Dr. William L. Atkinson, Immunization Legend, Retiring from CDC

After 25 years of service, Dr. William (Bill) L. Atkinson will be retiring from the Centers for Disease Control and Prevention’s (CDC) National Center for Immunization and Respiratory Diseases (NCIRD) at the end of June. Well known to readers of the Vaccine Adults and Needle Tips columns “Ask the Experts,” Dr. Atkinson has had tremendous impact on the U.S. immunization program during his career. The following tributes from Dr. Larry K. Pickering and Dr. Deborah L. Wexler attest to the significance of Dr. Atkinson’s tenure of service at CDC.

Larry K. Pickering, MD, FAAP, senior advisor to the director of NCIRD and executive secretary of the Advisory Committee on Immunization Practices (ACIP), honored Dr. Atkinson at the February 2012 ACIP meeting. The following paragraphs are adapted from Dr. Pickering’s speech at ACIP. Dr. Wexler’s accolades follow Dr. Pickering’s.

Following training in psychology, medicine, and epidemiology, and board certification in clinical medicine and preventive medicine, Bill arrived at CDC in 1983 as an Epidemic Intelligence Service (EIS) officer. Following his two-year assignment as an EIS officer, he served at the Louisiana State Health Department in New Orleans and was on the faculty of the Tulane University School of Public Health and Tropical Medicine until 1989, when he moved to Atlanta.

From 1989 through 1994, he was responsible for measles surveillance and outbreak investigation for what was then known as the National Immunization Program. He was the point person for measles during the major resurgence of 1989 through 1991.

The first ACIP statement Bill wrote was the noteworthy 1989 recommendation on measles prevention. It made a significant change in the childhood immunization schedule by recommending two doses of measles-containing vaccine.

(continued on page 4)

Ask the Experts

IAC extends thanks to our experts, medical epidemiologist Andrew T. Kroger, MD, MPH; nurse educator Donna L. Weaver, RN, MN; medical officer Iyabode Akinsanya-Beysolow, MD, MPH; and medical epidemiologist William L. Atkinson, MD, MPH. All are with the National Center for Immunization and Respiratory Diseases, Centers for Disease Control and Prevention (CDC).

Needle Tips

- Give the Tdap dose to adults for whom it is recommended if no record of previous administration exists.
- Do not miss an opportunity to give Tdap to people age 65 years and older. Administer the vaccine you have available—either Boostrix or Adacel. When feasible, give Boostrix to adults age 65 and older. However, either vaccine product provides

(continued on page 5)

Stay current with FREE subscriptions

The Immunization Action Coalition’s 2 periodicals, Vaccinate Adults and Needle Tips, and our email news service, IAC Express, are packed with up-to-date information.

Subscribe to all 3 free publications in one place. It’s simple! Go to www.immunize.org/subscribe
New! “Cocooning and Tdap Vaccination”
Web Section on immunize.org

Newborns have the highest rates of death from pertussis (whooping cough) because they are too young to be vaccinated against the disease. A vaccination strategy called “cocooning” involves protecting newborns by vaccinating their close contacts against pertussis with Tdap vaccine. Close contacts include parents, siblings, grandparents, other family members, family friends, child care providers, and healthcare staff.

To provide one-step access to information on cocooning, IAC has developed a web section titled Cocooning and Tdap Vaccination.

IAC’s new web section brings together resources from multiple sources, including the Centers for Disease Control and Prevention (CDC), state health departments, professional societies, medical journals, and blogs. You’ll find helpful vaccination-related resources, such as Advisory Committee on Immunization Practices (ACIP) recommendations, a cocooning handbook for healthcare providers, pertussis videos, selected journal articles, patient handouts, PowerPoint presentations, and much more. You can access the new cocooning web section from the index at the bottom of IAC’s home page, “Guide to immunize.org,” or by using IAC’s search engine.

PERTUSSIS VIDEOS
Because video is such a compelling and popular medium, IAC is featuring a collection of videos about pertussis and the importance of Tdap vaccination.

The pertussis-related videos include videos of pertussis cough in infants and children; educational information for healthcare professionals to help increase immunization rates and prevent disease.

The Immunization Action Coalition is also supported by:
- Merck Sharp & Dohme Corp.
- GlaxoSmithKline
- Novartis Vaccines sanofi pasteur
- Pfizer Inc.
- MedImmune, Inc.
- CSL Biotherapies
- Ortho Clinical Diagnostics, Inc.
- Baxter Healthcare Corp.
- American Pharmacists Association
- Mark and Muriel Wexler Foundation

Many other generous donors

IAC maintains strict editorial independence in its publications.

IAC Board of Directors
- Stephanie L. Jakim, MD
  Olmsted Medical Center
- James P. McCord, MD
  Children’s Hospital at Legacy Emanuel
- Sheila M. Specker, MD
  University of Minnesota
- Debra A. Strathoff, MD
  Amery Regional Medical Center
- Deborah L. Wexler, MD

Immunization Action Coalition

DISCLAIMER: Vaccinate Adults! is available to all readers free of charge. Some of the information in this issue is supplied to us by the Centers for Disease Control and Prevention in Atlanta, Georgia, and some information is supplied by third-party sources. The Immunization Action Coalition (IAC) has used its best efforts to accurately publish all of this information, but IAC cannot guarantee that the original information as supplied by others is correct or complete, or that it has been accurately published. Some of the information in this issue is created or compiled by IAC. All of the information in this issue is of a time-critical nature, and we cannot guarantee that some of the information is not now outdated, inaccurate, or incomplete. IAC cannot guarantee that reliance on the information in this issue will cause no injury. Before you rely on the information in this issue, you should first independently verify its current accuracy and completeness. IAC is not licensed to practice medicine or pharmacology, and the providing of the information in this issue does not constitute such practice. Any claim against IAC must be submitted to binding arbitration under the auspices of the American Arbitration Association in St. Paul, Minnesota.
Laminated adult and child immunization schedules
Order one of each for every exam room

Here are the ACIP/AAFP/ACP/ACOG/ACNM-approved schedule for adults and the ACIP/AAP/AAFP-approved immunization schedule for people ages 0 through 18 years. Both are laminated and washable for heavy-duty use, complete with essential footnotes, and printed in color for easy reading. The cost is $7.50 for each schedule and only $5.50 each for five or more copies.

To order, visit www.immunize.org/shop, or use the order form on page 12.

For 20 or more copies, contact us for discount pricing: admininfo@immunize.org

Wallet-sized immunization record cards for all ages:
For adults, children & teens, and for a lifetime!

Now you can give any patient a permanent vaccination record card designed specifically for their age group: adult, child & teen, or lifetime. These brightly colored cards are printed on durable rip-, smudge-, and water-proof paper. To view the cards or for more details, go to www.immunize.org/shop and click on the images.

