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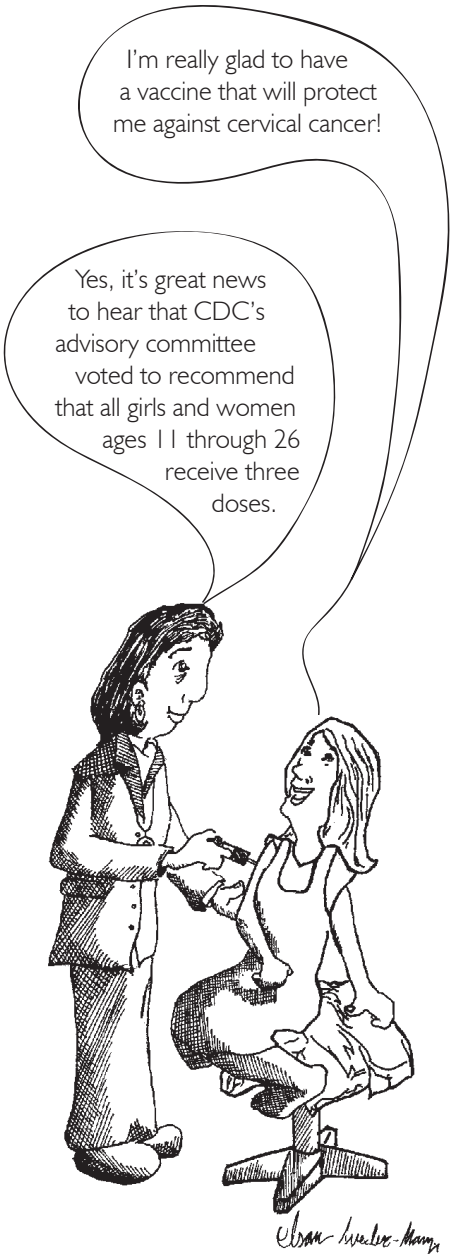
VACCINATE WOMEN

A periodical for obstetrician/gynecologists from the Immunization Action Coalition

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



What's Inside?

Ask the Experts

Editor's note: The Immunization Action Coalition thanks William L. Atkinson, MD, MPH, Andrew T. Kroger, MD, MPH, and Eric E. Mast, MD, MPH, of the Centers for Disease Control and Prevention (CDC) for answering the following questions for our readers. Dr. Atkinson is a medical epidemiologist, and Dr. Kroger is a medical officer, both at CDC's National Immunization Program. Dr. Mast is chief, Prevention Branch, at CDC's Division of Viral Hepatitis.

Immunization Questions

by William L. Atkinson, MD, MPH and Andrew T. Kroger, MD, MPH

How common is human papillomavirus (HPV) infection?

HPV is the most common sexually transmitted infection in the United States. Currently, more than 20 million men and women in the United States are infected with HPV, and more than 6 million are estimated to become infected each year. HPV is most common in young women and men in their late teens and early 20s. By age 50, at least 80 percent of sexually active women will have acquired HPV infection.

How serious is disease caused by HPV?

HPV infection can lead to cervical cancer in women as well as to other cancers that can affect males or females. Cervical cancer is diagnosed in more than 9,700 women each year in the United States each year and causes 3,700 deaths. Seventy percent of cervical cancers are caused by strains of HPV included in the newly licensed HPV vaccine. HPV also causes genital warts in men and women.

Please provide more information about the new HPV vaccine.

Gardasil™, manufactured by Merck, is the first vaccine developed to prevent cervical cancer, precancerous genital lesions, and genital warts due to HPV. The vaccine is highly effective against four types of the HPV virus, including two that cause about 70 percent of cervical cancer. HPV-vaccine recipients who have not acquired HPV would get the full benefits of the vaccine. Though women already infected with an HPV vaccine type virus will not benefit from that part of the vaccine, they could still benefit from the other vaccine virus types.

What are the recommendations for use of HPV vaccine?

The Advisory Committee on Immunization Practices (ACIP) voted to recommend that it be routinely given to girls ages 11–12 years, though it can be given to girls as young as 9 years. ACIP also voted to recommend that girls and women ages 13 through 26 years receive the vaccine. Ideally vaccine should be administered before onset of sexual activity, but sexually active females should still be vaccinated.

Gardasil is licensed as a 3-dose series, with dose #2 given 2 mos after dose #1, and dose #3 given 4 mos after dose #2. The vaccine should be given IM in the deltoid. ACIP recommendations do not become official until they are published in the *MMWR,* which is expected to occur later this year. ACOG will be publishing recommendations for the use of HPV vaccine soon. For more information on the use of HPV vaccine, consult the package insert: www.fda.gov/cber/label/hpvmer060806LB.pdf.

If a woman is diagnosed with HPV, should she still be vaccinated?

Yes. Although the vaccine would not alter the clinical course of the current infection, she would still benefit from protection against the other virus types in the vaccine.

Since men transmit HPV, why isn't the vaccine recommended for them also?

Studies of the safety and immunogenicity among males are not yet complete. It is possible that HPV vaccine will be recommended for males at a later date.

Immunization questions?

- Call the CDC-INFO Contact Center at (800) 232-4636 or (800) CDC-INFO
- Email nipinfo@cdc.gov
- Call your state health dept. (phone numbers at www.immunize.org/coordinators)

What is the Current Procedural Terminology (CPT) code for HPV vaccine?

It is 90649. CPT codes are used for billing.

Which adults should receive Tdap (the pertussis-containing vaccine for adults)?

A one-time dose of Tdap should replace a dose of Td for any adult younger than age 65 years, either as part of a primary series of tetanus and diphtheria toxoid or as a 10-year booster. Certain adults should get Tdap with an interval of 2 years or less following their previous Td dose if they are (1) a

(continued on page 2)

Vaccinate Women

Immunization Action Coalition
Hepatitis B Coalition
1573 Selby Avenue, Suite 234
St. Paul, MN 55104
Phone: (651) 647-9009
Fax: (651) 647-9131
Email: admin@immunize.org
Websites: www.immunize.org
www.vaccineinformation.org
www.hepprograms.org
www.izcoalitions.org

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Publication Staff
Editor: Deborah L. Wexler, MD
Associate Editor: Diane C. Peterson
Managing Editor: Dale Thompson
Editorial Asst.: Janelle Tangonan Anderson
Consultant: Linda A. Moyer, RN
Layout: Kathy Cohen

IAC Staff
Assistant to the Director: Becky Payne
Office Administrator: Robin VanOss
Administrative Asst.: Susan Broadribb
Website Design: Lantern Web™

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

The Hepatitis B Coalition, a program of IAC, promotes hepatitis B vaccination for all persons ages 0–30 years; HBsAg screening for all pregnant women; testing and vaccination for high-risk groups; and education and treatment for people chronically infected with hepatitis B virus.

parent or caregiver of a child younger than age 12 months, (2) a healthcare worker having direct patient contact, or (3) at risk for pertussis due to increased pertussis activity or during outbreaks.

Which Tdap products can be used in adults?
Adacel (sanofi pasteur) is licensed for use in persons ages 11–64 years. Boostrix® (GlaxoSmithKline) is licensed for use in persons ages 10–18 years. Neither product is licensed for persons ages 65 years and older, so Td should be used in this age group whenever needed.

Can Tdap be given to pregnant women?
ACIP recently voted to recommend using Td (not Tdap) during pregnancy if a routine tetanus booster is needed. If the previous Td booster was given within the preceding 10 years, the new mother should receive Tdap immediately postpartum. However there are situations when a clinician can consider the use of Tdap for a pregnant woman, such as if there is a risk of exposure because of a pertussis outbreak. Tdap is not contraindicated for pregnant women. The infant's other household contacts ages 10–64 years should also receive Tdap.

I heard there is a new vaccine to prevent shingles. How effective is it and how should it be used?
In May 2006, the FDA licensed Zostavax® by Merck to prevent herpes zoster (shingles) as a 1-dose vaccination for all persons ages 60 years and older. In clinical trials, Zostavax reduced the risk of developing shingles by 51 percent, compared with placebo. ACIP has not yet made recommendations for the use of Zostavax.

