WHAT’S ON THE INSIDE:

Ask the Experts
One of CDC’s immunization experts, Dr. William Atkinson, answers your questions .......... 1
CDC’s hepatitis chief, Dr. Harold Margolis, answers hepatitis A & B questions ................... 7

What’s New?
Vaccine highlights: new vaccines and new recommendations .............................................. 4
What’s your state doing? pneumococcal, influenza, varicella, hepatitis B rates, etc .......... 19

Photocopy these new and revised materials!
NEW! Basic knowledge about hepatitis B ............................................................................ 8
NEW! Hep B and the health care worker .............................................................................. 9
NEW! Pneumococcal vaccine: who needs it and who needs it again? ...................................... 10
REvised! Summary of recommendations on childhood immunization ................................. 11
NEW! Every week thousands of sexually active people are infected with hepatitis B .......... 13
NEW! All kids 0 –18 need hepatitis B shots! ........................................................................ 15

National Resources
Where to get videos, ACIP statements, adolescent and adult materials, and more ............... 21

Coalition Catalog
Immunization and hepatitis B videos, brochures, etc. Order one, make copies! ..................... 24

Join the Coalition!
A $50 annual membership will help support the Coalition and entitles you to a packet
of all our printed materials, too! .......................................................................................... 28

Ask the Experts
Editors’ note: The Coalition thanks William L. Atkinson, MD, MPH; Harold S. Margolis, MD; and Linda A. Moyer, RN, of the Centers for Disease Control and Prevention for answering the following questions from 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.

Questions for the experts?
Contact: Immunization Action Coalition 1573 Selby Avenue, St. Paul, MN 55104 Telephone: 612-647-9009 Fax: 612-647-9131 E-mail: mail@immunize.org

General vaccine questions
by William L. Atkinson, MD, MPH

How do I obtain ACIP statements?
ACIP statements are published in the Morbidity and Mortality Weekly Report (MMWR). To obtain any ACIP statement try the following: 1) Download them from CDC’s website at www.cdc.gov/epo/mmwr/mmwr.html. You can also request a free electronic subscription to MMWR at this site. 2) Call CDC’s Immunization Hotline at 800-232-2522. 3) E-mail your request to nipinfo@cdc.gov 4) Call your state immunization program, see phone numbers on page 20. 5) Request them from your medical library. Note: if you want new ACIP recommendations as soon as they are released, CDC’s website is the place to go!

Why do some vaccination rules say months and some say weeks for minimum intervals?
The choice of using week or month terminology is based on the preference of the person writing the statement, or the way the interval was described in prior statements. It does not appear to be based on science. Until recently, there has been no clear guidance on the appropriate unit of measurement. However, the soon-to-be published statement on measles, mumps, and rubella vaccines will be the first to operationally define a month as 28 days.

If a 2-month old was vaccinated with DTaP, IPV, Hib, and Hep-B, then received a second set of the same shots 3 weeks later, will the child need these doses repeated at 4 months of age?
The minimum interval between doses of these vaccines is either 4 weeks (DTaP and IPV) or a month (Hib). The “General Recommendations on Immunization” (MMWR, 1994;43:No.RR-1) state that doses given at less than the minimum interval should not be counted as part of the series. These doses should be repeated at 4 months of age.

For a child under two years of age traveling outside of the U.S., can I give varicella vaccine, MMR, and at the same time give immune globulin (IG) to prevent hepatitis A?
No. The antibody in IG will inactivate the live attenuated vaccine viruses in MMR and varicella

(continued on page 6)
Letters to the Editor...

Editor’s note: We welcome letters of interest to our readers. Please send your letters by mail, fax, or e-mail to the address in the box at the left.

The forgotten children of hepatitis B

The ACIP recommendation to vaccinate all children 0–18 years of age against hepatitis B virus (HBV) infection is great news. However, the danger still remains that the “forgotten children of hepatitis B immunization” will be overlooked.

Who are these forgotten children? They are the children who were born, or whose parents were born, in areas of the world where HBV infection is moderately or highly endemic—Asia, Pacific Islands, Sub-Saharan Africa, Amazon Basin, Eastern Europe, and the Middle East. Since 1989, the ACIP has been recommending that all these children be vaccinated.

There are two messages which need to be given loud and clear to clinicians caring for the “forgotten children of hepatitis B immunization”:

1. They can’t wait to be immunized at 11–12 years old since many will have become infected before then.
2. Serologic testing should be considered to identify people who are chronically infected or those who are already immune.

Clinicians who would like detailed information on why there is a sense of urgency to vaccinate these children should contact their state’s hepatitis B coordinator.

— Anthony Chen, MD

The Immunization Action Coalition, a 501(c)3 nonprofit organization, works to boost immunization rates. The Coalition 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 the Immunization Action Coalition, 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 who are chronically infected with hepatitis B.

Pneumococcal vaccine saves lives

The study by Ortqvist and colleagues (Lancet, 1998;351:399-403) adds to an already conflicted literature regarding the efficacy of pneumococcal vaccines on preventing pneumonia in middle-aged and elderly people.

This and previously reported studies with similar negative conclusions have been criticized on the basis of population size, case ascertainment, and other methodologic issues and other studies from Finland (Koivula I., et al., Amer J Med. 1997;103(4):281–90) and the United States (K. Nichol, personal communication) indicate a benefit of pneumococcal vaccination in preventing pneumonia in the elderly. Nevertheless, it seems clear that when measured by pneumonia prevention, the pneumococcal vaccine is not the “home run” that we had wished.

In revisiting its recommendations for the use of the pneumococcal vaccine (“Prevention of Pneumococcal Disease,” MMWR, 1997; 46:No.RR-8), the Advisory Committee on Immunization Practices of the Centers for Disease Control and Prevention recognized the variability of the study results which measure prevention of pneumococcal pneumonia and chose to base its recommendations on the well-established efficacy of the vaccine in preventing invasive pneumococcal disease (bacteremia and meningitis).

The estimated annual burden of invasive pneumococcal disease in the United States is 50,000 cases of bacteremia and 3,000 cases of meningitis. The elderly bear the brunt of these infections, both in terms of incidence and mortality.

Multiple trials have consistently demonstrated protective efficacy (50–80%) of pneumococcal vaccines in prevention of invasive pneumococcal disease in immunocompetent elderly people. This alone is ample justification for the continued and increased use of the current pneumococcal vaccine in the indicated populations. At the same time, the limited effectiveness of the current vaccine in preventing pneumonia should spur efforts to “develop a better mousetrap.” The more immunogenic protein conjugated pneumococcal vaccines (now being studied in children) need to be evaluated in adult groups at high risk of pneumococcal disease, both invasive and noninvasive.

— Pierce Gardner, MD

State University of New York, Stony Brook

— Marie Griffin, MD

Vanderbilt University

— Gregory A. Poland, MD

Mayo Clinic, Rochester, MN

— William Schaffner, MD

Vanderbilt University

Ed. note: Pneumococcal disease kills about 40,000 people every year in the United States. Pneumococcal vaccine is recommended for every person 65 years of age and older as well as for many persons under 65. See page for 10 for information about the recommendations for the use of pneumococcal vaccine.

Chickenpox is not a “casual” disease

I think chickenpox is not something to be casually overlooked. My six-year old had cerebellar ataxia from chickenpox when he was three. It was a very frightening experience. First, he was unbalanced and falling down a lot, then he couldn’t walk, then he couldn’t sit up, then he was vomiting and lethargic. The pediatrician did not know what it was, and a neurologist finally diagnosed him.

(continued on page 3)
NEEDLE TIPS • Spring/Summer 1998 (printed 4/98) • 1573 Selby Avenue, St. Paul, MN 55104 • 612-647-9009 • www.immunize.org

I believe cerebellar ataxia has had a lasting effect on my son. He does well for his age with everything besides coordination. He does not balance well. He cannot ride his bike without the training wheels yet. I can see it when he runs, goes down stairs, etc. I encourage physicians to give chickenpox vaccine to their patients and parents to ask for this vaccine for their children.

– Dana Kujawski, parent

Planned Parenthood vaccinates teens against hepatitis B

I’m writing to let your readers know of Planned Parenthood of Greater Iowa’s success with immunizing teens against hepatitis B virus infection in our clinics. Since July 1996, over 1400 adolescents have been vaccinated with a compliance rate of 78.2 percent. As of Jan. 7, 1998, an average of 85.4 clients begin the vaccine series each month.

Thanks to VFC, we are able to use hepatitis B vaccine in our clinics for all VFC-eligible adolescents through 18 years of age.

If any of your readers are thinking of starting hepatitis B vaccination programs, I would be happy to talk to them about our program. We believe that the number of adolescents who are vaccinated in our clinics and the high rate of compliance is evidence that our education and counseling programs work!

Betsy Wentzel, ARNP
Planned Parenthood of Greater Iowa
515-292-1000

Welcome new advisory board members!

Pierce Gardner, MD, FACP, internist, is the Associate Dean for Academic Affairs and Professor of Medicine, at State University of New York, Stony Brook. Dr. Gardner, the American College of Physicians’ liaison to the Advisory Committee on Immunization Practices of the Centers for Disease Control and Prevention, also serves on national subcommittees and working groups concerned with such issues as immunization following bone marrow transplantation, pneumococcal vaccine, and the “Influenza Pandemic Preparedness and Emergency Response for the United States.” Dr. Gardner received his medical degree from Harvard Medical School.

Bernard Gonik, MD, obstetrician-gynecologist, is Professor and Associate Chairman, Department of Obstetrics and Gynecology, at Wayne State University School of Medicine, and Chief of Obstetrics and Gynecology at Grace Hospital, Detroit, Michigan. Dr. Gonik, an associate examiner for the American Board of Obstetrics and Gynecology, serves on the editorial board of Infectious Diseases in Obstetrics and Gynecology and is a reviewer for major journals including the Journal of Immunology. He is a prolific author and a lecturer on hepatitis B infection in pregnant women. Dr. Gonik received his medical degree from Michigan State University College of Human Medicine.

William Schaffner, MD, internist, is Professor and Chairman, Department of Preventive Medicine, and Professor of Medicine, Division of Infectious Diseases, at Vanderbilt University School of Medicine. Dr. Schaffner, the American Hospital Association’s liaison to the Advisory Committee on Immunization Practices of the Centers for Disease Control and Prevention, is also a member of the National Institute of Allergy and Infectious Diseases’ Adult Acellular Pertussis Vaccine Trial Data Monitoring and Safety Committee and the hospital epidemiologist at Vanderbilt University Hospital. Dr. Schaffner received his medical degree from Cornell University Medical College.

Raymond A. Strikas, MD, infectious disease specialist, is Chief of the Adult Vaccine-Preventable Diseases Branch, Epidemiology and Surveillance Division, National Immunization Program, Centers for Disease Control and Prevention (CDC), and serves as a CDC liaison to the Immunization Action Coalition. Dr. Strikas, co-editor of the recently released ACIP statement on “Immunization of Health-Care Workers,” is also the co-chair of “Influenza Pandemic Preparedness Federal Working Group for the United States.” Dr. Strikas received his medical degree from the University of Illinois, Chicago.

“IAC Express” expressly appreciated!

This is a tardy thank you to everyone at the Immunization Action Coalition for “IAC Express” and the information it provides. In the last issue I especially appreciated the review and recommendation of What Every Parent Should Know about Vaccines. I now have my own copy, and I’m glad to have it on my bookshelf to help me with some of those hard-to-answer questions that parents sometimes raise.

I’m also glad that you include information about topics such as rabies postexposure prophylaxis and the new STD guidelines (addressing the expanded use of hepatitis A and B vaccines). I work hard at staying well-informed, but I learn something new in every issue of “IAC Express.” It’s a great supplement to NEEDLE TIPS and I especially appreciate the pointers to other on-line information. Thanks for making it easier for me to do my job well! Do you guys ever sleep??

– Nancy Fasano
Outreach and Education Manager
Immunization Division
Michigan Department of Community Health

Sign up for IAC Express!
You will receive monthly immunization and hepatitis announcements from us via e-mail.
To subscribe, send an e-mail request to express@imunize.org and place the word "SUBSCRIBE" in the "subject:" field.

Advisory Board

William L. Atkinson, MD, MPH
Liaison, National Immunization Program, CDC
Virginia Burggraf, MSN, RN
American Nurses Association, Washington, DC
Arthur Chen, MD
Alameda Co. Health Department, Oakland, CA
Moon S. Chen, Jr., PhD, MPH
Ohio State University
Richard D. Clover, MD
University of Louisville
Deborah K. Freese, MD
Mayo Clinic, Rochester, MN
Pierce Gardner, MD
State University of New York, Stony Brook
Gregory P. Gilmet, MD, MPH
American Association of Health Plans
Bernard Gonik, MD
Wayne State University
John D. Graveline, MS Pharm, EdM
ImmunoFacts, Durham, NC
Caroline Breese Hall, MD
University of Rochester
Neal A. Halsey, MD
Johns Hopkins University
Hie-Won L. Hann, MD
Jefferson Medical College
Norbert Hirschhorn, MD
Minnesota Department of Health
Neal Holton, MD, MPH
St. Paul Ramsey Co. Public Health, St. Paul, MN
Margaret K. Hostetter, MD
University of Minnesota
Robert M. Jacobson, MD
Mayo Clinic, Rochester, MN
Jerri A. Jenista, MD
Adoption Medical News, Ann Arbor, MI
Samuel L. Katz, MD
Duke University Medical Center
Anne Kuettel, PHN
St. Paul Ramsey Co. Public Health, St. Paul, MN
B U.K. Li, MD
Ohio State University
Anna S.-F. Lok, MD
University of Michigan
Virginia R. Lupo, MD
Hennepin Co. Medical Center, Minneapolis, MN
Edgar K. Marcuse, MD, MPH
University of Washington School of Medicine
Harold S. Margolis, MD
Liaison, Hepatitis Branch, CDC
Christine C. Matson, MD
Eastern Virginia Medical School
Jesse Mordoor, MD
Children’s Health Care - St. Paul, MN
Brian J. McMahan, MD
Alaska Native Medical Center, Anchorage, AK
Margaret Morrison, MD
Mississippi Department of Health
Paul A. Offit, MD
Children’s Hospital of Philadelphia
Gregory A. Poland, MD
Mayo Clinic, Rochester, MN
Gary Remafedi, MD, MPH
University of Minnesota
Thomas N. Saari, MD
University of Wisconsin
William Schaffner, MD
Vanderbilt University
Neil R. Schram, MD
Kaiser Permanente, Harbor, CA
Sarah Jane Schwarzenberg, MD
University of Minnesota
Coleman I. Smith, MD
Minnesota Gastroenterology, Minneapolis, MN
Raymond A. Strikas, MD
Liaison, National Immunization Program, CDC
Myron I. Tong, PhD, MD
Huntington Memorial Hosp., Pasadena, CA
Walter W. Williams, MD
Liaison Associate for Public Health, CDC
Richard K. Zimmerman, MD, MPH
University of Pittsburgh
Deborah L. Wexler, MD
Executive Director

Dr. Gardner is a reviewer for major journals including the Journal of Immunology. He is a prolific author and a lecturer on hepatitis B infection in pregnant women. Dr. Gonik received his medical degree from Michigan State University College of Human Medicine.
New vaccine highlights

Latest recommendations and schedules

The next ACIP meetings...

Editors’ note: The information on this page is current as of April 1, 1998.

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 on June 24–25, 1998, and October 21–22, 1998.

The latest ACIP statements

ACIP statements. No clinic should be without a set of these public health recommendations on vaccines, which are published in the MMWR. To get a complete set of ACIP statements or just the ones you want: 1) download them from CDC’s website at www.cdc.gov/epo/mmwr/mmwr.html (you can request a free electronic subscription to MMWR at this site); 2) call CDC’s Immunization Hotline at 800-232-2522; 3) e-mail your request to nipinfo@cdc.gov; 4) call your state’s immunization program (phone numbers on page 20); 5) request them from your medical library; or 6) call 617-893-3800 to subscribe to the MMWR.


NEW! On Dec. 26, 1997, MMWR published, “Immunization of Health-Care Workers.” Included in these recommendations are the most up-to-date guidelines for screening and vaccination of health care workers in clinics, hospitals, nursing homes, etc. Every clinic should have a copy!