Buy 1 box (250 cards) for $45 (first order of a 250-card box comes with a 30-day, money-back guarantee). Discounts for larger orders:
- 2 boxes $40 each; 3 boxes $37.50 each; 4 boxes $34.50 each

To order, visit www.immunize.org/shop, or use the order form on page 12.

To receive sample cards, contact us: admininfo@immunize.org

"Immunization Techniques — Best Practices with Infants, Children, and Adults"

The California Department of Public Health, Immunization Branch, updated its award-winning training video, "Immunization Techniques: Best Practices with Infants, Children, and Adults." The 25-minute DVD can be used to train new employees and to refresh the skills of experienced staff on administering injectable, oral, and nasal-spray vaccines to children, teens, and adults. Make sure your healthcare setting has the 2010 edition!

The cost is $17 each for 1–9 copies; $10.25 each for 10–24 copies; $7 each for 25–49 copies; $5.75 each for 50–99 copies.

To order, visit www.immunize.org/shop, or use the order form on page 12.

For 100 or more copies, contact us for discount pricing: admininfo@immunize.org

For healthcare settings in California, contact your local health department immunization program for a free copy.

Advisory Board
Liaisons from Organizations
Bernadette A. Albanese, MD, MPH
Council of State & Territorial Epidemiologists
William L. Atkinson, MD, MPH
Nat’l Ctr. for Immun. & Resp. Diseases, CDC
Stephen L. Cochi, MD, MPH
Nat’l Ctr. for Immun. & Resp. Diseases, CDC
Paul Etkind, DrPH, MPH
Nat’l’ Asn. of County & City Health Officials
Stanley A. Gall, MD
Amer. College of Obstetricians & Gynecologists
Bruce Gellin, MD, MPH
National Vaccine Program Office, DHHS
Neal A. Halbesy, MD
Institute for Vaccine Safety, Johns Hopkins Univ.
Claire Hanmann, MPH
Association of Immunization Managers
Carol E. Hayes, CNM, MN, MPH
American College of Nurse-Midwives
Gregory James, DO, MPH, FACOPF
American Osteopathic Association
Samuel L. Katz, MD
Pediatric Infectious Diseases Society
Elsey Oshen Kharbanda, MD, MPH
Society for Adolescent Health and Medicine
Marie-Michele Leger, MPH, PA-C
American Academy of Physicians Assistants
Harold S. Margolis, MD
Nat’l Ctr. for Emerg. & Zoonotic Inf. Diseases, CDC
Martin G. Myers, MD
National Network for Immunization Information
Kathleen M. Neuzil, MD, MPH
American Academy of Physicians
Paul A. Offit, MD
Vaccine Education Ctr., Children’s Hosp. of Phila.
Walter A. Orenstein, MD
Emory Vaccine Center, Emory University
Mitchel C. Rothholz, RPh, MBA
American Pharmacists Association
Thomas N. Saari, MD
American Academy of Pediatrics
William Schaffner, MD
Infectious Diseases Society of America
Anne Schuchat, MD
Nat’l Ctr. for Immun. & Resp. Diseases, CDC
Thomas E. Stengv, RN, PhD
American Nurses Association
Kathryn L. Talkington, MPAff
Asm. of State & Territorial Health Officials
Lijten Tan, PhD
American Medical Association
Ann S. Taub, MA, CPNP
National Asm. of Pediatric Nurse Practitioners
John W. Ward, MD
Division of Viral Hepatitis, NCHHSTP, CDC
Patricia N. Whitley-Williams, MD, MPH
National Medical Association
Walter W. Williams, MD, MPH
Nat’l Ctr. for Immun. & Resp. Diseases, CDC

Individuals
Hie-Won L. Hann, MD
Jefferson Medical College, Philadelphia, PA
Mark A. Kane, MD, MPH
Consultant, Seattle, WA
Edgar K. Marcuse, MD, MPH
University of Washington School of Medicine
Brian J. McMahon, MD
Alaska Native Medical Center, Anchorage, AK
Stanley A. Plotkin, MD
Vaxconsult.com
Gregory A. Poland, MD
Mayo Clinic, Rochester, MN
Sarah Jane Schwarzenberg, MD
University of Minnesota
Coleman L. Smith, MD
Minnesota Gastroenterology, Minneapolis, MN
Richard K. Zimmerman, MD, MPH
University of Pittsburgh

Vaccinate Adults! • May 2012 • Immunization Action Coalition • (651) 647-9009 • www.immunize.org • www.vaccineinformation.org
Dr. William L. Atkinson, Immunization Legend, Retiring . . . continued from page 1

vaccine rather than one. Since then, Bill has made major contributions to numerous ACIP recommendations. In 1998, he assumed the lead in writing ACIP’s General Recommendations on Immunization, a critically important reference and teaching guide on immunization techniques and concepts. Bill continued to be an author on subsequent editions, including the 2011 version. Over the past 15 years, Bill has served as a member of almost every ACIP work group, providing useful input based on his extensive interaction with front-line clinicians.

Bill has been a trailblazer throughout his career:

- In 1995, he pioneered the use of satellite and broadcast technology to bring immunization education to thousands of immunization providers simultaneously. Since 1995, he has produced, wrote, and/or appeared in more than 100 broadcasts and webcasts that were viewed by more than 300,000 healthcare providers.
- In 1995, Bill conceived, developed, and took the lead in writing one of CDC’s most widely sought-after books, Epidemiology and Prevention of Vaccine-Preventable Diseases (aka the Pink Book). The book is now in its twelfth edition, and more than 400,000 copies have been distributed.
- In 1995, Bill developed nipinfo@cdc.gov, one of the first and most long-lived program-specific email services at CDC. NIPINFO, which provides access to CDC immunization experts, is run by Bill and other staff of CDC’s Immunization Services Division. Since 1995, NIPINFO has responded to between 5,000 and 10,000 queries per year.
- Bill’s talent as a speaker is legendary within the immunization community. He is in constant demand for live presentations. During his tenure at CDC, he gave more than 600 invited lectures and taught more than 100 two-day training courses across the United States, addressing more than 150,000 attendees.
- The recipient of numerous awards, Bill was the first recipient of CDC’s highest immunization honor, the Phil Horne Award, which is given to recognize NCIRD staff members who have demonstrated high ideals, innovation, and commitment to immunization practices, and whose accomplishments and work performance have had a significant impact on achieving NCIRD’s mission. He was also the 2001 recipient of the Bill Watson Medal of Excellence, the highest award given to a CDC employee.

Throughout his career, Bill has used his creativity, dynamic personality, and exceptional teaching abilities to the benefit of the immunization community. His numerous accomplishments serve as an inspiration to all of us.

Deborah L. Wexler, MD, executive director of the Immunization Action Coalition (IAC), recalled the first time she heard Bill speak at an immunization conference. “He was breathtaking. His style was completely engaging, entertaining, and energizing. His content was factual and practical. I’d never heard anyone give a presentation about immunization as dynamically as Bill did. Nor had I ever met anyone with the depth and breadth of knowledge about immunization that Bill had.

