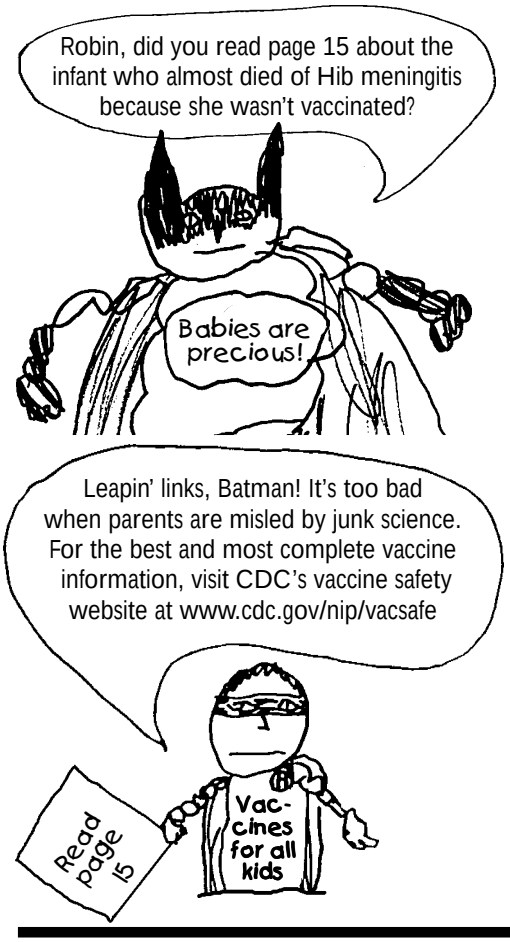
Volume 11 — Number 1 Spring 2001

NEEDLE TIPS

and the Hepatitis B Coalition News

Published by the Immunization Action Coalition for individuals and organizations concerned about vaccine-preventable diseases



WHAT'S ON THE INSIDE:

Ask the Experts

Editor's note: The Immunization Action Coalition thanks William L. Atkinson, MD, MPH; Harold S. Margolis, 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, and Dr. Margolis, chief of the Hepatitis Branch, serve as CDC liaisons to the Coalition. Ms. Moyer is an epidemiologist at the Hepatitis Branch.

Immunization questions?

- E-mail nipinfo@cdc.gov
- Call your state health department (phone numbers on page 23)
- Call CDC's Immunization Information Hotline at (800) 232-2522

General vaccine questions

by William L. Atkinson, MD, MPH

By law, when vaccinating adults or children, when and to whom is it required to give Vaccine Information Statements (VISs)?

The National Childhood Vaccine Injury Act requires that a VIS must be given to parents/guardians or adult patients before administering a vaccine containing diphtheria, tetanus, pertussis, hepatitis B, measles, mumps, rubella, varicella, Hib, polio, or pneumococcal conjugate. A VIS must be provided prior to each dose, not just the first. Providers should be sure they are using the most current version of each VIS. Current VISs and their dates are available from the National Immunization Program website at www.cdc.gov/nip/publications/vis and from IAC's website at www.immunize.org/vis

If a patient is on steroids, when should vaccines be withheld?

Steroid therapies that are short term (<2 weeks); alternate-day; physiologic replacement; topical (skin or eyes); aerosol; or given by intra-articular, bursal, or tendon injection are not considered contraindications to the use of live virus vaccines. The immunosuppressive effects of corticosteroid treatment vary, but many clinicians consider a dose equivalent to either 2 mg/kg of body weight or a total of 20 mg per day of prednisone for ≥2 weeks as sufficiently immunosuppressive to raise concern about the safety of vaccination with live virus vaccines (MMR, varicella, yellow fever). Providers should wait at least 1 month after discontinuation of therapy or reduction of dose before administering a live virus vaccine to patients who have received high systemically absorbed doses of corticosteroids for 2 weeks or more. Inactivated vaccines and toxoids can be administered to all immunocompromised patients, although the

(continued on page 18)

NEEDLE TIPS

Immunization Action Coalition
Hepatitis B Coalition

1573 Selby Avenue, Suite 234
St. Paul, MN 55104
Phone: (651) 647-9009
Fax: (651) 647-9131
E-mail: admin@immunize.org
Website: www.immunize.org

NEEDLE TIPS is a semiannual publication of the Immunization Action Coalition (IAC) written for health professionals. All information contained in ***NEEDLE TIPS*** is reviewed by the Centers for Disease Control and Prevention (CDC) for technical accuracy, with the exception of opinion pieces written by non-CDC authors. Circulation is now approximately 215,000. ISSN 1526-1816.

This publication is supported by CDC Grant Nos. U66/CCU518372 and U50/CCU518789. The contents of the publication are solely the responsibility of IAC and do not necessarily represent the official views of CDC.

Editor:
Deborah L. Wexler, MD

Publication Staff:
Lynn Bahta, RN, Valerie Gillispie, Megan O'Keefe, Caryn Pernu, Heidi Seppelt, Pat Storti

Artwork:
Leo, Isaac, and Sarah Wexler-Mann

IAC EXPRESS is the Coalition's e-mail news and announcement service. To sign up for this service, send an e-mail request to express@immunize.org with the word SUBSCRIBE in the "Subject:" field, or visit www.immunize.org/express

www.immunize.org is IAC's website. Visit often for the most current resources. Website design by Lantern Web™.

The Immunization Action Coalition (IAC), a 501(c)3 nonprofit organization, works to increase immunization rates and prevent disease. IAC promotes physician, community, and family awareness of and responsibility for appropriate immunization of all people of all ages against all vaccine-preventable diseases.

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.

Letters to the Editor...

Editor's note: IAC welcomes letters of interest to readers. Please send your letters by mail, fax, or e-mail to the address in the box at the left.

Expert reminds readers of the importance of immunization

I received my copy of *NEEDLE TIPS* today and want to compliment you and your staff on the excellent, highly useful publication.

As a member of your advisory board, that group of "experts" which provides you with, what else, stuffy advice, I'm here to tell you that we have our own personal stories about vaccine-preventable diseases. For example, I had polio at age one in the late 1940s and suffered a withered lower leg. That was only the visible problem. There were other intangible wounds such as my mother's guilt that she somehow was responsible for "letting" her baby get sick when actually there was nothing she could have done. The effects of vaccine-preventable diseases are devastating and costly to the victims, the families, and to society for decades afterwards and in many different ways.

Needless to say, it irritates me when I hear a few vocal people spreading unreasonable fears about immunizations and tearing down the progress we've made and continue to make in eliminating vaccine preventable diseases. The doubters and their children are safe from most of the diseases only because of the herd immunity provided by billions of parents and good citizens who choose to get their children immunized. For those of us who have experienced the diseases, the opposition of some people to immunization and the delay and inattention by others are simply not understandable.

Keep up the good work.

— Neal R. Holtan, MD, MPH
Minneapolis, Minnesota

New CPT codes for immunization now published on AMA's website

The American Medical Association (AMA) wants your readers to know that, in conjunction with the Centers for Disease Control and Prevention's National Immunization Program, we recently restructured Current Procedure Terminology (CPT) to better support current and future reporting requirements for immunizations. CPT is the standard code for reporting health care services in electronic transactions in the United States.

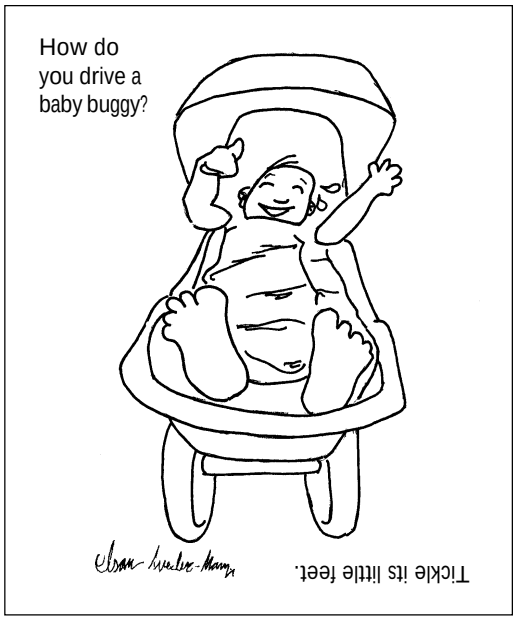
To avoid delays during the CPT code review process, the AMA has added new CPT codes for vaccines under development, in anticipation of Food and Drug Administration approval. With codes readily available, new vaccines can be implemented immediately. To further streamline the process of implementing new vaccine codes, the CPT Editorial Panel has developed a website so that any new or revised immunization administration and vaccine product codes will be released electronically twice a year at: www.ama-assn.org/cpt

This means that new codes are now available for use effective January 1 and July 1 each year, instead of waiting until the next annual code book release. For example, if a new vaccine product code is approved at an August CPT Editorial Panel meeting, it can now be released for electronic publication in January and made available for use then, instead of waiting until the next CPT book release approximately fourteen months later.

Note: Since recent CPT codes published on the AMA's website may not appear in the current CPT 2001 coding book, health professionals should check with any third party payers before reporting new CPT codes in their transactions.

For CPT coding questions, please contact the AMA's CPT Information Services at (800) 634-6922.

— L.J. Tan, PhD
Senior Scientist
Science Research and Technology
American Medical Association
Chicago, Illinois



NEEDLE TIPS appreciated for its immunization information

As the president-elect of my county medical association, the Chairman of the California Medical Association Committee on Quality Care, a member of the House of Delegates of both the CMA and the AMA and the Chief Medical Officer of third-party medical benefits organization, I want to compliment you on your publication, *NEEDLE TIPS and the Hepatitis B Coalition News.* I find it helpful and informative for all aspects of my work.

—Steven T. Kmucha, MS, MD
Daly City, California

Nurse reports on the dangers of vaccine-preventable disease

When I became an RN in 1987, I worked on a pediatric floor for about three and a half years. While there, I experienced firsthand the wonders of vaccinating our children against *Haemophilus influenzae* type b, which caused meningitis in children mainly under age two.

My first year on pediatrics, we saw countless numbers of children with Hib meningitis. At that time the Hib vaccine was not yet licensed for use in infants but was given at 15 months of age. After the new recommendation to vaccinate infants at 2, 4, and 6 months was implemented, the numbers of Hib meningitis cases dropped dramatically. In fact, the disease almost became obsolete in our community. At the time, I didn't realize I was seeing medical history in the making.

I also saw firsthand the effects of pertussis on an infant, not just once but twice. Both infants were 4 months old at the time they contracted the disease. Neither infant was vaccinated against pertussis.

I will never forget my experience with the first case of pertussis I saw. I was working alone that night with only a nurse's aide. The infant, a 4-month-old twin born 4 weeks prematurely, coughed nonstop for an hour and a half. I could not leave his side. I feared he would become too fatigued even to continue breathing. It was a very long night. I am happy to say that he survived it.

The other infant likewise survived the illness. But the fact remains that we should not be seeing these diseases any more. They can be prevented.

Now as a supervisor of a public health unit, I realize just how important this vaccine was to our children. I still cry when I see the film *Balto* that was made about the great diphtheria epidemic in Alaska. Many parents today don't realize they are actually jeopardizing the health of other children when they don't keep up with their children's immunizations and allow the potential for vaccine-preventable diseases to spread.

Still today I have parents who refuse to get their children vaccinated. If they only could have seen the terror and torment that the parents went through on the pediatric floor who almost lost their babies to meningitis or pertussis. I continue to encourage and educate all parents not to listen to the propaganda against vaccines, but to vaccinate their children to save lives.

—Susan Dupont, RN
Cameron Parish Health Unit
Cameron, Louisiana

Welcome new advisory board members!

Anthony Chen, MD, is a family physician with the International Community Health Services Clinics in Seattle and a clinical assistant professor at the University of Washington Department of Family Medicine. As previous chair for the National Task Force on Hepatitis B Immunization, Focus on Asians and Pacific Islanders, he has won awards for his efforts to raise awareness and immunization rates for hepatitis B vaccine. Dr. Chen presents frequently at national conferences, writes articles on hepatitis B prevention, and is involved in statewide projects to prevent hepatitis B.

Nancy Fasano is the outreach and education manager for the Communicable Disease and Immunization Division with the Michigan Department of Community Health. She is responsible for all education and outreach activities within the immunization program, including regional conferences, a newsletter, a physician peer education program, a nurse in-service education program, and a multitude of hepatitis prevention activities. Ms. Fasano also staffs the statewide immunization coalition and oversees the annual production of the provider tool kit on immunization.

Bruce Gellin, MD, MPH, is the executive director of the National Network for Immunization Information and a well-known and highly sought speaker on vaccine issues and the media. An infectious disease expert, he is a member of the faculty of the Department of Preventive Medicine at the Vanderbilt University School of Medicine in Nashville. Dr. Gellin has had broad experience in public health aspects of infectious diseases. He has written extensively about these topics in textbooks and peer-reviewed medical literature.

Mary Beth Koslap-Petraco, MS, RN-CS, CPNP, is the coordinator of child health for the Suffolk County Department of Health Services in New York. She is also clinical assistant professor and preceptor to graduate and undergraduate students at the State University of New York at Stony Brook. Ms. Koslap-Petraco is a NAPNAP fellow, chair of NAPNAP's Special Interest Group on Immunizations and former president of the New York/Long Island chapter. She has published widely in the area of childhood immunization.

Vaccine highlights

Latest recommendations and schedules

The next ACIP meetings

Editor's note: The information on these pages is current as of March 26, 2001.

The Advisory Committee on Immunization Practices (ACIP) is a committee of 10 national experts that provides advice and guidance to CDC regarding the most appropriate use of vaccines and immune globulins. ACIP meetings are held three times a year in Atlanta, Ga., and are open to the public. The next meetings will be held June 20–21 and October 17–18.

ACIP statements

No clinic should be without a set of these public health recommendations on vaccines, which are published in the *MMWR*. Continuing education credits (CMEs, CEUs, CNEs) are available for reading the statement and completing the brief test at the end of the statement.

To get a complete set of ACIP statements or just the ones you want:

- Download individual statements from CDC's website: www.cdc.gov/mmwr You can also request a free electronic subscription to the *MMWR* at this site. For a subscription by mail, call the Massachusetts Medical Society at (800) 843-6356. Cost is $98/year.
- Visit IAC's website to download individual statements: www.immunize.org/acip
- E-mail your request to nipinfo@cdc.gov
- Call CDC's Immunization Hotline at (800) 232-2522.
- Call your state's immunization program (phone numbers on page 23).
- Request them from your medical library.

Recently published ACIP statements:

- "Use of Anthrax Vaccine in the United States" (12/15/00)
- "Use of DTaP Vaccine as a Five-Dose Series" (11/17/00)
- "Preventing Pneumococcal Disease Among Infants and Young Children" (10/6/00)

2001 Childhood IZ schedule

On Jan. 12, 2001, CDC released the "Recommended Childhood Immunization Schedule—United States, 2001." The new schedule adds pneumococcal conjugate vaccine and extends the recommendation for the use of hepatitis A vaccine to include persons through age 18 years in selected geographic areas and in certain high-risk groups. This schedule is available online at www.cdc.gov/nip/recs/child-schedule.pdf or by calling CDC at (800) 232-2522.

Td vaccine news

On Mar. 16, 2001, "Update on Supply of TT, Td, and DTaP" was published in the *MMWR*. During the last quarter of 2000, the U.S. Public Health Service learned of a shortage of Td and TT resulting from decreased production of these vaccines by the two U.S. manufacturers. The shortage was expected to be resolved by early 2001; however, on Jan. 10, 2001, Wyeth Lederle announced it had stopped production of all products containing tetanus toxoid, leaving Aventis Pasteur as the sole nationwide distributor of Td and TT. Now the shortage is not expected to be resolved for 12–18 months.

Because of Td and TT shortages, clinics and hospitals that treat acute wounds will be given priority for vaccine until supplies are restored. Clinics and hospitals in need of vaccine for wound care should call Aventis Pasteur, telephone (800) 822-2463.

On Nov. 17, 2000, "Shortage of TT and Td" was published in the *MMWR*. CDC released the following list for prioritizing available Td doses.

1. Persons traveling to a country where the risk for diphtheria is high.
2. Persons requiring tetanus vaccination for prophylaxis in wound management.
3. Persons who have received fewer than 3 doses of vaccine containing Td.
4. Pregnant women and persons at occupational risk for tetanus-prone injuries who have not been vaccinated with Td within the preceding 10 years.
5. Adolescents who have not been vaccinated with Td within the preceding 10 years.
6. Adults who have not been vaccinated with Td within the preceding 10 years.

DTaP vaccine news

On Mar. 16, 2001, "Update on Supply of TT, Td, and DTaP" was published in the *MMWR*. Aventis Pasteur and GlaxoSmithKline, producers of Tripedia and Infanrix, respectively, are now the only remaining suppliers of DTaP, since Wyeth Lederle discontinued its DTaP vaccine Acel-Imune and Baxter Hyland Immuno Vaccines discontinued production of Certiva.

Some vaccine providers may have difficulties obtaining sufficient supplies of DTaP to vaccinate all children in their practices. If providers have insufficient quantities of DTaP, priority should be given to vaccinating infants who need the initial three DTaP doses and, if necessary, to defer the fourth dose. When adequate DTaP supplies are available, providers should recall for vaccination all children who did not receive the fourth dose of DTaP. CDC is evaluating the situation, and more guidance will be provided should substantial supply problems occur.