Which healthcare workers in Ob/Gyn practices need influenza vaccine?
All of them. It is important to vaccinate all outpatient and hospital healthcare personnel who have contact with patients.

Which of my patients should be vaccinated against influenza?
Influenza vaccination is recommended for all women who will be pregnant during the influenza season (December through March) during any trimester. Additionally, influenza vaccine should be administered to (1) all persons age 50 years or older, (2) all persons with chronic medical conditions (e.g., pulmonary/cardiovascular, diabetes), (3) all persons who live with a person who has a high-risk condition and/or all persons who are caretakers or household contacts of children ages birth to 5 years. Influenza vaccine can also be given to any person who wishes to be protected against influenza.

How can I stay up to date on all that's new in immunization?
One easy method is to sign up for *IAC Express,* a weekly (and sometimes more often) email news service from IAC. Simply go to www.immunize.org/express and subscribe. It's available free of charge.

Where can I find information on vaccine handling and storage?
A toolkit containing general guidelines for correct vaccine storage and handling can be found on CDC's website at www2a.cdc.gov/nip/isd/shtoolkit/splash.html.

How can our nursing staff stay current on immunization techniques?
A video "Immunization Techniques: Safe, Effective, Caring," is available in VHS tape and DVD disk formats. It can be ordered at www.immunize.org/iztech.

Where can I get samples of standing orders for various vaccines?
IAC has developed standing orders for most childhood and adult vaccines. You can find them at www.immunize.org/standingorders.

Hepatitis B

by Eric E. Mast, MD, MPH

Where can I obtain a copy of the new ACIP hepatitis B recommendations for infants, children, and teens?
These recommendations were published in *MMWR* on 12/23/05. The entire document is available at www.cdc.gov/mmwr/pdf/rr/rr5416.pdf. In addition, CDC released a "Dear Colleague" letter that summarizes succinctly the updated hepatitis B recommendations that prenatal care providers, delivery hospitals, newborn care providers, and health departments should follow to prevent perinatal and early childhood HBV transmission. To obtain the letter, go to www.immunize.org/acip/HBVinfant_dearcolleague.pdf.

How have the universal hepatitis B birth dose recommendations been strengthened?
The recommendations to administer hepatitis B vaccine at birth now include the following:

- All delivery hospitals should implement standing orders for administration of hepatitis B vaccine as part of routine medical care of all medically stable infants weighing 2 kg (4.4 lb) or more at birth.
- All medically stable infants weighing 2 kg or more at birth and born to HBsAg-negative mothers should receive the first dose of vaccine before hospital discharge.
- On a case-by-case basis and only in rare circumstances, the first dose may be delayed until after hospital discharge for an infant who weighs 2 kg or more and whose mother is HBsAg negative. When such a decision is made, a physician's order

not to give the birth dose must be written, and a copy of the original laboratory report indicating that the mother was HBsAg negative during this pregnancy should be placed in the infant's medical record.

Do AAP, AAFP, and ACOG all agree with the birth dose recommendations from CDC?
Yes.

What are the new recommendations for prenatal HBsAg testing and management of pregnant women?

- All pregnant women should be tested routinely for HBsAg during an early prenatal visit (e.g., first trimester) in **each** pregnancy, even if they have been previously vaccinated or tested.
- Women who were not screened prenatally, those with clinical hepatitis, and those who engage in behaviors that put them at increased risk for HBV infection (e.g., recent or current injection drug use, having had sex with more than one partner in the previous 6 months or with an HBsAg-positive partner, or evaluation or treatment for an STD) should be tested at the time of admission to the hospital for delivery.
- All laboratories that provide HBsAg testing of pregnant women should use an FDA-licensed or FDA-approved HBsAg test and should perform testing according to the manufacturer's labeling. This includes testing of initially reactive specimens with a licensed neutralizing confirmatory test.
- When pregnant women are tested for HBsAg at the time of admission for delivery, shortened testing protocols may be used and initially reactive results should be reported to expedite administration of immunoprophylaxis to infants.
- Women who are HBsAg positive should be referred to an appropriate case-management program to ensure that their infants receive timely postexposure prophylaxis and follow-up.
- A copy of the original lab report indicating the pregnant woman's HBsAg status should be provided to the hospital where delivery is planned and to the healthcare provider who will care for the newborn.
- Women who are HBsAg positive should be provided with or referred for appropriate counseling and medical evaluation and receive information concerning hepatitis B that discusses
  - modes of transmission;
  - perinatal concerns (e.g., infants who are born to HBsAg-positive mothers may be breast-fed);
  - prevention of HBV transmission to contacts, including the importance of postexposure immunoprophylaxis for the newborn infant and hepatitis B vaccination for household, sexual, and needle-sharing contacts;
  - substance abuse treatment, if appropriate;
  - medical evaluation and possible treatment of chronic hepatitis B.
- When HBsAg testing of pregnant women is not feasible (i.e., in remote areas without access to a laboratory), all infants should receive hepatitis B vaccine no later than 12 hours after birth and should complete the hepatitis B vaccine series according to a recommended schedule for infants born to HBsAg-positive mothers.

Are all HBsAg-positive test results for pregnant women supposed to be reported to the state health department?
Yes. This reporting is critical as it helps assure appropriate case management of infants born to HBV-infected mothers and counseling and medical evaluation for the infected mothers.

Do you have patients who are HBsAg-positive?

They need medical monitoring, including liver cancer screening; many can benefit from treatment.

The FDA licenses five medications for treatment in the United States. They are interferon alfa-2b and peginterferon alfa-2a (administered subcutaneously); and adefovir dipivoxil, entecavir, and lamivudine (administered orally).

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

Visit IAC websites

www.immunize.org
www.vaccineinformation.org
www.hepprograms.org
www.izcoalitions.org

Guidelines for Standing Orders in Labor & Delivery and Nursery Units to Prevent Hepatitis B Virus Transmission to Newborns

In December 2005, the Centers for Disease Control and Prevention (CDC) published updated recommendations of the Advisory Committee on Immunization Practices (ACIP) for prevention of hepatitis B virus (HBV) infections in infants, children, and adolescents. The American Academy of Pediatrics, American Academy of Family Physicians, and American College of Obstetricians and Gynecologists have endorsed these recommendations. To obtain a copy of these recommendations, go to www.cdc.gov/mmwr/PDF/rr/rr5416.pdf.

CDC recommends that all delivery hospitals institute standing orders to ensure

- Administration of hepatitis B vaccine to all medically stable newborns weighing at least 2 kg (4.4 lb) at birth before discharge from the nursery.
- Identification of infants born to hepatitis B surface antigen (HBsAg)-positive mothers and infants born to mothers with unknown HBsAg status and administration of appropriate immunoprophylaxis to these infants.

The guidance below has been developed to help your hospital establish standing orders in the labor and delivery and nursery units and has been reviewed by CDC staff for consistency with ACIP recommendations.

Labor and Delivery (L&D) standing orders

Upon admission, review the HBsAg[1] status of all pregnant women. You must review a copy of the mother's original laboratory report to verify that the correct test was performed during this pregnancy and to verify the test date. Do not rely on a transcribed test result!

For women with a documented HBsAg test result

- Place a copy of the original laboratory report of the mother's HBsAg[1] test result into (1) the mother's L&D record and (2) the infant's medical record.
- If the mother is HBsAg positive, alert the nursery staff.
- If the mother is HBsAg negative and is at risk for HBV infection during this pregnancy (e.g., had more than one sex partner in the previous 6 months; had an HBsAg-positive sex partner; had evaluation or treatment for a sexually transmitted disease; currently uses or recently used injection drugs), perform a repeat test for HBsAg.[1] Instruct the laboratory to call L&D and the nursery with the HBsAg test result ASAP.

For women without a documented HBsAg test result

- Perform HBsAg[1] testing ASAP on women who do not have a documented HBsAg test result from the current pregnancy.
- Instruct the lab to call L&D and the nursery with the HBsAg test result ASAP.