“Bill’s contributions to IAC have been immeasurable. From writing his first “Ask the Experts” column for IAC in 1995 to reviewing IAC’s educational materials, he has been an enormously valued partner to IAC for nearly 20 years. He was IAC’s CDC project officer from 2000 to 2004, a time of critical expansion for IAC. Since then, he has consistently helped to clarify and sharpen our work. As IAC’s founder, I am so appreciative of all that Bill has contributed.”

All of us at IAC are grateful to Dr. Atkinson for his enduring leadership and dedication. We wish him great happiness in retirement and hope the immunization community can continue to engage his boundless talents!
Is there an upper age limit for Tdap administration? For example, should I vaccinate an 85-year-old?

There is no upper age limit for Tdap vaccination. A one-time dose of Tdap is recommended for all adults.

If HPV vaccine is given subcutaneously (SC) instead of intramuscularly (IM), does the dose need to be repeated?

Yes. No data exist on the efficacy or safety of HPV vaccine given by the subcutaneous route. All data on efficacy and duration of protection are based on a 3-dose series given on the approved schedule and administered by the intramuscular route. In the absence of data on subcutaneous administration, CDC and the manufacturers recommend that a dose of HPV vaccine given by any route other than intramuscular be repeated. There is no minimum interval between the invalid (subcutaneous) dose and the repeat dose.

Editor’s note: The question above is identical to a question that appeared in “Ask the Experts” in the February 2012 issue of Vaccine Adults. The answer, however, is different. The answer given in February generated significant discussion, which led CDC experts to modify the answer.

Which adults need to receive PPSV prior to age 65 years?

PPSV is recommended for adults age 19 through 64 years who currently smoke cigarettes; reside in nursing homes or long-term care facilities; have chronic lung disease (including chronic obstructive pulmonary disease, emphysema, and asthma); chronic cardiovascular disease; diabetes mellitus; chronic liver disease (including cirrhosis); alcoholism; cochlear implants; cerebrospinal fluid leaks; immunocompromising conditions; and functional or anatomic asplenia (e.g., sickle cell disease and other hemoglobinopathies, congenital or acquired asplenia, splenic dysfunction, or splenectomy [if elective splenectomy is planned, vaccinate at least 2 weeks before surgery]); asymptomatic or symptomatic HIV (vaccinate as soon as possible after diagnosis). Public health authorities may consider recommending PPSV for American Indians/Alaska Natives who live in areas where the risk for invasive pneumococcal disease is increased. Please see IAC’s “Pneumococcal Polysaccharide Vaccine: CDC answers your questions” at www.immunize.org/catg.d/p2015.pdf.

Editor’s note: The next Q&A explains which adults need a second dose of PPSV.

Which adults should receive a second dose of PPSV?

One-time revaccination 5 years after the first dose is recommended for people age 19 through 64 years who have functional or anatomic asplenia (including persons with sickle cell disease or splenectomy patients); chronic renal failure (including dialysis patients) or nephrotic syndrome; are immunocompromised, including those with HIV infection, leukemia, lymphoma, Hodgkin’s disease, multiple myeloma, generalized malignancy; are receiving immunosuppressive therapy (including long-term systemic corticosteroids or radiation therapy); or who have received an organ or bone marrow transplant.

Adults who receive their first PPSV at or after age 65 years should receive only a single dose, regardless of their health status. Please see IAC’s “Pneumococcal Polysaccharide Vaccine: CDC answers your questions” at www.immunize.org/catg.d/p2015.pdf.

Are the minimum intervals for giving the 3-dose series of Twinrix (hepatitis A-hepatitis B vaccine; GSK)?

Minimum intervals for Twinrix are 4 weeks between dose #1 and dose #2, and 5 months between dose #2 and dose #3.

When reconstituting a vaccine with the manufacturer-supplied diluent, should the clinic nurse administer exactly 0.5 mL and then discard the rest?

No. The nurse should administer the entire volume supplied. The package inserts include this information.

Should we fill out a report with the Vaccine Adverse Event Reporting System (VAERS) if a patient fainst after getting a vaccination, even if no injury or complication resulted?

Yes. VAERS looks for trends, so such information is helpful. To find out about VAERS and the kinds of events you should report to the system, visit vaers.hhs.gov/index.

Should a healthcare worker who has just received a dose of a live virus vaccine (varicella, MMR, LAIV, yellow fever) stay away from work for a certain number of days?

No. Healthcare workers should not refrain from working after receiving live virus vaccines or any other vaccine.

---

**Vaccinate Adults correction policy**

If you find an error, please notify us immediately by sending an email message to admin@immunize.org. We publish notification of significant errors in our email announcement service, IAC Express. Be sure you’re signed up for this service. To subscribe, visit www.immunize.org/subscribe.

---

**Now Available! 2012 Edition**

The Vaccine Handbook: A Practical Guide for Clinicians

by Gary S. Marshall, MD

www.immunize.org/vaccine-handbook
**Recommended Adult Immunization Schedule – United States, 2012**

**Figure 1. Recommended adult immunization schedule, by vaccine and age group**

<table>
<thead>
<tr>
<th>Vaccine</th>
<th>Age group</th>
<th>19–21 years</th>
<th>22–26 years</th>
<th>27–49 years</th>
<th>50–59 years</th>
<th>60–64 years</th>
<th>≥65 years</th>
</tr>
</thead>
<tbody>
<tr>
<td>Influenza²,*</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Tetanus, diphtheria, pertussis (Td/Tdap)³,*</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Varicella⁴,*</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Human papillomavirus (HPV)⁵,*</td>
<td>Females</td>
<td>3 doses</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Males</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Zoster⁶</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>1 dose</td>
</tr>
<tr>
<td>Measles, mumps, rubella (MMR)⁷,*</td>
<td></td>
<td></td>
<td></td>
<td>1 or 2 doses</td>
<td></td>
<td></td>
<td>1 dose</td>
</tr>
<tr>
<td>Pneumococcal (polysaccharide)⁸,⁹</td>
<td></td>
<td></td>
<td></td>
<td>1 or 2 doses</td>
<td></td>
<td></td>
<td>1 dose</td>
</tr>
<tr>
<td>Meningococcal¹⁰,*</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>1 or more doses</td>
</tr>
<tr>
<td>Hepatitis A¹¹,*</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>2 doses</td>
</tr>
<tr>
<td>Hepatitis B¹²,*</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>3 doses</td>
</tr>
</tbody>
</table>

*Covered by the Vaccine Injury Compensation Program.

**Note:** These recommendations must be read with the footnotes that follow; the notes contain the number of doses, intervals between doses, and other important information.