Editor's note: The current DTaP vaccine supply is an evolving situation. To keep up to date on this topic (and other vaccine issues), sign up for IAC EXPRESS, Immunization Action Coalition's free e-mail news service, delivered 1–2 times/week. To subscribe, visit www.immunize.org/express

On Mar. 7, 2001, the FDA approved a newly formulated version of Tripedia in one-dose vials without preservative and with only a trace amount of thimerosal. Approval of this vaccine should improve the supply of DTaP.

On Nov. 17, 2000, CDC published an ACIP statement titled "Use of DTaP Vaccine as a Five-Dose Series" in the *MMWR*. This 16-page report contains information on adverse reactions after the fourth and fifth doses of a series, including limb swelling. It also states that when the provider does not know or does not have the type of DTaP vaccine previously given, any licensed DTaP vaccine can be used for any dose in the series, including the fifth dose.

Hepatitis B vaccine news

On Feb. 16, 2001, CDC published a report in the *MMWR* on how the 1999 AAP/U.S. Public Health Service (USPHS) Joint Statement on Thimerosal in Vaccines affected infant hepatitis B vaccination practices. In this report, AAP and USPHS advocate the reintroduction of routine hepatitis B vaccination policies for all newborn infants born in hospitals that discontinued this practice because of concerns about thimerosal. All birthing hospitals should have hepatitis B vaccine available for use in infants born to HBsAg-positive and unscreened women.

Hospitals should continue to vaccinate all infants at birth until procedures are in place to guarantee that 1) the HBsAg status of every pregnant woman is available and reviewed at delivery, 2) appropriate passive-active immunoprophylaxis (HBIG and hepatitis B vaccine) is provided for infants of HBsAg-positive women within 12 hours of birth, and 3) appropriate active immunoprophylaxis (hepatitis B vaccine) is provided for infants of women with an unknown HBsAg status.

Pregnant women who are identified as HBsAg-positive should be reported to local or state health departments to ensure that their infants, family, and household contacts receive a full hepatitis B vaccination series.

Hepatitis A vaccine news

On Oct. 13, 2000, FDA approved a supplemental license for Merck's hepatitis A vaccine, Vaqta. The new approval extends the age range for the pediatric dose of Vaqta an extra year—it is now approved for use from ages 2 through 18 instead of from ages 2 through 17. It also extends the interval of the adult second dose of Vaqta from 6 months following the initial dose to 6 to 12 months.

Vax and bone marrow recipients

On Oct. 2, 2000, CDC published "Guidelines for Preventing Opportunistic Infections Among Hematopoietic Stem Cell Transplant Recipients" in the *MMWR*. This 125-page report offers guidelines for preventing opportunistic infections and provides tables with detailed vaccination recommendations. The vaccination information been excerpted and is available on CDC's website at www.cdc.gov/nip/publications/HSCTrecs.pdf

Meningococcal vaccine news

In the Dec. 2000 issue of *Pediatrics*, the AAP released a statement recommending that new college students, specifically those living in dormitories, should be made aware of their increased risk of meningococcal disease. It recommends that students' physicians and college health services provide information about the disease, as well as vaccinations for those who request them.

Polio vaccine news

On Mar. 2, 2001, and Dec. 8, 2000, CDC published information in the *MMWR* about the outbreak of poliomyelitis in the Dominican Republic and Haiti. The polio virus strain in the outbreak was derived from an OPV strain that became virulent, and the outbreak occurred when OPV vaccination coverage rates had decreased. Travelers to these areas who are not adequately vaccinated are at risk for polio and should be vaccinated against polio according to national vaccination policies.

Vaccines and BSE

On Dec. 22, 2000, CDC published "USPHS Recommendations for the Use of Vaccines Manufactured with Bovine-Derived Materials" in the *MMWR*. The report concluded that the risk for variant Creutzfeldt-Jakob disease (vCJD) posed by vaccines manufactured with bovine-derived materials was theoretical and remote. It stressed that the benefits of vaccination outweigh any remote risks for vCJD and recommended continuing current vaccination practices.

VISs (Vax. Info. Statements)

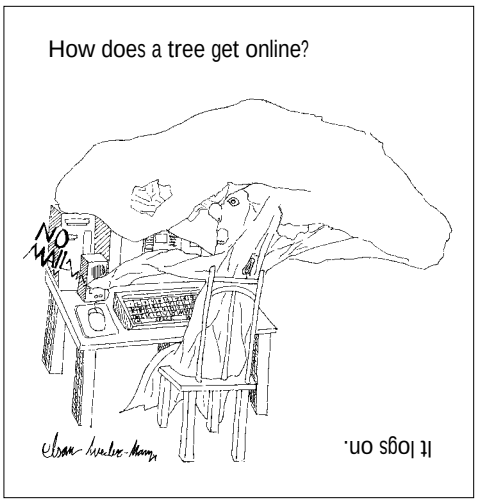
CDC has released two new Vaccine Information Statements (VISs) since August 2000: Hepatitis B (interim) (8/9/00) and Anthrax (11/6/00). Health care providers in the U.S. who administer any vaccine containing diphtheria, tetanus, pertussis, measles, mumps, rubella, polio, hepatitis B, Hib, pneumococcal conjugate, or varicella vaccine **are required by law** to provide a copy of the relevant VIS to the patient or parent/guardian prior to administration of each dose of the vaccine. For the vaccine-preventable diseases not listed above, use of the VISs is recommended, but not required.

Current VISs

Here are the most current VISs and the issue date that is printed at the bottom of each. Make sure you are using the current ones. Recycle your old copies.

anthrax	11/6/00	meningococcal	3/31/00
DTaP/DT/DTP	8/15/97	MMR	12/16/98
hepatitis A	8/25/98	polio	1/1/00
hepatitis B	8/09/00	pneumo (PCV7)	7/18/00
Hib	12/16/98	pneumo (PPV23)	7/29/97
influenza	4/14/00	Td	6/10/94
Lyme	11/1/99	varicella	12/16/98

VISs and instructions on how to use them can be obtained from CDC's website: www.cdc.gov/nip/publications/vis or from your state health department (see page 23). The VISs, some in 24 languages, and the VIS instruction sheet are also available on IAC's website: www.immunize.org/vis



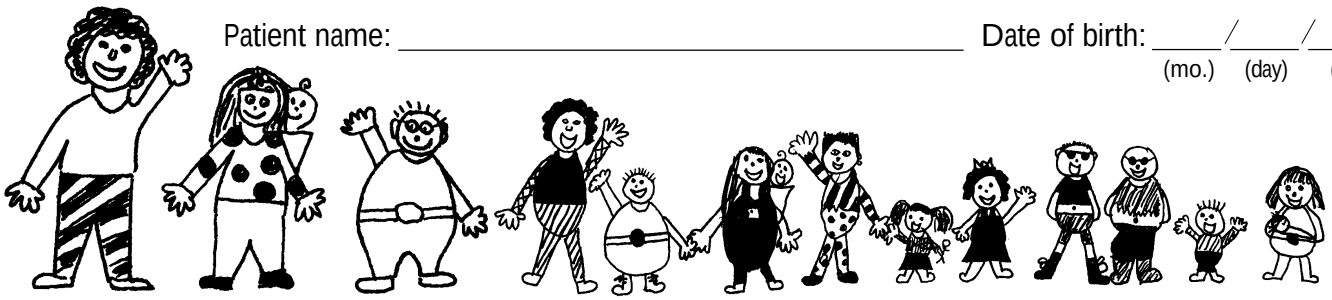
VFC coverage in 2001

The Vaccines for Children program (VFC) provides free vaccines to providers for children who meet the VFC-eligibility guidelines. If you would like information on how to become a VFC provider, contact your state VFC coordinator (phone numbers are on page 23).

As of March 2000, the age guidelines (for children who are VFC-eligible) are as follows:

- MMR and varicella: Children 1–18 years of age are eligible to receive one or two doses (depending on the child's age at the time of vaccination).
- Hepatitis B: Children 0–18 years of age are eligible to receive three doses.
- Pneumococcal conjugate (PCV7): Children 6 weeks through 23 months of age are eligible for up to 4 doses, and children ages 24–59 months are eligible for up to 2 doses depending on their ACIP-recommended risk group.
- DTaP, DT, Td, polio, and Hib: Children 6 weeks through 18 years of age who need routine or catch-up doses.
- Hepatitis A: Children 2–18 years of age are eligible to receive two doses if they live in one of the eleven high-risk states: AK, AZ, CA, ID, NV, NM, OK, OR, SD, UT, and WA. Hepatitis A vaccine may be available for use in these moderate-risk states: AR, CO, MO, MT, TX, and WY, and may also be available for use in communities with increased rates of hepatitis A virus infection. Check with your local or state health department.
- Influenza: Children 6 months of age through 18 years of age are eligible if they are in an ACIP-recommended risk group.
- Pneumococcal polysaccharide (PPV23): Children 2–18 years of age are eligible if they are in an ACIP-recommended risk group.

NOTE: Some states use state funding to expand these age limits. Check with your state immunization program (for phone numbers see page 23).♦



Patient name: _____ Date of birth: ____/____/____
(mo.) (day) (yr.)

Screening Questionnaire for Child and Teen Immunization

For parents/guardians: The following questions will help us determine which vaccines may be given today. If a question is not clear, please ask the nurse or doctor to explain it.

	Yes	No	Don't Know
1. Is the child sick today?	☐	☐	☐
2. Does the child have allergies to medications, food, or any vaccine?	☐	☐	☐
3. Has the child had a serious reaction to a vaccine in the past?	☐	☐	☐
4. Has the child had a seizure or a brain problem?	☐	☐	☐
5. Does the child have cancer, leukemia, AIDS, or any other immune system problem?	☐	☐	☐
6. Has the child taken cortisone, prednisone, other steroids, or anticancer drugs, or had x-ray treatments in the past 3 months?	☐	☐	☐
7. Has the child received a transfusion of blood or blood products, or been given a medicine called immune (gamma) globulin in the past year?	☐	☐	☐
8. Is the child/teen pregnant or is there a chance she could become pregnant in the next 3 months?	☐	☐	☐
9. Has the child received any vaccinations in the past 4 weeks?	☐	☐	☐

Form completed by: _____ Date: _____

Did you bring your child's immunization record card with you? **yes** ☐ **no** ☐

It is important to have a personal record of your child's vaccinations. If you don't have a record card, ask the child's health care provider to give you one! Bring this record with you every time you seek medical care for your child. Make sure your health care provider records all your child's vaccinations on it. Your child will need this card to enter daycare, kindergarten, junior high, etc.

Item #P4060 (3/01)

Understanding the Screening Questionnaire for Child & Teen Immunization

The information below has been adapted from CDC's *Guide to Contraindications to Childhood Vaccinations,* Oct. 2000, and *Epidemiology & Prevention of Vaccine-Preventable Diseases,* WL Atkinson et al., editors, CDC, 6th edition, Jan. 2000.

1. Is the child sick today?
There is no evidence that acute illness reduces vaccine efficacy or increases vaccine adverse events (1, 2). However, with moderate or severe acute illness, all vaccines should be delayed until the illness has improved. Mild illnesses (such as otitis media, upper respiratory infections, and diarrhea) are NOT contraindications to vaccination. Do not withhold vaccination if a person is taking antibiotics.

2. Does the child have allergies to medications, food, or any vaccine?
History of anaphylactic reaction such as hives (urticaria), wheezing or difficulty breathing, or circulatory collapse or shock (not fainting) from a previous dose of vaccine or vaccine component is a contraindication for further doses. For example, if a person experiences anaphylaxis after eating eggs, do not administer influenza vaccine, or if a person has anaphylaxis after eating gelatin, do not administer MMR or varicella vaccine. Local reactions (e.g., a red eye following instillation of ophthalmic solution) are not contraindications. For an extensive table of vaccine components, see reference 3.

3. Has the child had a serious reaction to a vaccine in the past?
History of anaphylactic reaction (see question 2) to a previous dose of vaccine or vaccine component is a contraindication for subsequent doses. History of encephalopathy within 7 days following DTP/DTaP is a contraindication for further doses of pertussis-containing vaccine. Precautions to pertussis-containing vaccines include the following: (a) seizure within 3 days of a dose, (b) pale or limp episode or collapse within 48 hours of a dose, (c) continuous crying for 3 hours within 48 hours of a dose, and (d) fever of 105°F (40°C) within 48 hours of a previous dose. There are other serious reactions to vaccines that constitute contraindications or precautions (4). Under normal circumstances, vaccines are deferred when a precaution is present. However, situations may arise when the benefit outweighs the risk (e.g., community pertussis outbreak).

4. Has the child had a seizure or a brain problem?
DTaP is contraindicated in children who have a history of encephalopathy within 7 days following DTP/DTaP. An unstable progressive neurologic problem is a precaution to the use of DTP/DTaP. For children with stable neurologic disorders (including seizures) unrelated to vaccination, or for children with a family history of seizure, vaccinate as usual but consider the use of acetaminophen or ibuprofen to minimize fever.

5. Does the child have cancer, leukemia, AIDS, or any other immune system problem?
Live virus vaccines (e.g., MMR, varicella) are usually contraindicated in immunocompromised children. However, there are exceptions. For example, MMR and varicella vaccines are recommended for asymptomatic HIV-infected children who do not have evidence of severe immunosuppression. For details, consult the ACIP recommendations (5, 6).

6. Has the child taken cortisone, prednisone, other steroids, or anticancer drugs, or had x-ray treatments in the past 3 months?
Live virus vaccines (e.g., MMR, varicella) should be postponed until after chemotherapy or long-term high-dose steroid therapy has ended. For details and length of time to postpone, consult the ACIP statement (1). To find specific vaccination schedules for stem cell transplant (bone marrow transplant) patients, see reference 7.

7. Has the child received a transfusion of blood or blood products, or been given a medicine called immune (gamma) globulin in the past year?
Live virus vaccines (e.g., MMR, varicella) may need to be deferred, depending on several variables. Consult the *2000 Red Book,* p. 390 (2), for the most current information on intervals between immune globulin or blood product administration and MMR or varicella vaccination.

8. Is the child/teen pregnant or is there a chance she could become pregnant in the next 3 months?
Live virus vaccines (e.g., MMR, varicella) are contraindicated prior to and during pregnancy due to the theoretical risk of virus transmission to the fetus. Sexually active young women who receive MMR or varicella vaccination should be instructed to practice careful contraception for 3 months following MMR vaccination and for one month following varicella vaccination (5, 8). Different inactivated vaccines may be given to a pregnant woman whenever indicated.

9. Has the child received any vaccinations in the past 4 weeks?
If two live virus vaccines (e.g., MMR, varicella) are not given on the same day, the doses must be separated by at least 28 days. Different inactivated vaccines may be given at any spacing interval if they are not administered simultaneously.

1. CDC. General recommendations on immunization. *MMWR* 1994; 34 (RR-1).
2. AAP. *2000 Red Book: Report of the Committee on Infectious Diseases.* 25th ed. Elk Grove Village, IL: AAP, 2000.
3. Visit the website: www.cdc.gov/nip/publications/pink/vaxcont.pdf
4. CDC. Guide to contraindications to childhood vaccinations. Oct. 2000. Available online at: www.cdc.gov/nip/recs/contraindications.pdf
5. CDC. Measles, mumps, and rubella—vaccine use and strategies for elimination of measles, rubella, and congenital rubella syndrome and control of mumps. *MMWR* 1998; 47 (RR-8).
6. CDC. Prevention of varicella: updated recommendations of the ACIP. *MMWR* 1999; 48 (RR-6).
7. CDC. Guidelines for preventing opportunistic infections among hematopoietic stem cell transplant recipients. *MMWR* 2000; 49 (RR-10).
8. CDC. Prevention of varicella. *MMWR* 1996; 45 (RR-11).

Identification number: _____ Today's date: ____/____/____ (mo.) (day) (yr.)

Are You at Risk for Hepatitis A?

The following questions will help us determine your risk for hepatitis A virus infection. Please check the boxes that apply to you. If you prefer not to answer personal questions in writing, let your health care provider know if one or more of the following risk factors applies to you. Your health care provider will advise you on hepatitis A testing and vaccination.

		Yes	No	Not sure
1.	Do you believe you've been exposed to hepatitis A in the past 2 weeks?	☐	☐	☐
2.	Have you ever been told you have hepatitis or liver disease?	☐	☐	☐
3.	Do you travel or work in areas outside the United States where hepatitis A is a problem? (This includes everywhere except Australia, New Zealand, Northern and Western Europe, Japan, and Canada.)	☐	☐	☐
4.	Do you have a blood clotting factor disorder?	☐	☐	☐
5.	Do you live in a community where cases of hepatitis A are occurring?	☐	☐	☐
6.	Are you a Native American or an Alaska Native?	☐	☐	☐
7.	Do you live or work on a reservation?	☐	☐	☐
8.	If you are a man, do you have sex with other men?	☐	☐	☐
9.	Do you engage in anal pleasuring with your partner (licking or fingering the anus)?	☐	☐	☐
10.	Do you inject or snort illegal drugs?	☐	☐	☐

Item #P2190 (3/01)

Identification number: _____ Today's date: ____/____/____
(mo.) (day) (yr.)

Are You at Risk for Hepatitis B?

The following questions will help us determine your risk for hepatitis B virus infection. Please check the boxes as they apply to you. If you prefer not to answer personal questions in writing, let your health care provider know if one or more of the following risk factors applies to you. Your health care provider will advise you on hepatitis B testing, vaccination, and/or treatment.