The following ACIP statements were released in 1997: The Prevention of Pneumococcal Disease, 4/4/97; Pertussis Vaccination, 3/28/97; Poliomyelitis Prevention, 1/24/97. Also make sure you have a copy of General Recommendations on Immunization, 1/24/94. It’s a great resource.

Hepatitis A and B news

On Oct. 23, 1997, ACIP recommended that all children 0 through 18 years of age be vaccinated against hepatitis B. Prior to this recommendation, only certain age cohorts and at-risk children were recommended for HBV vaccination. The ACIP also voted to expand the use of VFC hepatitis B vaccine to cover all VFC-eligible children ages 0 through 18 years beginning March 1, 1998.

At the March 24–25, 1997, NIH Consensus Development Conference, a non-federal panel of experts recommended that hepatitis A and B vaccination be given to all persons who are infected with the hepatitis C virus. To order a copy of “Management of Hepatitis C - NIH Consensus Statement,” call 888-644-2667.

Rabies news

On Jan. 16, 1998, MMWR published, “Human Rabies - Texas and New Jersey, 1997.” This article updates the ACIP recommendations on who should receive postexposure prophylaxis (PEP) following exposure to bats. These recommendations call for more aggressive use of PEP.

On Oct. 20, 1997, RabAvert, a rabies vaccine manufactured by Chiron Behring GmbH & Co., (distributed in the U.S. by Chiron Corp.) was approved by the FDA for both preexposure and postexposure prophylactic use in humans. See MMWR, Jan 16, 1998: 47: No. 1.

Rotavirus news

On Feb. 11, 1998, a majority of the ACIP members went on record as being in favor of a recommendation for routine use of rotavirus vaccine among infants at 2, 4, and 6 months of age when a licensed product becomes available. A revised draft ACIP statement will be prepared for the June ACIP meeting and will include recommendations on the use of rotavirus vaccine for all infants.

Tetanus news

On March 6, 1998, MMWR published, “Tetanus Among Injecting-Drug Users - California, 1997.” During 1987–1997, 27 of the 67 cases of tetanus reported in California occurred in injecting drug users (IDUs). The article reports that IDUs have frequent contact with the medical system but poorer continuity of care. Each clinical encounter with an IDU should be used for assessment and, when needed, completion of Td vaccination.

Rubella news

On Jan. 9, 1998, the MMWR published recommendations on rubella prevention following rubella outbreaks on two commercial cruise ships. CDC recommends that cruise lines administer MMR to all crew members without documented immunity to rubella. To prevent transmission of rubella infection and subsequent congenital rubella syndrome, women of childbearing age, particularly pregnant women, should be immune to rubella before cruise ship excursions or international travel.

1998 Childhood IZ schedule

On Jan. 16, the “1998 Childhood Immunization Schedule” was released by the ACIP, AAP, and AAFP. The 1998 schedule has recommendations that are not on the 1997 schedule — the second dose of MMR is now recommended at 4–6 years of age and the third dose of an all-IPV and all-OPV schedule can now be given as early as 6 months of age — so make sure to get the new schedule.

After the “1998 Childhood Immunization Schedule” was published in the MMWR, two footnotes were changed. The footnotes now read: 1) combination vaccines may be used whenever any components of the combination are indicated and its other components are not contraindicated; and 2) in infants born to mothers whose HBsAg status is unknown, the second dose of hepatitis B vaccine is recommended at 1–2 months of age. The corrected version can be downloaded from the web at www.cdc.gov/nip/child.htm

VFC coverage expands for ’98

Every year additional age groups of children become eligible for VFC vaccine. In 1998, VFC vaccine is available for VFC-eligible children in the following age groups:

- Children 1 through 15 years of age are eligible to receive varicella vaccine.
- Children 1 through 18 years of age are eligible to receive two doses of MMR vaccine.
- Children 0 through 18 years of age are eligible to receive hepatitis B vaccine.
- Children 11 through 18 years of age are eligible to receive a Td vaccine booster if at least 5 years have elapsed since the previous dose.

Needle tips

How do you communicate with a fish?

Drop It A There!
What a wonderful web we’ve woven!

Here’s what you’ll find at www.immunize.org

- ALL of the Immunization Action Coalition’s print materials can be downloaded from www.immunize.org. Everything is camera-ready, copyright free, and reviewed by CDC for technical accuracy. It's yours free! Add your clinic's name to any of our print items and make copies.

- Photographs of people with vaccine-preventable diseases

- "Ask the Experts"

- Electronic editions of the current issues of NEEDLE TIPS and VACCINATE ADULTS!

- Our catalog of over 100 different items including videos, slides, photographs, resource manuals, and much more!

Sign up! While you’re in our web, sign up for “IAC Express.” You will receive monthly immunization and hepatitis announcements from us via e-mail. To subscribe, send an e-mail message to express@immunize.org and insert the word SUBSCRIBE in the “subject:” field. You will be added to our mailing list.
Ask the Experts . . . continued from page 1

vaccines. The vaccines should be given 2 weeks prior to administration of IG. If the IG has already been given, MMR should be delayed for 3 months and varicella vaccine for 5 months.

**Does IG given for hepatitis A prophylaxis to infants interfere with DTaP, polio, hepatitis B, or Hib vaccines?**

Inactivated vaccines, such as DTaP, Hib, IPV, and hepatitis B, may be given at any time before or after IG. Response to the vaccines will not be affected. Oral polio and yellow fever vaccines are also not affected by IG, even though they are live virus vaccines.

**If a patient has a bleeding disorder, what injection route should I use for administering vaccinations?**

This issue is discussed in the “General Recommendations on Immunization” (MMWR; 1994; 43:No. RR-1). Briefly, vaccines should be given by the same route as in a person without a bleeding disorder. Intramuscular vaccines should be given with a fine needle (23 gauge or smaller), and firm pressure should be applied over the site for at least 2 minutes. If possible, schedule the IM injections shortly after antihemophilia or similar therapy to minimize the risk of a hematoma.

**What new vaccines might be available in the next year or two?**

An oral rotavirus vaccine is likely to be licensed by the Food and Drug Administration within the next few months. License applications are also pending for two DTaP-Hib combination vaccines, and a DTaP-hepatitis B combination. It is also possible that at least one inactivated vaccine for Lyme disease will be available this year, and a live attenuated influenza vaccine, given by nasal spray, may be available within the next two years.

**Diphtheria, tetanus, pertussis**

*by William L. Atkinson, MD, MPH*

**Is it okay to continue to use DTP-Hib in a routine clinic setting?**

Yes. However, ACIP recommends the use of acellular pertussis vaccine (DTaP) for all 5 doses in the series because of the lower risk of adverse reactions.

**A 2-month old received her first dose of DTaP and then had inconsolable crying for greater than 3 hours. For the 4-month dose would you give DT or DTaP?**

Persistent crying is not an absolute contraindication to further doses of pertussis-containing vaccine. The symptoms you describe are considered a “precaution” (or warning). Children who experience these symptoms would not NORMALLY receive additional doses of any pertussis-containing vaccine (i.e., you would complete the series with pediatric DT).

However, if you believe the benefit of the pertussis vaccine exceeds the risk of more crying (which, although unnerving, is otherwise benign), you can administer DTaP. Many providers choose to administer pertussis-containing vaccine if this is the ONLY precaution the child has experienced. You and the parent will need to make this judgment.

**Hib**

*by William L. Atkinson, MD, MPH*

**How many total doses of Hib vaccine are needed for a 12-month old who received one previous dose?**

Children who are not up to date with Hib vaccine present a challenge. They usually don’t need a full series of 3 or 4 doses of vaccine (depending on the brand used). A 12-month old who received only one previous dose would need one dose of any conjugate Hib vaccine now, and a second dose 2 months later. AAP’s 1997 Red Book contains an excellent Hib vaccination table for children who have fallen behind (p. 230).

Ed. note: For information on how to obtain a copy of the AAP’s 1997 Red Book, call 800-433-9016.

**Measles, mumps, rubella**

*by William L. Atkinson, MD, MPH*

**What is the new recommendation for measles-mumps-rubella (MMR) vaccine for health care workers (HCWs)?**

A new ACIP statement called the “Immunization of Health-Care Workers” was published in December 1997 (MMWR; 1997;46:No.RR-18). The new recommendation for MMR is that all persons who work in a medical facility should have evidence of immunity (defined in the statement), not just those persons with direct patient contact. For most persons born after 1956, this means documentation of two doses of MMR vaccine. Persons born before 1956 can generally be considered immune to all three diseases, but age does not guarantee immunity. As a result, ACIP recommends that facilities consider recommending a dose of MMR to persons born before 1957 if there is no other evidence of immunity (such as serologic testing).

A HCW received 2 doses of MMR and the rubella titer remains negative. What should be done?

Failure to respond to two properly timed doses of MMR vaccine would be expected to occur in one or two persons per thousand vaccinees, at most. This situation could also occur because of the relative insensitivity of the serologic test used for screening. ACIP does not address this situation. However, one approach would be to administer one additional dose of MMR. Additional testing is neither indicated nor recommended.

**Can I give MMR to a child whose sibling is receiving chemotherapy for leukemia?**

Yes. MMR and varicella vaccines should be given to the healthy household contacts of immunosuppressed children. Oral polio is the only vaccine that should not be given to a healthy child if an immunosuppressed person resides in the household.

**Varicella**

*by William L. Atkinson, MD, MPH*

**What is the new recommendation on varicella immunity for HCWs?**

The recommendation for varicella immunity in HCWs has not changed since the 1996 ACIP varicella statement. All HCWs should be immune to varicella, either as a result of having had chickenpox, or from receiving two doses of varicella vaccine.

**Which of my patients should have varicella serology prior to receiving varicella vaccine?**

ACIP does not recommend serologic testing for persons <13 years of age. At least 90% of adolescents and adults from the U.S. can be expected to be immune to varicella, including those who do not recall having had the disease. As a result, serologic screening may be considered for persons 13 years of age and older who do not have a history of chickenpox, or from receiving two doses of varicella vaccine.

**I have a 22-year old patient who requested varicella immunization after a negative varicella titer. Eleven days postimmunization she developed a fever and at least 50 chickenpox lesions (with no known exposure other than the vaccine). Does she still need the second vaccination?**

No. This mild case of varicella probably represents replication of the vaccine virus, although it could be a mild case of varicella disease. In any event, the person is now immune and does not need additional vaccine.
Influenza
by William L. Atkinson, MD, MPH

For influenza vaccine, what is the difference between the split virus and whole virus products? Whole virus vaccine is just that—influenza virus purified and inactivated with formalin. Split virus vaccine is treated with a detergent-type chemical, and purified so that the neuraminidase and/or hemagglutinin remains in the vaccine. There is no difference in efficacy between the two vaccines. Split virus vaccine is recommended for children <13 years of age because of a lower rate of febrile reactions. In adults there is no difference in local or febrile reactions using whole or split virus.

Which patients with egg allergy should not receive influenza vaccine?
For those who claim egg allergy, determine the nature of the allergy. If it is severe (anaphylaxis, urticaria, bronchospasm) do not vaccinate. You might consider consultation with an allergist. Protocols for desensitization have been published (e.g., in the AAP’s 1997 Red Book). For allergies other than severe, give the vaccine.

Are influenza and pneumococcal vaccines safe to administer to patients with multiple sclerosis?
Multiple sclerosis is not a contraindication to any vaccine, including influenza and pneumococcal vaccines.

Pneumococcal disease
by William L. Atkinson, MD, MPH

Is there any reason to withhold pneumococcal vaccine from a healthy 45-year old who requests it to decrease his/her risk of this disease?
No, although ACIP does not routinely recommend pneumococcal vaccine for healthy persons of this age.

CDC answers additional questions about the use of pneumococcal vaccine on page 10.

Rabies
by William L. Atkinson, MD, MPH

If a bat is found in a room where a baby is sleeping, do you need to give postexposure prophylaxis?
Yes. The ACIP recently expanded its recommendations on who should receive postexposure prophylaxis (PEP) following exposure to bats. When a bat is found in a dwelling, even in the absence of a known bite or scratch, the recommendation calls for more aggressive use of PEP. Details of these new rabies recommendations were published in the MMWR, 1998;47:1. The indications for postexposure prophylaxis are fairly complex, and depend on several factors. Providers who are responsible for decisions on postexposure prophylaxis should also be familiar with the ACIP recommendations (MMWR, 1991;40:No.RR-3).

Hepatitis B
by Harold S. Margolis, MD, and Linda A. Moyer, RN

For whom is hepatitis B surface antibody (anti-HBs) titer (test for immunity) recommended after three doses of vaccine are given?
It is only necessary to know the immune response of persons in the following risk groups:
• health care workers who have the risk of exposure to blood or body fluids in the workplace (to guide postexposure prophylaxis)
• infants born to hepatitis B surface antigen (HBsAg)-positive mothers (to ensure ongoing protection)
• immunocompromised persons, e.g., dialysis patients, AIDS patients (to ensure protection)
• sex partners of HBsAg-positive persons (to assure adequate response to vaccination).

Are the hepatitis B vaccines interchangeable?
Yes. The vaccines available in the United States are Recombivax-HB (Merck & Co.) and Engerix-B (SmithKline Beecham). They may be used interchangeably at the recommended dosage for each product.

HBV Clinical Trials
The National Institute of Allergy and Infectious Diseases has information about adult and pediatric HBV clinical trials being conducted in the United States. For adult studies, contact Lanette Sherrill, CRNP, MSN. For pediatric studies, contact Jan Kiehl, RN, BS. Both can be reached at 205-934-2424.
Basic knowledge about hepatitis B

Know the risk groups for hepatitis B virus infection

People in these groups are at moderate or high risk for hepatitis B virus infection and should be vaccinated.

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

Who needs serologic testing?

Prior serologic testing may be recommended depending on the specific level of risk and/or likelihood of previous exposure. If you do decide to test, give the first dose of vaccine at the same office visit that you draw blood for testing. Vaccination can then be continued, or not, based upon the results of the tests. If you are not sure who needs screening, call your consultant or health department for details. It is especially prudent to screen individuals who have emigrated from endemic areas. When people with chronic HBV infection are identified, offer them appropriate disease management. In addition, their household members and intimate contacts should be screened and, if found susceptible, vaccinated.

Guidelines on which risk groups need to receive prevaccination serology (anti-HBc), which groups need to have post-vaccination serology (anti-HBs), and which groups need evaluation to determine if they are chronically infected with hepatitis B virus, will be published in 1998 in the MMWR as part of the ACIP recommendations on vaccination to prevent hepatitis B virus infection. You can get copies of ACIP recommendations by calling 800-232-2522.

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

Interpretation of the hepatitis B panel

<table>
<thead>
<tr>
<th>Tests</th>
<th>Results</th>
<th>Interpretation</th>
</tr>
</thead>
<tbody>
<tr>
<td>HBsAg anti-HBc anti-HBs</td>
<td>negative negative</td>
<td>susceptible</td>
</tr>
<tr>
<td>HBsAg anti-HBc anti-HBs</td>
<td>negative or positive positive</td>
<td>immune</td>
</tr>
<tr>
<td>HBsAg anti-HBc IgM anti-HBc anti-HBs</td>
<td>positive positive negative</td>
<td>acutely infected</td>
</tr>
<tr>
<td>HBsAg anti-HBc IgM anti-HBc anti-HBs</td>
<td>positive negative negative</td>
<td>chronically infected</td>
</tr>
<tr>
<td>HBsAg anti-HBc anti-HBs</td>
<td>negative positive negative</td>
<td>four interpretations possible*</td>
</tr>
</tbody>
</table>

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

Laboratory diagnosis of chronic hepatitis B, C, and D

Lab tests needed to diagnose chronic hepatitis B, C, or D:

- **Hepatitis B**: HBsAg. If positive, obtain IgM anti-HBc to differentiate acute hepatitis B (IgM anti-HBc is positive) from chronic hepatitis B (IgM anti-HBc is negative). Chronic hepatitis B is also defined by two HBsAg-positive tests separated by at least 6 months.
- **Hepatitis C**: Anti-HCV. Verify a positive test with a supplemental assay such as RIBA or nucleic acid detection of HCV RNA, depending on the clinical situation.
- **Hepatitis D**: Must meet criteria for chronic hepatitis B. Then, obtain anti-HDV.