Nursery standing orders

For all newborns

- Review a copy of the mother's original HBsAg[1] lab report. Provide appropriate management based on (1) the mother's HBsAg status and (2) the infant's birth weight. Manage those who weigh less than 2 kg differently from those who weigh 2 kg or more (see below and footnotes 2, 5, 6).
- Ensure that a copy of the original maternal HBsAg[1] laboratory report is in the infant's medical record.

For infants born to HBsAg-negative mothers

- Administer single-antigen hepatitis B vaccine (0.5 mL, IM) before discharge to all infants weighing at least 2 kg at birth.[2, 3, 4] Document the hepatitis B vaccine dose appropriately in the infant's medical record, including date and time of administration.
- Give the mother an immunization record card that includes the hepatitis B vaccination date, and explain the need for a complete hepatitis B vaccine series to fully protect her baby. Remind the mother to bring the card with her each time her baby sees a provider.

For infants born to mothers with unknown HBsAg status

- Administer single-antigen hepatitis B vaccine (0.5 mL, IM) within 12 hours of birth.[3, 5] Do not wait for test results to return before giving this dose of vaccine! Document the hepatitis B vaccine dose appropriately.
- Give the mother an immunization record card that includes the hepatitis B vaccination date. Explain the need for further doses to fully protect her baby. Remind the mother to bring the card with her each time her baby sees a provider.
- Confirm that the laboratory has received serum for the mother's HBsAg[1] test. Verify when the HBsAg result will be available and that it will be reported to L&D and the nursery ASAP. If the nursery does not receive the report at the expected time, call the laboratory for the result.
- If the mother's HBsAg[1] test result comes back positive
  - Administer hepatitis B immune globulin (HBIG 0.5 mL, IM) to the infant ASAP. Document the HBIG dose appropriately in the infant's medical record. There is little benefit in giving HBIG if more than 7 days have elapsed since birth.
  - Alert the mother's and infant's physician(s) of the test result.
  - Follow the instructions below for infants born to HBsAg-positive mothers.
- If the infant must be discharged before the HBsAg result is known
  - Document contact information for the parents (e.g., addresses, telephone numbers, emergency contacts) in case further treatment is needed.
  - Obtain the name, address, and phone number of the mother's and the infant's healthcare provider.
  - Notify the mother's and the infant's healthcare provider that the mother's HBsAg test result is pending.

For infants born to HBsAg-positive mothers

- Administer HBIG (0.5 mL, IM) and single-antigen hepatitis B vaccine[3, 6] (0.5 mL, IM) at separate injection sites within 12 hours of birth. Document the hepatitis B vaccine and HBIG doses appropriately in the infant's medical record, including date and time of administration.
- Give the mother an immunization record card that includes the date of the hepatitis B vaccine and HBIG doses, and explain the need for further doses of hepatitis B vaccine to fully protect her baby. Remind the mother to bring the card with her each time her baby sees a provider.
- Notify the local or state health department of the infant's birth and the date and time of administration of HBIG and hepatitis B vaccine doses.
- Obtain the name, address, and phone number of the infant's primary care provider. Notify the provider of the infant's birth, the date and time of HBIG and hepatitis B vaccine doses administered, and the importance of additional on-time vaccination and postvaccination testing of the infant for HBsAg and antibody to HBsAg after completion of the hepatitis B vaccine series.
- Provide advice to the mother. Tell her
  - About the importance of her infant completing the full hepatitis B vaccine series on schedule
  - About modes of HBV transmission and the need for vaccination of her susceptible household, sexual, and needle-sharing contacts
  - That she may breast-feed her infant upon delivery, even before hepatitis B vaccine and HBIG are given
  - That blood will need to be drawn from the infant after completion of the hepatitis B vaccine series at age 9–18 months to determine if the infant needs further management
  - That she needs to have a medical evaluation for chronic hepatitis B, including an assessment of whether she is eligible for antiviral treatment

Footnotes

1. Be sure the correct test for HBsAg (hepatitis B surface antigen) was/is ordered. The HBsAg test should not be confused with other hepatitis B serologic tests, including antibody to HBsAg (anti-HBs or HBsAb) and antibody to hepatitis B core antigen (anti-HBc or HBcAb).
2. Infants weighing less than 2 kg whose mothers are documented to be HBsAg negative should receive the first dose of vaccine 1 month after birth or at hospital discharge. The mother's HBsAg status must be part of the infant's medical record.
3. Federal law requires that you give parents a Hepatitis B Vaccine Information Statement (VIS) before vaccine administration. To obtain a VIS, download from the IAC website at www.immunize.org/vis or call your state health department.
4. Exceptions to giving the birth dose of hepatitis B vaccine are allowed on a case-by-case basis and only in rare circumstances. If a birth dose is not administered, a copy of the mother's negative HBsAg test result from the current pregnancy must be placed in the infant's medical record and the attending physician must write a specific order directing staff not to administer the birth dose in the hospital.
5. An infant weighing less than 2 kg whose mother's HBsAg status is unknown should receive HBIG and hepatitis B vaccine within 12 hours of birth. Do not count the hepatitis B vaccine dose as the first dose in the vaccine series. Reinitiate the full hepatitis B vaccine series at age 1–2 months.
6. An infant weighing less than 2 kg whose mother is HBsAg positive should receive the first dose of hepatitis B vaccine and HBIG within 12 hours of birth. Do not count the hepatitis B vaccine dose as the first dose in the vaccine series. Reinitiate the full hepatitis B vaccine series at age 1–2 months.

www.immunize.org/catg.d/p2130per.pdf • Item #2130 (4/06)

Summary of Recommendations for Adult Immunization

Adapted from the recommendations of the Advisory Committee on Immunization Practices (ACIP)* by the Immunization Action Coalition, July 2006

Vaccine name and route	For whom vaccination is recommended	Schedule for vaccine administration (any vaccine can be given with another)	Contraindications and precautions (mild illness is not a contraindication)
Influenza Trivalent inactivated influenza vaccine (TIV) *Give IM*	• Persons age 50yrs and older. • Persons with medical problems (e.g., heart disease, lung disease, diabetes, renal dysfunction, hemoglobinopathy, immunosuppression) and/or people living in chronic-care facilities. • Persons with any condition that compromises respiratory function or the handling of respiratory secretions or that can increase the risk of aspiration (e.g., cognitive dysfunction, spinal cord injury, seizure disorder, or other neuromuscular disorder). • Persons working or living with at-risk people. • Women who will be pregnant during the influenza season (December–March). • All healthcare workers and other persons who provide direct care to at-risk people. • Household contacts and out-of-home caregivers of children ages 0–59m. • Travelers at risk for complications of influenza who go to areas where influenza activity exists or who may be among people from areas of the world where there is current influenza activity (e.g., on organized tours). • Persons who provide essential community services. • Students or other persons in institutional settings (e.g., dormitory residents). • Anyone wishing to reduce the likelihood of becoming ill with influenza.	• Given every year in the fall or winter. • October and November are the ideal months to give TIV. • LAIV may be given as early as August. • Continue to give TIV and LAIV through the influenza season from December through March (including when influenza activity is present in the community) and at other times when the risk of influenza exists.	**Contraindication** Previous anaphylactic reaction to this vaccine, to any of its components, or to eggs. **Precaution** • Moderate or severe acute illness. • History of Guillain-Barré syndrome within 6wks of previous TIV.
Influenza Live attenuated influenza vaccine (LAIV) *Give intranasally*	• Healthy, non-pregnant persons age 49yrs and younger who meet any of the conditions listed below. - Working or living with at-risk people as listed in the section above. - Healthcare workers or other persons who provide direct care to at-risk people (except persons in close contact with severely immunosuppressed persons). - Household contacts and out-of-home caregivers of children ages 0–59m. - Travelers who may be among people from areas of the world where there is current influenza activity (e.g., on organized tours). - Persons who provide essential community services. - Students or other persons in institutional settings (e.g., dormitory residents). - Anyone wishing to reduce the likelihood of becoming ill with influenza.		**Contraindications** • Previous anaphylactic reaction to this vaccine, to any of its components, or to eggs. • Pregnancy, asthma, reactive airway disease or other chronic disorder of the pulmonary or cardiovascular system; an underlying medical condition, including metabolic disease such as diabetes, renal dysfunction, and hemoglobinopathy; a known or suspected immune deficiency disease or receiving immunosuppressive therapy; history of Guillain-Barré syndrome. **Precaution** Moderate or severe acute illness.
Pneumococcal poly-saccharide (PPV23) *Give IM or SC*	• Persons age 65yrs and older. • Persons who have chronic illness or other risk factors, including chronic cardiac or pulmonary disease, chronic liver disease, alcoholism, diabetes, CSF leak, as well as people living in special environments or social settings (including Alaska Natives and certain American Indian populations). Those at highest risk of fatal pneumococcal infection are persons with anatomic asplenia, functional asplenia, or sickle cell disease; immunocompromised persons including those with HIV infection, leukemia, lymphoma, Hodgkin's disease, multiple myeloma, generalized malignancy, chronic renal failure, or nephrotic syndrome; persons receiving immunosuppressive chemotherapy (including corticosteroids); and those who received an organ or bone marrow transplant and candidates for or recipients of cochlear implants.	• Routinely given as a one-time dose; administer if previous vaccination history is unknown. • One-time revaccination is recommended 5yrs later for persons at highest risk of fatal pneumococcal infection or rapid antibody loss (e.g., renal disease) and for persons age 65yrs and older if the 1st dose was given prior to age 65 and 5yrs or more have elapsed since the previous dose.	**Contraindication** Previous anaphylactic reaction to this vaccine or to any of its components. **Precaution** Moderate or severe acute illness.