		Yes	No	Not sure
1.	Have you ever been told you have hepatitis?	☐	☐	☐
2.	Have you traveled or do you plan to travel for 3 months or more to a place where hepatitis B is common (Asia, Africa, Middle East, Eastern Europe, Amazon Basin of South America, Pacific Islands)?	☐	☐	☐
3.	Were you or your parents born in an area of the world where hepatitis B is common, or are your parents Alaska Natives?	☐	☐	☐
4.	Was your mother infected with hepatitis B virus when you were born?	☐	☐	☐
5.	Have you ever lived with a person who has hepatitis B virus infection?	☐	☐	☐
6.	Have you come in direct contact with the blood of another person?	☐	☐	☐
7.	Have you worked in health care or another occupation where you might have come in contact with someone else's blood or body fluids?	☐	☐	☐
8.	Have you provided services for or lived in a home for people with developmental disabilities?	☐	☐	☐
9.	Do you have hemophilia, have you had kidney dialysis, or did you receive a blood transfusion prior to 1975?	☐	☐	☐
10.	Have you ever had a tattoo or body piercing?	☐	☐	☐
11.	Have you ever been in prison?	☐	☐	☐
12.	Are you concerned that you might have been exposed to a sexually transmitted disease?	☐	☐	☐
13.	Have you or your sex partner ever had a sexually transmitted disease or hepatitis B?	☐	☐	☐
14.	Have you had more than one sex partner during a six-month period?	☐	☐	☐
15.	Are you a man who has sex with other men?	☐	☐	☐
16.	How many sex partners have you had in your lifetime?			
	0 1 2 3–5 6–20 more than 20			
17.	Have you or your sex partner ever injected illegal drugs?	☐	☐	☐
18.	Have you ever shared equipment (needles, syringes, cotton, water, etc.) when injecting drugs with someone else?	☐	☐	☐
19.	Have you ever been vaccinated against hepatitis B? If so, when? _____	☐	☐	☐

Item #P2191 (3/01)

Identification number: _____ Today's date: ____/____/____
(mo.) (day) (yr.)

Are You at Risk for Hepatitis C?

The following questions will help us determine your risk for hepatitis C virus infection. Please check the boxes as they apply to you. If you prefer not to answer personal questions in writing, let your health care provider know if one or more of the following risk factors applies to you. Your health care provider will advise you on hepatitis C testing and/or treatment.

		Yes	No	Not sure
1.	Did you receive a blood transfusion or solid organ transplant (heart, lung, liver, pancreas, kidney) before July 1992?	☐	☐	☐
2.	Did you receive clotting factor concentrates produced before 1987?	☐	☐	☐
3.	Were you ever on long-term hemodialysis?	☐	☐	☐
4.	Have you had blood tests that showed a liver problem?	☐	☐	☐
5.	Have you had a needlestick injury working in a health care setting?	☐	☐	☐
6.	Did your mother have hepatitis C when you were born?	☐	☐	☐
7.	Have you shared a toothbrush, razor, or any other item that might have blood on it (visible or not) with a person who has hepatitis C?	☐	☐	☐
8.	Have you had a sex partner who has hepatitis C?	☐	☐	☐
9.	Have you or your sex partner had a sexually transmitted disease?	☐	☐	☐
10.	Have you or your sex partner injected illegal drugs, even if it was only one time many years ago?	☐	☐	☐

Item #P2192 (3/01)

Summary of Rules for Childhood Immunization*

(Adapted from ACIP, AAP, and AAFP by the Immunization Action Coalition, March 2001)

Vaccine	Ages usually given and other guidelines	If child falls behind (minimum intervals)	Contraindications (Remember: mild illness is not a contraindication)
DTaP (Diphtheria, tetanus, acellular pertussis) Give IM	• DTaP (not DTP) is recommended for all doses in the series. • Give at 2m, 4m, 6m, 15–18m, 4–6yrs of age. • May give #1 as early as 6wks of age. • May give #4 as early as 12m of age if 6m have elapsed since #3 and the child is unlikely to return at age 15–18m. • If started with DTP, complete the series with DTaP. • Do not give DTaP to children ≥7yrs of age (give Td). • May give with all other vaccines but as a separate injection. • It is preferable but not mandatory to use the same DTaP product for all doses.	• #2 & #3 may be given 4wks after previous dose. • #4 may be given 6m after #3. • If #4 is given before 4th birthday, wait at least 6m for #5 (4–6yrs of age). • If #4 is given after 4th birthday, #5 is not needed. • DO NOT restart series, no matter how long since previous dose.	• Anaphylactic reaction to a prior dose or to any vaccine component. • Moderate or severe acute illness. Don't postpone for mild illness. • Previous encephalopathy within 7d after DTP/DTaP. **Precautions for DTP/DTaP:** The following are precautions, not contraindications. Generally when these conditions are present, the vaccine shouldn't be given. But in situations when the benefit outweighs the risk (e.g., community pertussis outbreak), vaccination should be considered. • T≥105°F (40.5°C) within 48hrs after previous dose. • Continuous crying lasting ≥3hrs within 48hrs after previous dose. • Previous convulsion within 3d after immunization. • Pale or limp episode or collapse within 48hrs after previous dose. • Unstable progressive neurologic problem (defer until stable).
DT Give IM	• Give to children <7yrs of age if child had a serious reaction to "P" in DTaP/DTP or if parents refuse the pertussis component. • May give with all other vaccines but as a separate injection.		
Td Give IM	• Use for persons ≥7yrs of age. • A booster dose is recommended for children 11–12yrs of age if 5yrs have elapsed since last dose. Then boost every 10yrs. • May give with all other vaccines but as a separate injection.	For those never vaccinated or with an unknown vaccination history: dose #1 is given now, dose #2 is given 4wks later, dose #3 is given 6m after #2, then give booster dose every 10yrs. **continued ➤**	• Anaphylactic reaction to a prior dose or to any vaccine component. • Moderate or severe acute illness. Don't postpone for minor illness. If the series is incomplete, continue from where you left off. DO NOT restart the series.
MMR (Measles, mumps, rubella) Give SC	• Give #1 at 12–15m of age. Give #2 at 4–6yrs of age. • Make sure that all children (and teens) over 4–6yrs of age have received both doses of MMR. • If a dose was given before 12m of age it doesn't count as the first dose, so give #1 at 12–15m of age with a minimum interval of 4wks between these doses. • If MMR and Var (and/or yellow fever vaccine) are not given on the same day, space them ≥28d apart. • May give with all other vaccines but as a separate injection.	• 2 doses of MMR are recommended for all children ≤18yrs of age. • Dose should be given whenever it is noted that a child is behind. Exception: If MMR and Var (and/or yellow fever vaccine) are not given on the same day, space them ≥28d apart. • There should be a minimum interval of 28d between MMR #1 and MMR #2. • Dose #2 can be given at any time if at least 28d have elapsed since dose #1 and both doses are administered after 1yr of age. • DO NOT restart the series, no matter how long since previous dose.	• Anaphylactic reaction to a prior dose or to any vaccine component. • Pregnancy or possible pregnancy within next 3m (use contraception). • Moderate or severe acute illness. Don't postpone for minor illness. • If blood, plasma, or immune globulin were given in past 11m, see ACIP recommendations or *2000 Red Book* (p.390) re: time to wait before vaccinating. • HIV is NOT a contraindication unless severely immunocompromised. • Immunocompromised persons (e.g., because of cancer, leukemia, lymphoma). **Note:** For patients on high-dose immunosuppressive therapy, consult ACIP recommendations regarding delay time. **Note:** MMR is not contraindicated if a PPD test was recently applied. If PPD and MMR weren't given on same day, delay PPD for 4–6wks after MMR.
Varicella (Var) (Chickenpox) Give SC	• Routinely give at 12–18m of age. • Vaccinate all children ≥12m of age including all adolescents who have not had chickenpox. • May use as postexposure prophylaxis if given within 3–5d. • If Var and MMR (and/or yellow fever vaccine) are not given on the same day, space them ≥28d apart. • May give with all other vaccines but as a separate injection.	• Do not give to children <12m of age. • Susceptible children <13yrs of age receive 1 dose. • Susceptible persons ≥13yrs of age receive 2 doses 4–8wks apart. • DO NOT restart series, no matter how long since previous dose.	• Anaphylactic reaction to a prior dose or to any vaccine component. • Moderate or severe acute illness. Don't postpone for minor illness. • Pregnancy or possibility of pregnancy within 1m. • If blood, plasma, or immune globulin (IG or VZIG) were given in past 5m, see ACIP recommendations or AAP's *2000 Red Book* (p.390) re: time to wait before vaccinating. • Persons immunocompromised due to high doses of systemic steroids, cancer, leukemia, lymphoma, or immunodeficiency. **Note:** For patients with humoral immunodeficiency, HIV infection, or leukemia, or for patients on high doses of systemic steroids, consult ACIP recommendations. • For use in children taking salicylates, consult ACIP recommendations.

*The newer combination vaccines are not listed on this table but may be used whenever administration of any component is indicated and none is contraindicated. Read package inserts. For detailed information, see the ACIP statements which are published in the *MMWR.* To obtain, visit www.cdc.gov/nip/publications/ACIP-list.htm or visit the Immunization Action Coalition's (IAC) website at www.immunize.org/acip For recommendations of American Academy of Pediatrics (AAP), consult AAP's *2000 Red Book* and the journal *Pediatrics,* www.aap.org

This table is published annually by the Immunization Action Coalition, 1573 Selby Ave., St. Paul, MN 55104, (651) 647-9009. The most recent edition is found on IAC's website at www.immunize.org/childrules

Thank you to the following individuals for their review: William L. Atkinson, MD, MPH; Beth Bell, MD, MPH; Judith Coates, RN, FNP; Anthony Fiore, MD; John Grabenstein, RPh, PhD; Robert Jacobson, MD; Aisha Jumaan, PhD, MPH; Margaret Keane; Anne Kuettel, PHN; Edgar Marcuse, MD, MPH; James McCord, MD; Margaret Morrison, MD; Linda Moyer, RN; Diane Peterson; Mary Beth Koslap-Petraco, RN-CS, CPNP; Fred Ruben, MD; Jane Seward, MBBS; Tom Stenvig, RN, MS, MPH; Peter Tobar; Thomas Vernon, MD; and Richard Zimmerman, MD, MPH. Responsibility for errors or omissions lies with the editor, Deborah L. Wexler, MD.

Item #P2010 (3/01)

Summary of Rules for Childhood Immunization (continued)

Vaccine	Ages usually given and other guidelines	If child falls behind (minimum intervals)	Contraindications (Remember: mild illness is not a contraindication)
Polio (IPV) Give SC or IM	• Give at 2m, 4m, 6–18m, and 4–6yrs of age. • May give #1 as early as 6wks of age. • Not routinely recommended for those ≥18yrs of age (except certain travelers). • May give with all other vaccines but as a separate injection.	• All doses should be separated by at least 4wks. • #4 is given at 4–6yrs of age. • If #3 of an all-IPV or all-OPV series is given at ≥4yrs of age, dose #4 is not needed. • Those who receive a combination of IPV and OPV doses must receive all 4 doses. • DO NOT restart series, no matter how long since previous dose.	• Anaphylactic reaction to a prior dose or to any vaccine component. • Moderate or severe acute illness. Don't postpone for minor illness.
Hib Give IM	• HibTITER (HbOC) & ActHib or OmniHib (PRP-T): give at 2m, 4m, 6m, 12–15m. • PedvaxHIB (PRP-OMP): give at 2m, 4m, 12–15m. • Dose #1 of Hib vaccine may be given as early as 6wks of age but no earlier. • May give with all other vaccines but as a separate injection. • Hib vaccines are interchangeable. • Any Hib vaccine may be used for the booster dose. • Hib is not routinely given to children ≥5yrs of age.	**Rules for all Hib vaccines:** • The last dose (booster dose) is given no earlier than 12m of age and a minimum of 2m after the previous dose. • For children ≥15m and <5yrs of age who have never received Hib vaccine, give only 1 dose. • DO NOT restart series, no matter how long since previous dose. **Rules for HbOC (HibTITER) & PRP-T (ActHib, OmniHib) only:** • #2 and #3 may be given 4 wks after previous dose. • If #1 was given at 7–11m, only 3 doses are needed; #2 is given 4–8wks after #1, then boost at 12–15m. • If #1 was given at 12–14m, give a booster dose in 2m. **continued ➤**	• Anaphylactic reaction to a prior dose or to any vaccine component. • Moderate or severe acute illness. Don't postpone for minor illness. **(continued from previous column)** **Rules for PRP-OMP (PedvaxHiB) only:** • #2 may be given 4wks after dose #1. • If #1 was given at 12–14m, boost 8wks later.
Hep-B Give IM	• Vaccinate all infants at 0–2m, 1–4m, 6–18m of age. • Vaccinate all children 0 through 18yrs of age. • For older children/teens, spacing options include: 0, 1, 6m; 0, 2, 4m; or 0, 1, 4m. • Children born (or whose parents were born) in countries of high HBV endemicity or who have other risk factors should be vaccinated ASAP. • **If mother is HBsAg positive:** give HBIG and hep B #1 within 12hrs of birth, #2 at 1–2m, and #3 at 6m of age. • **If mother's HBsAg status is unknown:** give hep B #1 within 12hrs of birth, #2 at 1–2m, and #3 at 6m of age. If mother is later found to be HBsAg positive, her infant should receive HBIG within 7d of birth. • May give with all other vaccines but as a separate injection.	• DO NOT restart series, no matter how long since previous dose. • 3-dose series can be started at any age. • Minimum spacing for children and teens: 4wks between #1 & #2, and 8wks between #2 & #3. Overall there must be ≥16wks between #1 & #3. • Dose #3 should not be given earlier than 6m of age. **Dosing of hepatitis B vaccines:** Vaccine brands are interchangeable for 3-dose schedule. For Engerix-B, use 10mcg for 0 through 19yrs of age. For Recombivax HB, use 5mcg for 0 through 19yrs of age. **Alternative dosing schedule for adolescents aged 11 through 15yrs:** For Recombivax HB *only*, use 10mcg (adult dose) in two doses spaced 4–6m apart. May only be given to adolescents 11 through 15yrs of age.	• Anaphylactic reaction to a prior dose or to any vaccine component. • Moderate or severe acute illness. Don't postpone for minor illness.
Hep-A Give IM	• Vaccinate children ≥2yrs old who live in areas with consistently elevated rates of hepatitis A, as well as children who have specific risk factors. (See ACIP statement and column 2 of this table for details.) • Children who travel outside of the U.S. (except Western Europe, New Zealand, Australia, Canada, or Japan). • Give dose #2 a minimum of 6m after dose #1. • Dose #1 may not be given earlier than 2yrs of age. • May give with all other vaccines but as a separate injection.	• DO NOT restart series, no matter how long since previous dose. • The minimum interval between dose #1 and #2 is 6m. • Hepatitis A vaccine brands are interchangeable. • Consult your local or state public health authority for information regarding your city, county, or state hepatitis A rates. States with consistently elevated rates (average ≥10 cases per 100,000 population from 1987-1997) include the following: AL, AZ, AK, CA, CO, ID, MO, MT, NV, NM, OK, OR, SD, TX, UT, WA, and WY.	• Anaphylactic reaction to a prior dose or to any vaccine component. • Moderate or severe acute illness. Don't postpone for minor illness.
Pneumo-coccal conjugate (PCV7) Give IM	• Give at 2m, 4m, 6m and 12–15m of age. • For children age 24–59m of age, give 2 doses to high-risk children, and consider 1 dose for moderate-risk children. (See box below for list of high- and moderate-risk children.) • If both PCV7 and PPV23 are indicated, PPV23 is given ≥8wks after PCV7. • May give 1 dose to unvaccinated healthy children 24–59m. • PCV7 not routinely given to children ≥5 years of age. • May give with all other vaccines but as a separate injection.	• Minimum interval for infants ≤12m of age is 4wks, for >12m of age is 8wks. • For infants 7–11m of age: If unvaccinated, give dose #1 now, give dose #2 4–8wks later, and boost at 12–15m. If infant has had 1 or 2 previous doses, give next dose now, and boost at 12–15m. • For infants 12–23 months: If not previously vaccinated or only one previous dose before 12m, give 2 doses ≥8wks apart. If infant previously had 2 doses, give booster dose ≥8 wks after previous dose. • DO NOT restart series, no matter how long since previous dose.	• Anaphylactic reaction to a prior dose or to any vaccine component. • Moderate or severe acute illness. Don't postpone for minor illness.
	High-risk children: Those with sickle cell disease; anatomic or functional asplenia; chronic cardiac, pulmonary, or renal disease; diabetes mellitus; CSF leak; HIV infection; or immunosuppression. **Moderate-risk children:** Children aged 24–35m; children aged 24–59m who attend group daycare centers or are of Alaska Native, American Indian, or African American descent.		
PPV23	There are children ≥2yrs of age for whom pneumococcal polysaccharide vaccine (PPV23) is recommended. Give IM or SC. Consult the ACIP statement *Prevention of Pneumococcal Disease* (4/4/97) for details.		
Influenza	There are children ≥6m of age for whom influenza vaccine is recommended. Give IM. Consult the current year's ACIP statement *Prevention and Control of Influenza* for details.		
Lyme	There are teenagers (≥15yrs of age) for whom Lyme disease vaccine is recommended. Give IM. Consult the ACIP statement *Recommendations for the Use of Lyme Disease Vaccine* (6/4/99) for details.		
Mening.	Meningococcal disease risk and vaccine availability should be discussed with college students. Give SC. Consult the ACIP statement *Meningococcal Disease and College Students* (6/30/00) for details.		