**Figure 2. Vaccines that might be indicated for adults, based on medical and other indications**¹

<table>
<thead>
<tr>
<th>Indication</th>
<th>Vaccine</th>
<th>Pregnancy</th>
<th>Immunocompromising conditions (excluding human immunodeficiency virus [HIV])¹⁰,¹¹,¹²</th>
<th>HIV infection¹³,¹⁴</th>
<th>CD4+ T lymphocyte count &lt;200 cells/µL ≤200 cells/µL</th>
<th>Men who have sex with men (MSM)</th>
<th>Heart disease, chronic lung disease, chronic alcoholism</th>
<th>Asplenia¹⁵ (including elective splenectomy and persistent complement component deficiencies)</th>
<th>Chronic liver disease</th>
<th>Diabetes, kidney failure, end-stage renal disease, receipt of hemodialysis</th>
<th>Healthcare personnel</th>
</tr>
</thead>
<tbody>
<tr>
<td>Influenza²,*</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Tetanus, diphtheria, pertussis (Td/Tdap)³,*</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Varicella⁴,*</td>
<td></td>
<td>Contraindicated</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Human papillomavirus (HPV)⁵,*</td>
<td>Females</td>
<td>3 doses through age 26 years</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Males</td>
<td>3 doses through age 26 years</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Zoster⁶</td>
<td></td>
<td>Contraindicated</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Measles, mumps, rubella (MMR)⁷,*</td>
<td></td>
<td>Contraindicated</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Pneumococcal (polysaccharide)⁸,⁹</td>
<td></td>
<td>1 or 2 doses</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Meningococcal¹⁰,*</td>
<td></td>
<td>1 or more doses</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Hepatitis A¹¹,*</td>
<td></td>
<td>2 doses</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Hepatitis B¹²,*</td>
<td></td>
<td>3 doses</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

*Covered by the Vaccine Injury Compensation Program.

For all persons in this category who meet the age requirements and who lack documentation of vaccination or have no evidence of previous infection. Tdap recommended for ≥65 if contact with <12 month old child. Either Td or Tdap can be used if no infant contact. Recommended if some other risk factor is present (e.g., on the basis of medical, occupational, lifestyle, or other indications).

These schedules indicate the recommended age groups and medical indications for which administration of currently licensed vaccines is commonly indicated for adults ages 19 years and older, as of January 1, 2012. For all vaccines being recommended on the Adult Immunization Schedule: a vaccine series does not need to be restarted, regardless of the time that has elapsed between doses. Licensed combination vaccines may be used whenever any components of the combination are indicated and when the vaccine's other components are not contraindicated. For detailed recommendations on all vaccines, including those used primarily for travelers or that are issued during the year, consult the manufacturers’ package inserts and the complete statements from the Advisory Committee on Immunization Practices (www.cdc.gov/vaccines/pubs/acip-list.htm).

The recommendations in this schedule were approved by the Centers for Disease Control and Prevention’s (CDC) Advisory Committee on Immunization Practices (ACIP), American Academy of Family Physicians (AAFP), American College of Physicians (ACP), American College of Obstetricians and Gynecologists (ACOG), and American College of Nurse-Midwives (ACNM).
Footnotes

1. **Additional Information:** Advisory Committee on Immunization Practices (ACIP) vaccine recommendations and additional information are available at www.cdc.gov/vaccines/pubs/acip-list.htm. Information on travel vaccine requirements and recommendations (e.g., for hepatitis A and B, meningococcal, and other vaccines) are available at wwwnc.cdc.gov/travel/page/vaccinations.htm.

2. **Influenza vaccination.**
   - Annual vaccination against influenza is recommended for all persons age 6 months and older.
   - Persons age 6 months and older, including pregnant women, can receive the trivalent inactivated vaccine (TIV).
   - Healthy, nonpregnant adults younger than age 50 years without high-risk medical conditions can receive either intranasally administered live, attenuated influenza vaccine (LAIV) (Flumist), or TIV. Healthcare personnel who care for severely immunocompromised persons (i.e., those who require care in a protected environment) should receive TIV rather than LAIV. Other persons should receive TIV.
   - The intramuscular or intradermal administered TIV are options for adults age 18–64 years.
   - Adults age 65 years and older can receive the standard dose TIV or the high-dose TIV (Fluzone High-Dose).

3. **Tetanus, diphtheria, and acellular pertussis (Td/Tdap) vaccination.**
   - Give a one-time dose of Tdap to adults younger than age 65 years who have not received Tdap previously or for whom vaccine status is unknown to replace one of the 10-year Td boosters.
   - Tdap is specifically recommended for the following persons: 1) pregnant women more than 20 weeks’ gestation; 2) adults, regardless of age, who are close contacts of infants younger than age 12 months (e.g., parents, grandparents, or child care providers); and 3) healthcare personnel.
   - Tdap can be given regardless of interval since the most recent tetanus or diphtheria-containing vaccine.
   - Pregnant women not vaccinated during pregnancy should receive Tdap immediately postpartum.
   - Adults age 65 years and older who do not have contact with an infant younger than age 12 months may also receive Tdap.
   - Adults with unknown or incomplete history of completing a 3-dose primary vaccination series with Td-containing vaccines should begin or complete a primary vaccination series. Tdap should be substituted for a single dose of Td in the vaccination series, with Td preferred as the first dose.
   - For unvaccinated adults, give the first 2 doses at least 4 weeks apart and the third dose 6–12 months after the second.
   - If incompletely vaccinated (i.e., less than 3 doses), give remaining doses.
   - Refer to the ACIP statement for recommendations for giving Td/Tdap as prophylaxis in wound management (see footnote 1).

4. **Varicella vaccination.**
   - All adults without evidence of immunity to varicella (as defined below) should receive 2 doses of single-antigen varicella vaccine or a second dose if they have received only 1 dose.
   - Special consideration for vaccination should be given to those who 1) have close contact with persons at high risk for severe disease (e.g., healthcare personnel and family contacts of persons with immunocompromising conditions) or 2) are at high risk for exposure or transmission (e.g., teachers; child care employees; residents and staff members of institutional settings, including correctional institutions; college students; military personnel; adolescents and adults living in households with children; nonpregnant women of childbearing age; and international travelers).
   - Pregnant women should be assessed for evidence of varicella immunity. Women who do not have evidence of immunity should receive the first dose of varicella vaccine upon completion or termination of pregnancy and before discharge from the healthcare facility. The second dose should be given 4–8 weeks after the first dose.
   - Evidence of immunity to varicella in adults includes any of the following: 1) documentation of 2 doses of varicella vaccine at least 4 weeks apart; 2) U.S.-born before 1980 (although for healthcare personnel and pregnant women, birth before 1980 should not be considered evidence of immunity); 3) history of varicella based on diagnosis or verification of varicella by a healthcare provider (for a patient reporting a history of or having an atypical case, a mild case, or both, healthcare providers should seek either an epidemiologic link to a typical varicella case or to a laboratory-confirmed case or evidence of laboratory confirmation, if it was performed at the time of acute disease); 4) history of herpes zoster based on diagnosis or verification of herpes zoster by a healthcare provider; or 5) laboratory evidence of immunity or laboratory confirmation of disease.