To diagnose the presence of hepatitis-associated liver disease, the liver enzymes are usually elevated at least 1.5-2X normal. In this situation the patient should be referred to a gastroenterologist/hepatologist for further evaluation, which may include liver biopsy. Treatment for chronic hepatitis B and C is available for some patients who meet clinical criteria. Currently, interferon alfa-2b is the only FDA-approved treatment for hepatitis B or hepatitis C.

For more information about hepatitis B including guidelines for the management of people chronically infected with HBV, contact the Hepatitis B Coalition, 1573 Selby Avenue, St. Paul, MN 55104, 612-647-9009 or visit our website at www.immunize.org

Basic knowledge about hepatitis B

Know the risk groups for hepatitis B virus infection

People in these groups are at moderate or high risk for hepatitis B virus infection and should be vaccinated.

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

Who needs serologic testing?

Prior serologic testing may be recommended depending on the specific level of risk and/or likelihood of previous exposure. If you do decide to test, give the first dose of vaccine at the same office visit that you draw blood for testing. Vaccination can then be continued, or not, based upon the results of the tests. If you are not sure who needs screening, call your consultant or health department for details. It is especially prudent to screen individuals who have emigrated from endemic areas. When people with chronic HBV infection are identified, offer them appropriate disease management. In addition, their household members and intimate contacts should be screened and, if found susceptible, vaccinated.

Guidelines on which risk groups need to receive prevaccination serology (anti-HBc), which groups need to have post-vaccination serology (anti-HBs), and which groups need evaluation to determine if they are chronically infected with hepatitis B virus, will be published in 1998 in the MMWR as part of the ACIP recommendations on vaccination to prevent hepatitis B virus infection. You can get copies of ACIP recommendations by calling 800-232-2522.

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

Interpretation of the hepatitis B panel

<table>
<thead>
<tr>
<th>Tests</th>
<th>Results</th>
<th>Interpretation</th>
</tr>
</thead>
<tbody>
<tr>
<td>HBsAg anti-HBc anti-HBs</td>
<td>negative negative</td>
<td>susceptible</td>
</tr>
<tr>
<td>HBsAg anti-HBc anti-HBs</td>
<td>negative or positive positive</td>
<td>immune</td>
</tr>
<tr>
<td>HBsAg anti-HBc IgM anti-HBc anti-HBs</td>
<td>positive positive negative</td>
<td>acutely infected</td>
</tr>
<tr>
<td>HBsAg anti-HBc IgM anti-HBc anti-HBs</td>
<td>positive negative negative</td>
<td>chronically infected</td>
</tr>
<tr>
<td>HBsAg anti-HBc anti-HBs</td>
<td>negative positive negative</td>
<td>four interpretations possible*</td>
</tr>
</tbody>
</table>

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

Laboratory diagnosis of chronic hepatitis B, C, and D

Lab tests needed to diagnose chronic hepatitis B, C, or D:

- **Hepatitis B**: HBsAg. If positive, obtain IgM anti-HBc to differentiate acute hepatitis B (IgM anti-HBc is positive) from chronic hepatitis B (IgM anti-HBc is negative). Chronic hepatitis B is also defined by two HBsAg-positive tests separated by at least 6 months.
- **Hepatitis C**: Anti-HCV. Verify a positive test with a supplemental assay such as RIBA or nucleic acid detection of HCV RNA, depending on the clinical situation.
- **Hepatitis D**: Must meet criteria for chronic hepatitis B. Then, obtain anti-HDV.

To diagnose the presence of hepatitis-associated liver disease, the liver enzymes are usually elevated at least 1.5-2X normal. In this situation the patient should be referred to a gastroenterologist/hepatologist for further evaluation, which may include liver biopsy. Treatment for chronic hepatitis B and C is available for some patients who meet clinical criteria. Currently, interferon alfa-2b is the only FDA-approved treatment for hepatitis B or hepatitis C.

For more information about hepatitis B including guidelines for the management of people chronically infected with HBV, contact the Hepatitis B Coalition, 1573 Selby Avenue, St. Paul, MN 55104, 612-647-9009 or visit our website at www.immunize.org
Hepatitis B and the health care worker

CDC answers frequently asked questions about how to protect health care workers

Harold S. Margolis, MD, pediatrician, is chief of the Hepatitis Branch, Centers for Disease Control and Prevention (CDC), and director of the World Health Organization Collaborating Centre for Research and Reference in Viral Hepatitis. Linda A. Moyer, RN, is an epidemiologist at the Hepatitis Branch, CDC.

Which workers in the health care setting need hepatitis B vaccine?

Persons who have a reasonable expectation of being exposed to blood on the job should be offered hepatitis B vaccine. This does not include receptionists, executive directors, billing staff, general office workers, etc., as these groups would not be expected to have occupational risk.

What is the appropriate site for administration of hepatitis B vaccine and what needle length and gauge should be used?

The deltoid is recommended for routine intramuscular vaccination in adults, particularly for hepatitis B vaccine. The suggested needle size is 1 to 1⅛ inches and 20 to 25 gauge.

A health care worker’s (HCW) first dose of hepatitis B vaccine was 4 months ago. Should the series be restarted?

No. The vaccine series does not need to be restarted. The person should receive the second dose at this time and third dose 2–6 months later.

Is it safe for pregnant HCWs to be vaccinated during pregnancy?

Yes. Pregnant women in occupations with a high risk of HBV infection should be vaccinated. Hepatitis B vaccine contains no components that have been shown to pose a risk to the fetus at any time during gestation. However, HBV infection during pregnancy poses a significant risk to the fetus or newborn of perinatal or in utero infection.

Which HCWs need serologic testing after receiving 3 doses of hepatitis B vaccine?

Persons at occupational risk of infection with and continued percutaneous or percutaneous exposures to blood or body fluids (e.g., HCWs with direct patient contact, HCWs who have the risk of needlestick or sharps injury, lab workers who draw and test blood) should be tested after vaccination. Testing should be done 1–2 months after the last dose of vaccine.

What should be done if a HCW’s serologic test comes back negative for anti-HBs?

Repeat the 3-dose series and then test for anti-HBs 1–2 months after the last dose of vaccine. If the HCW is still negative after a second vaccine series, the HCW is considered a non-responder to hepatitis B vaccination. The HCW should be counseled that non-response to the vaccination series most likely means that the HCW is susceptible to HBV infection. It is possible, however, that the HCW is chronically infected with HBV and HBsAg testing should be recommended. Counseling of the HCW should then be done to discuss what non-response to the vaccination series means for that specific HCW and what steps should be taken in the future to protect his/her health.

How often should anti-HBs titers be drawn on HCWs who perform invasive procedures?

No healthy person needs to be repeatedly tested for anti-HBs. Persons who perform invasive procedures should be treated no differently from other health care workers with respect to anti-HBs testing. If a health care worker has an exposure (e.g., needlestick) he or she should be evaluated for postexposure prophylaxis according to current recommendations (see table below).

Recommended postexposure prophylaxis for percutaneous or percutaneous exposure to hepatitis B virus, United States

<table>
<thead>
<tr>
<th>Vaccination and antibody response status of exposed person</th>
<th>Treatment when source is</th>
<th>Source not tested or status unknown</th>
</tr>
</thead>
<tbody>
<tr>
<td>U/vaccinated</td>
<td>HBSAg positive</td>
<td>Initiate HB vaccine series</td>
</tr>
<tr>
<td>Previously vaccinated</td>
<td>HBSAg negative</td>
<td>Initiate HB vaccine series</td>
</tr>
<tr>
<td>Known responder‡</td>
<td>No treatment</td>
<td>No treatment</td>
</tr>
<tr>
<td>Known non-responder‡</td>
<td>HBsAg x 2 or HBsAg x 1 and initiate revaccination</td>
<td>No treatment</td>
</tr>
<tr>
<td>Antibody response unknown</td>
<td>Test exposed person for anti-HBs† 1. If adequate, no treatment 2. If inadequate, HBsAg x 1 and vaccine booster</td>
<td>No treatment</td>
</tr>
<tr>
<td>1 Hepatitis B surface antigen</td>
<td></td>
<td>Test exposed person for anti-HBs† 1. If adequate, no treatment 2. If inadequate, initiate revaccination</td>
</tr>
<tr>
<td>2 Hepatitis B immune globulin; dose 0.06 mL/kg intramuscularly</td>
<td></td>
<td></td>
</tr>
<tr>
<td>3 Hepatitis B vaccine</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

‡ Responder is defined as a person with adequate levels of serum antibody to hepatitis B surface antigen (i.e., anti-HBs ≥10 mIU/mL); inadequate response to vaccination defined as serum anti-HBs < 10 mIU/mL.

† from “Immunization of Health-Care Workers,” MMWR, 1997; 46: No. RR-18.
Pneumococcal vaccine

Who needs it and who needs it again?


My patient doesn’t have a record of receiving pneumococcal vaccine. What should I do?
Providers should not withhold vaccination in the absence of an immunization record or complete record. The patient’s verbal history should be used to determine prior vaccination status. Persons with uncertain or unknown vaccination status should be vaccinated.

Should all nursing home patients 65 and over be vaccinated against pneumococcal disease?
Yes. Standing orders for vaccination of persons admitted to long-term care facilities can help simplify the procedure.

How serious is pneumococcal pneumonia?
Pneumococcal pneumonia accounts for 10–25% of all pneumonias leading to hospitalization. Pneumococcal infections account for an estimated 40,000 deaths annually in the United States.

What needle length is recommended for administration of pneumococcal vaccine?
Pneumococcal vaccine may be given either IM or SQ. When administration is IM, a 1–1 ½” needle is recommended for adults, depending on muscle mass. When administration is SQ, a ½-¾” needle is recommended.

Should people with asthma receive pneumococcal vaccine?
Asthma is not an indication for routine pneumococcal vaccination unless it occurs with chronic bronchitis, emphysema, or long-term systemic corticosteroid use. However, persons with obstructive lung disease should be vaccinated regardless of the cause.

Should people who are HIV positive receive pneumococcal vaccine?
Yes. Persons with HIV infection should receive the vaccine as soon as possible after diagnosis and a one-time revaccination dose at the appropriate interval. The risk of pneumococcal infection is up to 100 times greater in HIV-infected persons than in other adults of similar age. Although severely immunocompromised persons may not respond well to the vaccine, the risk of disease is great enough to warrant vaccination even though there is a chance that the vaccine may not produce an antibody response.

My patient has had laboratory-confirmed pneumococcal pneumonia. Does he/she still need to be vaccinated?
There are more than 80 known serotypes of pneumococcus (23 serotypes are in the current vaccine). Infection with one serotype does not necessarily produce immunity to other serotypes. As a result, if the person is a candidate for vaccination, he/she should receive it even after one or more episodes of invasive pneumococcal disease.

If I give pneumococcal vaccine to my patient now, how long must I wait before giving the influenza or Td vaccine?
Influenza vaccine and Td may be given at the same time or at any time before or after a dose of pneumococcal vaccine. There are no minimum interval requirements between the doses of any inactivated vaccines.

Are influenza and pneumococcal vaccines safe to administer to patients with multiple sclerosis (MS)?
MS is not a contraindication to any vaccine, including influenza and pneumococcal vaccines.

How often should diabetic patients receive pneumococcal vaccine?
Diabetics 2–64 years of age who have not already received a dose of pneumococcal vaccine should receive one now. At age 65 they should receive a one-time revaccination if ≥5 years have elapsed since the previous dose.

How often should adult dialysis patients receive pneumococcal vaccine?
Adult dialysis patients need a dose of pneumococcal vaccine followed by a one-time revaccination 5 years later. ♦

---

<table>
<thead>
<tr>
<th>Immunocompetent Persons</th>
<th></th>
<th>Immunocompromised Persons</th>
</tr>
</thead>
<tbody>
<tr>
<td>Who needs pneumococcal vaccine?</td>
<td>Who needs revaccination?</td>
<td>Who needs pneumococcal vaccine?</td>
</tr>
<tr>
<td>Vaccine all persons ≥65 years of age.</td>
<td>Revaccination is not recommended. However, if a person received a first dose prior to age 65, give a single revaccination at age 65 if ≥5 years have elapsed since the previous dose.</td>
<td>Vaccine immunocompromised persons ≥2 years of age, including those with HIV infection, leukemia, lymphoma, Hodgkin’s disease, multiple myeloma, generalized malignancy, chronic renal failure, or nephrotic syndrome; those receiving immunosuppressive therapy (including long-term systemic corticosteroids); and those who have received an organ or bone marrow transplant.</td>
</tr>
<tr>
<td>Vaccine persons 2-64 years of age with chronic cardiovascular disease (including congestive heart failure and cardiomyopathies), chronic pulmonary disease (including COPD and emphysema), or diabetes mellitus.</td>
<td>If a person received a first dose prior to age 65, give a single revaccination at age 65 if ≥5 years have elapsed since the previous dose.</td>
<td></td>
</tr>
<tr>
<td>Vaccine persons 2-64 years of age with alcoholism, chronic liver disease (including cirrhosis), or cerebrospinal fluid leaks.</td>
<td>If a person received a first dose prior to age 65, give a single revaccination at age 65 if ≥5 years have elapsed since the previous dose.</td>
<td></td>
</tr>
<tr>
<td>Vaccine persons 2-64 years of age with functional or anatomic asplenia (including sickle cell disease and splenectomy).</td>
<td>If patient is &gt;10 years of age, give a single revaccination if ≥5 years have elapsed. If patient is ≤10 years of age, consider revaccination 3 years later.</td>
<td></td>
</tr>
<tr>
<td>Vaccine persons 2-64 years of age living in special environments or social settings (including Alaska natives and certain American Indian populations).</td>
<td>If a person received a first dose prior to age 65, give a single revaccination at age 65 if ≥5 years have elapsed since the previous dose.</td>
<td></td>
</tr>
</tbody>
</table>

Summary of Rules for Childhood Immunization*
Adapted from ACIP, AAP, and AAFP by the Immunization Action Coalition, April 1998