Summary of Recommendations for Adult Immunization - side 1

Adapted from the Advisory Committee on Immunization Practices (ACIP) by the Immunization Action Coalition with review by ad hoc team, March 2001

Vaccine name and route	For whom it is recommended	Schedule for routine and "catch-up" administration	Contraindications (mild illness is not a contraindication)
Influenza *"flu vaccine"* Give IM	• Adults who are 50yrs of age or older. • People 6m–50yrs of age with medical problems such as heart disease, lung disease, diabetes, renal dysfunction, hemoglobinopathies, immunosuppression, and/or people living in chronic care facilities. • People (≥6m of age) working or living with at-risk people. • All health care workers and those who provide key community services. • Healthy pregnant women who will be in their 2nd or 3rd trimesters during influenza season. • Pregnant women who have underlying medical conditions should be vaccinated before influenza season, regardless of the stage of pregnancy. • Travelers to areas where influenza activity exists or when traveling among people from areas of the world where there is current influenza activity. • Anyone who wishes to reduce the likelihood of becoming ill with influenza.	• Given every year. • October through mid-November is the *optimal* time to receive an annual flu shot to maximize protection. • Influenza vaccine may be given at any time during the influenza season (typically December through March) or at other times when the risk of influenza exists. • May give with all other vaccines but as a separate injection.	• Previous anaphylactic reaction to this vaccine, to any of its components, or to eggs. • Moderate or severe acute illness. **Note:** Pregnancy and breastfeeding are not contraindications to the use of this vaccine.
Pneumococcal polysaccharide (PPV23) Give IM or SC	• Adults who are 65yrs of age or older. • People 2–65yrs of age who have chronic illness or other risk factors, including chronic cardiac or pulmonary diseases, chronic liver disease, alcoholism, diabetes mellitus, CSF leaks, as well as people living in special environments or social settings (including Alaska Natives and certain American Indian populations). Those at highest risk of fatal pneumococcal infection are people with anatomic or functional asplenia, or sickle cell disease; immunocompromised persons including those with HIV infection, leukemia, lymphoma, Hodgkin's disease, multiple myeloma, generalized malignancy, chronic renal failure, or nephrotic syndrome; persons receiving immunosuppressive chemotherapy (including corticosteroids); and those who received an organ or bone marrow transplant. Pregnant women with high-risk conditions should be vaccinated if not done previously.	• Routinely given as a one-time dose; administer if previous vaccination history is unknown. • One-time revaccination is recommended 5yrs later for people at highest risk of fatal pneumococcal infection or rapid antibody loss (e.g., renal disease) and for people ≥65yrs of age if the 1st dose was given prior to age 65 and ≥5yrs have elapsed since previous dose. • May give with all other vaccines but as a separate injection.	• Previous anaphylactic reaction to this vaccine or to any of its components. • Moderate or severe acute illness. **Note:** Pregnancy and breastfeeding are not contraindications to the use of this vaccine.
Hepatitis B (Hep-B) Give IM Brands may be used interchangeably.	• All adolescents. • High-risk adults including household contacts and sex partners of HBsAg-positive persons; users of illicit injectable drugs; heterosexuals with more than one sex partner in 6 months; men who have sex with men; people with recently diagnosed STDs; patients receiving hemodialysis and patients with renal disease that may result in dialysis; recipients of certain blood products; health care workers and public safety workers who are exposed to blood; clients and staff of institutions for the developmentally disabled; inmates of long-term correctional facilities, and certain international travelers. **Note:** Prior serologic testing may be recommended depending on the specific level of risk and/or likelihood of previous exposure. **Note:** In 1997, the NIH Consensus Development Conference, a panel of national experts, recommended that hepatitis B vaccination be given to all anti-HCV positive persons. **Ed. note:** Provide serologic screening for immigrants from endemic areas. When HBsAg-positive persons are identified, offer appropriate disease management. In addition, screen their sex partners and household members and, if found susceptible, vaccinate.	• Three doses are needed on a 0, 1, 6m schedule. • Alternative timing options for vaccination include: 0, 2, 4m 0, 1, 4m • There must be 4wks between doses #1 and #2, and 8wks between doses #2 and #3. Overall there must be at least 16wks between doses #1 and #3. • **Schedule for those who have fallen behind:** If the series is delayed between doses, do not start the series over. Continue from where you left off. • May give with all other vaccines but as a separate injection.	• Previous anaphylactic reaction to this vaccine or to any of its components. • Moderate or severe acute illness. **Note:** Pregnancy and breastfeeding are not contraindications to the use of this vaccine.
Hepatitis A (Hep-A) Give IM Brands may be used interchangeably.	• People who travel outside of the U.S. (except for Western Europe, New Zealand, Australia, Canada, and Japan). • People with chronic liver disease including people with hepatitis C; people with hepatitis B who have chronic liver disease; illicit drug users; men who have sex with men; people with clotting-factor disorders; people who work with hepatitis A virus in experimental lab settings (not routine medical laboratories); and food handlers when health authorities or private employers determine vaccination to be cost-effective. **Note:** Prevaccination testing is likely to be cost effective for persons >40yrs of age as well as for younger persons in certain groups with a high prevalence of hepatitis A virus infection.	• Two doses are needed. • The minimum interval between dose #1 and #2 is 6m. • If dose #2 is delayed, do not repeat dose #1. Just give dose #2. • May give with all other vaccines but as a separate injection.	• Previous anaphylactic reaction to this vaccine or to any of its components. • Moderate or severe acute illness. • Safety during pregnancy has not been determined, so benefits must be weighed against potential risk. **Note:** Breastfeeding is not a contra-indication to the use of this vaccine.

For specific ACIP immunization recommendations refer to the statements which are published in the *MMWR*. To obtain a complete set of ACIP statements, call (800) 232-2522, or to access individual statements, visit CDC's website: www.cdc.gov/nip/publications/ACIP-list.htm or visit IAC's website: www.immunize.org/acip

This table is revised yearly due to the changing nature of U.S. immunization recommendations. Visit the Immunization Action Coalition's website at www.immunize.org/adultrules to make sure you have the most current version. The Coalition thanks William Atkinson, MD, MPH; Beth Bell, MD; Judith Coates, RN; Anthony Fiore, MD; Stanley Gall, MD; Pierce Gardner, MD; John Grabenstein, RPh, PhD; Neal Holtan, MD, MPH; Aisha Jumaan, PhD, MPH; Margaret Keane; Anne Kuettel, PHN; Margaret Morrison, MD; Linda Moyer, RN; Diane Peterson; Greg Poland, MD; Fred Ruben, MD; William Schaffner, MD; Jane Seward, MBBS; Thomas Vernon, MD; and Rick Zimmerman, MD, MPH, for their comments on this table. Responsibility for errors or omissions lies with the editor, Deborah L. Wexler, MD. This table is published by the Immunization Action Coalition, 1573 Selby Avenue, St. Paul, MN 55104. Telephone: (651) 647-9009. E-mail: admin@immunize.org

Item #P2011 (3/01)

Summary of Recommendations for Adult Immunization - side 2

Vaccine name and route	For whom it is recommended	Schedule for routine and "catch-up" administration	Contraindications (mild illness is not a contraindication)
Td (Tetanus, diphtheria) Give IM	• All adolescents and adults. • After the primary series has been completed, a booster dose is recommended every 10yrs. Make sure your patients have received a primary series of 3 doses. • A booster dose as early as 5yrs later may be needed for the purpose of wound management, so consult ACIP recommendations.	• Give booster dose every 10yrs after the primary series has been completed. • For those who are unvaccinated or behind, complete the primary series (spaced at 0, 1–2m, 6–12m intervals). Don't restart the series, no matter how long since the previous dose. • May give with all other vaccines but as a separate injection.	• Previous anaphylactic or neurologic reaction to this vaccine or to any of its components. • Moderate or severe acute illness. **Note:** Pregnancy and breastfeeding are not contraindications to the use of this vaccine.
MMR (Measles, Mumps, Rubella) Give SC	• Adults born in 1957 or later who are ≥18yrs of age (including those born outside the U.S.) should receive at least one dose of MMR if there is no serologic proof of immunity or documentation of a dose given on or after 1st birthday. • Adults in high-risk groups, such as health care workers, students entering colleges and other post high school educational institutions, and international travelers, should receive a total of two doses. • Adults born before 1957 are usually considered immune but proof of immunity may be desirable for health care workers. • All women of childbearing age (i.e., adolescent girls and premenopausal adult women) who do not have acceptable evidence of rubella immunity or vaccination. • Special attention should be given to immunizing women born outside the United States in 1957 or later.	• One or two doses are needed. • If dose #2 is recommended, give it no sooner than 4wks after dose #1. • May be given with all other vaccines but as a separate injection. • If varicella vaccine and MMR are both needed and are not administered on the same day, space them at least 4wks apart. • If a pregnant woman is found to be rubella-susceptible, administer MMR postpartum.	• Previous anaphylactic reaction to this vaccine, or to any of its components. • Pregnancy or possibility of pregnancy within 3 months. **Note:** Breastfeeding is not a contraindication to the use of this vaccine. • HIV positivity is NOT a contraindication to MMR except for those who are severely immunocompromised. • Persons immunocompromised due to cancer, leukemia, lymphoma, immunosuppressive drug therapy, including high-dose steroids or radiation therapy. • If blood products or immune globulin have been administered during the past 11 months, consult the ACIP recommendations regarding time to wait before vaccinating. • Moderate or severe acute illness. **Note:** MMR is not contraindicated if a PPD test was recently applied. If PPD and MMR not given on same day, delay PPD for 4–6wks after MMR.
Varicella (Var) *"Chickenpox vaccine"* Give SC	All susceptible adults and adolescents should be vaccinated. It is especially important to ensure vaccination of the following groups: susceptible persons who have close contact with persons at high risk for serious complications (e.g., health care workers and family contacts of immunocompromised persons) and susceptible persons who are at high risk of exposure (e.g., teachers of young children, day care employees, residents and staff in institutional settings such as colleges and correctional institutions, military personnel, adolescents and adults living with children, non-pregnant women of childbearing age, and international travelers who do not have evidence of immunity). **Note:** People with reliable histories of chickenpox (such as self or parental report of disease) can be assumed to be immune. For adults who have no reliable history, serologic testing may be cost effective since most adults with a negative or uncertain history of varicella are immune.	• Two doses are needed. • Dose #2 is given 4–8wks after dose #1. • May be given with all other vaccines but as a separate injection. • If varicella vaccine and MMR are both needed and are not administered on the same day, space them at least 4wks apart. • If the second dose is delayed, do not repeat dose #1. Just give dose #2.	• Previous anaphylactic reaction to this vaccine or to any of its components. • Pregnancy, or possibility of pregnancy within 1 month. • Immunocompromised persons due to malignancies and primary or acquired cellular immunodeficiency including HIV/AIDS. (See *MMWR* 1999, Vol. 28, No. RR-6.) **Note:** For those on high dose immunosuppressive therapy, consult ACIP recommendations regarding delay time. • If blood products or immune globulin have been administered during the past 5m, consult the ACIP recommendations regarding time to wait before vaccinating. • Moderate or severe acute illness. **Note:** Breastfeeding is not a contraindication to the use of this vaccine. **Note:** Manufacturer recommends that salicylates be avoided for 6wks after receiving varicella vaccine because of a theoretical risk of Reye's syndrome.
Polio IPV Give IM or SC	Not routinely recommended for persons 18yrs of age and older. **Note:** Adults living in the U.S. who never received or completed a primary series of polio vaccine need not be vaccinated unless they intend to travel to areas where exposure to wild-type virus is likely. Previously vaccinated adults can receive one booster dose if traveling to polio endemic areas.	• Refer to ACIP recommendations regarding unique situations, schedules, and dosing information. • May be given with all other vaccines as a separate injection.	• Refer to ACIP recommendations.
Lyme disease Give IM	• Consider for persons 15–70yrs of age who reside, work, or recreate in areas of high or moderate risk and who engage in activities that result in frequent or prolonged exposure to tick-infested habitat. • Persons with a history of previous uncomplicated Lyme disease who are at continued high risk for Lyme disease. (See description in the first bullet.) • See ACIP statement for a definition of high and moderate risk.	• Three doses are needed. Give at intervals of 0, 1, and 12m. Schedule dose #1 (given in yr 1) and dose #3 (given in yr 2) to be given several weeks before tick season. See ACIP statement for details. • If given with other vaccines, give as a separate injection.	• Previous anaphylactic reaction to this vaccine or to any of its components. • Pregnancy. • Moderate or severe acute illness. • Persons with treatment-resistant Lyme arthritis. • There are not enough data to recommend Lyme disease vaccine to persons with these conditions: immunodeficiency, diseases associated with joint swelling (including rheumatoid arthritis) or diffuse muscular pain, chronic health conditions due to Lyme disease.
Mening.	Meningococcal disease risk and vaccine availability should be discussed with college students. Give SC. Consult the ACIP statement *Meningococcal Disease and College Students* (6/30/00) for details.		

Unprotected people...

Hib meningitis strikes unvaccinated infant

The Immunization Action Coalition collects stories and case reports about people who suffered or died from vaccine-preventable diseases. Such stories remind us of the seriousness of these diseases and the importance of vaccination. We need your help. Send stories, news, or case reports about ANY vaccine-preventable disease to us by email at iacx@immunize.org or by fax to (651) 647-9131.

To read more articles and case reports about unprotected people, visit IAC's website:

www.immunize.org/stories

The article "Vaccine's Safety, Morality Hit Home for Girl's Parents" by Bill Snyder first appeared in the September 17, 2000, edition of *The Tennessean,* and was reprinted with permission in the print edition of the Spring 2001 *NEEDLE TIPS*. The complete story is available online only at the website of *The Tennessean*. Go to: http://www.tennessean.com/sii/00/09/17/vaccine17.shtml

This article tells the story of Suzanne and Leonard Walther of Murfreesboro, Tenn., who had such serious concerns about the safety and morality of vaccination that they put off immunizing their infant daughter until they had answers to their questions. In the meantime, unfortunately, their daughter contracted Haemophilus influenzae type b (Hib), a vaccine-preventable disease.

Their daughter recovered, but the Walthers' experience led them to search further for answers to their questions. In the end they concluded that the benefits of vaccination far outweighed the risks. Suzanne Walther said, "I don't want my child to be the one in 3 million" children who suffers a potentially fatal reaction to a vaccine, "but I also don't want mine to be the one in 10 that dies if they get the disease."

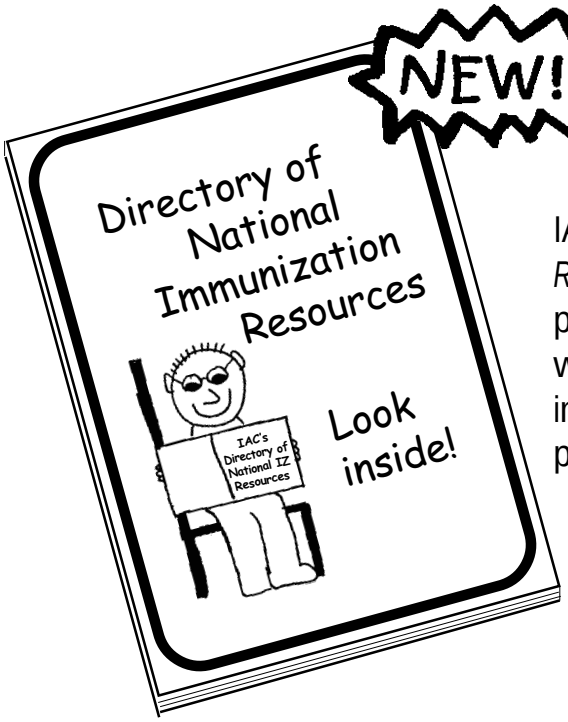
10 Tips on Evaluating Information on the Internet

How do you know if vaccine information you find on the Internet is accurate? Use these tips from CDC to evaluate the information you find.

1. The ownership of the website should be clear.
2. The information provided should be based on sound scientific study.
3. The website should carefully weigh the evidence and acknowledge the limitations of the work.
4. Beware of "junk science" and suggestions of "conspiracies."
5. The individuals or group providing the information should be qualified to address the subject matter.
6. Arguments should be based on facts, not conjecture.
7. The motives of the website should be clear.
8. The information provided should make sense (i.e., if it seems too good to be true, it probably is).
9. The website contains references from and to recognized peer-reviewed publications.
10. You should be able to obtain additional information if you need it.

Adapted from CDC's website: http://www.cdc.gov/od/nvpo/people.htm

Unprotected people *. . . continued from page 15*



Directory of National Immunization Resources

IAC's new 50-page *Directory of National Immunization Resources* is the most comprehensive guide available—packed with useful information on organizations, websites, hotlines, and books that offer a wide array of immunization resources for health professionals, policymakers, and families.

To order a copy of this important guide, call (651) 647-9009 to request an order form. A single copy is $10. Ask about bulk discounts. You can also order copies online or you can read or print the directory free of charge from IAC's website. Visit www.immunize.org/resources

What's your state doing?

Current U.S. immunization information by state

Empty boxes in this table mean "none."