*For specific ACIP recommendations, refer to the official ACIP statements published in *MMWR*. To obtain copies of these statements, call the CDC-INFO Contact Center at (800) 232-4636; visit CDC's website at www.cdc.gov/nip/publications/ACIP-list.htm; or visit the Immunization Action Coalition (IAC) website at www.immunize.org/acip.

This table is revised periodically. Visit IAC's website at www.immunize.org/adultrules to make sure you have the most current version. IAC thanks William Atkinson, MD, MPH, from CDC's National Immunization Program for his assistance. For more information, contact IAC at 1573 Selby Avenue, St. Paul, MN 55104, (651) 647-9009, or email admin@immunize.org.

Summary of Recommendations for Adult Immunization (continued)

Vaccine name and route	For whom vaccination is recommended	Schedule for vaccine administration (any vaccine can be given with another)	Contraindications and precautions (mild illness is not a contraindication)
Hepatitis B (Hep B) *Give IM* Brands may be used interchangeably.	• All adolescents; any adult wishing to obtain immunity. • High-risk persons, including household contacts and sex partners of HBsAg-positive persons; injecting drug users; heterosexuals with more than one sex partner in 6 months; men who have sex with men; persons with recently diagnosed STDs; patients receiving hemodialysis and patients with renal disease that may result in dialysis; recipients of certain blood products; healthcare workers and public safety workers who are exposed to blood; clients and staff of institutions for the developmentally disabled; inmates of long-term correctional facilities; and certain international travelers. • Persons with chronic liver disease. **Note:** Provide serologic screening for immigrants from endemic areas. When HBsAg-positive persons are identified, offer appropriate disease management. In addition, screen their sex partners and household members, and give the first dose of vaccine at the same visit. If found susceptible, complete the vaccine series.	• Three doses are needed on a 0, 1, 6m schedule. • Alternative timing options for vaccination include 0, 2, 4m and 0, 1, 4m. • There must be 4wks between doses #1 and #2, and 8wks between doses #2 and #3. Overall, there must be at least 16wks between doses #1 and #3. • **Schedule for those who have fallen behind:** If the series is delayed between doses, DO NOT start the series over. Continue from where you left off. For Twinrix™ (hepatitis A and B combination vaccine [GSK]), three doses are needed on a 0, 1, 6m schedule. Recipients must be age 18yrs or older.	**Contraindication** Previous anaphylactic reaction to this vaccine or to any of its components. **Precaution** Moderate or severe acute illness.
Hepatitis A (Hep A) *Give IM* Brands may be used interchangeably.	• Persons who travel or work anywhere except the U.S., Western Europe, New Zealand, Australia, Canada, and Japan. • Persons with chronic liver disease, including persons with hepatitis B and C; injecting and non-injecting drug users; men who have sex with men; people with clotting-factor disorders; persons who work with hepatitis A virus in experimental lab settings (not routine medical laboratories); and food handlers when health authorities or private employers determine vaccination to be cost effective. • Anyone wishing to obtain immunity to hepatitis A. **Note:** Prevaccination testing is likely to be cost effective for persons older than age 40yrs, as well as for younger persons in certain groups with a high prevalence of hepatitis A virus infection.	• Two doses are needed. • The minimum interval between doses #1 and #2 is 6m. • If dose #2 is delayed, do not repeat dose #1. Just give dose #2.	**Contraindication** Previous anaphylactic reaction to this vaccine or to any of its components. **Precautions** • Moderate or severe acute illness. • Safety during pregnancy has not been determined, so benefits must be weighed against potential risk.
Td, Tdap (Tetanus, diphtheria, pertussis) *Give IM*	• All adults who lack a history of a primary series consisting of at least 3 doses of tetanus- and diphtheria-containing vaccine. • A booster dose of tetanus- and diphtheria-containing toxoid may be needed for wound management as early as 5yrs after receiving a previous dose, so consult ACIP recommendations.* • Using tetanus toxoid (TT) instead of Td or Tdap is <u>not</u> recommended. <u>For Tdap (tetanus- and diphtheria-toxoids with acellular pertussis vaccine) only:</u> • All adults younger than age 65yrs who have not received Tdap. • Healthcare workers who work in hospitals or ambulatory care settings and have direct patient contact and who have not received Tdap. • Adults in contact with infants younger than age 12m (e.g., parents, grandparents younger than age 65yrs, childcare providers, healthcare workers) who have not received a dose of Tdap.	• For persons who are unvaccinated or behind, complete the primary series with Td (spaced at 0, 1–2m, 6–12m intervals). One dose of Tdap may be used for any dose if ages 19–64yrs. • Give Td booster every 10yrs after the primary series has been completed. For adults ages 19–64yrs, a 1-time dose of Tdap is recommended to replace the next Td. • Intervals of 2yrs or less between Td and Tdap may be used if needed. **Note:** The 2 Tdap products are licensed for different age groups: Adacel (sanofi) for use in persons ages 11–64yrs and Boostrix (GSK) for use in persons ages 10–18yrs.	**Contraindications** • Previous anaphylactic reaction to this vaccine or to any of its components. • For Tdap only, history of encephalopathy within 7 days following DTP/DTaP. **Precautions** • Moderate or severe acute illness. • Guillain-Barré syndrome within 6wks of receiving a previous dose of tetanus toxoid-containing vaccine. • Unstable neurologic condition. • Pregnancy: if ≥10yrs since prior Td, give Td in 2nd or 3rd trimester; if <10yrs, give Tdap in immediate postpartum period.
Polio (IPV) *Give IM or SC*	Not routinely recommended for persons age 18yrs and older. **Note:** Adults living in the U.S. who never received or completed a primary series of polio vaccine need not be vaccinated unless they intend to travel to areas where exposure to wild-type virus is likely. Previously vaccinated adults can receive one booster dose if traveling to polio endemic areas.	• Refer to ACIP recommendations* regarding unique situations, schedules, and dosing information.	**Contraindication** Previous anaphylactic or neurologic reaction to this vaccine or to any of its components. **Precautions** • Moderate or severe acute illness. • Pregnancy.