<table>
<thead>
<tr>
<th>Vaccine</th>
<th>Ages usually given, other guidelines</th>
<th>If child falls behind - minimum intervals</th>
<th>Contraindications (Remember, mild illness is not a contraindication.)</th>
</tr>
</thead>
<tbody>
<tr>
<td>DTaP</td>
<td>DTaP is preferred for all doses in the series but DTwP is acceptable. • 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 has elapsed since #3 and the child is unlikely to return at age15-18m. • If started with DTwP, may complete series with DTaP. • Do not give DTaP or DTwP to children &gt;7yrs of age (give Td). DTaP/DTwP may be given with all other vaccines but at a separate site.</td>
<td>• #2 &amp; #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. • If #4 is given after 4th birthday, #5 is not needed. • Don’t restart series, no matter how long since previous dose.</td>
<td>(DTaP and DTwP have the same contraindications and precautions.) • Anaphylactic reaction to a prior dose or to any vaccine component. • Moderate or severe acute illness. Don’t postpone for minor illness. • Previous encephalopathy within 7 days after DTwP/DTaP. • Undiagnosed progressive neurologic problem. Precautions: The following are precautions not contraindications. Generally when these conditions are present, the vaccine shouldn’t be given. But, there are situations when the benefit outweighs risk so vaccination should be considered (e.g., pertussis outbreak). • Previous reaction to the “P” in DTaP/DTwP, or if the parents refuse the pertussis component. • Anaphylactic reaction to a prior dose or to any vaccine component. • Moderate or severe acute illness. Don’t postpone for minor illness.</td>
</tr>
<tr>
<td>DTP or DTwP contains whole cell pertussis</td>
<td>Give IM</td>
<td></td>
<td></td>
</tr>
<tr>
<td>DT</td>
<td>Give IM</td>
<td>• Give to children &lt; 7yrs of age if the child has had a serious reaction to the “P” in DTaP/DTwP, or if the parents refuse the pertussis component. DT can be given with all other vaccines but at a separate site.</td>
<td>For children who have fallen behind, use information in box directly above.</td>
</tr>
<tr>
<td>Td</td>
<td>Give IM</td>
<td>• Use for persons &gt;7yrs of age. • A booster dose is now recommended for children 11-12yrs of age if 5yrs have elapsed since previous dose. Then boost every 10 years. • Td may be given with all other vaccines but at a separate site.</td>
<td>For those never vaccinated or behind, or if the vaccination history is unknown, give dose #1 now; dose #2 4wks later; dose #3 6m after #2; and then boost every 10 years.</td>
</tr>
<tr>
<td>Polio</td>
<td>• ACIP says give at 2m, 4m, 12-18m, 4-6yrs of age. (If all OPV or all IPV is given, #3 may be given as early as 6m of age.) • ACIP recommends “Sequential Schedule”: IPV for #1 and #2, and OPV for #3 and #4. ACIP also says all-OPV or all-IPV schedule is acceptable. AAPF/AAP recommend that clinicians/parents discuss the 3 schedules and choose one. • AAP says give at 2m, 4m, 6-18m, 4-6yrs for any polio vaccine schedule • If minimal intervals and ages are followed, any combination of 4 doses given by 4-6yrs of age is considered a complete series. • Not routinely given to anyone &gt; 18yrs of age (except certain travelers). • IPV may be given with all other vaccines but at a separate site. • OPV may be given with all other vaccines.</td>
<td>• #1 &amp; #2 (IPV or OPV) should be separated by at least 4wks. • If #3 of an all-IPV or all-OPV series is given at &gt; 4yrs of age, dose #4 is not needed. Children on an IPV/OPV “sequential” schedule must receive all 4 doses, regardless of the age when first initiated. • All IPV: In children under 4yrs of age, #3 may be given as early as 4wks after #2 but a 6m interval is preferred for best response. • All OPV: minimum of 4wks between #1, #2, &amp; #3 and a supplemental dose between 4-6yrs of age. • Don’t restart series, no matter how long since previous dose.</td>
<td>• Anaphylactic reaction to a prior dose or to any vaccine component. • Moderate or severe acute illness. Don’t postpone for minor illness. • Use IPV when an adult in the household or other close contact has never been vaccinated against polio. • In pregnancy, neither OPV nor IPV is recommended, but if immediate protection is needed, see the ACIP recommendations on the use of polio vaccine. The following are contraindications for OPV so use IPV in these situations: • Cancer, leukemia, lymphoma, immunodeficiency, including HIV/AIDS. • Taking a drug that lowers resistance to infection, e.g., anti-cancer, high-dose steroids. • Someone in the household has any of the above medical problems.</td>
</tr>
<tr>
<td>IPV and OPV</td>
<td>Give IPV</td>
<td></td>
<td></td>
</tr>
<tr>
<td>SQ or IM</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>PO</td>
<td>Give OPV</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Varicella</td>
<td>Var</td>
<td>• Routinely give at 12-18m. • Vaccinate all children &gt;12m of age including adolescents who have not had prior infection with chickenpox. • If Var and MMR (and any other live virus vaccine except polio) are not given on the same day, space them ≥ 28d apart. • Var may be given with all other vaccines but at a separate site.</td>
<td>• Do not give to children &lt;12m of age. • Susceptible children ≥ 12 yrs of age receive 1 dose. • Susceptible persons ≥ 13 yrs of age receive 2 doses 4-8wks apart. • Don’t restart series, no matter how long since previous dose.</td>
</tr>
<tr>
<td>Var</td>
<td>Give SQ</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

* Hepatitis A, influenza, and pneumococcal vaccines are indicated for many children, so make sure you provide these vaccines to at-risk children. The newer combination vaccines are not listed on this table but may be used whenever administration of any component is indicated and none are contraindicated. Read the package inserts.

For full immunization information, see recent ACIP statements published in the MMWR; the AAP’s 1997 Red Book; and the journal, Pediatrics, for the latest AAP Committee on Infectious Diseases’ recommendations.

Item #P2010 (4/98)
Summary of Rules for Childhood Immunization (continued)

<table>
<thead>
<tr>
<th>Vaccine</th>
<th>Ages usually given and other guidelines</th>
<th>For children fallen behind (minimum intervals)</th>
<th>Contraindications (Remember, mild illness is not a contraindication.)</th>
</tr>
</thead>
</table>
| MMR    | • ACIP, AAP, and AAFP recommend 2 doses of MMR for all children up to 18 years of age.  
  • Give #1 at 12-15m. Give #2 at 4-6yrs.  
  • Can give as early as 6m of age in an outbreak, but two routine doses will still need to be given at ≥12m of age.  
  • If a dose was given before 12m of age, give #1 at 12-15m of age with a minimum interval of 1m between these doses.  
  • If MMR and Var (and any other live virus vaccine except polio) are not given on the same day, space them ≥28d apart.  
  • There should be a minimum interval of 28days between MMR #1 and MMR #2.  
  • Dose #2 can be given at any time if at least 28days have elapsed since dose #1, and both doses are administered after 1 year of age. This also applies if dose #2 is given before 4-6 years of age.  
  • Don’t restart series, no matter how long since previous dose.  
  • Give whenever behind. Exception: If MMR and Var (and any other live virus vaccine except polio) are not given on the same day, space them ≥28d apart.  |
| Give SQ | May give with all other vaccines but at a separate site. | • 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.  |
| Hib    | • HibTITER (HbOC) & ActHib (PRP-T): give at 2m, 4m, 6m, 12-15m.  
  • PedvaxHib (PRP-OMP): give at 2m, 4m, 12-15m.  
  • Dose #1 of all Hib vaccines may be given as early as 6wks of age but do NOT give it any earlier than 6 wks of age.  
  • May give with all other vaccines but at a separate site.  |
| Give IM | | • Anaphylactic reaction to a prior dose or to any vaccine component.  
  • Moderate or severe acute illness. Don’t postpone for minor illness.  |
| Hep-B  | Note: Before administering hepatitis B vaccine, read “Dosing of hepatitis B vaccine” in the next column below.  
  • ACIP, AAP, and AAFP say to vaccinate ALL children 0-18 years of age.  
  • For infants, give at 0-2m, 1-4m, 6-18m of age.  
  • For older children/teens, spacing options include: 0m, 1m, 6m, 0m, 2m, 4m; or 0m, 1m, 4m.  
  • Children who were born or whose parents were born in countries of high HBV endemicity or who have other risk factors should be vaccinated as soon as possible.  
  • If mother is HBsAg positive: give HBIG and hep-B #1 within 12 hrs of birth, #2 at 1-2m, and #3 at 6m of age.  
  • If mother’s HBsAg status is unknown: give hep B #1within 12 hrs of birth, #2 at 1-2 m, and #3 at 6 m of age. If mother is later found to be HBsAg-positive, her infant should receive the additional protection of HBIG within the first 7 days of life.  
  • If mother is not chronically infected but is from an endemic area: complete series by 12m of age.  
  • May give with all other vaccines but at a separate site.  |
| Give IM | | • Anaphylactic reaction to a prior dose or to any vaccine component.  
  • Moderate or severe acute illness. Don’t postpone for minor illness.  |

This two-sided table was developed to combine the recommendations for childhood immunization onto one page and to assist health care workers in immunization clinics to determine the appropriate use and scheduling of vaccines. It can be posted in immunization clinics or clinicians’ offices.

Thank you to the following individuals for their review: William Atkinson, MD, Greg Gilmet, MD, John Grabenstein, MS Pharm, Neal Halsey, MD, Muriel Hoyt, RN, Robert Jacobson, MD, Samuel Katz, MD, Anne Kuettel, PHN, Edgar Marcuse, MD, Harold Margolis, MD, Linda Moyer, RN, Rebecca Prevoir, MD, William Schaffner, MD, and Tom Vernon, MD. Final responsibility for errors lies with the editors.

Your comments are welcome. Please send them to Lynn Bahta, PHN, or Deborah Wexler, MD, Immunization Action Coalition, 1573 Selby Ave., St. Paul, MN 55104 or call 612-647-9009, fax 612-647-9131, or e-mail: mail@immunize.org.

This table is revised yearly. The most recent edition of this table is available on our website at <www.immunize.org>

—I follow the rules of the road. If you follow the rules of immunization, you won’t get lost!”
How do I know if I’ve already been infected?

The only way to know if you’ve been infected is to have your blood tested.

Should I have a blood test before I start the hepatitis B vaccine series?

Talk to your doctor about whether you need this testing. Most people do not need a blood test. If you and your doctor decide you need testing, start the vaccine series at the same visit. That way you will be closer to being protected from HBV.

Will hepatitis B vaccine protect me from hepatitis A or hepatitis C?

No. Hepatitis A and hepatitis C are different diseases caused by different viruses. There is a vaccine for hepatitis A but there is no vaccine for hepatitis C. For information on hepatitis A and hepatitis C, talk to your doctor or your local health department.

What if I can’t afford these shots?

Sometimes these shots are available at no charge through clinics or health departments. Call your clinic or local health department for details. And, while you’re at it, find out what other vaccinations you need, too!

Everyone needs vaccinations!

If you can’t afford shots or don’t know where to get them, contact your city, county, or state health department, or call 800-232-2522.

Immunization Action Coalition
1573 Selby Avenue, Suite 234
St. Paul, MN 55104
612-647-9009
www.immunize.org
mail@immunize.org

The text in this brochure was reviewed for technical accuracy by the Centers for Disease Control and Prevention. It is copyright free. Feel free to alter it to fit your clinic or community’s needs. However, if you do alter it, please acknowledge that it was adapted from the Immunization Action Coalition.
What is hepatitis B?

Hepatitis B is a sexually transmitted disease. It is a liver infection caused by the hepatitis B virus (HBV). HBV is spread much like HIV, the virus that causes AIDS. HBV is found in the blood, semen, and vaginal secretions of an infected person. HBV is easier to catch than HIV because it is over 100 times more concentrated in an infected person’s blood.

How serious is hepatitis B?

HBV can cause severe liver disease, including liver scarring (cirrhosis) and liver cancer. Over 6,000 people in the United States die every year from hepatitis B-related liver disease. Fortunately, there is a vaccine to prevent this disease.

How great is my risk of getting HBV infection from sex?

If you answer “yes” to any of the following questions, you are at risk for hepatitis B virus infection and need to be vaccinated!

Is sex the only way I can get HBV?

No. HBV is a sexually transmitted disease, but it is spread in other ways, too. It is a hardy virus that can exist on almost any surface for up to one month. HBV can be spread by:

- unprotected vaginal or anal sex
- sharing needles or paraphernalia (works) for illegal drug use
- contact with open sores
- living in a household with a person with long-term HBV infection
- body piercing (including ear piercing) or tattooing with unsterile equipment
- sharing toothbrushes, razors, nail clippers, or washcloths
- human bites

You do not get hepatitis B virus infection from sneezing, coughing, dry lip kissing, or holding hands.

How do I protect myself from HBV?

Get three hepatitis B shots. The shots are usually given over a period of six months.

Tell your sex partner(s) to get vaccinated, too. There are very few STDs you can be vaccinated against so always follow “safer sex” practices.

What are the symptoms of HBV?

Only about half of the people who are infected with HBV get symptoms. Symptoms might include:

- loss of appetite
- nausea
- fever
- dark-colored urine
- yellow-tinged skin and eyes
- extreme tiredness
- pain in joints
- bloated and tender belly

Do people fully recover from HBV?

Most people who get HBV as adults will fully recover. However, approximately 6% will remain infected and will carry HBV in their bodies for life and can still spread the virus to others. People who stay infectious do not necessarily look or feel ill, but they are at increased risk for liver failure and liver cancer and need ongoing medical care.

HBV infects one out of every 20 people living in the United States.
What if I can’t afford to get my children vaccinated?

Vaccinations are usually free for children when families can’t afford them. Call 800-232-2522 or your local or state health department to find out where you can go for free or low-cost vaccinations. Your children’s health depends on it!

And here’s a friendly reminder for parents!

Adults need shots, too! Call your clinic or health department to find out what shots you need or when your next shots are due. Your children are counting on you to stay healthy!

All children 0–18 years of age need hepatitis B vaccine!

Everyone needs vaccinations!

If you can’t afford shots or don’t know where to get them, contact your city, county, or state health department, or call 800-232-2522.

All kids need hepatitis B shots!

little ones,

medium-sized ones,

and big ones, too!

Immunization Action Coalition
1573 Selby Avenue, Suite 234
St. Paul, MN 55104
612-647-9009
www.immunize.org
mail@immunize.org

The text in this brochure was reviewed for technical accuracy by the Centers for Disease Control and Prevention. It is copyright free. Feel free to alter it to fit your clinic or community’s needs. However, if you do alter it, please acknowledge that it was adapted from the Immunization Action Coalition.
What is hepatitis B?

Hepatitis B is a serious liver disease caused by a virus. This virus can enter the bloodstream, attack the liver, and cause severe illness. In some cases, the virus can remain in the body for a lifetime and cause ongoing liver damage.

How do children and teens get hepatitis B?

Lots of ways. Hepatitis B can be spread by:

- coming in contact with an infected person’s blood or body fluids
- sharing toothbrushes, razors, washcloths, or needles of an infected person
- human bites
- sex with an infected person
- ear piercing, body piercing, or tattooing with unsterile equipment

Why do all my children need hepatitis B shots?

All the major medical groups in the United States agree that all children 0-18 years of age need hepatitis B shots in order to be protected from this disease. Today, all babies should receive hepatitis B shots along with all their other baby shots. If your children and teens were not vaccinated against hepatitis B when they were babies, vaccinate them now.

Is my child at increased risk for hepatitis B virus infection?

Anyone can get hepatitis B. However, children who were born, or whose parents were born, outside the United States where hepatitis B is a serious problem may be at increased risk for hepatitis B virus infection. Some of the places where hepatitis B is a serious problem include Asia, Africa, the Pacific Islands, Eastern Europe, the Former Soviet Union, and South America.

If you aren’t sure about the seriousness of hepatitis B in your country of origin, check with your doctor or public health department. Your doctor may want to test your children at the time of the first vaccination to make sure they haven’t already been infected with hepatitis B virus.

Should I let my children be vaccinated at school?

Many children are now being offered the hepatitis B vaccine at school. If your child is being offered the vaccine at school, you can save yourself and/or your child three trips to the doctor’s office!

How safe is this vaccine?

The hepatitis B vaccine is one of the safest vaccines available. It has been used in the United States since 1981 and has been shown to be safe and effective.
Which sexually active adults should be offered hepatitis B vaccine?
Over 50% of persons who acquire hepatitis B virus (HBV) infection in the United States are infected through sexual activity with an infected person. Make sure you vaccinate your patients who are in any of these high-risk groups:

- Heterosexuals who have more than one sex partner during a 6-month period
- Men who have sex with men
- Persons who have a sexually transmitted disease (STD) or who have ever had an STD
- Sex partners and household contacts of persons chronically infected with HBV
- Sex partners of illicit injection drug users
- Pregnant women in any of these high-risk groups should be vaccinated. Hepatitis B vaccination is not contraindicated during pregnancy or lactation and is recommended for high-risk women by the American College of Obstetrics and Gynecology and the ACIP.

Since there is a national recommendation to begin the hepatitis B vaccination series on all persons diagnosed with STDs, how do I decide which patients need pre Vaccination testing?
In general, it is better to vaccinate than test if there is a concern that testing will delay getting the person vaccinated. Testing is only indicated if the expected prevalence of HBV infection is >30%, and one doesn’t always have this information. Testing is usually not indicated for adolescents being vaccinated. For adults seen in STD clinics where the prevalence of HBV infection is known to be >30%, testing might be warranted, but the cost effectiveness should be determined. In general, the prevalence of infection is lower among adults being vaccinated in private practice settings (although this may be changing) and testing may not be warranted. If you do decide to test, give the first dose of vaccine at the same office visit that you draw blood for testing. Vaccination can then be continued, or not, based upon the results of the test.

If a person has been sexually assaulted, should he/she be offered hepatitis B immune globulin (HBIG) and hepatitis B vaccine?
There have been no studies to determine the risk of HBV infection following sexual assault. However, it is known that other STDs are transmitted following such episodes. Thus, postexposure prophylaxis to victims of sexual assault should be provided. Unless the victim has a documented history of completed hepatitis B vaccination, she would give hepatitis B vaccine alone on a 0-, 1-, 6-month vaccination schedule because of its high efficacy in postexposure prophylaxis. Dose 1 should be given as part of the medical work-up of the assault, i.e., as soon as possible. There is no need to give HBIG for the following reasons: 1) vaccine alone has high efficacy in postexposure prophylaxis in persons exposed to chronic HBV infection; 2) HBIG is only needed to improve efficacy of postexposure prophylaxis of sex contacts of persons with acute hepatitis B. In most cases, it could be assumed that if the rapist were HBV infected, he/she would have chronic HBV infection and not acute hepatitis B.