For more information about state immunization mandates and vaccination rates visit www.immunize.org/laws

State	Varicella childhood vaccination mandates, with implementation dates				Mandates to offer vaccination in long-term care facilities, with implementation dates		Are pharmacists explicitly authorized to vaccinate?
	Mandate?	Daycare	Elem. school	Middle school	Influenza	Pneumococcal (PPV23)	
AL	yes	2000	9/01 prog†				yes
AK	yes	9/01					yes
AZ					residents 4/00	residents 4/00	yes
AR	yes	2000	2000	2000	staff* and residents 9/00	residents 9/00	yes
CA	yes	7/01	7/01				yes
CO	yes	2000	2000	prog†			yes
CT	yes	2000	2000	2000			
DE					residents 1990	residents 1990	yes
DC	yes	1997	1997 prog†	1997 prog†			
FL	yes	7/01	2001 prog†				
GA	yes	2000	2000	8/01			yes
HI							
ID							yes
IL							yes
IN							yes
IA							yes
KS							yes
KY	yes	8/01					yes
LA	yes	9/03	9/03				
ME							
MD	yes	1998	9/01	prog†	residents and staff 10/00	residents 10/00	
MA	yes	1998 daycare 1999 preschool	1999 prog†	1999 prog†			yes
MI	yes	2000	9/02	9/02			yes
MN							
MS							yes
MO							yes
MT							
NE							yes
NV							yes
NH							
NJ					residents 5/98	residents 5/98	
NM	yes	2000	9/02				yes
NY	yes	1/01	9/03		residents and staff 4/00	residents and staff 4/00	
NC							
ND							
OH							yes
OK	yes	1998	1998	prog†			yes
OR	yes	2000	2000 prog†	2000 prog†			yes
PA	yes	1997					
RI	yes	1999	1999 prog†	2000 prog†	residents and staff 1/00	residents 1/00	
SC	yes	9/00					yes
SD	yes		2000		residents* 1995	residents 1995	yes
TN	yes	1999			residents 9/99	residents 9/99	yes
TX	yes	2000	2000 prog†	2000 prog†	residents and staff 8/00	residents 8/00	yes
UT							yes
VT							
VA	yes	born on/after 1/97					yes
WA							yes
WV	yes	2000					
WI							yes
WY							

† Signifies a "progressive" law in which another successive grade becomes covered by the law each new school year (e.g., 7th grade in 2000, 7th and 8th grade in 2001).
* Indicates a mandate requiring (rather than offering) vaccination.

response to these vaccines may be suboptimal. All inactivated vaccines are recommended for immunocompromised persons in usual doses and schedules.

A 3-year-old who was otherwise on schedule received some of her 15-month vaccinations (MMR, DTaP, IPV) twice due to a change in health plans. Can these doses be counted toward kindergarten vaccinations?

Whether these doses count as part of the child's series depends on the intervals between these doses and the ones that preceded them. If the doses of MMR and IPV were separated from the previous ones by at least 4 weeks, they can be counted as the second MMR and fourth IPV. No additional doses are required. (Exception: some states require a dose of polio vaccine on or after the fourth birthday for school entry. In this case, the child would need a fifth dose of IPV on or after her fourth birthday.) The fifth dose of DTaP should not be given earlier than 4 years of age. Assuming this dose of DTaP was the fifth the child received, it was given much too early and should not be counted. The DTaP should be repeated on or after the child's fourth birthday.

Which vaccines should be given before one becomes pregnant? Which vaccines may be given during pregnancy?

Women who intend to become pregnant should have documentation of immunity (either vaccination or serology) to tetanus, diphtheria, measles, mumps, rubella, and varicella. A history of chickenpox is considered adequate evidence of varicella immunity. Hepatitis B immunity is also recommended for women with occupational or behavioral risk factors for hepatitis B virus infection. Verification of rubella immunity is particularly important for women born outside the U.S. where rubella vaccine may not be part of routine childhood immunization. Live virus vaccines should not be given to a woman known to be pregnant or planning to become pregnant in the next 1–3 months, although yellow fever vaccine may be considered under some travel circumstances. Inactivated vaccines and toxoids may be administered to pregnant women for whom the vaccines are indicated. Influenza vaccine is recommended for women who will be in the second or third trimester of pregnancy during influenza season.

What vaccinations are recommended for new immigrants to the United States?

In 1996 Congress amended the Immigration and Nationality Act and added vaccination requirements for any person who is applying for permanent resident status in the U.S. Children and adults must have evidence of having received (or at least having started the series of) the same vaccines recommended for an American citizen of the same age. Children must be vaccinated according to the current U.S. childhood schedule. Adults 18 years of age and older must have evidence of vaccination for tetanus and diphtheria. People born after 1956 must have evidence of immunity (vaccination or serology) for measles, mumps, and rubella. All persons 12 months of age and older must have evidence of varicella immunity (vaccination or history of chickenpox). Children adopted from outside the U.S. and political refugees are exempt from these requirements. Persons entering the U.S. as visitors are not required to provide proof of vaccination regardless of the length of stay.

What should one do when the vaccine package insert does not agree with the ACIP recommendations?

ACIP recommendations occasionally differ from those on the manufacturer's package insert. Usually, package insert information is somewhat more conservative than ACIP recommendations. The FDA has very strict requirements for information the manufacturer may include on the package insert. ACIP sometimes makes recommendations based on expert opinion and public health considerations. Published recommendations of national advisory groups (such as ACIP or AAP's Committee on Infectious Diseases) should be considered equally as authoritative as those on the package insert.

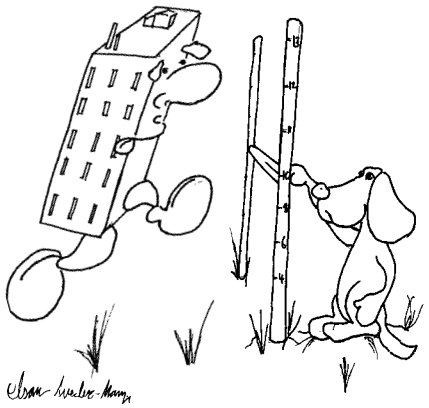
For patients undergoing bone marrow transplantation, are there special vaccine recommendations?

In Oct. 2000, CDC, the Infectious Diseases Society of America, and the American Society of Blood and Marrow Transplantation jointly published comprehensive guidelines for the prevention of opportunistic infections among recipients of hematopoietic stem cell (HSC) transplants, which includes bone marrow transplants. *(MMWR* 2000; 49 [RR-10]). These guidelines include vaccination recommendations (see CDC's website at www.cdc.gov/nip/publications/HSCTrecs.pdf). In short, all HSC transplant recipients should be revaccinated. Influenza vaccination should begin ≥6 months following the transplant and annually thereafter. Inactivated vaccines and toxoids (diphtheria, tetanus, Hib, polio for all persons; pertussis included for children <7 years) should begin 12 months after the transplant. Immunocompetent persons should receive MMR 24 months after transplant. Varicella and pneumococcal conjugate vaccines are not currently recommended for HSC transplant recipients.

NEEDLE TIPS correction policy

The Immunization Action Coalition works tirelessly to ensure the accuracy of the information we make available. At times, however, mistakes occur and we welcome your helpful review of our content. If you find an error, please notify us immediately. We publish notification of significant errors in ***NEEDLE TIPS*** and on our free e-mail announcement service ***IAC EXPRESS.*** Be sure you're signed up for this service! Visit www.immunize.org/express to sign up or subscribe by sending an e-mail message to express@immunize.org Then enter the word SUBSCRIBE in the "Subject:" field.

What dog can jump higher than a building?



Any dog can. Buildings can't jump.

Tetanus, diphtheria, pertussis

by William L. Atkinson, MD, MPH

Can TriHibit (combination DTaP and Hib used only for dose #4) be given as early as 12 months of age or after 18 months of age?

TriHibit may be given as the fourth dose of the DTaP and Hib series at 12 months of age or older, as long as it has been at least 6 months since the third DTaP and 2 months since the previous Hib dose.

When administering dose #5 of DTaP, what should we do if we don't have or don't know which product was used for the previous 4 doses?

If the DTaP brand used for previous doses is not known or not in stock, use whatever DTaP vaccine you have available for the fifth dose.

Because of the Td vaccine shortage, we are unable to get Td vaccine. Would it be okay to use pediatric DT or DTaP?

Pediatric DT and DTaP are not approved by FDA for use in persons ≥7 years of age. These vaccines should not be used in lieu of adult Td. If adult Td is not available, single antigen tetanus toxoid (TT) should be used.

What is the recommended timing for Td vaccine boosters for adolescents and adults?

The first routine booster dose of adult Td should be given at 11–12 years of age, if at least 5 years have elapsed since the previous dose of DTaP, DT, or Td. Thereafter, booster doses of Td should be routinely administered every 10 years.

When should a person receive tetanus toxoid (TT) alone and NOT tetanus and diphtheria toxoids (Td) combined?
Single antigen tetanus toxoid should be used only if a person has had a documented severe allergic response to diphtheria toxoid or if the combined adult Td vaccine is not available.

Does tetanus toxoid contain horse serum?
Tetanus toxoid has never contained horse serum or protein. Equine tetanus antitoxin (horse derived) was the only product available for the prevention of tetanus prior to the development of tetanus toxoid in the 1940s. Equine antitoxin was also used for passive postexposure prophylaxis of tetanus (e.g., after a tetanus-prone wound) until the development of human tetanus immune globulin in the late 1950s. Equine tetanus antitoxin has not been available in the U.S. for at least 40 years.

Polio

by William L. Atkinson, MD, MPH

What is the IPV schedule for unvaccinated children 4–18 years of age?
The schedule for routine polio vaccination of children 4–17 years of age is 2 doses of IPV separated by 4–8 weeks, and a third dose 6–12 months after the second dose. If an accelerated schedule is needed, three doses separated by at least 4 weeks may be given. Polio vaccine is not routinely administered to persons 18 years of age and older.

Pneumo conjugate (PCV7)

by William L. Atkinson, MD, MPH

What are the ACIP recommendations for the use of the 7-valent pneumococcal conjugate vaccine (PCV7)?
ACIP recommends routine vaccination with PCV7 for all children <24 months of age. Routine vaccination is also recommended (2 doses separated by 8 weeks) for all children 24–59 months of age at increased risk for pneumococcal infection (e.g., sickle cell disease and other sickle cell hemoglobinopathies, asplenia, HIV infection, immunodeficiency for any reason, and chronic diseases, such as diabetes, cardiac disease, and pulmonary disease except asthma). A single dose of PCV7 should be considered for all children 24–59 months of age, particularly children 24–35 months of age; children of Alaska Native, American Indian, or African American descent; and children who attend daycare.

Is PCV7 recommended for high-risk children >59 months of age?
There are limited data on the efficacy of PCV7 among children 5 years of age and older. Neither ACIP nor AAP has recommended routine vaccination of children >59 months of age.

Can PCV7 be given at the same visit as all other vaccines?
Yes.

Children under the age of 2 need at least two doses of PCV7. Is dose #2 necessary if dose #1 is given at 23 months?
Children who receive the first dose of PCV7 at 23 months of age should receive a second dose 2 months later.

A child was given the first dose of PCV7 at 9 months of age and the second dose at 15 months. When should she return?
The ACIP statement *(MMWR* 2000; 49 [RR-9]) contains a table that will help guide vaccination decisions for children with lapsed schedules. The table is reproduced below. This child should receive dose #3 of PCV7 two months after dose #2.

Recommendations for use of 7-valent pneumococcal conjugate vaccine (PCV7) among children with a lapse in vaccine administration*

Age at exam (mos)	Previous PCV7 vax history	Recommended regimen
7–11	1 or 2 doses	1 dose of PCV7 at 7–11 mos, and a dose ≥2 mos later, at 12–15 mos
12–23	1 dose before age 12 mos	2 doses of PCV7 ≥2 mos apart
	2 doses before age 12 mos	1 dose of PCV7 ≥2 mos after most recent dose
24–59	Any incomplete schedule	1 dose of PCV7†

*Source: Table 11 from CDC's "Preventing Pneumococcal Disease Among Infants and Young Children," *MMWR* 2000; 49 (RR-9): p.24.

†Children with certain chronic diseases or immunosupressing conditions should receive two doses ≥2 months apart.

A 2-month-old was mistakenly given PPV23 instead of PCV7. What should be done?
Pneumococcal polysaccharide vaccine (PPV23) is not effective in children <24 months of age. PPV23 given at this age should not be considered to be part of the pneumococcal vaccination series. PCV7 should be administered as soon as the error is discovered.

Haemophilus influenzae type b

by William L. Atkinson, MD, MPH

A child (DOB 7/19/97) received Hib #1 on 9/24/97, #2 on 11/20/97, and #3 on 7/23/98 (doses were not identified by brand). Does this child need a fourth dose?
The child received two doses of Hib before the first birthday and a third dose shortly after the first birthday. According to the *2000 Red Book* (table 3.13, p. 271) the child does not need a fourth dose.

If a dose of Hib vaccine was given by mistake to a 2-week-old, should further doses of Hib vaccine be given?
Limited data suggest that Hib vaccine given before 6 weeks of age may induce immunologic tolerance to Hib antigen and reduce the response to subsequent doses. As a result, Hib vaccine should not be given earlier than 6 weeks of age. However, if a dose was administered before 6 weeks of age, it should not be counted as part of the Hib series. A full series of 4 doses (Hibtiter, ActHib, and Omnihib) or 3 doses (PedvaxHib and Comvax) should be started at 6–8 weeks of age as usual. No special protocol or testing is recommended for children who received a dose of Hib vaccine before 6 weeks of age.

Varicella

by William L. Atkinson, MD, MPH

Since varicella disease is usually benign, why should I recommend this vaccine?
Although varicella is generally a mild disease, it can be serious, and even fatal. Prior to the availability of vaccine, about 10,000 people were hospitalized annually due to varicella or its complications, including many otherwise-healthy children. About 100 deaths were reported from varicella each year, mostly among healthy children and adults. Routine varicella vaccination has been recommended since 1996.

(continued on page 20)

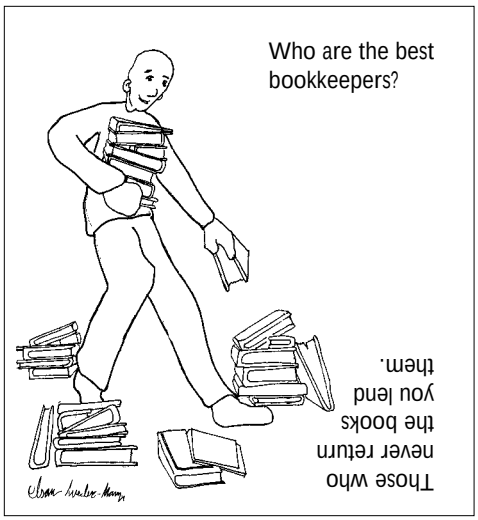
Which older children and teens should be offered varicella vaccine and at what age?
Any person of any age who has not had chickenpox and does not have a valid contraindication should be vaccinated. All persons (including staff) in all medical practices should have documentation on their records that they have either had the disease or have been vaccinated.

Is waning immunity a problem with varicella vaccine?
Waning immunity does not appear to be a significant problem with varicella vaccine. The duration of protection from any vaccine is never known when it is first introduced. Data from children vaccinated in prelicensure clinical trials indicate that protection from varicella vaccine lasts for at least 25 years (Japanese data) and 14 years (U.S. data). Experience with other live viral vaccines (e.g., measles, rubella) has shown that immunity remains intact throughout life. Studies will continue to evaluate the duration of protection from varicella vaccination in childhood.

Measles, mumps, rubella

by William L. Atkinson, MD, MPH

A story on "60 Minutes" suggested administering each component of MMR in separate injections to decrease the risk of autism. Is there any reason to do this?
There is no scientific reason for or benefit to separating the antigens. There is no credible evidence that measles vaccine or MMR increases the risk of autism. Separating the doses puts children (and pregnant women who may be exposed to them) at increased risk for these diseases by extending the amount of time children remain unvaccinated. Studies have shown that if parents have to schedule additional appointments for vaccinations, there is an increased risk that their children may not receive all the vaccines they need. Further information about autism and vaccines is available at www.cdc.gov/nip/vacsafe/concerns/autism



If a new employee in a health care setting cannot produce documentation of receiving any dose of MMR, what should be done?
Persons born in or after 1957 who work in health care facilities of any kind and cannot document prior vaccination should receive two doses of MMR separated by at least 4 weeks. Alternatively, serologic testing could determine if the person is immune to measles and rubella. Persons born before 1957 are generally considered immune to measles. However, ACIP recommends that at least one dose of MMR be considered for persons in this age group who do not have documentation of a measles-containing vaccination, history of physician-diagnosed measles, or laboratory evidence of measles and rubella immunity.

Influenza

by William L. Atkinson, MD, MPH

Which children should receive flu vaccine?
ACIP recommends annual influenza vaccination for children 6 months of age or older with chronic heart or lung disease, chronic metabolic disease (such as diabetes), renal disease, immunosuppression from any cause, hemoglobinopathy, HIV infection, or on chronic aspirin therapy. (Household members of these children should be vaccinated also.) Children who are residents of chronic care facilities should also be vaccinated each fall. In addition, influenza vaccine can be given to any child ≥6 months of age whose parents request it.

Do diabetics who control their disease with diet need influenza vaccine?
People who needed regular medical followup or who were hospitalized for diabetes during the previous year should receive annual influenza vaccine. All people 50 years of age and older should receive annual influenza vaccination regardless of the presence of chronic disease.