Summary of Recommendations for Adult Immunization (continued)

Vaccine name and route	For whom vaccination is recommended	Schedule for vaccine administration (any vaccine can be given with another)	Contraindications and precautions (mild illness is not a contraindication)
Varicella (Var) (Chickenpox) *Give SC*	All susceptible adults and adolescents should be vaccinated. It is especially important to ensure varicella immunity among household contacts of immunosuppressed persons and among healthcare workers.	• Two doses are needed. • Dose #2 is given 4–8wks after dose #1. • If varicella vaccine and MMR are both needed and are not administered on the same day, space them at least 4wks apart. • If the second dose is delayed, do not repeat dose #1. Just give dose #2.	**Contraindications** • Previous anaphylactic reaction to this vaccine or to any of its components. • Pregnancy or possibility of pregnancy within 4wks (use contraception). • Persons immunocompromised because of malignancies and primary or acquired cellular immunodeficiency including HIV/AIDS. (See *MMWR* 1999, Vol. 48, No. RR-6.) **Note:** For those on high-dose immunosuppressive therapy, consult ACIP recommendations regarding delay time.* **Precautions** • If blood, plasma, and/or immune globulin (IG or VZIG) were given in past 11m, see ACIP statement *General Recommendations on Immunization** regarding time to wait before vaccinating. • Moderate or severe acute illness.
Meningococcal Conjugate vaccine (MCV4) *Give IM* Polysaccharide vaccine (MPSV4) *Give SC*	• College freshmen living in dormitories. • Adolescents and adults with anatomic or functional asplenia or with terminal complement component deficiencies. • Persons who travel to or reside in countries in which meningococcal disease is hyperendemic or epidemic (e.g., the "meningitis belt" of Sub-Saharan Africa). • Microbiologists who are routinely exposed to isolates of *N. meningitidis.*	• MCV4 is preferred over MPSV4 for persons age 55yrs and younger, although MPSV4 is an acceptable alternative. • Give one dose to persons with risk factors; revaccinate after 5yrs if risk of disease continues and previous vaccine was MPSV4.	**Contraindication** Previous anaphylactic or neurologic reaction to this vaccine or to any of its components, including diphtheria toxoid (for MCV4). **Precautions** • Moderate or severe acute illness. • For MCV4 only, history of Guillain-Barré syndrome.
MMR (Measles, mumps, rubella) *Give SC*	• Persons born in 1957 or later (especially those born outside the U.S.) should receive at least one dose of MMR if there is no serologic proof of immunity or documentation of a dose given on or after the first birthday. • Persons in high-risk groups, such as healthcare workers, students entering college and other post–high school educational institutions, and international travelers, should receive a total of two doses. • Persons born before 1957 are usually considered immune, but proof of immunity (serology or vaccination) may be desirable for healthcare workers. • Women of childbearing age who do not have acceptable evidence of rubella immunity or vaccination.	• One or two doses are needed. • If dose #2 is recommended, give it no sooner than 4wks after dose #1. • If varicella vaccine and MMR are both needed and are not administered on the same day, space them at least 4wks apart. • If a pregnant woman is found to be rubella susceptible, administer MMR postpartum.	**Contraindications** • Previous anaphylactic reaction to this vaccine or to any of its components. • Pregnancy or possibility of pregnancy within 4wks (use contraception). • Persons immunocompromised because of cancer, leukemia, lymphoma, immunosuppressive drug therapy, including high-dose steroids or radiation therapy. **Note:** HIV positivity is NOT a contraindication to MMR except for those who are severely immunocompromised. **Precautions** • If blood, plasma, and/or immune globulin were given in past 11m, see ACIP statement *General Recommendations on Immunization** regarding time to wait before vaccinating. • Moderate or severe acute illness. • History of thrombocytopenia or thrombocytopenic purpura. **Note:** If PPD (tuberculosis skin test) and MMR are both needed but not given on same day, delay PPD for 4–6wks after MMR.
Human-papillomavirus (HPV) *Give IM*	All previously unvaccinated women through age 26yrs.	• Three doses are needed. • Dose #2 is given 4–8wks after dose #1, and dose #3 is given 6mos after dose #1 (at least 10wks after dose #2).	**Contraindication** Previous anaphylactic reaction to this vaccine or to any of its components. **Precaution** Data on vaccination in pregnancy are limited; therefore, vaccination during pregnancy should be delayed until after completion of the pregnancy.
Zoster (shingles) (Zos) *Give SC*	A herpes zoster (shingles) vaccine was licensed in May 2006 for use in persons age 60yrs and older. ACIP recommendations for its use are pending. Refer to the package insert for details on its use.		

How to Administer IM and SC Injections to Adults

Intramuscular (IM) Injections

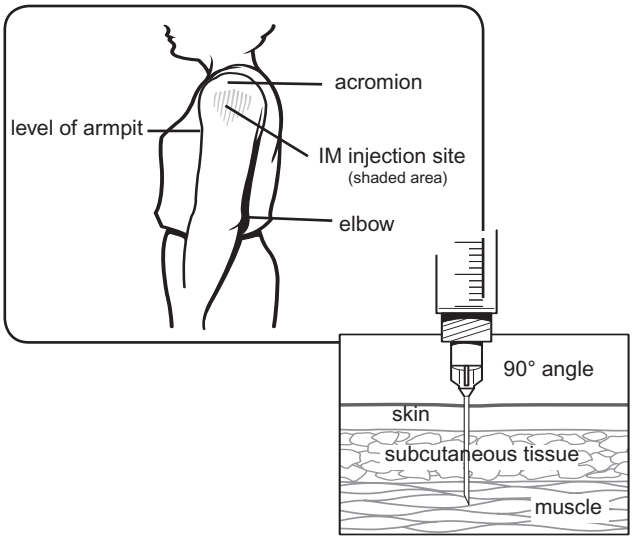
Administer these vaccines via IM route:
Tetanus, diphtheria (Td), or with pertussis (Tdap); hepatitis A; hepatitis B; human papillomavirus (HPV); trivalent inactivated influenza (TIV); and meningococcal conjugate (MCV4). Administer polio (IPV) and pneumococcal polysaccharide vaccine (PPV) either IM or SC.

Injection site:
Give in the central and thickest portion of the deltoid—above the level of the armpit and below the acromion (see the diagram).

Needle size:
22–25 gauge, 1–1½" needle

Needle insertion:

- Use a needle long enough to reach deep into the muscle.
- Insert the needle at a 90° angle to the skin with a quick thrust.
- Separate two injections given in the same deltoid muscle by a minimum of 1".



Subcutaneous (SC) Injections

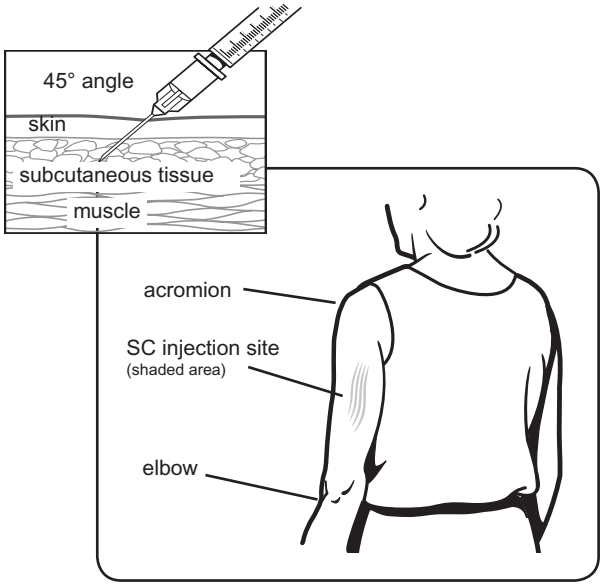
Administer these vaccines via SC route:
MMR, varicella, meningococcal polysaccharide (MPSV4), and zoster (shingles). Administer polio (IPV) and pneumococcal polysaccharide vaccine (PPV) either SC or IM.

Injection site:
Fatty tissue over the triceps (see the diagram)

Needle size:
23–25 gauge, 5/8" needle

Needle insertion:

- Pinch up on the tissue to prevent injection into the muscle. Insert the needle at a 45° angle to the skin.
- Separate two injections given in the same area of fatty tissue by a minimum of 1".

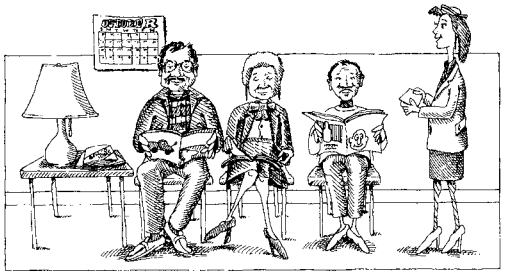


Adapted by the Immunization Action Coalition, courtesy of the Minnesota Department of Health

www.immunize.org/catg.d/p2020A.pdf • Item #P2020A (7/06)

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

Screening Questionnaire for Adult Immunization



For patients: The following questions will help us determine which vaccines you may be given today. If you answer "yes" to any question, it does not necessarily mean you should not be vaccinated. It just means additional questions must be asked. If a question is not clear, please ask your healthcare provider to explain it.