CDC answers frequently asked questions about hepatitis B and the health care worker on page 9.

For dialysis patients who have received hepatitis B vaccination, how often do they have to be screened for anti-HBs and HBsAg?
Hepatitis B vaccine is efficacious for as long as the dialysis patient has adequate antibody. For dialysis patients who have responded to hepatitis B vaccination (i.e., >10mIU/mL), no HBsAg testing is needed and anti-HBs should be done annually. Because dialysis patients are immunocompromised, they do not retain immune memory as do patients whose immune systems are not compromised. Therefore, dialysis patients who have a low level (<10mIU/mL) or no anti-HBs are at risk for HBV infection and should be revaccinated with one or more additional doses of hepatitis B vaccine. Postvaccination anti-HBs testing should follow 1–2 months later. Until the patient is found to have an adequate anti-HBs level, monthly HBsAg testing should be done. If the patient continues to have low level (<10mIU/mL) or no anti-HBs and a total of six or eight doses (depending on the brand) of hepatitis B vaccine have been given, the patient should be considered a non-responder to vaccination and susceptible to HBV infection. Monthly hepatitis B surface antigen (HBsAg) testing should then be continued and anti-HBs testing should be done every 6 months.

Is there a certain period of time one should wait after receiving hepatitis B vaccine before giving blood?
No. Although there have been case reports in the literature of persons testing HBsAg-positive transiently after hepatitis B vaccine, this is thought to occur rarely, doesn’t represent infection, and doesn’t warrant postponement of blood donation by recent vaccinees.

If you want to test and vaccinate your patient for hepatitis B on the same day, does it matter if you test or vaccinate first?
In theory, no. It is reasonable to draw the blood first and then administer the first dose of vaccine.

---

Hepatitis A

by Harold S. Margolis, MD, and Linda A. Moyer, RN

Why isn’t hepatitis A vaccine licensed for children under the age of 2 years?
Few data are available regarding the use of hepatitis A vaccine in this age group. Available data does show that infants with passively transferred maternal anti-HAV had a reduced anti-HAV concentration after vaccination. This issue will have to be addressed before vaccine can be used in this age group.

If dose #1 of hepatitis A vaccine was given over 1 year ago, do you restart the series?
No. Hepatitis A vaccine is very immunogenic and persons with intact immune memory should respond well to an interrupted schedule.

My patient is traveling in 2 weeks to a hepatitis A endemic area. How do I protect him or her in light of the immune globulin (IG) shortage?
Give the first dose of hepatitis A vaccine. If IG is available, give IG at the same time at a different site. Counseling should include safe eating and drinking practices in countries where sanitation may not be optimal.

If a traveler received the first dose of hepatitis A vaccine more than one year ago and needs to travel abroad imminently, will the traveler need IG in addition to dose #2 prior to leaving?
No. Just give the final dose of hepatitis A vaccine prior to travel.

What’s the biggest room in the world?

Room for improvement!

Ask the Experts... continued from page 7

NEEDLE TIPS • Spring/Summer 1998 (printed 4/98) • 1573 Selby Avenue, St. Paul, MN 55104 • 612-647-9009 • www.immunize.org 17
Hepatitis C
by Deborah L. Wexler, MD, Executive Director
Immunization Action Coalition

Should people with hepatitis C virus infection receive hepatitis A and B vaccines?
At the March 24–25, 1997, NIH Consensus Development Conference, a non-federal panel of experts recommended that hepatitis A and B vaccination be given to all persons who are infected with hepatitis C virus. To order a copy of “Management of Hepatitis C - NIH Consensus Statement,” call 888-644-2667 or download it from: <http://odp.od.nih.gov/consensus/statements/cdc/101/105_stmt.html>

In the March 1998 issue of Pediatrics, the American Academy of Pediatrics’ Committee on Infectious Diseases made the following recommendation in its statement entitled, Hepatitis C Virus Infection: “All children should receive the hepatitis B vaccine and those with chronic HCV infection also should receive hepatitis A vaccination to prevent further liver damage.”

Why doesn’t the Coalition more actively work on hepatitis C issues?
The mission of the Immunization Action Coalition is to promote physician, community, and family awareness of, and responsibility for appropriate immunization of all people of all ages against all vaccine-preventable diseases. Unfortunately, at this time there is no vaccine to prevent HCV infection.

Where can I get more information about hepatitis C?
There are a number of organizations that will provide you with information about hepatitis C:
• CDC’s hepatitis toll-free hotline: 888-443-7232
• CDC’s hepatitis website: www.cdc.gov/ncidod/diseases/hepatitis/hepatitis.htm
• American Liver Foundation: 800-223-0179
• American Liver Foundation’s website: www.liverfoundation.org
• Hepatitis Foundation International: 800-891-0707
• Hepatitis Foundation International’s website: www.hepfi.org
• Hepatitis C Foundation (for support groups): 215-672-2606
• Hepatitis C Foundation’s website: www.jeonet.com/hepcfoundation/

Check with your state health department to find out about hepatitis C coalitions in your state. Phone numbers are listed on page 20.

Did you know there are pages in here that are screaming to get out?

“Help, let us out!”

“We’re camera-ready and copyright free!”
“We’re all reviewed by CDC for technical accuracy!”
“Copy us onto colored paper! If we’re brochures, fold us!”
“Find us a home in your exam rooms and waiting rooms!”
Just get us out of here!”

Meet our most popular piece:
“Hello! I’m the Summary of recommendations on childhood immunization! You can find me on pages 11–12.
You wouldn’t believe how many people love me! You can keep me at your fingertips!
Copy me and share me with residents and nursing students!
Hang me in your exam rooms!
Laminate me so I don’t wear out.”
What’s your state doing?

Here is some current U.S. immunization information

<table>
<thead>
<tr>
<th>State</th>
<th>% of children (ages 19-35 mo) with 4:3:1:3 series complete* (CDC survey 7/96-6/97)</th>
<th>% of children (ages 19-35 mo) with ≥3 hep B shots (CDC survey 7/96-6/97)</th>
<th>% of children (ages 19-35 mo) given varicella shot (CDC survey 7/96-6/97)</th>
<th>Does your state have any hep B childhood vaccination mandates?</th>
<th>% of adults ≥65 yrs who reported having received influenza vaccine during the past year. (BRFSS* 1995 survey)</th>
<th>% of adults ≥65 yrs who reported ever having received pneumococcal vaccine (BRFSS* 1995 survey)</th>
<th>Are pharmacists authorized to vaccinate?</th>
</tr>
</thead>
<tbody>
<tr>
<td>AL</td>
<td>78</td>
<td>85</td>
<td>15</td>
<td>yes</td>
<td>44.2</td>
<td>31.2</td>
<td>yes</td>
</tr>
<tr>
<td>AK</td>
<td>72</td>
<td>86</td>
<td>9</td>
<td>yes</td>
<td>49.4</td>
<td>41.1</td>
<td>yes</td>
</tr>
<tr>
<td>AZ</td>
<td>69</td>
<td>81</td>
<td>17</td>
<td>yes</td>
<td>64.7</td>
<td>46.6</td>
<td></td>
</tr>
<tr>
<td>AR</td>
<td>75</td>
<td>88</td>
<td>11</td>
<td>yes</td>
<td>60.5</td>
<td>35.8</td>
<td>yes</td>
</tr>
<tr>
<td>CA</td>
<td>75</td>
<td>81</td>
<td>26</td>
<td>yes</td>
<td>59.4</td>
<td>42.7</td>
<td>yes</td>
</tr>
<tr>
<td>CO</td>
<td>73</td>
<td>74</td>
<td>16</td>
<td>yes</td>
<td>65.9</td>
<td>44.6</td>
<td></td>
</tr>
<tr>
<td>CT</td>
<td>88</td>
<td>87</td>
<td>23</td>
<td>yes</td>
<td>62.3</td>
<td>36.9</td>
<td></td>
</tr>
<tr>
<td>DE</td>
<td>79</td>
<td>88</td>
<td>18</td>
<td>yes</td>
<td>57.2</td>
<td>39.9</td>
<td></td>
</tr>
<tr>
<td>DC</td>
<td>72</td>
<td>80</td>
<td>22</td>
<td>yes</td>
<td>not available</td>
<td>not available</td>
<td></td>
</tr>
<tr>
<td>FL</td>
<td>77</td>
<td>82</td>
<td>22</td>
<td>yes</td>
<td>61.3</td>
<td>38.4</td>
<td></td>
</tr>
<tr>
<td>GA</td>
<td>80</td>
<td>89</td>
<td>16</td>
<td>yes</td>
<td>46.6</td>
<td>37.8</td>
<td>yes</td>
</tr>
<tr>
<td>HI</td>
<td>80</td>
<td>87</td>
<td>22</td>
<td>yes</td>
<td>62.1</td>
<td>40.5</td>
<td></td>
</tr>
<tr>
<td>ID</td>
<td>67</td>
<td>77</td>
<td>3</td>
<td>yes</td>
<td>64.2</td>
<td>38.8</td>
<td></td>
</tr>
<tr>
<td>IL</td>
<td>76</td>
<td>81</td>
<td>13</td>
<td>yes</td>
<td>57.6</td>
<td>28.3</td>
<td>yes</td>
</tr>
<tr>
<td>IN</td>
<td>71</td>
<td>80</td>
<td>13</td>
<td>yes</td>
<td>58.8</td>
<td>33.2</td>
<td>yes</td>
</tr>
<tr>
<td>IA</td>
<td>80</td>
<td>85</td>
<td>13</td>
<td>yes</td>
<td>62.8</td>
<td>43.6</td>
<td>yes</td>
</tr>
<tr>
<td>KS</td>
<td>77</td>
<td>78</td>
<td>18</td>
<td>yes</td>
<td>58.7</td>
<td>41.4</td>
<td>yes</td>
</tr>
<tr>
<td>KY</td>
<td>77</td>
<td>85</td>
<td>17</td>
<td>yes</td>
<td>52.1</td>
<td>24.1</td>
<td>yes</td>
</tr>
<tr>
<td>LA</td>
<td>82</td>
<td>85</td>
<td>10</td>
<td>yes</td>
<td>52.0</td>
<td>25.5</td>
<td></td>
</tr>
<tr>
<td>ME</td>
<td>85</td>
<td>82</td>
<td>8</td>
<td>yes</td>
<td>64.5</td>
<td>34.8</td>
<td></td>
</tr>
<tr>
<td>MD</td>
<td>78</td>
<td>83</td>
<td>27</td>
<td>yes</td>
<td>57.3</td>
<td>32.2</td>
<td></td>
</tr>
<tr>
<td>MA</td>
<td>86</td>
<td>89</td>
<td>13</td>
<td>yes</td>
<td>58.9</td>
<td>30.8</td>
<td></td>
</tr>
<tr>
<td>MI</td>
<td>73</td>
<td>81</td>
<td>14</td>
<td>yes</td>
<td>56.7</td>
<td>38.5</td>
<td>yes</td>
</tr>
<tr>
<td>MN</td>
<td>83</td>
<td>78</td>
<td>33</td>
<td>yes</td>
<td>62.9</td>
<td>39.2</td>
<td></td>
</tr>
<tr>
<td>MS</td>
<td>81</td>
<td>84</td>
<td>6</td>
<td>yes</td>
<td>56.7</td>
<td>38.7</td>
<td>yes</td>
</tr>
<tr>
<td>MO</td>
<td>74</td>
<td>82</td>
<td>21</td>
<td>yes</td>
<td>66.5</td>
<td>30.6</td>
<td>yes</td>
</tr>
<tr>
<td>MI</td>
<td>78</td>
<td>81</td>
<td>14</td>
<td>yes</td>
<td>63.8</td>
<td>34.6</td>
<td></td>
</tr>
<tr>
<td>NE</td>
<td>78</td>
<td>81</td>
<td>17</td>
<td>yes</td>
<td>63.9</td>
<td>35.0</td>
<td>yes</td>
</tr>
<tr>
<td>NV</td>
<td>70</td>
<td>84</td>
<td>6</td>
<td>yes</td>
<td>51.7</td>
<td>38.8</td>
<td></td>
</tr>
<tr>
<td>NH</td>
<td>82</td>
<td>86</td>
<td>15</td>
<td>yes</td>
<td>53.4</td>
<td>37.7</td>
<td></td>
</tr>
<tr>
<td>NJ</td>
<td>73</td>
<td>89</td>
<td>20</td>
<td>yes</td>
<td>45.6</td>
<td>11.4</td>
<td></td>
</tr>
<tr>
<td>NM</td>
<td>75</td>
<td>81</td>
<td>15</td>
<td>yes</td>
<td>68.5</td>
<td>38.5</td>
<td>yes</td>
</tr>
<tr>
<td>NY</td>
<td>74</td>
<td>83</td>
<td>20</td>
<td>yes</td>
<td>55.9</td>
<td>25.7</td>
<td>yes</td>
</tr>
<tr>
<td>NC</td>
<td>80</td>
<td>90</td>
<td>18</td>
<td>yes</td>
<td>52.2</td>
<td>30.7</td>
<td></td>
</tr>
<tr>
<td>ND</td>
<td>80</td>
<td>84</td>
<td>13</td>
<td>yes</td>
<td>56.9</td>
<td>32.1</td>
<td></td>
</tr>
<tr>
<td>OH</td>
<td>75</td>
<td>84</td>
<td>17</td>
<td>yes</td>
<td>62.7</td>
<td>39.8</td>
<td></td>
</tr>
<tr>
<td>OK</td>
<td>69</td>
<td>81</td>
<td>18</td>
<td>yes</td>
<td>60.8</td>
<td>36.8</td>
<td>yes</td>
</tr>
<tr>
<td>OR</td>
<td>72</td>
<td>78</td>
<td>20</td>
<td>yes</td>
<td>67.0</td>
<td>44.7</td>
<td></td>
</tr>
<tr>
<td>PA</td>
<td>82</td>
<td>85</td>
<td>33</td>
<td>yes</td>
<td>57.7</td>
<td>36.5</td>
<td></td>
</tr>
<tr>
<td>RI</td>
<td>81</td>
<td>88</td>
<td>26</td>
<td>yes</td>
<td>65.6</td>
<td>29.2</td>
<td></td>
</tr>
<tr>
<td>SC</td>
<td>82</td>
<td>89</td>
<td>18</td>
<td>yes</td>
<td>49.6</td>
<td>25.8</td>
<td>yes</td>
</tr>
<tr>
<td>SD</td>
<td>77</td>
<td>79</td>
<td>5</td>
<td>yes</td>
<td>59.9</td>
<td>31.1</td>
<td>yes</td>
</tr>
<tr>
<td>TN</td>
<td>78</td>
<td>84</td>
<td>15</td>
<td>yes</td>
<td>63.0</td>
<td>29.5</td>
<td>yes</td>
</tr>
<tr>
<td>TX</td>
<td>72</td>
<td>84</td>
<td>15</td>
<td>yes</td>
<td>56.4</td>
<td>42.7</td>
<td>yes</td>
</tr>
<tr>
<td>UT</td>
<td>68</td>
<td>75</td>
<td>10</td>
<td>yes</td>
<td>70.0</td>
<td>41.9</td>
<td></td>
</tr>
<tr>
<td>VT</td>
<td>64</td>
<td>82</td>
<td>15</td>
<td>yes</td>
<td>63.5</td>
<td>34.9</td>
<td></td>
</tr>
<tr>
<td>WA</td>
<td>75</td>
<td>86</td>
<td>24</td>
<td>yes</td>
<td>52.5</td>
<td>38.7</td>
<td>yes</td>
</tr>
<tr>
<td>WA</td>
<td>81</td>
<td>83</td>
<td>9</td>
<td>yes</td>
<td>66.4</td>
<td>44.4</td>
<td>yes</td>
</tr>
<tr>
<td>WV</td>
<td>80</td>
<td>82</td>
<td>13</td>
<td>yes</td>
<td>53.0</td>
<td>36.1</td>
<td></td>
</tr>
<tr>
<td>WI</td>
<td>79</td>
<td>83</td>
<td>16</td>
<td>yes</td>
<td>56.7</td>
<td>34.8</td>
<td>yes</td>
</tr>
<tr>
<td>WY</td>
<td>74</td>
<td>79</td>
<td>9</td>
<td>yes</td>
<td>66.5</td>
<td>43.1</td>
<td></td>
</tr>
</tbody>
</table>

* Four or more doses of diphtheria and tetanus toxoids and pertussis vaccine/diphtheria and tetanus toxoids (DPT/DT), three or more doses of poliovirus vaccine, one or more doses of any measles-containing vaccine, and three or more doses of Haemophilus influenzae type b vaccine. (Source: MMWR, 2/20/98, Vol. 47, No. 6.)