Should influenza vaccine be given on a separate visit from other vaccines?
No. Influenza vaccine can be given simultaneously with, or at any time before or after, any other vaccine.

How long does immunity from influenza vaccine last?
Protection from influenza vaccine is thought to persist for a year or less because of waning antibody and because of changes in the circulating influenza virus from year to year.

In which month is it too late to receive influenza vaccine?
Influenza vaccine can be administered whenever influenza is present in the community (generally through the end of March). For maximum protection, flu vaccine should be administered during October through mid-November, prior to the onset of influenza season.

Pneumo poly vaccine (PPV23)

by William L. Atkinson, MD, MPH

I've heard pneumococcal vaccine (PPV23) isn't very effective. Should I use it?
Yes. PPV23 vaccine is 60–80% effective against invasive pneumococcal disease when it is given to immunocompetent persons ≥65 years of age or people with chronic illnesses. The vaccine is less effective in immunodeficient people. So, although PPV23 is not as effective as some other vaccines, it can significantly lower the risk of serious pneumococcal disease and its complications in most recipients.

Are smokers at increased risk for pneumococcal disease? Should they be vaccinated?
A recent study identified cigarette smoking as a strong independent risk factor for invasive pneumococcal disease among immunocompetent nonelderly adults (Nuorti et al. *NEJM* 342 [10]: 681–9). However, ACIP does not currently recommend routine pneumococcal vaccination for people just because they smoke. People who smoke (sooner or later) develop chronic obstructive lung disease, heart disease, and/or various types of cancer. When end organ damage occurs, the person becomes a candidate for pneumococcal polysaccharide vaccine.

Meningococcal disease

by William L. Atkinson, MD, MPH

Which college students should receive meningococcal vaccine?
Routine meningococcal vaccination is recommended for college students (and other people 2 years of age and older) who have functional or anatomic asplenia or terminal complement component deficiency. College freshmen who reside in dormitories are at modestly increased risk of meningococcal disease compared to other persons of the same age. ACIP recommends that providers inform college freshmen of this increased risk and the availability of a vaccine. Providers are encouraged to administer the vaccine to college students who wish to reduce their risk, or to direct the student to a site where the vaccine is available.

Hepatitis B

by Harold Margolis, MD, and Linda Moyer, RN

Is it safe for an HBsAg-positive mother to breast-feed her infant?
Yes! An HBsAg-positive mother who wishes to breast-feed should be encouraged to do so, including immediately following delivery. However, the infant should receive HBIG and hepatitis B vaccine within 12 hours of birth. Although HBsAg can be detected in breast milk, studies done before hepatitis B vaccine was available showed that breast-fed infants born to HBsAg-positive mothers

did not demonstrate an increased rate of perinatal or early childhood hepatitis B virus (HBV) infection. More recent studies have shown that among infants receiving postexposure prophylaxis to prevent perinatal HBV infection, there is no increased risk of infection among breast-fed infants.

Is it safe to give hepatitis B vaccine to a pregnant woman?

Yes. Hepatitis B vaccination has not been shown to have an adverse effect on the developing fetus. Hepatitis B vaccine contains no components that have been shown to pose a risk to the fetus at any time during gestation. If the mother is being vaccinated because she is at risk for HBV infection (e.g., a health care worker, a person with a sexually transmitted disease, an injection drug user), vaccination should be initiated as soon as her risk factor is identified during the pregnancy. The *in utero* or perinatal risk of infection to the fetus or newborn is greater than any theoretical risk of vaccination.

How do I interpret some of the common hepatitis B panel results?

Editor's note: See column three for a glossary of hepatitis A and B laboratory terminology.

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.

Do you have patients who are HBsAg-positive?

They need medical monitoring and many can benefit from treatment.

There are two FDA-licensed treatment options available in the United States:

1. interferon alfa-2b, recombinant administered subcutaneously
2. lamivudine administered orally

Consult a liver specialist experienced in the treatment of viral hepatitis for appropriate monitoring guidelines and to help you determine which of your patients might benefit from treatment.

Hepatitis A

by Harold Margolis, MD, and Linda Moyer, RN

Please tell me the age ranges for pediatric and adult hepatitis A vaccine formulations.

GlaxoSmithKline's Havrix and Merck's Vaqta pediatric hepatitis A vaccines are now both licensed for children 2–18 years of age. In Oct. 2000, the FDA approved Merck's supplemental license application so that pediatric Vaqta can now be administered to children 18 years of age. The upper age limit was previously 17. Adult formulations for both hepatitis A vaccine products are administered to persons 19 years of age and older.

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?

The immunogenicity of one dose of hepatitis A vaccine is 94–100%. Immunogenicity is considered to be equal to efficacy. As long as dose #1 is given at least 4 weeks prior to travel, the person should be protected. The second dose is necessary to assure long-term protection.For both adult formulations, the second dose should be administered 6–12 months after dose #1. For pediatric vaccines, dose #2 of Havrix is administered 6–12 months after dose #1, and Vaqta at 6–18 months. If the second dose is delayed, do not start the series over again.

Wondering about clinical trials for hepatitis B and C?

www.clinicaltrials.gov

Hepatitis A and B lab tests

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 it 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 hepatitis B infection.

Hepatitis A lab nomenclature

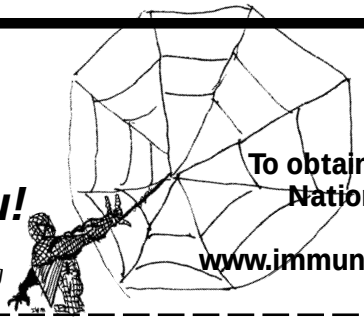
anti-HAV: *Antibody to hepatitis A virus.* This diagnostic test detects total antibody of both IgG and IgM subclasses of HAV. Its presence indicates either acute or resolved infection, or vaccine-induced immunity.

IgM anti-HAV: *IgM antibody subclass of anti-HAV.* Its presence indicates a recent infection with HAV. It is used to diagnose acute hepatitis A.

National Resources

There are many places that can help you!

If you know of new resources, call us at (651) 647-9009 or e-mail us at iacx@immunize.org



To obtain the Directory of National Immunization Resources, visit: www.immunize.org/resources

Here's what's new!

Directory of National Immunization Resources (IAC, 2000). A comprehensive guide to organizations, websites, hotlines, and books that provide a wide array of immunization resources for health professionals, policymakers, and the public. $10 for the first copy. For more information call (651) 647-9009. You can also order copies online or download copies free from IAC's website at: www.immunize.org/resources

2000 Red Book and ***Visual 2000 Red Book* CD-ROM** (AAP Committee on Infectious Diseases, 2000). Every medical practice providing health care for children should have a copy of this book. It contains AAP's recommendations for prevention and management of infectious diseases in children. Comes in hardcover, softcover, and CD-ROM format. The CD-ROM contains many additional resources with more than 600 color images, including photos of children with infectious diseases. Cost ranges from $84.95–$124.95. For more information, call (888) 227-1770 or order online at: www.aap.org/bookstore

Communicating with Patients about Immunization (Nat'l Network for Immunization Information, 2000). A 100+ page 3-ring notebook to help clinicians provide vaccine information to patients. The materials, which may be used as handouts, are the result of extensive research with parents, physicians, nurses, immunization experts, and risk communication specialists. $20. For more information call (877) 341-6644 or order online at: www.immunizationinfo.org Contents can be downloaded free from the website.

Prevention and Control of Vaccine-Preventable Diseases in Long-Term Care Facilities (CDC, 2000). This 37-page document (originally published in the *Journal of the American Medical Directors Association*, Sept./Oct. 2000, supplement) offers standing orders, flowsheets, and references for appropriate immunization of residents and staff in long-term care facilities. Hard copies are out of print but you can download copies free of charge from CDC's website. Visit: www.cdc.gov/nip/publications/Long-term-care.pdf

Vaccine Education Center (Children's Hospital of Philadelphia). A new website to provide parents and health professionals with current, accurate information about childhood vaccines and the diseases they prevent. The website address is: http://vaccine.chop.edu If you are interested in finding out more about their educational materials in print, call (215) 590-9990.

Organizations with immunization and hepatitis information

Routine Immunization

Allied Vaccine Group	www.vaccines.org
All Kids Count (www.allkidscount.org)	(404) 687-5615
American Academy of Pediatrics (www.aap.org) ★	(800) 433-9016
Association of Teachers of Preventive Medicine (www.atpm.org)	(800) 789-6737
CDC's Immunization Information Hotline	(800) 232-2522
CDC's Immunization Information Hotline (Spanish language) ★	(800) 232-0233
CDC's Voice & Fax Immunization Resource Request Line	(888) 232-3228
CDC's National Immunization Program website	www.cdc.gov/nip
CDC's Vaccine Safety website	www.cdc.gov/nip/vacsafe
CDC's Vaccines For Children (VFC) program website	www.cdc.gov/nip/vfc
CDC's Travel Website & Info Line (www.cdc.gov/travel)	(877-FYI-TRIP) (877) 394-8747
Every Child by Two (www.ecbt.org)★	(202) 783-7034
Immunization Action Coalition (www.immunize.org) ★	(651) 647-9009
Immunization Action Coalition's *IAC EXPRESS*	www.immunize.org/express
Immunization Action Coalition's *Unprotected People*	www.immunize.org/stories
Immunization Gateway website	www.immunofacts.com
Institute for Vaccine Safety	www.vaccinesafety.edu
Morbidity and Mortality Weekly Report	www.cdc.gov/mmwr
Nat'l Alliance for Hispanic Health (www.hispanichealth.org)★	(202) 387-5000
Nat'l Coalition for Adult Immunization (www.nfid.org/ncai) ★	(301) 656-0003
Nat'l Network for Immunization Information (www.immunizationinfo.org)	(877) 341-6644
Nat'l Partnership for Immunization (www.partnersforinformation.org)	(703) 836-3470
Nat'l Vaccine Injury Compensation Program (http://bhpr.hrsa.gov/vicp)	(800) 338-2382
100% Immunization Campaign (www.immunizeseniors.org)	(703) 739-1316 x178
Vaccine Adverse Events Reporting System (www.vaers.org)	(800) 822-7967
Vaccine Education Center (http://vaccine.chop.edu)	(215) 590-9990
Your health department's immunization program manager (see page 23)	_____

Hepatitis Information

American Liver Foundation (www.liverfoundation.org) ★	(800) 223-0179
CDC's Hepatitis Information Line ★	(888) 443-7232
CDC's Hepatitis Branch website ★	www.cdc.gov/hepatitis
CDC's National STD Hotline	(800) 227-8922
Hepatitis B Coalition (www.immunize.org) ★	(651) 647-9009
Hepatitis B Foundation (www.hepb.org) ★	(215) 489-4900
Hepatitis B Online Support Group	send a blank e-mail to: hepatitis-b-on@mail-list.com
Hepatitis Control Report (www.hepatitiscontrolreport.com)	(610) 664-2793
Hepatitis Foundation International (www.hepfi.org) ★	(800) 891-0707
Nat'l Hepatitis B Task Force: Focus on API (www.aapihp.com/hepbtf) ★	(614) 766-5219
Parents of Kids with Infectious Diseases (www.pkids.org)	(877-55-PKIDS) (877) 557-5437
PEPLine: 24-hr hotline to advise clinicians re: occupational blood exposures	(888) 448-4911
Your health department's hepatitis coordinator (see page 23)	_____

Pharmaceutical Companies

Aventis Pasteur, Inc. (www.us.aventispasteur.com)	(800-VACCINE) (800) 822-2463
Chiron Corporation (www.chiron.com)	(800) 244-7668
GlaxoSmithKline (http://us.gsk.com)	(888) 825-5249
Merck & Co. (www.vaccinesbynet.com)	(800) 672-6372
Nabi (www.nabi.com)	(800) 458-4244
Wyeth Lederle Vaccines (www.vaccineworld.com)	(800) 358-7443

★ materials available in languages other than English

To find out about more national resources, visit www.immunize.org/resources

Need Help?

Call your immunization, hepatitis, and VFC coordinators

Your governmental resource people are available to help you! Find out about their educational materials including posters, brochures, and videos. Call them to register for the excellent immunization conferences that CDC broadcasts by satellite. They may also be able to help you assess your clinic's immunization rates or develop immunization tracking systems.

State Coordinators

Alabama
Iz: Winkler Sims 334-206-5023
Hep B (So. AL): Judy Till, RN 334-575-7835
Hep B (No. AL): Janet Mitchell 256-582-3174
VFC: Cynthia Lesinger 800-469-4599

Alaska
Iz: Laurel Wood 907-269-8000
Hep B: Ken Browning 907-269-8000
VFC: Laurel Wood 907-269-8000

Arizona
Iz: Kathy Fredrickson 602-230-5852
Hep B: Linda Faris 602-230-5858
VFC: Betty Finch 602-230-5832

Arkansas
Iz: Kaleem Sayyed 501-661-2723
Hep B: Sherry Ahring 501-661-2053
VFC: Ruby Jones 501-661-2170

California
Iz: Natalie Smith, MD 510-540-2065
Hep B: Maggie Chiang 510-540-2393
VFC: John Scott 510-704-3750

CA, Los Angeles
Hep B: Bridget Beeman 213-580-9810

Colorado
Iz: Rebecca Jordan 303-692-2795
Hep B: Amy Warner 303-692-2673
VFC: Rosemary Spence 303-692-2798

Connecticut
Iz: Vincent Sacco 860-509-7929
Hep B: Monica Rak 860-509-7900
VFC: Timothy Egan 860-509-7929

Delaware
Iz: Steven Dettwyler 302-739-4746
Hep B: Laura Gannon 302-739-4746
VFC: Martin Luta 302-739-4746

District of Columbia
Iz: James Giandelia 202-576-7130 x25
Hep B: Ethel Holland 202-442-9141
VFC: DeWanda Eaton 202-576-7130 x43

Florida
Iz: Henry Janowski 850-245-4342
Hep B: Tony Richardson 850-245-4342
VFC: Al Sulkes 850-245-4342

Georgia
Iz: Michael Chaney 404-657-3158
Hep B: Theresa Turski 404-657-3158
VFC: Vanessa Bonaparte 404-657-3158

Hawaii
Iz: Malama Markowitz 808-586-8330
Hep B: Joe Elm 808-586-8338
VFC: Loriann Kanno 808-586-8329

Idaho
Iz: Holly Mercer 208-334-5942
Hep B: Jeff Kingsbury 208-334-5967
VFC: Bob Salisbury 208-334-4949

Illinois
Iz: Cynthia Noa 217-785-1455
Hep B: Susan Williams 217-785-1455
VFC: Mark Amerson 217-785-1455

IL, Chicago
Iz: Cheryl Byers 312-746-6120
Hep B: Monty Dobzyn 312-746-7147
VFC: Maribel Chavez-Torres 312-746-6050

Indiana
Iz: Vacant
Hep B: Terry Adams 765-747-7814
VFC: Beverly Sheets, RN 317-233-7704

Iowa
Iz: Carolyn Jacobson 515-281-4938
Hep B: Tina Patterson 515-281-7053
VFC: Don Callaghan 515-281-7301

Kansas
Iz: Vivian Kuawogai 785-296-5591
Hep B: Jennifer Hill 785-296-8156
VFC: Patti Smith 785-827-9639

Kentucky
Iz: Gary Bevill 502-564-4478
Hep B: Gena Gilbert 502-564-4478
VFC: Laura Harrod 502-564-4478

Louisiana
Iz: Ruben Tapia 504-483-1900
Hep B: Cathy Scott 318-345-1700
VFC: Patricia Simon 504-483-1900

Maine
Iz: Paul Kuehnert 207-287-3746
Hep B: Rachel Allen 207-287-3746
VFC: Paul Moffat 207-287-3746

Maryland
Iz: Gregory Reed 410-767-6679
Hep B: Maryann Harder 410-767-5716
VFC: Ed Hirshorn 410-767-6679

MD, Baltimore
Hep B: Melina Turtle 410-396-1884

Massachusetts
Iz: Pejman Talebian 617-983-6803
Hep B: Martha Badger 617-983-6850
VFC: Marie O'Donnell 617-983-6824

Michigan
Iz: Dr. Gillian Stoltman 517-335-8159
Hep B: Nancy Fasano 517-335-9423
VFC: Susan Wright 517-335-8161

MI, Detroit & SE Michigan
Iz: Melinda Dickson 313-876-4720
Hep B: Therese McGratty 313-256-1873
VFC: Stella Bayleff 313-876-4335

Minnesota
Iz: K. Ehresmann/D. Peterson 612-676-5237
Hep B: Stephanie Frank 612-676-5237
VFC: Barbara Ottis 612-676-5237

Mississippi
Iz: Joy Sennett 601-576-7751
Hep B: Joyce Booth 601-576-7751
VFC: Regina Irvin 601-576-7751

Missouri
Iz: Vic Tomlinson 573-751-6133
Hep B: Ruby McPherson 800-699-2313
VFC: Ruby McPherson 800-699-2313

Montana
Iz: Joyce Burgett 406-444-0065
Hep B: Marci Eckerson 406-444-1805
VFC: Elizabeth Evans 406-444-0277

Nebraska
Iz: T. Grey Bordon 402-471-6423
Hep B: Molly Uden 402-471-0301
VFC: Molly Uden 402-471-0301

Nevada
Iz: Robert Salcido 775-684-5939
Hep B: Rick Sowadsky 775-684-5941
VFC: Linda Platz, RN 775-684-5913