	Yes	No	Don't Know
1. Are you sick today?	☐	☐	☐
2. Do you have allergies to medications, food, or any vaccine?	☐	☐	☐
3. Have you ever had a serious reaction after receiving a vaccination?	☐	☐	☐
4. Do you have cancer, leukemia, AIDS, or any other immune system problem?	☐	☐	☐
5. Do you take cortisone, prednisone, other steroids, or anticancer drugs, or have you had x-ray treatments?	☐	☐	☐
6. Do you have a seizure, brain, or nerve problem?	☐	☐	☐
7. During the past year, have you received a transfusion of blood or blood products, or been given a medicine called immune (gamma) globulin?	☐	☐	☐
8. For women: Are you pregnant or is there a chance you could become pregnant during the next month?	☐	☐	☐
9. Have you received any vaccinations in the past 4 weeks?	☐	☐	☐

Form completed by: _____ Date: _____

Form reviewed by: _____ Date: _____

Did you bring your immunization record card with you? yes ☐ no ☐

It is important for you to have a personal record of your vaccinations. If you don't have a record card, ask your healthcare provider to give you one! Bring this record with you every time you seek medical care. Make sure your healthcare provider records all your vaccinations on it.

www.immunize.org/catg.d/p4065scr.pdf • Item#P4065 (7/06)

Information for Health Professionals about the Screening Questionnaire for Adults

Are you interested in knowing why we included a certain question on the Screening Questionnaire? If so, read the information below. If you want to find out even more, consult the references listed at the bottom of this page.

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

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

3. Have you ever had a serious reaction after receiving a vaccination?
History of anaphylactic reaction (see question 2) to a previous dose of vaccine or vaccine component is a contraindication for subsequent doses (1). Under normal circumstances, vaccines are deferred when a precaution is present. However, situations may arise when the benefit outweighs the risk (e.g., during a community measles outbreak).

4. Do you have cancer, leukemia, AIDS, or any other immune system problem?
Live virus vaccines (e.g., MMR, varicella, and the intranasal live attenuated influenza vaccine [LAIV]) are usually contraindicated in immunocompromised people. However, there are exceptions. For example, MMR vaccine is recommended for asymptomatic HIV-infected individuals who do not have evidence of severe immunosuppression. Immunosuppressed persons should not receive varicella vaccine or LAIV. For details, consult the ACIP recommendations (3, 4, 5).

5. Do you take cortisone, prednisone, other steroids, or anticancer drugs, or have you had x-ray treatments?
Live virus vaccines (e.g., MMR, varicella, LAIV) should be postponed until after chemotherapy or long-term high-dose steroid therapy has ended. For details and length of time to postpone, consult the ACIP statement (1, 5). To find specific vaccination schedules for stem cell transplant (bone marrow transplant) patients, see reference 6. LAIV can only be given to healthy non-pregnant individuals ages 5–49 years.

6. Do you have a seizure, brain, or nerve problem?
Tdap is contraindicated in persons who have a history of encephalopathy within 7 days following DTP/DTaP given before age 7 years. An unstable progressive neurologic problem is a precaution to the use of Tdap. For persons with stable neurologic disorders (including seizures) unrelated to vaccination, or for persons with a family history of seizure, vaccinate as usual. A history of Guillain-Barré syndrome (GBS) is a consideration with the following: 1) Td/Tdap: if GBS has occurred within 6 weeks of a tetanus-containing vaccine and decision is made to continue vaccination, give Tdap instead of Td if no history of prior Tdap; 2) Inactivated influenza vaccine (TIV): if GBS has occurred within 6 weeks of prior TIV, vaccinate with TIV if at high risk for severe influenza complications; 3) LAIV: if GBS history, do not give LAIV; 4) MCV4: avoid vaccinating persons unless in recommended risk groups.

7. During the past year, have you received a transfusion of blood or blood products, or been given a medicine called immune (gamma) globulin?

Certain live virus vaccines (e.g., MMR, varicella) may need to be deferred, depending on several variables. Consult the most current ACIP recommendations for current information on intervals between immune globulin or blood product administration and MMR or varicella vaccination. (1)

8. For women: Are you pregnant or is there a chance you could become pregnant during the next month?
Live virus vaccines (e.g., MMR, varicella, LAIV) are contraindicated in the month before and during pregnancy because of the theoretical risk of virus transmission to the fetus. Sexually active women in their childbearing years who receive MMR or varicella vaccination should be instructed to practice careful contraception for one month following receipt of either vaccine. On theoretical grounds, inactivated poliovirus vaccine should not be given during pregnancy; however, it may be given if risk of disease is imminent and immediate protection is needed (e.g., travel to endemic areas). Patients may be given Td routinely during 2nd or 3rd trimester if due for booster; if up to date and no history of Tdap, give 1 dose in immediate postpartum period, although some providers may choose to give Tdap during pregnancy. (1, 3, 4, 5, 7, 8)

9. Have you received any vaccinations in the past 4 weeks?
If the person to be vaccinated was given either live attenuated influenza vaccine (FluMist®) or an injectable live virus vaccine (e.g., MMR, varicella, yellow fever) in the past 4 weeks, they should wait 28 days before receiving another vaccination of this type. Inactivated vaccines may be given at any spacing interval if they are not administered simultaneously.

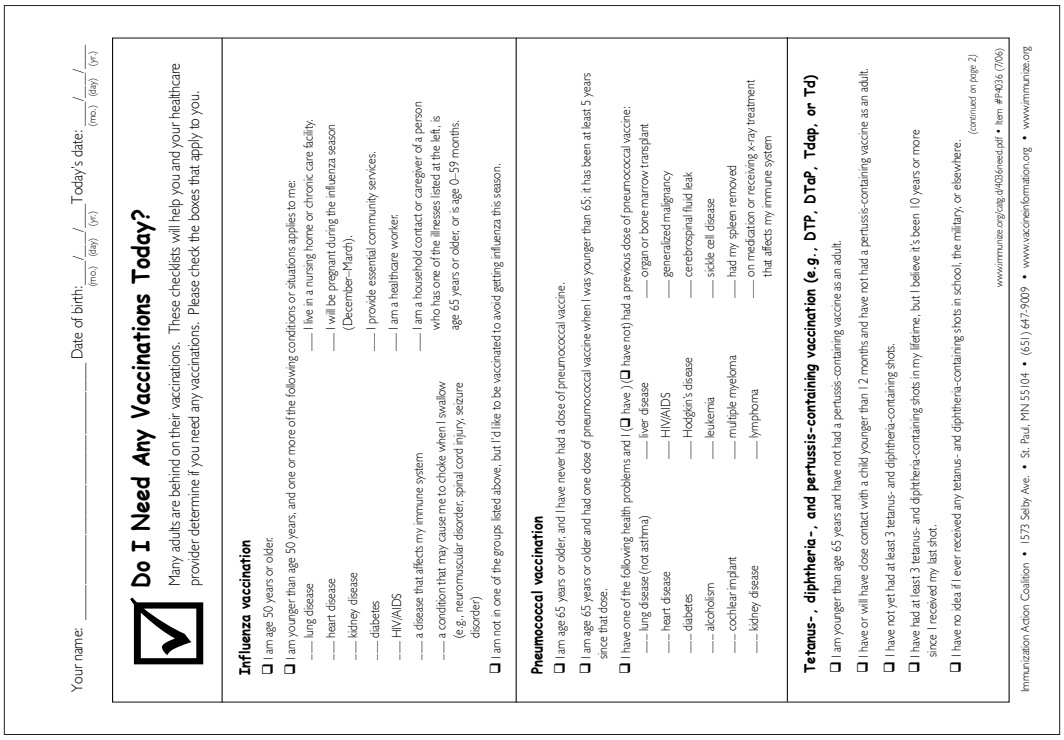
References:

1. CDC. General recommendations on immunization. *MMWR* 2002; 51 (RR-2).
2. Table of Vaccine Components: www.cdc.gov/nip/publications/pink/appendices/b/excipient-table-2.pdf.
3. CDC. Measles, mumps, and rubella—vaccine use and strategies for elimination of measles, rubella, and congenital rubella syndrome and control of mumps. *MMWR* 1998; 47 (RR-8).
4. CDC. Prevention of varicella: updated recommendations of the ACIP. *MMWR* 1999; 48 (RR-6).
5. CDC. Prevention and control of influenza—recommendations of ACIP, at www.cdc.gov/flu/professionals/vaccination.
6. CDC. Excerpt from Guidelines for preventing opportunistic infections among hematopoietic stem cell transplant recipients, *MMWR* 2000; 49 (RR-10), www.cdc.gov/nip/publications/hsct-recs.pdf.
7. CDC. Notice to readers: Revised ACIP recommendation for avoiding pregnancy after receiving a rubella-containing vaccine. *MMWR* 2001; 50 (49).
8. CDC. Prevention of varicella. *MMWR* 1996; 45 (RR-11).

