll find a catalog listing all the materials that IAC distributes for OB/GYNs. With your contribution to IAC of $60 or more, we will send you all the print items and the two "how-to" videos. Most practices prefer the convenience of contributing at this level in order to receive all IAC materials and have them available to review at their convenience. All IAC materials are camera-ready and copyright-free so you can make as many copies as you need.
- ***New!*** Adult Immunization Record Cards are now available from IAC for your patients. See page 3 for ordering information.

I hope this issue of ***VACCINATE WOMEN*** helps you provide better immunization services in your work setting. If you need additional information, please don't hesitate to contact us.

Deborah L. Wexler MD

Deborah L. Wexler, M.D.
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Immunization Action Coalition

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