** Behavioral Risk Factor Surveillance System.

An empty box in this table indicates that the state answered this question with a “NO.”
Need Help?

Call your immunization, hepatitis, and refugee coordinators

Get to know your governmental resource people. They are there to help you!

Find out what kinds of patient and provider educational materials they have including posters, brochures, and videos. Call them to register for the excellent immunization conferences that CDC broadcasts by satellite. They also may be able to help you audit your clinic’s immunization rates and/or help you develop immunization tracking systems. Give them a call!

### State Coordinators

#### Alabama
- Imm: Gary Higginbotham 334-206-5023
- Ref: Bue B. Salsamo 334-947-6206
- Ref: Janet Mitchell 205-547-6105

#### Alaska
- Imm: Laurel Wood 907-269-8000
- Bue: Ken Browning 907-269-8000

#### Arizona
- Imm: Kathy Fredrickson 602-230-5855
- Ref: Linda Fersis 602-230-5858
- Maricopa Co. Ref: Sherry Stotler 602-506-6657
- Ref: Tri Tran 602-542-6600

#### Arkansas
- Imm: Karen Mason 501-661-2723
- Ref: Bue Sherry Ahring 501-661-2053

#### California
- Imm: Natalie Smith, MD 510-540-2065
- Bue: Les Burd 510-540-2879
- Ref: Carlos Zavala 916-445-2938

#### CA, Los Angeles
- Ref: Bridget Beeman 213-580-9810
- Ref: Flora Lamb 213-744-6191

#### Colorado
- Imm: Patricia Rothameel 303-692-2647
- Ref: Amy Warner 303-692-2673
- Ref: Barbara Hummel 303-692-2647

#### Connecticut
- Imm: Vincent A. Sacco 860-509-7929
- Ref: George Raiselis 860-509-7722

#### Delaware
- Imm: Kathleen Russell 302-739-4746
- Bue: Laura Gannon 302-739-4746
- IP Coor: Ivelisse Tyndall 302-739-4746

#### District of Columbia
- Imm: James Giandella 202-576-7130
- Ref: Martin E. Levy 202-645-5572
- Ref: Tran M. Vu 202-667-9000

#### Florida
- Imm: Henry Janowski 850-847-2755
- Bue: Phillip Gresham 850-847-2755
- Ref: John Ridge 850-428-3433

#### Georgia
- Imm: Michael Cheney 404-657-3158
- Ref: Peggy Monkus 404-657-3158
- Ref: Bill Fields 404-657-6620

#### Hawaii
- Imm: Judy Hill 808-586-8338
- Bue: Mitsu Sugi 808-586-8338
- Ref: Gerald Ohia 808-586-4616

#### Idaho
- Imm: Merleene Fletcher 208-334-9542
- Bue: Fazle Khan 208-334-5638
- Ref: Susie Church 208-799-3100

#### Illinois
- Imm: Karen McMahon (acting) 217-785-1455
- Bue: Robert S. Williams 217-785-1455
- Ref: JoAnn Chikakus 312-814-2673

#### IL, Chicago
- Imm: Bridget Beeman 217-785-1455
- Ref: Dave Ellsworth (acting) 217-785-1456
- Ref: Dalma Praznowski 312-744-2144
- Imm: Cheryl Byers 312-746-6120

#### IL, DuPage
- Imm: JoAnn Chikakus 312-814-2673
- Ref: Dave Ellsworth (acting) 317-233-7010

#### IL, Peoria
- Imm: Linda Keller 617-983-6800
- Ref: Huan-van Vu 410-767-6665
- Imm: Paula Soper 410-767-6238

#### IL, Springfield
- Imm: Les Burd 510-540-2879
- Ref: Huan-van Vu 410-767-6665
- Ref: Mary Dufour 510-540-2879

#### IL, St. Louis
- Imm: Amy Warner 313-692-2673
- Ref: Dave Williams 313-692-2673
- Ref: Patricia Witte 215-685-6748

#### NE, Lincoln
- Imm: Bill Trapp 402-444-7395
- Ref: Bue: Amy Olsen 402-444-2973

#### NE, Nebraska
- Imm: Phillip Brown 405-271-4487
- Ref: Shawn Thompson 518-474-1944
- Ref: Noelle Howland (acting) 518-474-1946

#### NE, South Dakota
- Imm: Terrance Ford 605-773-3737
- Ref: Kristin Rounds 605-773-3737

#### NE, Wisconsin
- Imm: B. Schulterbrandt 809-776-8311
- Ref: Bue: Robert D. Schulterbrandt 809-776-8311

#### NH, New Hampshire
- Imm: B. Schulterbrandt 809-776-8311
- Ref: Bue: Robert D. Schulterbrandt 809-776-8311

#### NJ, New Jersey
- Imm: T. Grey Borden 402-471-2937
- Ref: Bue: Yvonne Bradford 406-523-4750

#### NJ, New York
- Imm: Dr. Melinda Dickson (acting) 313-876-4720
- Ref: Bue: James Lutz 313-876-4721

#### NM, New Mexico
- Imm: Nancy Fasano 517-335-9423
- Ref: Bhavani Pasana 517-335-9423
- Ref: Norm Keon 517-335-8050

#### NV, Nevada
- Imm: Kidsen Iohp 011-691-320-2619
- Ref: Bue: Richard Bronowski 011-691-320-2619

#### OH, Ohio
- Imm: Sylvia Tauiliili 011-684-633-6000
- Ref: Bue: Margaret Hansen (acting) 360-236-3595
- Ref: Bue: Richard Bronowski 011-691-320-2619

#### OR, Oregon
- Imm: Jennifer Cochran 617-983-6590
- Ref: Bhavani Pasana 517-335-9423

#### PA, Pennsylvania
- Imm: Fazle Khan 208-586-4616
- Ref: Chareundi Van Si 503-248-3601
- Ref: Robert D. Schulterbrandt 809-776-8311

#### VA, Virginia
- Imm: B. Schulterbrandt 809-776-8311
- Ref: Bue: Robert D. Schulterbrandt 809-776-8311

#### CA, Los Angeles
- Imm: Amy Warner 313-692-2673
- Ref: Dave Williams 313-692-2673

#### TX, Texas
- Imm: B. Schulterbrandt 809-776-8311
- Ref: Bue: Robert D. Schulterbrandt 809-776-8311

#### TN, Tennessee
- Imm: Mark Ritter 202-331-2395
- Ref: Bue: Lin Watson 202-331-2395

#### OH, Ohio
- Imm: Albertina Popa 313-692-2673
- Ref: Bue: Richard Bronowski 011-691-320-2619

#### MA, Massachusetts
- Imm: Bill Fields 313-876-0432
National Resources

Here's some info you may be looking for!

Order these immunization and hepatitis resources directly from the organizations listed.
Twice a year, the Immunization Action Coalition updates this list of great resources from around the nation. If you know of any resources, call us at 612-647-9009 or e-mail us at mail@immunize.org

Reference materials

NEW! IAC Express (Immunization Action Coalition). Sign up to receive e-mail announcements of new immunization and hepatitis B resources. To subscribe to this Internet news service (formerly called NEEDLE TIPS NOW!), send an e-mail message to express@immunize.org and place the word SUBSCRIBE in the “subject:” field. We’ll add your name to our list! It’s free!

CDC Immunization Information Hotline (CDC). Call this number to get ACIP statements, Vaccine Information Statements (VISs), vaccine safety fact sheets, or to speak with an information specialist who answers questions about shot schedules for children, teens, adults, new vaccines, and contraindications. This hotline also answers consumer questions in English and Spanish. Hours: 8 am to 11 pm EST Mon-Fri (voice mail available at all other times). Call 800-232-2522; for Spanish language, call 800-232-0233.

www.cdc.gov/nip
If you’re looking for immunization resources from CDC, this is a great place to go!

CDC Immunization Information Hotline (CDC). Call this number to get ACIP statements, Vaccine Information Statements (VISs), vaccine safety fact sheets, or to speak with an information specialist who answers questions about shot schedules for children, teens, adults, new vaccines, and contraindications. This hotline also answers consumer questions in English and Spanish. Hours: 8 am to 11 pm EST Mon-Fri (voice mail available at all other times). Call 800-232-2522; for Spanish language, call 800-232-0233.

Morbidity and Mortality Weekly Report (MMWR). Recommendations and information on vaccine-preventable diseases and many more public health topics. Available in print for $79/yr. To subscribe, call 781-893-3800, or sign up for free electronic delivery at CDC’s website at www.cdc.gov/epo/mmwr/mmwr.html

ACIP statements. ACIP statements are published in the MMWR. To obtain any ACIP statement try the following: 1) Download them from CDC’s website at www.cdc.gov/epo/mmwr/mmwr.html. You can also request a free electronic subscription to MMWR at this site. 2) Call CDC’s immunization hot line at 800-232-2522. 3) E-mail your request to nipinfo@cdc.gov. 4) Call your state immunization program, see phone numbers on page 20. 5) Request them from your medical library. Note: if you want new ACIP recommendations as soon as they are released, CDC’s website is the place to go!

Vaccine Information Statements (VIS) (CDC). Make sure you give these easy-to-read sheets to your patients prior to vaccination. To order, call your state health department or CDC’s Immunization Hotline at 800-232-2522. California’s Immunization Branch distributes VISs (except influenza and pneumococcal) in 14 different languages. To order, call Maria Clarke at 510-849-5042. Minnesota Department of Health has the influenza VIS in six languages. To order, call 612-623-5237.


www.immunize.org
If you’re looking for immunization or hepatitis A and B resources, this is a great place to go!

NEW! Vaccinate Adults! (Immunization Action Coalition, a semi-annual publication). For individuals and organizations concerned about hepatitis B and all other vaccine-preventable diseases. Free, but a $50 membership contribution is appreciated. Call 612-647-9009 or visit our website at www.immunize.org


www.cdc.gov/travel

Health Information for International Travel - Yellow Book (CDC, 1997). Vaccine information and requirements for foreign travel. $20. Call the Superintendent of Documents at 202-512-1800 or download it free from CDC’s travel website: www.cdc.gov/travel

Travel & Routine Immunizations - a practical guide for the medical office. (Shoreland, 1998). $30. Call 800-433-5256 or visit the website: www.shoreland.com

CDC presents:
Immunization Training via Satellite
by William L. Atkinson, MD, MPH
• Thursday, June 4: Adult Immunization: Technical issues (2½ hrs)
• Thursday, Sept.10: Immunization Update (2½ hrs)
• Thursday, Oct. 8: Adult Immunization: Strategies that Work (2½ hrs)

For more information, call your state immunization program (see phone numbers on page 20).


Teaching Modules for Physicians (ATPM, 1997). Call 800-789-6737.


**Vaccines**

**Immunization Action Coalition videos.** The Coalition has over a dozen terrific educational videos, some for providers and more for patients. Seven are in languages other than English. See “Immunization Order Form” on page 27 or fax your request for our catalog to 612-647-9131.

**CDC videos.** The “CDC/NIP Resource Request List” lists all available videos from CDC. Fax your request for this list to 404-639-8828. It will be sent to you via mail.


**Before It’s Too Late, Vaccinate!** (AAP, 1992, 15 min). Explains the importance of immunizations to parents. Available in English & Spanish. $6. Call 800-433-9016, ext. 6771.

**Precious Chance** (Scottish Rite Children’s Medical Center, 1992, 17 min). For parents. Reviews vaccine-preventable diseases, vaccine side effects, and contraindications. Available in English, Spanish, Russian, Hmong, Cambodian, Vietnamese, & Laotian. $59.95. Call 404-250-2319.

**Shot Talk - Immunize Your Little Guys** (Scottish Rite Children’s Medical Center, 1997, 13 min). A video for teen parents about childhood immunization. $59.95. Call 404-250-2319.

**Health is the Prize** (Mpls. Indian Health Board, 1996, 9 min). A “hip hop” music video to encourage teen parents to vaccinate their children. $20. Call 612-721-9800, ext. 880.

**Wally Takes Charge** (Mid-America Immunization Coalition, 1995, 12 min). For teachers to educate elementary students so they can teach their own families about immunizations. Available in English and Spanish. $25. Call 816-235-5479.

**Hepatitis—the Silent Killer** (Hepatitis Foundation International, 1995, 26 min). Describes hepatitis A, B, and C. $30 (includes a membership to the Foundation). Call 800-891-0707.

**Hepatitis B Video** (Hepatitis B Foundation, 1995, 28 min). Covers hepatitis B issues such as vaccination, care of the carrier, discrimination against carriers, daycare, etc. $10. Call 215-489-4900.

**Phone numbers and websites for more information**

**Call these organizations to find out what resources they can send you. Many of them have newsletters, brochures, fact sheets, and/or informational data bases. You can also check their websites.**

**Routine Immunization**

- **All Kids Count** (www.allkidscount.org) .................................................. 404-687-5615
- **American Academy of Pediatrics** (www.aap.org) ................................. 800-433-9016
- **CDC’s Immunization Information Hotline** ............................................. 800-232-2522
- **CDC’s Voice and Fax Immunization Information Line** ............................ 888-232-3228
- **Congress of National Black Churches** .................................................. 202-371-1091
- **COSSMHO (Nat’l Coalition of Hispanic Health Orgs.)** .......................... 202-797-4348
- **Every Child by Two** (www.ebct.org) ........................................................ 202-651-7226
- **HMA Associates (PSAs & print materials for Latinos)** ............................. 202-342-0676
- **Immunization Action Coalition** (www.immunize.org) ...................... 612-647-9009
- **Immunization Education and Action Committee** ................................. 202-863-2438
- **National Coalition for Adult Immunization** ......................................... www.medscape.com/affiliates/ncai
- **Council of La Raza** (www.nclr.org) ..................................................... 202-785-1670
- **National Initiative for Adult Immunization** ........................................... www.niaid.nih.gov
- **NIP: Ask a CDC expert your immunization question** .......................... nipinfo@cdc.gov
- **National Institute on Aging** (www.nih.gov/nia) ..................................... 800-222-2225
- **National Immunization Technical Information Service** ....................... www.immunization.org
- **Office of Minority Health** (www.omhrc.gov) ......................................... 800-444-6472

**Your health department’s immunization program (# is on page 20)**

**Hepatitis Information**

- **American Liver Foundation** (www.liver.foundation.org) .................... 800-223-0179
- **Hepatitis A brochure for gay men** ....................................................... 800-200-HEPA (4372)
- **Hepatitis A brochure for travelers** ...................................................... 800-437-2829
- **Hepatitis A information kit** ................................................................. 800-437-2344
- **CDC’s Hepatitis Information Hotline** ............................................. 888-443-7232
- **CDC’s Hepatitis website** .............................................................. www.cdc.gov/nCIDod/diseases/hepatitis/hepatitis.htm
- **CDC’s Hepatitis Branch epidemiologist on call** ................................ 404-639-2709
- **Hepatitis B Coalition** (www.immunize.org) ........................................ 612-647-9009
- **Hepatitis B Foundation** (www.hepb.org) ........................................... 215-489-4900
- **Hepatitis Foundation International** (www.hepfi.org) ......................... 800-891-0707
- **Nat’l Digestive Diseases Information Clearinghouse** .............................. 301-654-3810
- **Plexus Health Group** ..................................................................... 912-638-6705

**Your health department’s hepatitis coordinator (# is on page 20)**

**Pharmaceutical Companies**

- **Abbott Diagnostics** ................................................................. 800-323-9100
- **Aviron** (www.aviron.com) ................................................................. 650-919-6500
- **Chiron Corporation** (www.chiron.com) ........................................... 800-CHIRON-8
- **Merck & Co., Inc.** (www.merck.com) ................................................ 800-672-6372
- **North American Vaccine** (www.nava.com) ........................................ 301-419-8400
- **Pasteur Merieux Connaught, Inc.** (www.us.pmc-vacc.com) ............... 800-822-2463
- **SmithKline Beecham** (www.sb.com) .................................................. 800-366-8900
- **Wyeth-Lederle Vaccines & Pediatrics** (www.ahp.com) ................... 800-358-7443

**Questions about immunization registries? Contact Kris Saarlas, All Kids Count, at 404-687-5615 (www.allkidscount.org) or contact CDC’s Immunization Registry Clearinghouse website at www.cdc.gov/nip/registry**

**Developing Immunization Registries: Experiences from the All Kids Count Program** (American Journal of Preventive Medicine, supplement, 1997). To receive a copy of this report, fax your request to All Kids Count at 404-371-0415.
Clinic Assessment Software Application (CASA). This CDC software program assesses your clinic’s immunization rates. To order, call your local or state immunization program (page 20); download directly from www.cdc.gov/nip/casa/index.htm or call 404-639-8226.