Do I Need Any Vaccinations Today?

Many adults are behind on their vaccinations. This 2-page checklist will help your patients and you determine which vaccinations they need. CDC has reviewed the checklist for accuracy. It is copyright free. You can download full-size copies for your patients' use by going to www.immunize.org/catg.d/4036need.pdf.

For a ready-to-copy 8½ x 11" version of this 2-page piece, visit www.immunize.org/catg.d/4036need.pdf.



Your name: _____ Date of birth: ___/___/___ (mo.) (day) (yr.) Today's date: ___/___/___ (mo.) (day) (yr.)

Do I Need Any Vaccinations Today?

Many adults are behind on their vaccinations. These checklists will help you and your healthcare provider determine if you need any vaccinations. Please check the boxes that apply to you.

Influenza vaccination

- ❑ I am age 50 years or older.
- ❑ I am younger than age 50 years, and one or more of the following conditions or situations applies to me:
  - ___ lung disease
  - ___ heart disease
  - ___ kidney disease
  - ___ diabetes
  - ___ HIV/AIDS
  - ___ a disease that affects my immune system
  - ___ a condition that may cause me to choke when I swallow (e.g., neuromuscular disorder, spinal cord injury, seizure disorder)
  - ___ I live in a nursing home or chronic care facility.
  - ___ I will be pregnant during the influenza season (December–March).
  - ___ I provide essential community services.
  - ___ I am a healthcare worker.
  - ___ I am a household contact or caregiver of a person who has one of the illnesses listed at the left, is age 65 years or older, or is age 0–59 months.
- ❑ I am not in one of the groups listed above, but I'd like to be vaccinated to avoid getting influenza this season.

Pneumococcal vaccination

- ❑ I am age 65 years or older, and I have never had a dose of pneumococcal vaccine.
- ❑ I am age 65 years or older and had one dose of pneumococcal vaccine when I was younger than 65; it has been at least 5 years since that dose.
- ❑ I have one of the following health problems and I (❑ have / ❑ have not) had a previous dose of pneumococcal vaccine:
  - ___ lung disease (not asthma)
  - ___ heart disease
  - ___ diabetes
  - ___ alcoholism
  - ___ cochlear implant
  - ___ kidney disease
  - ___ liver disease
  - ___ HIV/AIDS
  - ___ Hodgkin's disease
  - ___ leukemia
  - ___ multiple myeloma
  - ___ lymphoma
  - ___ organ or bone marrow transplant
  - ___ generalized malignancy
  - ___ cerebrospinal fluid leak
  - ___ sickle cell disease
  - ___ had my spleen removed
  - ___ on medication or receiving x-ray treatment that affects my immune system

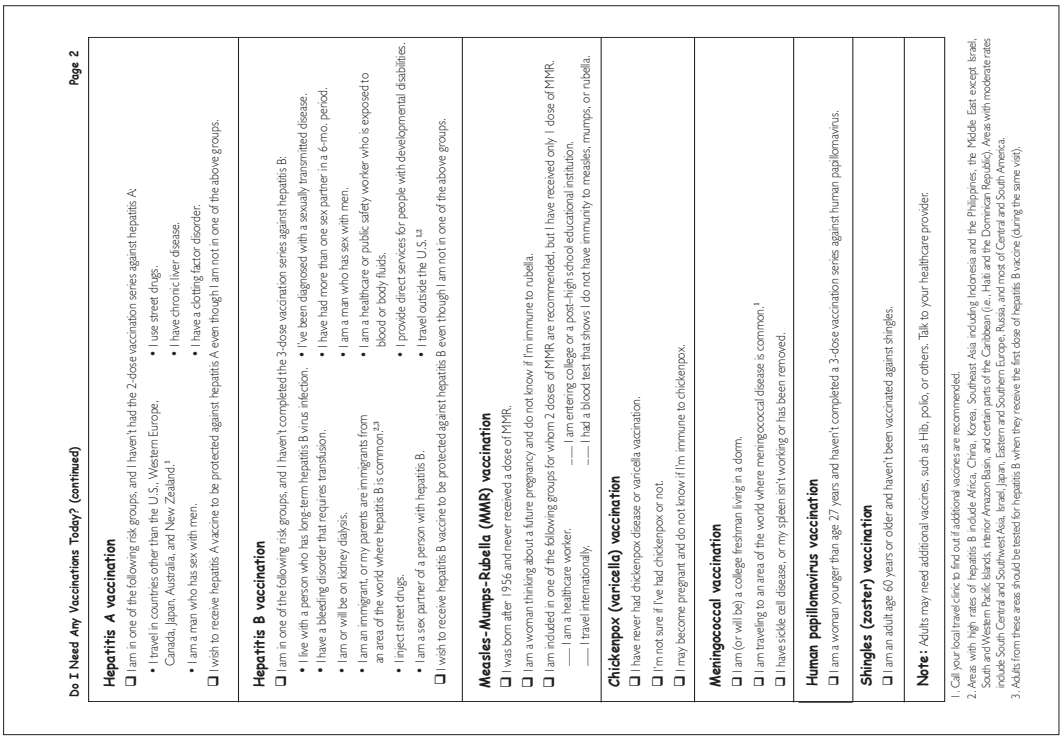
Tetanus-, diphtheria-, and pertussis-containing vaccination (e.g., DTP, DTaP, Tdap, or Td)

- ❑ I am younger than age 65 years and have not had a pertussis-containing vaccine as an adult.
- ❑ I have or will have close contact with a child younger than 12 months and have not had a pertussis-containing vaccine as an adult.
- ❑ I have not yet had at least 3 tetanus- and diphtheria-containing shots.
- ❑ I have had at least 3 tetanus- and diphtheria-containing shots in my lifetime, but I believe it's been 10 years or more since I received my last shot.
- ❑ I have no idea if I ever received any tetanus- and diphtheria-containing shots in school, the military, or elsewhere.

(continued on page 2)

www.immunize.org/catg.d/4036need.pdf • Item #P4036 (7/06)

Immunization Action Coalition • 1573 Selby Ave. • St. Paul, MN 55104 • (651) 647-9009 • www.vaccineinformation.org • www.immunize.org



Hepatitis A vaccination

- ❑ I am in one of the following risk groups, and I haven't had the 2-dose vaccination series against hepatitis A:
  - I travel in countries other than the U.S., Western Europe, Canada, Japan, Australia, and New Zealand.[1]
  - I am a man who has sex with men.
  - I use street drugs.
  - I have chronic liver disease.
  - I have a clotting factor disorder.
- ❑ I wish to receive hepatitis A vaccine to be protected against hepatitis A even though I am not in one of the above groups.