NV, Clark County
Hep B: Donna Clark 702-383-1494

NV, Washoe County
Hep B: Denise Stokich 775-328-2487

New Hampshire
Iz: Charles Haenal 603-271-4482
Hep B: Susan Bascom 603-271-8325
VFC: Sandra Kelsey 603-271-4634

New Jersey
Iz: Charles O'Donnell 609-588-7512
Hep B: Nancy Borsuk 609-588-7512
VFC: Barbara Giudici 609-588-7512

New Mexico
Iz: Karen Schlanger 505-827-2463
Hep B: Reena Anthony 505-827-2507
VFC: Carly Christian 505-827-2898

New York
Iz: David Lynch 518-473-4437
Hep B: Betsy Herlihy 518-473-4437
VFC: Patricia O'Hanlon 518-473-4437

NY, NYC
Iz: Arsenia Delgato 212-676-2259
Hep B: Davis Thanjan 718-520-8245
VFC: Dileep Sarecha 212-676-2298

North Carolina
Iz: Beth Rowe-West 919-715-6768
Hep B: Patricia Poole 919-715-6777
VFC: Barbara Laymon 919-715-6764

North Dakota
Iz: Barbara Frohlich 701-328-2035
Hep B: Tracy Miller 701-328-2387
VFC: Patrick Flanagan 701-328-4556

Ohio
Iz: Leonard Payton 614-466-4643
Hep B: Joseph Bronowski 614-466-4643
VFC: Kent Ware 614-466-4643

Oklahoma
Iz: Don Blose 405-271-4073
Hep B: Leonard Lang 405-271-4073
VFC: Dorothy Cox 405-271-4073

Oregon
Iz: Lorraine Duncan 503-731-4135
Hep B: Hilary Gillette 503-731-4807
VFC: Mimi Luther 503-731-4267

Pennsylvania
Iz: Alice Gray 717-787-5681
Hep B: Phuoc Tran 717-787-5681
VFC: Vickie Petrina 717-787-5681

PA, Philadelphia
Iz: James Lutz 215-685-6854
Hep B: Barbara Watson 215-685-6842
VFC: Mary Mulholland 215-685-6853

Rhode Island
Iz: Susan Shepardson 401-222-4603
Hep B: Patricia Raymond, RN 401-222-5921
VFC: Mimi Larzelere 401-222-4605

South Carolina
Iz: Jesse Greene 803-898-0460
Hep B: Libby Greene 803-898-0792
VFC: Jesse Greene 803-898-0460

South Dakota
Iz: Vacant 605-773-3737
Hep B: Vacant 605-773-3737
VFC: Vacant 605-773-3737

Tennessee
Iz: Jerry Narramore 615-741-7343
Hep B: Sally Somerfeldt 615-532-8508
VFC: Diane Bass 615-532-8513

Texas
Iz: Linda Linville, RN, MS 512-458-7284
Hep B: Rita Espinoza 512-458-7284
VFC: Jack Sims 512-458-7284

TX, Houston
Iz: Brock Lamont 713-794-9267
Hep B: Toni Wafeeg 713-794-9266
VFC: Maureen Moore 713-558-3535

TX, San Antonio
Iz: Mark Ritter 210-207-8794
Hep B: Nancy Walea 210-207-2087
VFC: Vivian Flores 210-207-2868

Utah
Iz: Linda Abel 801-538-9450
Hep B: Martee Hawkins 801-538-9450
VFC: Jan Kilpack 801-538-9450

Vermont
Iz: Carolyn Greene 802-863-7638
Hep B: Marilyn Proulx 802-863-7245
VFC: Karen Halverson 802-863-7638

Virginia
Iz: James Farrell 804-786-6246
Hep B: Marie Krauss 804-786-6246
VFC: Shannon Leary 804-786-6246

Washington
Iz: Margaret Hansen 360-236-3595
Hep B: Trang Kuss 360-236-3555
VFC: Katherine Harris-Wollburg 360-236-3513

West Virginia
Iz: Samuel Crosby Jr. 304-558-2188
Hep B: Beverly Littman 304-558-6441
VFC: Jeff Neccuzi 304-558-6437

Wisconsin
Iz: Dan Hopfensperger 608-266-1339
Hep B: Dave King (acting) 608-266-3128
VFC: Jaclyn Nelson 608-266-1506

Wyoming
Iz: James D. McKinna 307-777-6001
Hep B: James D. McKinna 307-777-6001
VFC: Robin Chandler (acting) 307-777-7466

Territories

American Samoa
Iz: Joseph Tufa 011-684-633-4606
Hep B: Sylvia Tauiliili 011-684-633-4606
VFC: Sylvia Tauiliili 011-684-633-4606

Federated States of Micronesia
Iz: Kidsen K. Iohp 011-691-320-2872
Hep B: Kidsen K. Iohp 011-691-320-2872

Guam
Iz: Ron Balajadia 671-735-7143
Hep B: Annie Lizama 671-735-7148
VFC: Michele Leon Guerrero 671-735-7143

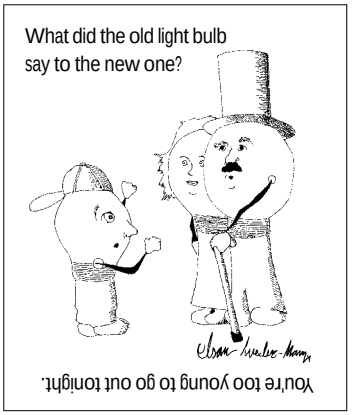
Mariana Islands
Iz: Mariana Sablan 011-670-233-8953
VFC: Norma Sepeda 011-670-233-8953

Republic of the Marshall Islands
Iz: Donald Capelle 011-692-625-5660
Hep B: Kenner Brianb 011-692-625-3355

Puerto Rico
Iz: Esteban Calderon 787-274-5612
Hep B: Carmen Rodríguez 787-274-5525
VFC: Margarita Sabathie 787-274-3337

Republic of Palau
Iz: Rosemary Kiep 011-680-488-1757

Virgin Islands
Iz: Beverly Blackwell 340-776-8311 x2151
Hep B: Carmen Vanterpool (acting)
340-776-8311 x2152



Coalition Catalog

Publications and resources

- **All our materials are camera-ready, copyright-free, and reviewed by national experts!**
- **You can order one of any item (including videos) and make as many copies as you need.**
- **A $60 membership contribution entitles you to a free copy of all IAC print materials as well as our brightly colored mousepad!**
- **Most items cost $1 (unless otherwise noted).**
- **To order materials, see instructions on page 26.**
- **Date of latest revision indicated in parentheses.**

REMEMBER . . .

A $60 annual membership contribution brings you camera-ready copies of ALL of the Coalition's print materials. See the order form or the back page for information on how to join!

★ Starred items are available in languages other than English.

Languages:
En: English
Sp: Spanish
Ab: Arabic
Am: Amharic
Ar: Armenian
Ca: Cambodian
Ch: Chinese
Fa: Farsi
Hm: Hmong
Ja: Japanese
Ko: Korean
La: Laotian
Po: Portuguese
Ro: Romanian
Ru: Russian
Sa: Samoan
So: Somali
Ta: Tagalog
Ti: Tigrinya
Tu: Turkish
Vi: Vietnamese

Materials for your patients

Revised! **Immunizations for babies.** A picture of the shot schedule. En (10/00). *Item #P4010*

★ ***New translation!*** **After the shots...what to do if your child has discomfort.** Thanks to Drs. Mustafa Kozanoglu and Murat Serbest of Adana, Turkey, for their translation. En, Sp, Tu (8/99); Ca, Ch, Fa, Hm, Ko, La, Ru, Ta, Vi (10/97). *Item #P4015*

★ **Are you 11–19 years old? Then you need to be vaccinated!** Covers all vaccinations for teenagers. En, Sp (4/98). *Item #P4020*

Questions parents ask about baby shots. A brochure about childhood vaccinations. En (4/00). *Item #P4025*

Revised! **Vaccinations for adults—you're never too old to get shots!** A visual table covering all adult vaccinations. En (10/00). *Item #P4030*

★ ***Revised!*** **Immunizations . . . not just kids' stuff.** Adult immunization brochure. En, Sp (9/00). *Item #P4035*

What would happen if we stopped vaccinations? A CDC publication that discusses by disease the potential risks of stopping vaccinations. En (8/00). *Item #P4037*

Vaccine myths. A reprint of chapter 16 of the book *Vaccines: What Every Parent Should Know* (IDG Books Worldwide, 1999), written by Paul A. Offit, MD, and Louis M. Bell, MD. En (1/00). *Item #P4038*

Shots for adults with HIV. A visual table of vaccinations recommended for HIV-infected adults. En (7/97). *Item #P4041*

Vaccinations for adults with hepatitis C. This one-page sheet describes vaccinations that HCV-positive adults need. En (5/00). *Item #P4042*

★ ***Revised!*** **When do children and teens need vaccinations?** A picture of the shot schedule. En, Sp (9/00). *Item #P4050*

★ ***New translation!*** **All kids need hepatitis B shots!** A brochure that tells parents all children 0–18 years old need hepatitis B shots. Thanks to Drs. Mustafa Kozanoglu and Murat Serbest of Adana, Turkey, for their translation. En, Sp, Ar, Ca, Ch, Fa, Hm, Ja, Ko, La, Po, Ro, Ru, Sa, So, Ta, Tu, Vi (4/98). *Item #P4055*

★ **Chickenpox isn't just an itchy, contagious rash.** A brochure for all ages. En, Sp, Vi (1/96). *Item #P4070*

★ **Hepatitis A is a serious liver disease . . . should you be vaccinated?** A brochure for all ages. En, Sp, Vi (10/97). *Item #P4080*

★ **Questions frequently asked about hepatitis B.** Four pages of commonly asked questions. En, Sp (9/96). *Item #P4090*

★ ***New translation!*** **Every week hundreds of teens are infected with hepatitis B.** A brochure for teens and parents. Thanks to Drs. Mustafa Kozanoglu and Murat Serbest of Adana, Turkey, for their translation. En, Sp, Ca, Ch, Hm, Ko, La, Ru, Ta, Tu, Vi (6/97). *Item #P4100*

★ ***New translations!*** **Hepatitis B shots are recommended for all new babies.** A brochure for parents of newborns. Thanks to Samsara Communications of Washington, DC, for their many translations. En, Sp, Ab, Am, Ca, Ch, Fa, Hm, Ko, La, Ru, So, Ti, Vi (1/96). *Item #P4110*

★ **Every week thousands of sexually active people are infected with hepatitis B.** A hepatitis B brochure for adults. En, Sp (4/98). *Item #P4112*

If you have sex, read this . . . and stop a killer STD from sneaking up on you! Use this article to help convince young women to get vaccinated against hepatitis B. Reprinted from *Mademoiselle.* En (2/99). *Item #P4113*

Hepatitis B . . . 100 times easier to catch than HIV. A brochure for men who have sex with men. En (2/97). *Item #P4115*

You don't have to go all the way to get hepatitis A. A brochure for men who have sex with men. En (6/97). *Item #P4116*

Revised! **You are not alone!** Article for teens with chronic HBV infection. By S.J. Schwarzenberg, MD, Univ. of Minnesota; and K. Wainwright, RN, Alaska Area Native Health Service, Anchorage. En (2/01). *Item #P4118*

★ ***Revised and new translation!*** **Do you have chronic hepatitis B?** How hepatitis B carriers can take care of themselves and protect others. Thanks to Drs. Mustafa Kozanoglu and Murat Serbest of Adana, Turkey, for their translation. En, Tu (1/01). *Item #P4120*

FREE MATERIALS! All of these items are available free on our website at www.immunize.org/free

Packet of hepatitis B adoption information. Includes information from adoption specialists throughout the United States. En (1/00). *Item #P4152 - $5*

★ ***New translations!*** **Hepatitis B information for adults and children from endemic areas.** Encourages testing and vaccination. Thanks to Samsara Communications of Washington, DC, for their many translations. En, Ab, Am, Ca, Ch, Fa, Hm, Ko, La, Ru, So, Ti, Vi (5/95). *Item #P4170*

Materials for your clinic staff

Revised! **Summary of rules for childhood immunization.** This two-sided reference table discusses the appropriate use, scheduling, and contraindications of childhood vaccines. En (3/01). *Item #P2010*

Revised! **Summary of recommendations for adult immunization.** A two-sided reference table on appropriate use, scheduling, and contraindications of adult vaccines. En (3/01). *Item #P2011*

Revised! **Give these people influenza vaccine!** A one-page checklist to help you decide who to vaccinate. En (12/00). *Item #P2013*

Revised! **Pneumococcal vaccine: who needs it and who needs it again?** A one-page Q&A with a table about revaccination. En (1/01). *Item #P2015*

Ask the experts. Compilation of hundreds of Q&A's on routine childhood and adult immunization issues published in past issues of *NEEDLE TIPS*. Written by CDC experts. En (3/00). *Item #P2021 - $5*

Revised! **Vaccine administration record for children and teens.** Keep children and teens' immunization records in the front of their medical charts on this handy, one-page sheet. En (12/00). *Item #P2022*

Revised! **Vaccine administration record for adults.** Keep adult patients' immunization records in the front of their medical charts on this handy, one-page sheet. En (12/00). *Item #P2023*

Revised! **It's federal law! You must give your patients current Vaccine Information Statements (VISs).** By N.A. Halsey, MD, Institute for Vaccine Safety, Johns Hopkins School of Public Health. Everything you need to know about VISs. En (11/00). *Item #P2027*

Tips to improve your clinic's immunization rates. For use in both pediatric and adult health settings. En (2/97). *Item #P2045*

Vaccinate, don't vacillate! Varicella kills 100 people each year in the U.S. What are you waiting for? By W.A. Orenstein, MD, Ass't Surgeon General, Director, NIP, CDC. If you aren't yet convinced that it's important to vaccinate for varicella, read this! En (10/98). *Item #P2058*

Hospitals and doctors sued for failing to immunize. Seven lawsuits against physicians and hospitals. En (9/94). *Item #P2060*

Revised! **Hepatitis A and B vaccines . . . be sure your patient gets the correct dose!** Recommended child and adult dosages of the two brands of hepatitis A and B vaccines. En (3/01). *Item #P2081*

No risk?? No way!! Reviews unusual transmissions of hepatitis B in "low-risk" individuals. En (9/94). *Item #P2100*

Revised! **Hepatitis B and the health care worker.** How to protect health care workers. Includes post-exposure prophylaxis guidelines and new Q & A's. En (3/01). *Item #P2109*

Revised! **Hepatitis B toolbox.** A list of high-risk groups, interpretation of the hepatitis B panel, and a glossary of hepatitis B terminology. En (3/01). *Item #P2110*

Revised! **Labor & delivery unit and nursery unit guidelines to prevent HBV transmission.** For HBsAg screening in labor and delivery units and hepatitis B immunization in newborn nurseries. En (2/01). *Item #P2130*

Management of chronic hepatitis B in children and adults. Four liver experts share their management guidelines for chronic hepatitis B. Authored by H. Conjeevaram, MD, Univ. of Chicago (4/99); C. Smith, MD, Minnesota Gastroenterology, Minneapolis, MN (4/99); B.J. McMahon, MD, Alaska Area Native Health Service, Anchorage, AK (4/99); and S.J. Schwarzenberg, MD, Univ. of Minnesota. En (8/94). *Item #P2164 - $5*

Tracking hepatitis B patients and their contacts. Manual tracking system for high-risk families. En (11/98). *Item #P2180*

New! **Are you at risk for hepatitis A?** Use this questionnaire to assess your patients' risk factors. En (3/01). *Item #P2190*

New! **Are you at risk for hepatitis B?** Use this questionnaire to assess your patients' risk factors. En (3/01). *Item #P2191*

New! **Are you at risk for hepatitis C?** Use this questionnaire to assess your patients' risk factors. En (3/01). *Item #P2192*

Coalition kid art. Immunization artwork (babies, bears, balloons, etc.) you can use to make your own brochures, posters, etc. (4/98). *Item #P3015 - $5*

How to operate a community-based shot clinic. Resource materials to help you run an immunization clinic. En (10/97). *Item #P3040 - $5*

Revised! **Screening questionnaire for child and teen immunization.** A form for the patient's parent/guardian to fill out to help staff evaluate which vaccines can be given at that day's visit. Now includes background information explaining why to ask the questions. En (3/01). *Item #P4060*

Revised! **Screening questionnaire for adult immunization.** A form your adult patients fill out to help you evaluate which vaccines can be given at that day's visit. Now includes background information explaining why to ask the questions. En (3/01). *Item #P4065*

Patient notification letter regarding hepatitis B test results. Sample letter explaining test results to patients. En (10/97). *Item #P4140*

Videos for your clinic staff

How to Protect Your Vaccine Supply (**Ice, Champagne, and Roses**) (California Dept. of Health, Minnesota Dept. of Health, 1996, 15 min). This "how-to" video also covers varicella and hepatitis A vaccines. Includes print materials. *Item #V2010 - $10*

Vaccine Administration Techniques (California Dept. of Health, 1989, 18 min). A refresher course on the correct techniques for administering vaccines. Includes print materials. *Item #V2020 - $10*

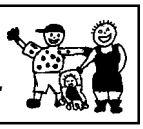
In Praise of the Public Health Nurse! (IAC, 1994, 31 min). Features M. Morrison, MD, Mississippi Dept. of Health, who stresses that immunization is a team effort. *Item #V2040 - $10*

Videos for teens and pre-teens

Immunization Day! (UCLA, 1997, 13 min). An attention-holding vaccination video for middle school students. Includes print materials. En (3/98). *Item #V2050 - $5*

(continued on page 26)

HELP YOURSELF! All our materials are copyright-free! You can order one of any item listed and make as many copies as you need. Use the order form on page 27.