### Miscellaneous

**Kids Care Fair Program Kit** (American Red Cross, 1995). Complete kit on how to coordinate and implement children’s health and immunization fairs. $39.95. Call 213-739-6853.

America’s Youth Passport and America’s Senior Health Record (Securitec Corp). Sturdy booklets in which to keep children’s and seniors’ immunizations records. Call 800-783-2145.

### Adolescent resources

**Reference materials**

ACIP Adolescent Statement. To get a copy, contact CDC’s Immunization Hotline at 800-232-2522 or your state immunization program (phone numbers on page 20).


Adolescent Immunization Workshop. A CDC national workshop report on how groups can implement the national recommendation for the adolescent immunization visit. Free. Fax requests to the Coalition at 612-647-9131.


GAPS (Guidelines for Adolescent Preventive Services) (AMA, 1996). Recommendations on immunization, teen health, etc. Call 312-464-5570.

**Recycle! Roll Up Your Sleeves: Implementing a Hepatitis B Program in Schools** (San Francisco Unified School District, 1995) is no longer available. If you’re not using your copy, please send it to the Immunization Action Coalition and we’ll make sure someone who needs it gets it! For more information, call 612-647-9009.

**Coming soon! “Roll Up BOTH Sleeves!”** (San Francisco Unified School District). This expanded version of “Roll Up Your Sleeves” will help you provide vaccination and TB testing to students and school staff. Includes video for teens. Available fall 1998. To be put on a list to get more information, fax your request to the Immunization Action Coalition at 612-647-9131 or e-mail your request to mail@immunize.org.


**Primer for Teachers, Quick & Easy** (Hepatitis Foundation Internat’l, 1996). A liver wellness curriculum for teachers which includes messages about hepatitis B and substance abuse prevention. This primer has two parts, one tailored for K-6, the other for grades 7-12. Call 800-891-0707.

**Teen videos from the Coalition**

All of the following videos can be ordered using the Coalition’s order form on page 27 or by faxing a request for our catalog to 612-647-9131.


- **Partnership for Prevention** (SKB, 1995, 6 min). A hepatitis B video for 10- through 12-year olds. May be shown in classrooms, clinics, etc., but may not be shown on TV - $10.

- **Get the Facts, Then Get the Vax!** (American School Health Association, 1995, 6 min). Presents hepatitis B information for high school students. May be used in any setting - $10.

- **Teen brochures/poster from the Coalition**

  The *Immunization Action Coalition* has teen immunization materials including brochures, a poster, immunization guidelines, and more. Some teen brochures are available in Spanish, Hmong, Cambodian, Laotian, Vietnamese, Chinese, Korean, Tagalog, and Russian. To order camera-ready brochures, see the Coalition order form on page 27, or fax your request for our catalog to 612-647-9131. All items (except poster) are available free on our website: www.immunize.org

**Adult resources**

**NEW! VACCINATE ADULTS!** (Immunization Action Coalition, a semi-annual publication). This 12-page publication contains information about adult immunization issues as well as hepatitis prevention, diagnosis, and treatment. It is designed as a quick read for busy adult medicine specialists. Everything published in *VACCINATE ADULTS!* is extracted from the Coalition’s publication, NEEDLE TIPS & the Hepatitis B Coalition News: If you receive NEEDLE TIPS, you are already getting the information that is published in *VACCINATE ADULTS!* Free, but a $40 membership contribution is appreciated. To be added to the mailing list, e-mail your request to mail@immunize.org or send a fax to 612-647-9131. Complete text is available on the Coalition’s website: www.immunize.org

The *Immunization Action Coalition* has other adult immunization materials including brochures, a poster, immunization guidelines. To find out more about these materials, see the catalog on pages 24–27 or fax your request for our catalog to 612-647-9131. All items (except poster) are available free on our website at www.immunize.org

**ACIP 1998 Influenza Statement** (will be available by the end of April). **ACIP Pneumococcal Statement** (April 25, 1997). To request copies, call CDC’s Immunization Hotline at 800-232-2522 or your state’s immunization program (phone numbers on page 20).

**NEW! A Guide to Locating Information on Adult Immunization (NITIS, 1997).** A comprehensive web page that identifies adult immunization search tools and resources on the Internet: www.immunize.org/adultvac.htm

**Revised! Resource Guide for Adult and Adolescent Immunization (NCAI, 1998).** A list of materials you can order from various organizations. Fax your request for a free copy to 301-907-0878.

**CDC’s Immunization Information Hotline.** Call to receive a copy of “Summary of Adult Immunization Recommendations - 7/16/97.” Ask about other materials CDC can send you. Call 800-232-2522.

The *American Lung Association* has brochures, posters, and other items about influenza and pneumococcal disease. For more information call 800-586-4872 and you will be connected to your local chapter.

**Health Care Financing Administration (HCFA)** has posters (English and Spanish) and reminder postcards (English, Spanish, Korean, Vietnamese, and Chinese) that promote adult immunization against influenza and pneumococcal disease. For more information, contact your regional HCFA office.

Coalition Catalog

Publications and resources

- All of our materials are camera ready, copyright free, and reviewed by national experts!
- You can order one of any item and make as many copies as you need (including videos).
- Everything costs $1 unless otherwise stated.
- Starred items are available in foreign languages.
- To order materials, see instructions on page 26.
- Join the Coalition for 1998 with a $50 membership and we will send you ALL of our print materials. See the order form for details.

Before you order, REMEMBER...
A $50.00 annual membership 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!

Brochures for your patients

Revised! Immunizations for babies. A visual picture of the shot schedule (4/98). Item #P4010

★ New translations! After the shots...what to do if your child has discomfort. Available in English, Spanish, Hmong, Cambodian, Laotian, Vietnamese, Tagalog, Russian, Chinese, Korean, Farsi (2/97). Item #P4015

Revised! Are you 11-19 years old? Then you need to be vaccinated! Covers all vaccinations (4/98). Item #P4020

Questions parents ask about baby shots. A brochure about childhood vaccinations (10/97). Item #P4025

Vaccinations for adults – you’re never too old for shots! A visual table covering all adult vaccinations (10/97). Item #P4030

★ Immunizations...not just kids’ stuff. Adult immunization brochure. Available in English, Spanish, Chinese (2/97). (For matching poster, see page 26. Poster available only in English.) Item #P4035

Shots for adults with HIV. A visual table of shots needed for HIV-positive adults (7/97). Item #P4041

★ Revised! When do children and teens need shots? A visual picture of the shot schedule. Available in English, Spanish (4/98). Item #P4050

NEW! All kids need hepatitis B shots. A brochure that tells parents all children birth–18 years old need hepatitis B shots (4/98). Item #P4055

★ Chickenpox isn’t just an itchy, contagious rash. A brochure for all ages. Available in English, Spanish (12/95). Item #P4070

★ Hepatitis A is a serious disease...should you be vaccinated? A brochure for all ages. Available in English, Spanish (10/97). Item #P4080

★ New translation! Questions frequently asked about hepatitis B. Four pages of commonly asked questions. Available in English, Spanish. Thanks to the Rhode Island Department of Health (9/96). Item #P4090

★ Every week hundreds of teens are infected with hepatitis B. A brochure for teens and parents. Available in English, Spanish, Hmong, Cambodian, Laotian, Vietnamese, Tagalog, Russian, Chinese, Korean (5/97). Item #P4100


NEW! Every week thousands of sexually active people get hepatitis B. A new hepatitis B brochure for adults (4/98). Item #P4112

Hepatitis B . . . 100 times easier to catch than HIV. A brochure for men who have sex with men (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 (7/97). Item #P4116

★ If you are a hepatitis B carrier... Describes how the carrier can take care of her/himself and protect others from hepatitis B infection. Available in English, Spanish, Hmong, Chinese (12/95). Item #P4120

Packet of hepatitis B and adoption information. Includes information from S.J. Schwarzenberg, MD, U of MN, and Jerri Ann Jenista, MD, Adoption Medical News (9/94). Item #P4152 - $5

★ Hepatitis B information for adults and children from endemic areas. Encourages testing and vaccination. Available in English, Hmong, Cambodian, Laotian, Vietnamese, Tagalog, Russian, Chinese, Korean (5/95). Item #P4170

Materials for your clinic staff


Summary of recommendations for adult immunization. A two-sided reference table on appropriate use, scheduling, and contraindications of vaccines (10/97). Item #P2011

Vaccine handling, storage, and transport. (9/96). Item #P2020

Ask the experts. Written by CDC experts. Includes questions and answers on routine immunization published in current and past issues of NEEDLE TIPS. Item #P2021 - $5

Revised! Vaccine administration record for children and teens. Keep children and teens’ immunization records on this one-page sheet in the front of their medical charts (10/97). Item #P2022

Vaccine administration record for adults. Keep adult patients’ immunization records on this one-page sheet in the front of their medical charts (1/96). Item #P2023

HELP YOURSELF! All of our materials are copyright free! You can order one of any item and make as many copies as you need. Use the order form on page 27.
Tips to improve your clinic’s immunization rates. For use in both pediatric and adult health settings (2/97). Item #P2045

Hospitals & doctors sued for failing to immunize. Seven lawsuits against physicians and hospitals (12/94). Item #P2060

Recommended child and adult dosages of the two brands of hepatitis A and B vaccines (10/97). Item #P2081

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

Revised! Basic knowledge about hepatitis B. A list of high-risk groups, interpretation of the hepatitis B panel, and tests to diagnose chronic hepatitis B, C, and D (4/98). Item #P2110

Basic facts about adult hepatitis B. A list of adult high-risk groups, interpretation of the hepatitis B panel, and tests to diagnose chronic hepatitis B, C, and D (11/97). Item #P2112

Universal prenatal screening for hepatitis B (by D. Freese, MD, Mayo Clinic. Rochester, MN). Reviews neonatal transmission and screening rationale (2/93). Item #P2120

Sample hospital perinatal protocols. For HBsAg screening on labor and delivery units and hepatitis B immunization in newborn nurseries (12/95). Item #P2130

Management of chronic hepatitis B in children and/or adults. Four liver experts share their management guidelines for chronic hepatitis B: H. Conjeevaram, MD, University of Chicago, IL (1/97); C. Smith, MD, Minnesota Gastroenterology, Minneapolis, MN (1/97); B.J. McMahon, MD, Alaska Area Native Health Service, Anchorage, AK (12/95); S.J. Schwarzenberg, MD, University of MN (8/94). Item #P2164 - $5

Tracking hepatitis B patients and household contacts. Manual tracking system for high-risk families (6/91). Item #P2180

Kid Art. Immunization artwork (babies, bears, balloons, etc.) you can use to make your own brochures, posters, etc. (9/96). Item #P3015 - $5

How to operate a community-based shot clinic. A packet of resource materials to help you start or run an immunization clinic (10/97). Item #P3040 - $5

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 (12/95). Available in English, Spanish, Hmong, Chinese. Item #P4060

New translation! 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. Available in English, Spanish (2/97). Item #P4065

Sample letter explaining hepatitis B test results to patients (10/97). Item #P4140

Vaccines Administration Techniques (CA Department of Health, 1989, 18 min). A refresher course on the correct techniques for administering vaccines. Comes with accompanying print material. Item #V2020 - $10

When to Immunize, When to Wait (CA Department of Health, 1995, 22 min). Features CDC’s immunization expert, Dr. William Atkinson. Includes accompanying materials. Item #V2030 - $10

In Praise of the Public Health Nurse! (IAC, 1994, 31 min). Features Margaret Morrison, MD, Mississippi Department of Health, who stresses that immunization is a team effort. Comes with printed material. Item #V2040 - $10

Videos for teens and pre-teens

Immunization Day! (UCLA, 1997, 13 min). An attention-holding vaccination video for middle-school students. Item #V2050 - $10. To order the complete curriculum which includes this video, see Immunization Plus below.

Partnership for Prevention (SKB, 1995, 6 min). A hepatitis B video for 11- and 12-year olds. May be shown in classrooms, clinics, etc., but 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 senior high school students. Item #V3015 - $10

Videos for Asians and Pacific Islanders

★ Family Album (UCLA, 1997, 15 min). An immunization video to encourage S.E. Asian parents to immunize their children on time. Available in English, Hmong, Cambodian, Laotian, and Mien. Item #V4000 - $10/each

Our Family, Our Strength (ALF, 1986, 19 min). A doctor discusses hepatitis B with a pregnant Asian woman who is HBsAg-positive. Her extended family is present. On the same cassette, Dr. W. T. London counsels a pregnant woman who is a hepatitis B carrier. Item #V4001 - $10

★ Kev Koom Siab - Immunization and Hepatitis B Information (KTCTV, 1992, 54 min). In Hmong with English subtitles. Item #V4020 - $10

★ Hepatitis B - A Family’s Story (1995, 15 min). A hepatitis B video dubbed into Cambodian. Promotes testing and vaccination. Includes English script. Item #V4025 - $10


Photos, slides, video kits, curricula, & posters


Work together and “catch-up” the children (H.A.P.I. Kids, San Diego, CA, 1997). A video and “how-to” manual for vaccinating Asian & Pacific Island children against hepatitis B. Item #R2052 - $10

HELP YOURSELF! All of our materials are copyright free! You can order one of any item and make as many copies as you need. Use the order form on page 27.
Photo notebook of vaccine-preventable diseases. Includes 19 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! (9/97) Item #R2053 - $75*

APIA hepatitis B “catch-up” demonstration materials. Program materials from three U.S. projects to help you get your own program started, 300 pages (1997). Item #R2055 - $10

Vaccine-preventable diseases slide set and script. Includes 30 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. Thanks to Departamento de Salud de Puerto Rico for Spanish translation. (9/96). Item #S3010 - $25

Hepatitis B training program for bilingual workers. Use this video (80 min), slide set, and manual to train bilingual health educators to make community presentations on hepatitis B (1993). Item #X3010 - $25

Poster! Roll up your sleeves! Full-color 11” x 17” poster of a diverse trio of kids showing off their hepatitis B shots! Item #Q2010 - 10 posters for $1 (order in units of 10)

Poster! Immunizations...not just kids’ stuff. A two-color 7” x 14” adult poster. Hang this poster up in every exam room. Item #Q2020 - 10 posters for $1 (order in units of 10). The companion brochure is on page 24.

BEST SELLER!
A Picture Is Worth a Thousand Words

“Photo Notebook of Vaccine-Preventable Diseases” is perfect for taking out into the community! Developed with help from outreach workers, this three-ring notebook includes:

- 19 full-page color photographs of children and adults with vaccine-preventable diseases
- simple text that describes the diseases

Item #R2053 - $75*

* Color photographs are expensive, but these are really worth it!

Immunization curriculum for middle schools

“Immunization Plus” is a math, science, and language curriculum you can use to educate teens about vaccinations. Developed by UCLA School of Public Health and the California Department of Health.

“Immunization Plus” includes:

- a teacher training video
- “Immunization Day,” a student video (or it can be purchased separately for $10)
- worksheets
- resource manual

“Immunization Plus,” Item #R2051 - $25* (only 450 available)

“Immunization Day,” Item #V2050 - $10

* It doesn’t take a rocket scientist to know you’re getting a good deal!
Before you order, remember: A $50 annual membership includes camera-ready copies of ALL of the Coalition’s print materials.