Hepatitis B vaccination

- ❑ I am in one of the following risk groups, and I haven't completed the 3-dose vaccination series against hepatitis B:
  - I live with a person who has long-term hepatitis B virus infection.
  - I have a bleeding disorder that requires transfusion.
  - I am or will be on kidney dialysis.
  - I am an immigrant, or my parents are immigrants from an area of the world where hepatitis B is common.[2,3]
  - I inject street drugs.
  - I am a sex partner of a person with hepatitis B.
  - I've been diagnosed with a sexually transmitted disease.
  - I have had more than one sex partner in a 6-mo. period.
  - I am a man who has sex with men.
  - I am a healthcare or public safety worker who is exposed to blood or body fluids.
  - I provide direct services for people with developmental disabilities.
  - I travel outside the U.S.[2,3]
- ❑ I wish to receive hepatitis B vaccine to be protected against hepatitis B even though I am not in one of the above groups.

Measles-Mumps-Rubella (MMR) vaccination

- ❑ I was born after 1956 and never received a dose of MMR.
- ❑ I am a woman thinking about a future pregnancy and do not know if I'm immune to rubella.
- ❑ I am included in one of the following groups for whom 2 doses of MMR are recommended, but I have received only 1 dose of MMR.
  - ___ I am a healthcare worker.
  - ___ I travel internationally.
  - ___ I am entering college or a post-high school educational institution.
  - ___ I had a blood test that shows I do not have immunity to measles, mumps, or rubella.

Chickenpox (varicella) vaccination

- ❑ I have never had chickenpox disease or varicella vaccination.
- ❑ I'm not sure if I've had chickenpox or not.
- ❑ I may become pregnant and do not know if I'm immune to chickenpox.

Meningococcal vaccination

- ❑ I am (or will be) a college freshman living in a dorm.
- ❑ I am traveling to an area of the world where meningococcal disease is common.[1]
- ❑ I have sickle cell disease, or my spleen isn't working or has been removed.

Human papillomavirus vaccination

- ❑ I am a woman younger than age 27 years and haven't completed a 3-dose vaccination series against human papillomavirus.

Shingles (zoster) vaccination

- ❑ I am an adult age 60 years or older and haven't been vaccinated against shingles.

Note: Adults may need additional vaccines, such as Hib, polio, or others. Talk to your healthcare provider.

1. Call your local travel clinic to find out if additional vaccines are recommended.
2. Areas with high rates of hepatitis B include Africa, China, Korea, Southeast Asia including Indonesia and the Philippines, the Middle East except Israel, South and Western Pacific Islands, interior Amazon Basin, and certain parts of the Caribbean (i.e., Haiti and the Dominican Republic). Areas with moderate rates include South Central and Southwest Asia, Israel, Japan, Eastern and Southern Europe, Russia, and most of Central and South America.
3. Adults from these areas should be tested for hepatitis B when they receive the first dose of hepatitis B vaccine (during the same visit).

Essential Immunization Resources from IAC

To access IAC print materials (and VISs in more than 30 languages), visit www.immunize.org/free.

Adult immunization record cards—perfect for your practice!
IAC's adult immunization record cards for your patients are essential for health professionals who provide vaccination services. In June, we modified the card to make it even more useful by adding space for you to record four new vaccines—HPV, Tdap, zoster (shingles), and meningococcal. With space for recording ten adolescent/adult vaccines, the card can help you remind patients about the importance of vaccination. In addition, the card is virtually indestructible, making it valuable to your patients for a lifetime.

Since 2002, IAC has sold more than 4 million cards. The first box you purchase (boxes contain 250 cards) comes with a 30-day, money-back guarantee. To learn more, or to order online, go to www.immunize.org/adultizcards. Or use the order form below.

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❑$200 ❑$250 ❑$500 other: $_____

❑ I'm supporting IAC at a $75 level or higher. Please send me a CD of all IAC print materials in English and available Spanish translations, as well as Vaccine Information Statements (VISs) in English and Spanish.

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Essential Immunization Resources

CD-ROM of IAC print materials

FREE with a contribution of $75 or more (see above). The CD contains all IAC's ready-to-print materials in English and any translations available in Spanish. Includes VISs in English and Spanish.

Qty.		Videos, CD, and DVD (discounts on bulk orders)		Amt.
____	V2010	Videotape: How to Protect Your Vaccine Supply	$15	_____
____	C2012	CD: Vaccine Storage and Handling Toolkit	$15	_____
____	V2020	Videotape: Immunization Techniques: Safe, Effective, Caring	$30	_____
____	D2020	DVD: Immunization Techniques: Safe, Effective, Caring	$35	_____

Adult immunization record cards (first box comes with a 30-day, money-back guarantee; discounts on bulk orders)

____	R2005	Adult immunization record cards: 250 cards/box; 1 box—$35; 2 boxes—$65; 3 boxes—$90; 4 boxes—$110	$ _____

Laminated immunization schedules (discounts on bulk orders)

____	R2008	Childhood/adolescent immunization schedule: 1–4 copies—$4 each; 5–19 copies—$3 each	$ _____
____	R2009	Adult immunization schedule: 1–4 copies—$5 each; 5–19 copies—$4 each	$ _____

Grand Total $_____

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Vaccines safeguard women's health: 5 good reasons to vaccinate

Deborah L. Wexler, MD
IAC Executive Director

Dear Colleagues,

It's a new day for protecting women from some very serious diseases. Newly licensed vaccines are being recommended for routine use in adults, and this includes the women in your practices. These new vaccines protect women from cervical cancer, genital warts, pertussis, and herpes zoster (shingles). The new pertussis vaccine for adults (Tdap) will also help protect infants from whooping cough when mothers and other family members are vaccinated. If you haven't yet incorporated vaccination into your practices, now would be a *great* time to start.

Human papilloma virus (HPV) vaccine. Approved by FDA in June 2006 for use in females ages 9–26, HPV vaccine begins a new era in cancer prevention. Prelicensure studies show the vaccine is nearly 100 percent effective in protecting recipients against precancerous lesions caused by the HPV-virus types included in this vaccine. Approximately 9,710 U.S. women develop cervical cancer each year, and 3,700 die from it. This vaccine will be lifesaving. It also will protect women from genital warts. CDC's and ACOG's recommendations for the use of HPV vaccine are forthcoming. Refer to the "Resource" section to help you stay up-to-date on new vaccine recommendations.

Tdap (tetanus, diphtheria, pertussis) vaccine for adults. Licensed in 2005, Tdap is recommended as a one-time dose for all adolescents and adults younger than age 65. It replaces a single booster dose of Td (tetanus diphtheria vaccine). It's particularly important to give Tdap before a woman becomes pregnant or immediately following delivery to protect infants from deadly pertussis. Tdap is not contraindicated for use during pregnancy if a physician chooses to administer it. CDC recommendations are forthcoming.

Herpes zoster (Zos) vaccine: Licensed by FDA in June 2006, this vaccine protects adults from shingles and can be given to persons age 60 years and older. Until official vaccine recommendations are available, consult the package insert for details on its use.

Influenza vaccine: Influenza vaccine continues to be recommended for women who will be pregnant during influenza season (December through March). This recommendation has been in place for several years. The vaccine is also recommended for use in any person (older than age 6 months) who desires protection from influenza.

Hepatitis B vaccine: Currently recommended for all women age 18 years and younger but excellent at protecting your patients older than age 18 years from a future STD. It can be given at the same visit as HPV vaccine.

Resources

There are many national resources available to help you fine-tune your vaccination practices. Please consult the following list and don't hesitate to email IAC if you need additional assistance. We're here to help!

- IAC Express: IAC's free email news service keeps you up-to-date on the latest vaccine recommendations. Sign up at www.immunize.org/express.
- *Immunization Techniques: Safe, Effective, Caring* (VHS or DVD) www.immunize.org/iztech
- *Vaccine Handling & Storage Toolkit* (CD-ROM) www.immunize.org/vachandling
- IAC's *Adults Only Vaccination: A Step-by-Step Guide* www.immunize.org/guide
- IAC's print materials: reviewed by CDC for technical accuracy, ready for you to copy and share with patients and clinic staff www.immunize.org/free
- IAC's immunization website for health professionals (all the resources you need to enhance your immunization services): www.immunize.org
- Contact IAC at admin@immunize.org.

Deborah L. Wexler, MD

Deborah L. Wexler, MD
Executive Director
deborah@immunize.org

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August 2006

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