5. **Human papillomavirus (HPV) vaccination.**
   - Two vaccines are licensed for use in females, bivalent HPV vaccine (HPV2) and quadrivalent HPV vaccine (HPV4), and one HPV vaccine for use in males (HPV4).
   - For females, either HPV4 or HPV2 is recommended in a 3-dose series for routine vaccination at age 11 or 12 years, and for those age 13 through 26 years, if not previously vaccinated.
   - For males, HPV4 is recommended in a 3-dose series for routine vaccination at age 11 or 12 years, and for those age 13 through 21 years, if not previously vaccinated.
   - Males age 22 through 26 years may be vaccinated.
   - HPV vaccines are not live vaccines and can be given to persons who are immunocompromised as a result of infection (including HIV infection), disease, or medications. Vaccine is recommended for immunocompromised persons through age 26 years who did not get any or all doses when they were younger. The immune response and vaccine efficacy might be less than that in immunocompetent persons.
   - Men who have sex with men (MSM) may especially benefit from vaccination to prevent condyloma and anal cancer. HPV4 is recommended for MSM through age 26 years who did not get any or all doses when they were younger.
   - Ideally, vaccine should be given before potential exposure to HPV through sexual activity; however, persons who are sexually active should still be vaccinated consistent with age-based recommendations. HPV vaccine can be given to persons with a history of genital warts, abnormal Papanicolaou test, or positive HPV DNA test.
   - A complete series for either HPV4 or HPV2 consists of 3 doses. The second dose should be given 1–2 months after the first dose; the third dose should be given 6 months after the first dose (at least 24 weeks after the first dose).
   - Although HPV vaccination is not specifically recommended for healthcare personnel (HCP) based on their occupation, HCP should receive the HPV vaccine if they are in the recommended age group.

6. **Zoster vaccination.**
   - A single dose of zoster vaccine is recommended for adults age 60 years and older regardless of whether they report a prior episode of herpes zoster. Although the vaccine is licensed by the Food and Drug Administration (FDA) for use among and can be administered to persons age 50 years and older, ACIP recommends that vaccination begins at age 60 years.
   - Persons with chronic medical conditions may be vaccinated unless their condition constitutes a contraindication, such as pregnancy or severe immunodeficiency.
   - Although zoster vaccination is not specifically recommended for healthcare personnel (HCP), HCP should receive the vaccine if they are in the recommended age group.

7. **Measles, mumps, rubella (MMR) vaccination.**
   - Adults born before 1957 generally are considered immune to measles and mumps. All adults born in 1957 or later should have documentation of 1 or more doses of MMR vaccine unless they have a medical contraindication to the vaccine, laboratory evidence of immunity to each of the three diseases, or documentation of provider-diagnosed measles or mumps disease. For rubella, documentation of provider-diagnosed disease is not considered acceptable evidence of immunity.
   - **Measles component:** A routine second dose of MMR vaccine, given a minimum of 28 days after the first dose, is recommended for adults who 1) are students in postsecondary educational institutions; 2) work in a healthcare facility; or 3) plan to travel internationally. Persons who received inactivated (killed) measles vaccine or measles vaccine of unknown type from 1963 to 1967 should be revaccinated with 2 doses of MMR vaccine.
   - **Mumps component:** A routine second dose of MMR vaccine, given a minimum of 28 days after the first dose, is recommended for adults who 1) are students in postsecondary educational institutions; 2) work in a healthcare facility; or 3) plan to travel internationally. Persons vaccinated before 1979 with either killed mumps vaccine or mumps vaccine of unknown type who are at high risk for mumps infection (e.g., persons who are working in a healthcare facility) should be considered for revaccination with 2 doses of MMR vaccine.
   - **Rubella component:** For women of childbearing age, regardless of birth year, rubella immunity should be determined. If there is no evidence of immunity, women who are not pregnant should be vaccinated. Pregnant women who do not have evidence of immunity should receive MMR vaccine upon completion or termination of pregnancy and before discharge from the healthcare facility.
   - **Healthcare personnel born before 1957:** For unvaccinated healthcare personnel born before 1957 who lack laboratory evidence of measles, mumps, and/or rubella immunity or laboratory confirmation of disease, healthcare facilities should consider routinely vaccinating personnel with 2 doses of MMR vaccine at the appropriate interval for measles and mumps or 1 dose of MMR vaccine for rubella.
8. Pneumococcal polysaccharide (PPSV) vaccination.

- Vaccinate all persons with the following indications:
  - age 65 years and older without a history of PPSV vaccination;
  - adults younger than age 65 years with chronic lung disease (including chronic obstructive pulmonary disease, emphysema, and asthma); chronic cardiovascular diseases; diabetes mellitus; chronic liver disease (including cirrhosis); alcoholism; cochlear implants; cerebrospinal fluid leaks; immunocompromising conditions; and functional or anatomic asplenia (e.g., sickle cell disease and other hemoglobinopathies, congenital or acquired asplenia, splenectomy, splenic dysfunction, or splenectomy [if elective splenectomy is planned, vaccinate at least 2 weeks before surgery]);
  - residents of nursing homes or long-term care facilities; and
  - adults who smoke cigarettes.

- Persons with asymptomatic or symptomatic HIV infection should be vaccinated as soon as possible after their diagnosis.

- When cancer chemotherapy or other immunosuppressive therapy is being considered, the interval between vaccination and initiation of immunosuppressive therapy should be at least 2 weeks. Vaccination during chemotherapy or radiation therapy should be avoided.

- Routine use of PPSV is not recommended for American Indians/Alaska Natives or persons younger than age 65 years unless they have underlying medical conditions that are PPSV indications. However, public health authorities may consider recommending PPSV for American Indians/Alaska Natives who are living in areas where the risk for invasive pneumococcal disease is increased.

9. Revaccination with PPSV.

- One-time revaccination 5 years after the first dose is recommended for persons ages 19 through 64 years with chronic renal failure or nephrotic syndrome; functional or anatomic asplenia (e.g., sickle cell disease or splenectomy); and for persons with immunocompromising conditions.

- Persons who received PPSV before age 65 years for any indication should receive another dose of the vaccine at age 65 years or later if at least 5 years have passed since their previous dose.

- No further doses are needed for persons vaccinated with PPSV at or after age 65 years.

10. Meningococcal vaccination.

- Give 2 doses of meningococcal conjugate vaccine quadrivalent (MCV4) at least 2 months apart to adults with functional asplenia or persistent complement component deficiencies.

- HIV-infected persons who are vaccinated should also receive 2 doses.

- Give a single dose of meningococcal vaccine to microbiologists routinely exposed to isolates of Neisseria meningitidis, military recruits, and persons who travel to or live in countries in which meningococcal disease is hyperendemic or epidemic.