<table>
<thead>
<tr>
<th>Qty.</th>
<th>Brochures for your patients</th>
<th>Amt.</th>
</tr>
</thead>
<tbody>
<tr>
<td>P4010</td>
<td>Immunizations for babies</td>
<td>$1</td>
</tr>
<tr>
<td>P4015</td>
<td>After the shots: what to do if your child has discomfort:</td>
<td>$1</td>
</tr>
<tr>
<td></td>
<td>English</td>
<td>$1</td>
</tr>
<tr>
<td></td>
<td>Spanish</td>
<td>$1</td>
</tr>
<tr>
<td></td>
<td>Vietnamese</td>
<td>$1</td>
</tr>
<tr>
<td></td>
<td>Tagalog</td>
<td>$1</td>
</tr>
<tr>
<td></td>
<td>Russian</td>
<td>$1</td>
</tr>
<tr>
<td></td>
<td>Chinese</td>
<td>$1/ea</td>
</tr>
<tr>
<td></td>
<td>Korean</td>
<td>$1/ea</td>
</tr>
<tr>
<td></td>
<td>Farsi</td>
<td>$1/ea</td>
</tr>
<tr>
<td>P4020</td>
<td>Are you 11-19? Then you need to be vaccinated!</td>
<td>$1</td>
</tr>
<tr>
<td>P4025</td>
<td>Questions parents ask about baby shots</td>
<td>$1</td>
</tr>
<tr>
<td>P4030</td>
<td>Vaccinations for adults</td>
<td>$1</td>
</tr>
<tr>
<td>P4035</td>
<td>Immunizations: not just kids’ stuff</td>
<td>$1/ea</td>
</tr>
<tr>
<td></td>
<td>English</td>
<td>$1/ea</td>
</tr>
<tr>
<td></td>
<td>Spanish</td>
<td>$1/ea</td>
</tr>
<tr>
<td></td>
<td>Chinese</td>
<td>$1/ea</td>
</tr>
<tr>
<td>P4041</td>
<td>Shots for adults with HIV</td>
<td>$1</td>
</tr>
<tr>
<td>P4050</td>
<td>When do children and teens need shots:</td>
<td>$1/ea</td>
</tr>
<tr>
<td></td>
<td>English</td>
<td>$1/ea</td>
</tr>
<tr>
<td></td>
<td>Spanish</td>
<td>$1/ea</td>
</tr>
<tr>
<td></td>
<td>Chinese</td>
<td>$1/ea</td>
</tr>
<tr>
<td>P4055</td>
<td>All kids need hepatitis B shots</td>
<td>$1</td>
</tr>
<tr>
<td>P4070</td>
<td>Chickenpox isn’t just an itchy, contagious rash</td>
<td>$1</td>
</tr>
<tr>
<td></td>
<td>English</td>
<td>$1</td>
</tr>
<tr>
<td></td>
<td>Spanish</td>
<td>$1</td>
</tr>
<tr>
<td>P4080</td>
<td>Hepatitis A is serious...should you be vaccinated?</td>
<td>$1/ea</td>
</tr>
<tr>
<td></td>
<td>English</td>
<td>$1/ea</td>
</tr>
<tr>
<td></td>
<td>Spanish</td>
<td>$1/ea</td>
</tr>
<tr>
<td></td>
<td>Vietnamese</td>
<td>$1/ea</td>
</tr>
<tr>
<td></td>
<td>Tagalog</td>
<td>$1/ea</td>
</tr>
<tr>
<td></td>
<td>Russian</td>
<td>$1/ea</td>
</tr>
<tr>
<td></td>
<td>Chinese</td>
<td>$1/ea</td>
</tr>
<tr>
<td></td>
<td>Korean</td>
<td>$1/ea</td>
</tr>
<tr>
<td>P4110</td>
<td>Every week hundreds of teens are infected with hep B:</td>
<td>$1/ea</td>
</tr>
<tr>
<td></td>
<td>English</td>
<td>$1/ea</td>
</tr>
<tr>
<td></td>
<td>Spanish</td>
<td>$1/ea</td>
</tr>
<tr>
<td></td>
<td>Hmong</td>
<td>$1/ea</td>
</tr>
<tr>
<td></td>
<td>Cambodian</td>
<td>$1/ea</td>
</tr>
<tr>
<td></td>
<td>Laotian</td>
<td>$1/ea</td>
</tr>
<tr>
<td></td>
<td>Vietnamese</td>
<td>$1/ea</td>
</tr>
<tr>
<td></td>
<td>Tagalog</td>
<td>$1/ea</td>
</tr>
<tr>
<td></td>
<td>Russian</td>
<td>$1/ea</td>
</tr>
<tr>
<td></td>
<td>Chinese</td>
<td>$1/ea</td>
</tr>
<tr>
<td></td>
<td>Korean</td>
<td>$1/ea</td>
</tr>
<tr>
<td>P4115</td>
<td>Every week...sexually active people get hepatitis B</td>
<td>$1</td>
</tr>
<tr>
<td>P4116</td>
<td>Hepatitis B...100 times easier to catch than HIV</td>
<td>$1</td>
</tr>
<tr>
<td>P4120</td>
<td>You don’t have to go all the way to get hepatitis A</td>
<td>$1</td>
</tr>
<tr>
<td></td>
<td>English</td>
<td>$1</td>
</tr>
<tr>
<td></td>
<td>Spanish</td>
<td>$1</td>
</tr>
<tr>
<td></td>
<td>Chinese</td>
<td>$1</td>
</tr>
<tr>
<td></td>
<td>Vietnamese</td>
<td>$1</td>
</tr>
<tr>
<td></td>
<td>Tagalog</td>
<td>$1</td>
</tr>
<tr>
<td></td>
<td>Russian</td>
<td>$1</td>
</tr>
<tr>
<td></td>
<td>Korean</td>
<td>$1</td>
</tr>
<tr>
<td>P4152</td>
<td>Packet of hepatitis B and adoption information</td>
<td>$5</td>
</tr>
<tr>
<td>P4170</td>
<td>Hep B information for adults</td>
<td>$1/ea</td>
</tr>
<tr>
<td></td>
<td>English</td>
<td>$1/ea</td>
</tr>
<tr>
<td></td>
<td>Spanish</td>
<td>$1/ea</td>
</tr>
<tr>
<td></td>
<td>Hmong</td>
<td>$1/ea</td>
</tr>
<tr>
<td></td>
<td>Cambodian</td>
<td>$1/ea</td>
</tr>
<tr>
<td></td>
<td>Laotian</td>
<td>$1/ea</td>
</tr>
<tr>
<td></td>
<td>Vietnamese</td>
<td>$1/ea</td>
</tr>
<tr>
<td></td>
<td>Tagalog</td>
<td>$1/ea</td>
</tr>
<tr>
<td></td>
<td>Russian</td>
<td>$1/ea</td>
</tr>
<tr>
<td></td>
<td>Chinese</td>
<td>$1/ea</td>
</tr>
<tr>
<td></td>
<td>Korean</td>
<td>$1/ea</td>
</tr>
</tbody>
</table>

Materials for your clinic staff

<table>
<thead>
<tr>
<th>Qty.</th>
<th>Amt.</th>
</tr>
</thead>
<tbody>
<tr>
<td>P2010</td>
<td>Summary of rules for childhood immunization</td>
</tr>
<tr>
<td>P2011</td>
<td>Summary of recommendations for adult immunization</td>
</tr>
<tr>
<td>P2020</td>
<td>Vaccine handling, storage, and transport</td>
</tr>
<tr>
<td>P2021</td>
<td>Ask the experts</td>
</tr>
<tr>
<td>P2022</td>
<td>Vaccine administration record for children and teens</td>
</tr>
<tr>
<td>P2023</td>
<td>Vaccine administration record for adults</td>
</tr>
<tr>
<td>P2045</td>
<td>Tips to improve your clinic’s immunization rates</td>
</tr>
<tr>
<td>P2060</td>
<td>Hospitals &amp; doctors sued for failing to immunize</td>
</tr>
<tr>
<td>P2081</td>
<td>Recommended dosages of hep A and hep B vaccines</td>
</tr>
<tr>
<td>P2100</td>
<td>No risk? No way!</td>
</tr>
<tr>
<td>P2110</td>
<td>Basic knowledge about hepatitis B</td>
</tr>
<tr>
<td>P2112</td>
<td>Basic facts about adult hepatitis B</td>
</tr>
<tr>
<td>P2120</td>
<td>Universal prenatal screening for hepatitis B</td>
</tr>
<tr>
<td>P2130</td>
<td>Sample hospital prenatal protocol</td>
</tr>
<tr>
<td>P2164</td>
<td>Management of chronic hepatitis B in children/adults</td>
</tr>
<tr>
<td>P2180</td>
<td>Tracking hepatitis B patients and contacts</td>
</tr>
<tr>
<td>P3015</td>
<td>Kid art</td>
</tr>
<tr>
<td>P3040</td>
<td>How to operate a community-based shot clinic</td>
</tr>
<tr>
<td>P4060</td>
<td>Screening questionnaire for child &amp; teen immunization:</td>
</tr>
<tr>
<td></td>
<td>English</td>
</tr>
<tr>
<td></td>
<td>Spanish</td>
</tr>
<tr>
<td></td>
<td>Hmong</td>
</tr>
<tr>
<td></td>
<td>Chinese</td>
</tr>
<tr>
<td>P4065</td>
<td>Screening questionnaire for adult immunization:</td>
</tr>
<tr>
<td></td>
<td>English</td>
</tr>
<tr>
<td></td>
<td>Spanish</td>
</tr>
<tr>
<td></td>
<td>Vietnamese</td>
</tr>
<tr>
<td></td>
<td>Tagalog</td>
</tr>
<tr>
<td></td>
<td>Russian</td>
</tr>
<tr>
<td></td>
<td>Chinese</td>
</tr>
<tr>
<td></td>
<td>Korean</td>
</tr>
</tbody>
</table>

Payment, Shipping, and Handling Information

Minimum order/donation $10. We request prepayment by check. Purchase orders accepted. Sorry, no credit cards. Checks must be in U.S. dollars. Order form or a photocopy must accompany check or P.O. (Our Federal ID# is 41-1768237). Orders shipped via fourth class mail. No charge for shipping or handling within the United States. Expect delivery in approximately three weeks.

Immunization Action Coalition
& Hepatitis B Coalition
1573 Selby Avenue, Suite 234, St. Paul, MN 55104
Phone 612-647-9099 • Fax 612-647-9131

Before you order, remember: A $50 annual membership includes camera-ready copies of ALL of the Coalition’s print materials.

<table>
<thead>
<tr>
<th>Qty.</th>
<th>Videos for your clinic staff</th>
<th>Amt.</th>
</tr>
</thead>
<tbody>
<tr>
<td>V2010</td>
<td>How to Protect Your Vaccine Supply</td>
<td>$10</td>
</tr>
<tr>
<td>V2020</td>
<td>Vaccine Administration Techniques</td>
<td>$10</td>
</tr>
<tr>
<td>V2030</td>
<td>When to Immunize, When to Wait</td>
<td>$10</td>
</tr>
<tr>
<td>V2040</td>
<td>In Praise of the Public Health Nurse</td>
<td>$10</td>
</tr>
<tr>
<td>V2050</td>
<td>Immunization Day!</td>
<td>$10</td>
</tr>
<tr>
<td>V3012</td>
<td>Partnership for Prevention</td>
<td>$10</td>
</tr>
<tr>
<td>V3015</td>
<td>Get the Facts, Then Get the Vax</td>
<td>$10</td>
</tr>
<tr>
<td>V4000</td>
<td>Family Album: English</td>
<td>$1</td>
</tr>
<tr>
<td></td>
<td>Spanish</td>
<td>$1</td>
</tr>
<tr>
<td></td>
<td>Hmong</td>
<td>$1</td>
</tr>
<tr>
<td></td>
<td>Cambodian</td>
<td>$1</td>
</tr>
<tr>
<td>V4001</td>
<td>Our Family, Our Strength</td>
<td>$10</td>
</tr>
<tr>
<td>V4020</td>
<td>Hmvn Koom Siab (with English subtitles)</td>
<td>$10</td>
</tr>
<tr>
<td>V4025</td>
<td>Cambodian: Hepatitis B - A Family’s Story</td>
<td>$10</td>
</tr>
<tr>
<td>V4030</td>
<td>Vietnamese: Bneh viem ban b va gia dinh Bac Tam</td>
<td>$10</td>
</tr>
<tr>
<td>V4060</td>
<td>Photos, slides, video kits, curricula, &amp; posters</td>
<td>$25</td>
</tr>
<tr>
<td>R2015</td>
<td>Immunization Plus</td>
<td>$25</td>
</tr>
<tr>
<td>R2052</td>
<td>Work together and “catch-up” the children (HAPI Kids)</td>
<td>$10</td>
</tr>
<tr>
<td>R2053</td>
<td>Photo notebook of vaccine-preventable diseases</td>
<td>$75</td>
</tr>
<tr>
<td>R2055</td>
<td>APIA hepatitis B catch-up demonstration materials</td>
<td>$10</td>
</tr>
<tr>
<td>S3010</td>
<td>30 slides of vaccine-preventable diseases—script included, check which language(s) you need</td>
<td>$25</td>
</tr>
<tr>
<td>X3010</td>
<td>Hep B training program for bilingual workers</td>
<td>$25</td>
</tr>
<tr>
<td>Q2010</td>
<td>“Roll up your sleeves!” adolescent hep B poster</td>
<td>$10/100</td>
</tr>
<tr>
<td>Q2020</td>
<td>“Immunizations...not just kids’ stuff,” adult poster</td>
<td>$10/100</td>
</tr>
</tbody>
</table>

Total $ 

Please Join the Coalition!

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

I appreciate NEEDLE TIPS. Here’s my contribution to help defray costs ($25 suggested). $ 

I want to join the Coalition for 1998! 

☑ I am a new member 
☑ I am a renewing member 

Here is my 1998 membership contribution:

☑ $50 ☑ $100 ☑ $250 ☑ $500 ☑ other. $ 

I’m joining the Coalition at a $50 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:

☐ Spanish ☐ Hmong ☐ Cambodian ☐ Laotian ☐ Vietnamese ☐ Tagalog ☐ Russian ☐ Chinese ☐ Korean ☐ Farsi

(All contributions to the Coalition are tax deductible to the full extent of the law.)

Grand Total $ 

I sign up for “IAC Express”

☐ Sign me up for “IAC Express” (our free e-mail news service).

My e-mail address is
Dear Reader:

In your hands is the Immunization Action Coalition’s 25th issue of NEEDLE TIPS & the Hepatitis B Coalition News, a practical publication on immunization and hepatitis B for busy health professionals who treat children and/or adults.

Look inside! Everything is carefully reviewed for technical accuracy by the Centers for Disease Control and Prevention with additional help from members of our prestigious Advisory Board. These materials are designed for you to copy and distribute to patients; to keep as ready references in exam rooms; or to distribute to your clinic staff members. All of the Coalition’s materials are copyright free so you may use our materials in any way you’d like.

Great news!! Hepatitis B vaccine is now recommended for all children 0 through 18 years of age! The ACIP’s October 24, 1997, decision to expand the age recommendation has simplified hepatitis B immunization practices for thousands of providers. We no longer have to think about which children are the “right” age or which children are in the “right” risk groups to receive hepatitis B vaccine. Just vaccinate ALL children! Make it part of your clinic’s policy to offer hepatitis B vaccination whenever a child or teen of any age presents in your office. There’s a new brochure called “All kids need hepatitis B shots” on page 15 that you can copy and hand out to parents to help you with this effort. And don’t forget, if you’re a VFC provider you can use hepatitis B vaccine for all VFC-eligible children birth through 18 years of age.

Please join the Coalition for 1998. With a contribution of $50 or more, you will receive a complete packet of all of our print materials ready for you to copy and hand out to your staff and patients. If you haven’t joined us yet in 1998, please join today!

Thank you to CDC!
The CDC provides invaluable technical support as well as a federal grant. A special thanks to Muriel Hoyt, RN, our CDC project officer, who is always there when we need her.

Thank you for your personal support!
The Coalition receives tremendous support from our readers. Thank you so much.

Thank you for your educational grants! Thank you to the following corporations for their generous educational grants:
• Abbott Diagnostics
• Aviron
• Chiron Corporation
• Medical Arts Press
• Merck & Co.
• North American Vaccine
• Pasteur Mérieux Connaught
• SmithKline Beecham
• Wyeth-Lederle Vaccines and Pediatrics

Please be understanding if you receive duplicate mailings. It is difficult to remove every duplicate name since many of you are listed on more than one list. If you receive an extra copy, please pass it along to someone who can use it.

Immunization Action Coalition
1573 Selby Avenue, Suite 234
Saint Paul, MN 55104

ADDRESS CORRECTION REQUESTED