Partnership for Prevention (SKB, 1995, 6 min). A hepatitis B video for 11- and 12-year-olds. May not be broadcast on television. *Item #V3012 - $10*

Get the Facts, Then Get the Vax (ASHA, 1995, 6 min). A hepatitis B video for high school students. *Item #V3015 - $10*

Videos for Asian and Pacific Islanders

★ **Family Album** (UCLA, 1997, 15 min). A video to encourage S.E. Asian parents to vaccinate their children on time. En, Ca, Hm, La, Mien. *Item #V4000 - $10 ea.*

Our Family, Our Strength (ALF, 1986, 19min). A doctor discusses hepatitis B with a pregnant Asian woman who is HBsAg-positive. En. *Item #V4001 - $10*

★ **Hepatitis B—A Family's Story** (1995, 15 min). A doctor discusses hepatitis B with a pregnant woman who is HBsAg-positive. Dubbed into Cambodian. Includes English script. *Item #V4025 - $10*

★ **Benh viem gan B va gia dinh bac Tam - Hepatitis B and Uncle Tam's Family** (Vietnamese Community Health Promotions, 1995, 11 min). A top-notch Vietnamese-language hepatitis B video with English script. *Item #V4030 - $10*

APIA Power Pack. Use the video, manual, demonstration materials, and training materials included in the Power Pack to conduct hepatitis B immunization campaigns in APIA communities. *Item #R2052 - $10*

Photos, slides, posters, and more

Teen poster! **Roll up your sleeves!** Full-color 11 x 17" poster of kids showing off their hepatitis B shots! Use it for your hepatitis B school vaccination campaigns. *Item #Q2010 - 10 posters for $1 (order in units of 10)*

Adult poster! **Immunization . . . not just kids' stuff.** A two-color 7 x 14" poster to hang in every exam room. The companion brochure is item #P4035. *Item #Q2020 –10 posters for $1 (order in units of 10)*

IAC mousepad. This mousepad is wildly colorful and irresistible! Order more than one to liven up your office and home computer work stations or give them to your online friends! *Item #R2000 - $3*

Photo notebook of vaccine-preventable diseases. Includes 20 full-page color photos of children and adults with vaccine-preventable diseases, and simple text that describes the diseases. Perfect for taking out into the community to give presentations. Outreach workers love it! (9/00) *Item #R2053 - $75*

New! **Directory of National Immunization Resources.** Packed with over 50 pages of useful information on organizations, websites, and hotlines that offer a wide array of immunization resources. En (10/00). *Item #R2065 - $10 (Discounts for multiple copies: 2 copies–$13; 3 copies–$15; 4 copies–$17; 5 copies–$20; please call if placing order for six or more)*

★ ***Revised!*** **Vaccine-preventable diseases slide set and script.** Includes 31 slides of children and adults with vaccine-preventable diseases. Suitable for use by public health departments, community outreach workers, nursing schools, and medical teaching programs. Every clinic should have a set of these slides. Comes with scripts in En and Sp (12/00). *Item #S3010 - $25*

Updated! **Unprotected People: Stories of people who died or suffered from vaccine-preventable diseases.** Compilation of personal stories and case reports. All stories illustrate tragedies that occurred because someone wasn't immunized (8/98–3/01). *Items #T2011, #T2012, #T2013 and #T2014 - $5 for all 4 volumes*

READ THIS BEFORE YOU ORDER!

Join the Coalition! With a $60 gift or more, we will send you a complete packet of all our print materials in the languages you specify as well as one of our brightly colored mousepads.

Ordering Information

- All of our materials are camera-ready, copyright-free, and reviewed by national experts!
- You can order just one of any item, including videos, and make as many copies as you need.
- Minimum order/donation is $10, please.
- Please prepay by check or credit card. Purchase orders accepted.
- You may fax us your credit card order or your purchase order. Be sure to include the card's expiration date.
- Checks must be in U.S. dollars.
- Make sure the order form accompanies your order.
- Orders are shipped via fourth-class mail. No charge for shipping and handling within the U.S.
- Delivery in 3 weeks or less.

Coalition Order Form

Payment, Shipping, and Handling Information

Minimum order/donation is $10. Please prepay by check or credit card. Purchase orders accepted. Checks in U.S. dollars only. Order form must accompany check or P.O. (Our Federal ID # is 41-1768237). Orders shipped via fourth class mail. No charge for shipping within the U.S. Expect delivery in three weeks or less.

Immunization Action Coalition & Hepatitis B Coalition
1573 Selby Avenue, Suite 234, St. Paul, MN 55104
Phone (651) 647-9009 • Fax (651) 647-9131

Before you order, remember: *A $60 annual membership donation includes camera-ready copies of ALL of the Coalition's print materials.*

Languages:				
En: English	**Ab:** Arabic	**Fa:** Farsi	**Po:** Portuguese	**Ta:** Tagalog
Sp: Spanish	**Am:** Amharic	**Hm:** Hmong	**Ro:** Romanian	**Ti:** Tigrinya
	Ar: Armenian	**Ja:** Japanese	**Ru:** Russian	**Tu:** Turkish
	Ca: Cambodian	**Ko:** Korean	**Sa:** Samoan	**Vi:** Vietnamese
	Ch: Chinese	**La:** Laotian	**So:** Somali	

Name/Title

Organization

Shipping address

City/State/Zip Telephone ( )

E-mail address **Mailcode (found on your mailing label)**

Qty.	Materials for Your Patients	Amt.
___	P4010 Immunizations for babies $1	_____
___	P4015 After the shots: what to do if your child has discomfort ☐En ☐Sp ☐Ca ☐Ch ☐Fa ☐Hm ☐Ko ☐La ☐Ru ☐Ta ☐Tu ☐Vi $1/ea	_____
___	P4020 Are you 11–19? Then you need to be vaccinated! ☐En ☐Sp $1/ea	_____
___	P4025 Questions parents ask about baby shots $1	_____
___	P4030 Vaccinations for adults $1	_____
___	P4035 Immunizations . . . not just kids' stuff: ☐En ☐Sp $1/ea	_____
___	P4037 What would happen if we stopped vaccinations? $1	_____
___	P4038 Vaccine myths $1	_____
___	P4041 Shots for adults with HIV $1	_____
___	P4042 Vaccinations for adults with hepatitis C $1	_____
___	P4050 When do children and teens need vaccinations? ☐En ☐Sp $1/ea	_____
___	P4055 All kids need hepatitis B shots! ☐En ☐Sp ☐Ar ☐Ca ☐Ch ☐Fa ☐Hm ☐Ja ☐Ko ☐La ☐Po ☐Ro ☐Ru ☐Sa ☐So ☐Ta ☐Tu ☐Vi $1/ea	_____
___	P4070 Chickenpox isn't just an itchy, contagious rash ☐En ☐Sp ☐Vi $1/ea	_____
___	P4080 Hepatitis A is a serious disease, should you be vaccinated? ☐En ☐Sp ☐Vi $1/ea	_____
___	P4090 Questions frequently asked about hepatitis B: ☐En ☐Sp $1/ea	_____
	P4100 Every week hundreds of teens are infected with hep B: ☐En ☐Sp ☐Ca ☐Ch ☐Hm ☐Ko ☐La ☐Ru ☐Ta ☐Tu ☐Vi $1/ea	_____
___	P4110 Hepatitis B shots are recommended for all new babies ☐En ☐Sp ☐Ab ☐Am ☐Ca ☐Ch ☐Fa ☐Hm ☐Ko ☐La ☐Ru ☐So ☐Ti ☐Vi $1/ea	_____
___	P4112 Every week thousands of sexually active people get hep B ☐En ☐Sp $1/ea	_____
___	P4113 If you have sex, read this $1	_____
___	P4115 Hepatitis B . . . 100 times easier to catch than HIV $1	_____
___	P4116 You don't have to go all the way to get hepatitis A $1	_____
___	P4118 You are not alone: teens with hepatitis B $1	_____
___	P4120 Do you have chronic hepatitis B? ☐En ☐Tu $1/ea	_____
___	P4152 Packet of hepatitis B adoption information $5	_____
___	P4170 Hep B info for adults *&* children from endemic areas ☐En ☐Ab ☐Am ☐Ca ☐Ch ☐Fa ☐Hm ☐Ko ☐La ☐Ru ☐So ☐Ti ☐Vi $1/ea	_____
	Materials for Your Clinic Staff	
___	P2010 Summary of rules for childhood immunization $1	_____
___	P2011 Summary of recommendations for adult immunization $1	_____
___	P2013 Give these people influenza vaccine! $1	_____
___	P2015 Pneumococcal vaccine: who needs it, who needs it again? $1	_____
___	P2021 Ask the experts $5	_____
___	P2022 Vaccine administration record for children and teens $1	_____
___	P2023 Vaccine administration record for adults $1	_____
___	P2027 It's federal law! You must give your patients current VISs $1	_____
___	P2045 Tips to improve your clinic's immunization rates $1	_____
___	P2058 Vaccinate don't vacillate! Varicella kills $1	_____
___	P2060 Hospitals and doctors sued for failing to immunize $1	_____
___	P2081 Hepatitis A and B vaccine dosages $1	_____
___	P2100 No risk?? No way!! $1	_____
___	P2109 Hepatitis B and the health care worker $1	_____
___	P2110 Hepatitis B toolbox $1	_____
___	P2130 Labor & delivery and nursery unit guidelines to prevent HBV $1	_____

Qty.		Amt.
___	P2164 Management of chronic hepatitis B in children & adults $5	_____
___	P2180 Tracking hepatitis B patients and their contacts $1	_____
___	P2190 Are you at risk for hepatitis A? $1	_____
___	P2191 Are you at risk for hepatitis B? $1	_____
___	P2192 Are you at risk for hepatitis C? $1	_____
___	P3015 Coalition kid art $5	_____
___	P3040 How to operate a community-based shot clinic $5	_____
___	P4060 Screening questionnaire for child and teen immunization $1	_____
___	P4065 Screening questionnaire for adult immunization $1	_____
___	P4140 Patient notification letter regarding hep B test results $1	_____
	Videos for Your Clinic Staff	
___	V2010 How to Protect Your Vaccine Supply $10	_____
___	V2020 Vaccine Administration Techniques $10	_____
___	V2040 In Praise of the Public Health Nurse! $10	_____
	Videos for Teens and Pre-teens	
___	V2050 Immunization Day! $5	_____
___	V3012 Partnership for Prevention $10	_____
___	V3015 Get the Facts, Then Get the Vax $10	_____
	Videos for Asian and Pacific Islanders	
___	V4000 Family Album ☐En ☐Ca ☐Hm ☐La ☐Mien $10/ea	_____
___	V4001 Our Family, Our Strength $10	_____
___	V4025 Hepatitis B – A Family's Story $10	_____
___	V4030 Benh viem gan B va gia dinh bac Tam–Hepatitis B and Uncle Tam's Family $10	_____
___	R2052 APIA Power Pack $10	_____
	Photos, Slides, Posters, and More	
___	Q2010 "Roll up your sleeves!" adolescent hep B poster ..... 10/$1	_____
___	Q2020 "Immunizations . . . not just kids' stuff," adult poster ..... 10/$1	_____
___	R2000 IAC mousepad $3	_____
___	R2053 Photo notebook of vaccine-preventable diseases $75	_____
___	R2065 Directory of National Immunization Resources ..... $10 *(see catalog for quantity discounts)*	_____
___	S3010 Vaccine-preventable diseases slide set (script included) ☐En ☐Sp (check both boxes to receive both scripts) $25	_____
___	T2011–14 Unprotected people stories: Vols. 1–4 ..... $5/all	_____

Please Join the Coalition!

This is the total amount for the materials I'm ordering ..... $_____

Here's my extra contribution to help defray costs of *NEEDLE TIPS* $_____

I want to join the Immunization Action Coalition!

❑ I am a new member ❑ I am a renewing member

Here is my membership contribution

❑$60 ❑$75 ❑$100 ❑$250 $ _____ other .... $ _____

❑ I'm joining the Coalition at a $60 level or higher, so please send me all of your print materials in English. I also would like to receive whatever translations you have in:

❑ Sp ❑ Ab ❑ Am ❑ Ar ❑ Ca ❑ Ch ❑ Fa ❑ Hm
❑ Ja ❑ Ko ❑ La ❑ Po ❑ Ro ❑ Ru ❑ Sa ❑ So
❑ Ta ❑ Ti ❑ Tu ❑ Vi ❑ All languages

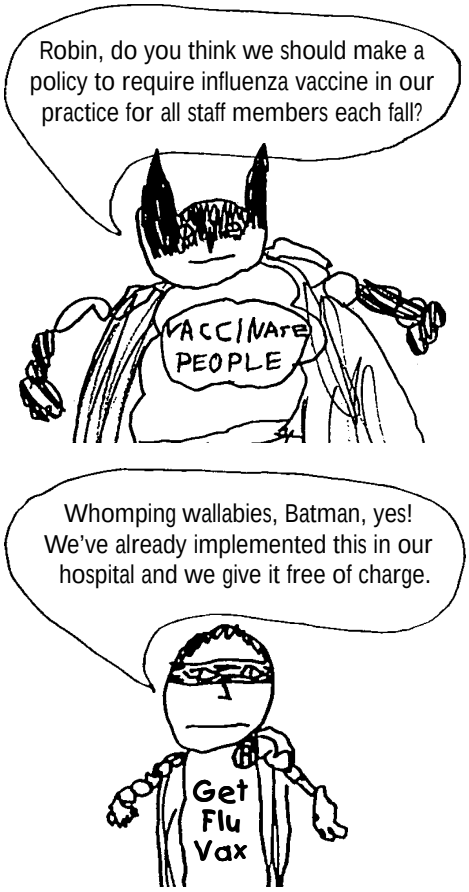
Grand Total $ _____

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

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

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

Health professionals can spread disease. Make sure you're vaccinated!



Thank you, readers!
We receive tremendous support from you.

Thank you to CDC!
CDC provides invaluable technical support as well as two federal grants.

Thank you for your educational grants to all the following:

- American Pharmaceutical Association
- Aventis Pasteur
- Chiron Vaccines
- GlaxoSmithKline
- Medical Arts Press
- Merck & Co.
- Nabi
- Wyeth Lederle Vaccines

IAC receives funding from a variety of sources, both public and private, and maintains strict editorial independence.

Dear Colleagues,

If you're like most people who work in medicine, your patients' well-being is of primary concern to you. Yet every year more than 200,000 MDs and RNs needlessly expose their patients to the influenza virus. Are you one of them?

According to CDC, only 34% of MDs and RNs get vaccinated annually against influenza. This means that over 2.3 million MDs and RNs are unvaccinated and at risk not only for contracting influenza but also for passing it on to others. On average, 20,000 people die annually in the U.S. from influenza or its complications. Some of these cases are unwittingly passed from health professionals to their patients.

Why are so many of us unvaccinated? According to surveys, here are some reasons:

1. I don't get sick and I never get influenza.
About 10–25% of people get influenza each year, and health professionals are not exempt. Many of us develop only mild symptoms of the disease, so we often don't get a florid influenza syndrome. But even with minimal symptoms, we can still transmit the full-blown illness to our patients. Health professionals are notorious for going to work even when sick. With mild illness—scratchy throats, muscle aches—we talk with patients, check blood pressures, examine throats. We breathe the air. We infect others with respiratory viruses.

2. I'm not in a risk group.
If you are a healthy person under the age of 50, you might not be in an influenza risk group, but as a health professional, you put other people at risk. Unvaccinated health care workers put hundreds of others at risk for influenza. Our patients can get infected, need to be hospitalized, and even die from influenza. The only acceptable reason for your not being vaccinated is a valid medical contraindication. By not getting vaccinated against influenza, you endanger the lives of others.

3. I forget to get vaccinated or don't have time.
No time? Plan ahead to make the time next fall. Make influenza vaccination a priority for all the employees in your practice or hospital. Establish a system so that everyone is vaccinated against influenza free of charge every year and no one forgets.

4. I'm concerned about vaccine side effects.
The most common side effect from influenza vaccine is arm soreness. Two recent studies demonstrated that influenza vaccine caused no significant difference in systemic side effects (fever, headache, fatigue, myalgias) when compared to placebo injection. (Margolis, KL et al., *JAMA.* 1990; 264: 1339–1141. Nichol, KL et al., *Arch Intern Med.* 1996;156:1546–1550.)

All clinics, hospitals, and long-term care facilities should require that their employees receive influenza vaccine and provide it free of charge. While the investment may seem high, in the long run, it often offers a cost savings to society and **it saves lives.** If your facility doesn't have a system in place to vaccinate all staff members, now is the time to start planning.

Make sure you get vaccinated every year and that all staff members in your facility do too. Make it a requirement. Once a year. It's so simple. And it's lifesaving. After all, isn't this what medicine is all about?

Deborah L. Wexler, MD
Executive Director

Immunization Action Coalition
NEEDLE TIPS* and the *Hepatitis B Coalition News
1573 Selby Avenue, Suite 234
Saint Paul, MN 55104

Nonprofit Org.
U.S. Postage
PAID
Permit No. 3388
Champlin, MN