- First-year college students up through age 21 years who are living in residence halls should be vaccinated if they have not received a dose on or after their 16th birthday.

- MCV4 is preferred for adults with any of the preceding indications who are age 55 years and younger; meningococcal polysaccharide vaccine (MPSV4) is preferred for adults age 56 years and older.

- Revaccination with MCV4 every 5 years is recommended for adults previously vaccinated with MCV4 or MPSV4 who remain at increased risk for infection (e.g., adults with anatomic or functional asplenia, persistent complement component deficiencies).

11. Hepatitis A vaccination.

- Vaccinate any person seeking protection from hepatitis A virus (HAV) infection and persons with any of the following indications:
  - men who have sex with men and persons who use injection drugs;
  - persons working with HAV-infected primates or with HAV in a research laboratory setting;
  - persons with chronic liver disease and persons who receive clotting factor concentrates;
  - persons traveling or working in countries that have high or intermediate endemicity of hepatitis A; and
  - unvaccinated persons who anticipate close personal contact (e.g., household or regular babysitting) with an international adoptee during the first 60 days after arrival of the adoptee in the United States from a country with high or intermediate endemicity (see footnote 1 for more information on travel recommendations).

- The first dose of the 2-dose hepatitis A vaccine series should be given as soon as adoption is planned, ideally 2 or more weeks before the arrival of the adoptee.

- Single-antigen vaccine formulations should be given in a 2-dose schedule at either 0 and 6–12 months (Havrix), or 0 and 6–18 months (Vaqta). If the combined hepatitis A and hepatitis B vaccine (Twinrix) is used, give 3 doses at 0, 1, and 6 months; alternatively, a 4-dose schedule may be used, given on days 0, 7, and 21–30, followed by a booster dose at month 12.

12. Hepatitis B vaccination.

- Vaccinate persons with any of the following indications and any person seeking protection from hepatitis B virus (HBV) infection:
  - sexually active persons who are not in a long-term, mutually monogamous relationship (e.g., persons with more than one sex partner during the previous 6 months); persons seeking evaluation or treatment for a sexually transmitted disease (STD); current or recent injection-drug users; and men who have sex with men;
  - healthcare personnel and public-safety workers who are exposed to blood or other potentially infectious body fluids;
  - persons with diabetes younger than age 60 years as soon as feasible after diagnosis; persons with diabetes who are age 60 years or older at the discretion of the treating clinician based on increased need for assisted blood glucose monitoring in long-term care facilities, likelihood of acquiring hepatitis B infection, its complications, or chronic sequelae, and likelihood of immune response to vaccination;
  - persons with end-stage renal disease, including patients receiving hemodialysis;
  - persons with HIV infection; and persons with chronic liver disease;
  - household contacts and sex partners of persons with chronic HBV infection; clients and staff members of institutions for persons with developmental disabilities; and international travelers to countries with high or intermediate prevalence of chronic HBV infection; and
  - all adults in the following settings: STD treatment facilities; HIV testing and treatment facilities; facilities providing drug-abuse treatment and prevention services; healthcare settings targeting services to injection-drug users or men who have sex with men; correctional facilities; end-stage renal disease programs and facilities for chronic hemodialysis patients; and institutions and nonresidential daycare facilities for persons with developmental disabilities.

- Give missing doses to complete a 3-dose series of hepatitis B vaccine to those persons not vaccinated or not completely vaccinated. The second dose should be given 1 month after the first dose; the third dose should be given at least 2 months after the second dose (and at least 4 months after the first dose). If the combined hepatitis A and hepatitis B vaccine (Twinrix) is used, give 3 doses at 0, 1, and 6 months; alternatively, a 4-dose Twinrix schedule, given on days 0, 7, and 21–30, followed by a booster dose at month 12, may be used.

- Adult patients receiving hemodialysis or with other immunocompromising conditions should receive 1 dose of 40 µg/mL (Recombivax HB) given on a 3-dose schedule or 2 doses of 20 µg/mL (Engerix-B) given simultaneously on a 4-dose schedule at 0, 1, 2, and 6 months.

13. Selected conditions for which Haemophilus influenzae type b (Hib) vaccine may be used.

- 1 dose of Hib vaccine should be considered for persons who have sickle cell disease, leukemia, or HIV infection, or who have anatomic or functional asplenia if they have not previously received Hib vaccine.


- Inactivated vaccines generally are acceptable (e.g., pneumococcal, meningococcal, influenza [inactivated influenza vaccine]) and live vaccines generally are avoided in persons with immune deficiencies or immunocompromising conditions. Information on specific conditions is available at www.cdc.gov/vaccines/pubs/acip-list.htm.
### Guide to Contraindications and Precautions to Commonly Used Vaccines in Adults

<table>
<thead>
<tr>
<th>Vaccine</th>
<th>Contraindications</th>
<th>Precautions</th>
</tr>
</thead>
<tbody>
<tr>
<td>Influenza, injectable trivalent (TIV)</td>
<td>• Severe allergic reaction (e.g., anaphylaxis) after previous dose of any influenza vaccine or to a vaccine component, including egg protein</td>
<td>• Moderate or severe acute illness with or without fever&lt;br&gt;• History of Guillain-Barré syndrome (GBS) within 6 wks of previous influenza vaccination</td>
</tr>
<tr>
<td>Influenza, live attenuated (LAIV)²</td>
<td>• Severe allergic reaction (e.g., anaphylaxis) after a previous dose of any influenza vaccine or to a vaccine component, including egg protein&lt;br&gt;• Immune suppression&lt;br&gt;• Certain chronic medical conditions such as asthma, diabetes, heart or kidney disease.³&lt;br&gt;• Pregnancy</td>
<td>• Moderate or severe acute illness with or without fever&lt;br&gt;• History of GBS within 6 wks of previous influenza vaccination&lt;br&gt;• Receipt of specific antivirals (i.e., amantadine, rimantadine, zanamivir, or oseltamivir) 48 hours before vaccination, if possible; avoid use of these antiviral drugs for 14 days after vaccination</td>
</tr>
<tr>
<td>Tetanus, diphtheria, pertussis (Tdap)</td>
<td>• Severe allergic reaction (e.g., anaphylaxis) after a previous dose or to a vaccine component&lt;br&gt;For Tdap only: Encephalopathy (e.g., coma, decreased level of consciousness, or prolonged seizures) not attributable to another identifiable cause within 7 days of administration of a previous dose of DTP, DTaP, or Tdap</td>
<td>• Moderate or severe acute illness with or without fever&lt;br&gt;• GBS within 6 weeks after a previous dose of tetanus toxoid-containing vaccine&lt;br&gt;• History of arthus-type hypersensitivity reactions after a previous dose of tetanus or diphtheria toxoid-containing vaccine; defer vaccination until at least 10 years have elapsed since the last tetanus toxoid-containing vaccine&lt;br&gt;• For Tdap only: Progressive or uncontrolled seizures, or progressive encephalopathy until a treatment regimen has been established and the condition has stabilized</td>
</tr>
<tr>
<td>Varicella (Var)²</td>
<td>• Severe allergic reaction (e.g., anaphylaxis) after a previous dose or to a vaccine component&lt;br&gt;Known severe immunodeficiency (e.g., from hematologic and solid tumors, receipt of chemotherapy, congenital immunodeficiency or long-term immunosuppressive therapy⁶ or patients with HIV infection who are severely immunocompromised)&lt;br&gt;Pregnancy</td>
<td>• Moderate or severe acute illness with or without fever&lt;br&gt;• Recent (within 11 months) receipt of antibody-containing blood product (specific interval depends on product)⁴&lt;br&gt;• Receipt of specific antivirals (i.e., acyclovir, famciclovir, or valacyclovir) 24 hours before vaccination, if possible; delay resumption of these antiviral drugs for 14 days after vaccination</td>
</tr>
<tr>
<td>Human papillomavirus (HPV)</td>
<td>• Severe allergic reaction (e.g., anaphylaxis) after a previous dose or to a vaccine component</td>
<td>• Moderate or severe acute illness with or without fever&lt;br&gt;Pregnancy</td>
</tr>
<tr>
<td>Zoster (Zos)</td>
<td>• Severe allergic reaction (e.g., anaphylaxis) to a vaccine component&lt;br&gt;Known severe immunodeficiency (e.g., from hematologic and solid tumors, receipt of chemotherapy, or long-term immunosuppressive therapy³ or patients with HIV infection who are severely immunocompromised)&lt;br&gt;Pregnancy</td>
<td>• Moderate or severe acute illness with or without fever&lt;br&gt;• Receipt of specific antivirals (i.e., acyclovir, famciclovir, or valacyclovir) 24 hours before vaccination, if possible; avoid use of these antiviral drugs for 14 days after vaccination</td>
</tr>
<tr>
<td>Measles, mumps, rubella (MMR)²</td>
<td>• Severe allergic reaction (e.g., anaphylaxis) after a previous dose or to a vaccine component&lt;br&gt;Known severe immunodeficiency (e.g., from hematologic and solid tumors, receipt of chemotherapy, congenital immunodeficiency, long-term immunosuppressive therapy⁶ or patients with HIV infection who are severely immunocompromised)&lt;br&gt;Pregnancy</td>
<td>• Moderate or severe acute illness with or without fever&lt;br&gt;• Recent (within 11 months) receipt of antibody-containing blood product (specific interval depends on product)⁴&lt;br&gt;• History of thrombocytopenia or thrombocytopenic purpura&lt;br&gt;• Need for tuberculin skin testing⁵</td>
</tr>
<tr>
<td>Pneumococcal polysaccharide (PPSV)</td>
<td>• Severe allergic reaction (e.g., anaphylaxis) after a previous dose or to a vaccine component</td>
<td>• Moderate or severe acute illness with or without fever</td>
</tr>
<tr>
<td>Meningococcal: conjugate (MCV4); polysaccharide (MPSV4)</td>
<td>• Severe allergic reaction (e.g., anaphylaxis) after a previous dose or to a vaccine component</td>
<td>• Moderate or severe acute illness with or without fever</td>
</tr>
<tr>
<td>Hepatitis A (HepA)</td>
<td>• Severe allergic reaction (e.g., anaphylaxis) after a previous dose or to a vaccine component</td>
<td>• Moderate or severe acute illness with or without fever&lt;br&gt;Pregnancy</td>
</tr>
<tr>
<td>Hepatitis B (HepB)</td>
<td>• Severe allergic reaction (e.g., anaphylaxis) after a previous dose or to a vaccine component</td>
<td>• Moderate or severe acute illness with or without fever</td>
</tr>
</tbody>
</table>

**Footnotes**

1. Vaccine package inserts and the full ACIP recommendations for these vaccines should be consulted for additional information on vaccine-related contraindications and precautions and for more information on vaccine excipients. Events or conditions listed as precautions should be reviewed carefully. Benefits of and risks for administering a specific vaccine to a person under these circumstances should be considered. If the risk from the vaccine is believed to outweigh the benefit, the vaccine should not be administered. If the benefit of vaccination is believed to outweigh the risk, the vaccine should be administered.

2. LAIV, MMR, and varicella vaccines can be administered on the same day. If not administered on the same day, these live vaccines should be separated by at least 28 days.

3. Known severe immunodeficiency (e.g., from hematologic and solid tumors, receipt of chemotherapy, congenital immunodeficiency or long-term immunosuppressive therapy or patients with HIV infection who are severely immunocompromised).

4. Substantially immunosuppressive steroid dose is considered to be 2 weeks or more of daily receipt of 20 mg (or 2 mg/kg body weight) of prednisone or equivalent.

5. Vaccine should be deferred for the appropriate interval if replacement immune globulin products are administered (see Table 5 in CDC. "General Recommendations on Immunization: Recommendations of the Advisory Committee on Immunization Practices [ACIP]") at www.cdc.gov/vaccines/pubs/acip-list.htm).

6. Measles vaccination might suppress tuberculin reactivity temporarily. Measles-containing vaccine can be administered on the same day as tuberculin skin testing. If testing cannot be performed until after the day being administered (see Table 5 in CDC. "General Recommendations on Immunization: Recommendations of the Advisory Committee on Immunization Practices [ACIP]") at www.cdc.gov/vaccines/pubs/acip-list.htm).

7. GBS) within 6 wks of previous vaccination.


Technical content reviewed by the Centers for Disease Control and Prevention, March 2012. Technical content reviewed by the Centers for Disease Control and Prevention, March 2012. Technical content reviewed by the Centers for Disease Control and Prevention, March 2012. Technical content reviewed by the Centers for Disease Control and Prevention, March 2012.
Tips for Locating Old Immunization Records

Immunization records often are needed for entry into childcare, kindergarten, school, summer camp, and college or other post-high school training, as well as for future employment and international travel. If you are seeing a new healthcare provider, you will need this information to ensure you receive proper medical care. Providers usually count only those vaccine doses that are documented on a written record or available on a local computerized immunization information system. Unfortunately, no national organization maintains this information. So, if immunization records are lost or not available, you or your child may have to repeat vaccine doses. Piecing together old immunization information can be difficult and time-consuming. Here are some ideas that might help you reconstruct this information.

PLACES YOU MAY WANT TO CHECK:

- **All previous healthcare providers** – Don’t forget vaccination visits you made to local public health departments or neighborhood clinics. Sometimes when physicians retire or a medical practice changes hands, old patient records are sent to a medical record storage company. You may be able to obtain records directly from the company, but you may have to pay a fee.

- **Your home** – Look through your old papers, including baby books and school or camp forms. If you’re an adult, don’t forget to ask your mother or father if they still have your childhood records.

- **Schools and colleges or other post-secondary institutions** you or your child attended.

- **Previous employers**, including the military.

- **Local immunization registry** – Most states and some cities have centralized registries of vaccines given by local providers. Although a registry may not have all records, this still can be a great place to check. The Centers for Disease Control and Prevention (CDC) has a listing of registry contacts and websites at [www.cdc.gov/vaccines/programs/iis/contacts-state-iis.htm](http://www.cdc.gov/vaccines/programs/iis/contacts-state-iis.htm). Or to find the phone number of your local health department, call 800-CDC-INFO (232-4636).

When you find your records

Congratulations! Now you should take the records you have found to your provider or local public health clinic and ask them to document this information on an official record, and, if possible, in the state or local immunization registry. Many schools, camps, etc., will accept only this type of “provider-verified” record because this ensures the information has been evaluated and corroborated by a medical professional. But if you’re unable to visit your provider or clinic, your next best option is to consolidate this information on an immunization record card, available through your state health department or at [www.immunize.org/recordcards](http://www.immunize.org/recordcards). You should document the name of the vaccine, the date it was given, the name of the provider or clinic that administered it, and any additional information found on the record. Be sure to place all your supporting documentation in a safe place where you can find it.

What if you don’t find your records?

In general, both children and adults will need to repeat some vaccines. Although this is time-consuming and inconvenient, it is not harmful to receive additional vaccine doses. For a few vaccines, blood tests can help determine if you’re already immune to certain diseases. Your healthcare provider can help you determine exactly what’s best for you.

For the future...

To avoid hunting for old records and possibly repeating undocumented vaccinations, remember to bring your or your child’s immunization record card to EVERY medical appointment. Keep your personal record in your wallet, a vinyl sleeve, or a Ziploc bag. It is also a good idea to keep a back-up copy where you store your important papers. Make sure all vaccines you are given are documented on this card or a supplemental record. Ask that your vaccines also be documented in an immunization registry, whenever possible. Remember, you need to rely on YOU to keep these records. This will help you save time, reduce hassles, and be ready to provide your immunization history whenever it’s needed in the future!
Here Are Standing Orders for Adult Vaccinations

Click blue text to view standing orders documents

<table>
<thead>
<tr>
<th>Vaccine</th>
<th>Vaccine Reactions</th>
<th>(Date of last revision)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hepatitis A (HepA)</td>
<td></td>
<td>(1/11)</td>
</tr>
<tr>
<td>Hepatitis B (HepB)</td>
<td></td>
<td>(2/12)</td>
</tr>
<tr>
<td>Human papillomavirus (HPV)</td>
<td></td>
<td>(5/12)</td>
</tr>
<tr>
<td>Influenza</td>
<td></td>
<td>(8/11)</td>
</tr>
<tr>
<td>Measles-mumps-rubella (MMR)</td>
<td></td>
<td>(1/08)</td>
</tr>
<tr>
<td>Meningococcal conjugate (MCV4) and Meningococcal polysaccharide (MPSV)</td>
<td></td>
<td>(2/12)</td>
</tr>
<tr>
<td>Pneumococcal polysaccharide (PPSV)</td>
<td></td>
<td>(1/11)</td>
</tr>
<tr>
<td>Tetanus-diphtheria toxoids and pertussis (Tdap/Td)</td>
<td></td>
<td>(5/12)</td>
</tr>
<tr>
<td>Varicella (VAR; chickenpox)</td>
<td></td>
<td>(7/08)</td>
</tr>
<tr>
<td>Zoster (ZOS; shingles)</td>
<td></td>
<td>(5/08)</td>
</tr>
</tbody>
</table>

Medical Management of Vaccine Reactions in Adult Patients (4/11)
Order Essential Immunization Resources from IAC

Laminated immunization schedules give you solid information for 2012—order today!

IAC has two laminated immunization schedules for 2012—one for adults and one for children/teens. Based on CDC’s immunization schedules, these laminated schedules are covered with a tough, washable coating. This allows them to stand up to a year’s worth of use as at-your-fingertips guides to immunization and as teaching tools you can use to give patients and parents authoritative information. Plus, each schedule includes a guide to vaccine contraindications and precautions, an additional feature that will help you make on-the-spot determinations about the safety of vaccinating patients of any age.

To order laminated schedules, or any of our other essential immunization resources listed below, print out and mail or fax this page, or place your order online at www.immunize.org/shop.

### How to Place an Order

**By Credit Card:** Order easily online at our secure shopping cart at www.immunize.org/shop.

**By Check, Purchase Order, or Credit Card:** Print out this page, fill out the necessary information, and

**Fax the page to:** (651) 647-9131 or

**Mail the page to:** Immunization Action Coalition

1573 Selby Avenue, Suite 234

St. Paul, MN 55104

Our federal ID# is 41-1768237.

For Questions or International Orders: Contact us by phone at (651) 647-9009 or email admininfo@immunize.org

Thank you for your support of the Immunization Action Coalition. We depend on you!

### Order Essential Immunization Resources

<table>
<thead>
<tr>
<th>Qty.</th>
<th>Laminated 2012 U.S. Immunization Schedules (details p. 3; call for discounts on bulk orders)</th>
<th>Amt.</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Adult schedule: 1-4 copies—$7.50 each; 5-19 copies—$5.50 each.......................... $</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Child/teen schedule: 1-4 copies—$7.50 each; 5-19 copies—$5.50 each........................ $</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Qty.</th>
<th>DVD – Immunization Techniques: Best Practices with Infants, Children, and Adults (details p. 3; call for discounts on bulk orders)</th>
<th>Amt.</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>1-9 copies—$17 each; 10-24 copies—$10.25 each; 25-49 copies—$7 each................................................................ $</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Immunization Techniques: Best Practices with Children/Teens/Adults .......................................................... $</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Qty.</th>
<th>Patient Immunization Record Cards — for for adults, children &amp; teens, and for a lifetime! (all are wallet-sized; details p. 3; call for discounts on bulk orders)</th>
<th>Amt.</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>250 cards/box; 1 box—$45; 2 boxes—$40 each; 3 boxes—$37.50 each; 4 boxes—$34.50 each........................ $</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Adult immunization record cards ......................................................... $</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Child/teen immunization record cards ................................................. $</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Lifetime immunization record cards .................................................... $</td>
<td></td>
</tr>
</tbody>
</table>

Total for Purchases $ ______

### Make a Charitable Contribution

I am a ☐ new ☐ renewing contributor.

Here is my contribution:

☐ $25 ☐ $50 ☐ $75 ☐ $100 ☐ $125

☐ $150 ☐ $200 ☐ $250 ☐ other: ______

IAC is a 501(c)(3) charitable organization and your contribution is tax deductible to the fullest extent of the law.

Total for Purchases and Contribution $ ______

### It’s convenient to shop IAC online at www.immunize.org/shop