

VACCINATE ADULTS!

A bulletin for adult medicine specialists from the Immunization Action Coalition

Highlighting the latest developments in routine adult immunization and chronic hepatitis B virus infection.

Ask the Experts

Editor's note: The Immunization Action Coalition thanks William L. Atkinson, MD, MPH; Andrew T. Kroger, MD, MPH; Eric E. Mast, MD, MPH; and Linda A. Moyer, RN, 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, and Ms. Moyer is an epidemiologist, both at CDC's Division of Viral Hepatitis.

Immunization questions

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

Has CDC made new recommendations this year regarding who should be protected from influenza?

Yes. CDC's Advisory Committee on Immunization Practices (ACIP) recommends that persons with any condition that can compromise respiratory function or the handling of respiratory secretions or that can increase the risk for aspiration (e.g., cognitive dysfunction, spinal cord injuries, seizure disorders, or other neuromuscular disorders) be vaccinated against influenza. In addition,

conditions that increase the risk of complications of influenza

- Persons ages 65 years and older without other medical conditions
 - Children ages 6–23 months
 - Pregnant women
 - Healthcare personnel who provide direct patient care
 - Household contacts and out-of-home caregivers of infants younger than 6 months of age.
- Beginning October 24, all persons will be eligible to receive injectable influenza vaccination.

Am I correct that prioritized vaccine use is not recommended when giving LAIV?

You are correct. The use of live attenuated influenza vaccine (LAIV) should not be prioritized. LAIV may be administered at any time for vaccination of nonpregnant healthy persons ages 5 through 49 years, including most healthcare personnel, other persons in close contact with groups at high risk for influenza-related complications, and others desiring protection against influenza.

Is there a change in the storage requirements for LAIV?

Use of the manufacturer-supplied "freezebox" is no longer required to store LAIV, and the vaccine

(continued on page 4)

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)

ACIP emphasizes that all healthcare workers should be vaccinated against influenza annually, and that facilities that employ healthcare workers be strongly encouraged to provide vaccine to workers by using approaches that maximize immunization rates.

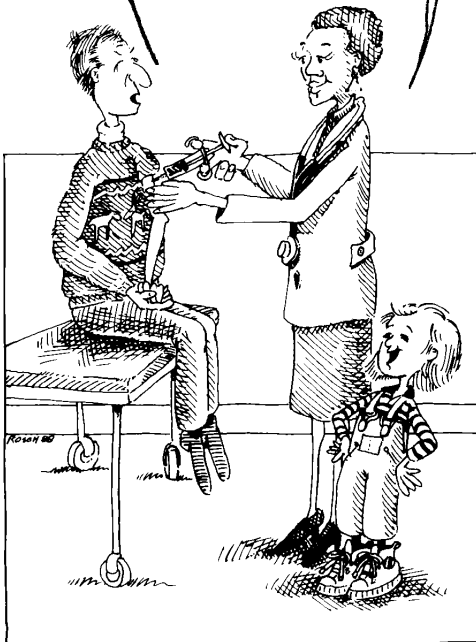
I've heard "tiering" is recommended for injectable influenza vaccination this year. Which persons should be prioritized to receive the injectable influenza vaccine?

Given the uncertainties in doses and distribution of injectable influenza vaccine this season, CDC recommends that until October 24, 2005, the following groups be prioritized to receive trivalent inactivated influenza vaccine (TIV):

- Persons ages 65 years and older with medical conditions that increase the risk of complications of influenza
- Residents of long-term-care facilities
- Persons ages 2–64 years with medical condi-

Why do I need a flu shot? I'm 60 years old and I feel good!

Mr. Fesler, you may feel healthy today, but you have asthma. Because of this, you're at increased risk for complications from influenza. Everyone with asthma should receive yearly influenza vaccination early in the fall.



Artwork courtesy of New York State Department of Health

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Vaccinate Adults!

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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 children 0–18 years; HBsAg screening for all pregnant women; testing and vaccination for high-risk groups; and education and treatment for people chronically infected with hepatitis B.

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Vaccine Highlights

Recommendations, schedules, and more

Editor's note: The information on this page is current as of September 14, 2005.

ACIP recommendations

All clinicians should have a set of ACIP recommendations, the public health guidance on vaccines, published in the *Morbidity and Mortality Weekly Report (MMWR)*. Free continuing education credits are available for reading many of the recommendations and completing a brief test afterward. To obtain ACIP recommendations

- Download them from links on IAC's website: www.immunize.org/acip.
- Download them from CDC's website: www.cdc.gov/nip/publications/acip-list.htm.
- Call the CDC-INFO Contact Center at (800) CDC-INFO [(800) 232-4636].

Recently published ACIP recommendations:

- Prevention and Control of Influenza (7/29/05)
- Prevention and Control of Meningococcal Disease (5/27/05)

Influenza news

On Sept. 2, CDC published "Update: Influenza Vaccine Supply and Recommendations for Prioritization During the 2005–06 Influenza Season" in *MMWR*. The article highlights eight risk groups who should be given priority to receive injectable influenza vaccine before Oct. 24. (See "Ask the Experts," p. 1 for a list of the prioritized risk groups.) This prioritized approach does not apply to the use of live attenuated influenza vaccine (LAIV). LAIV may be administered at any time for vaccination of non-pregnant healthy persons ages 5–49 years, including most healthcare personnel and others. On Oct. 24, all persons will be eligible for injectable influenza vaccine. To obtain a copy of this *MMWR* article, go to www.cdc.gov/mmwr/preview/mmwrhtml/mm5434a4.htm.

On August 31, FDA approved GlaxoSmithKline's Fluarix, a trivalent inactivated injectable influenza vaccine to immunize persons ages 18 and older. To view the package insert, go to www.fda.gov/cber/label/inflgla083105LB.pdf.

On July 29, CDC published "Prevention and Control of Influenza" in *MMWR*, Vol. 54 (RR-8). It includes new or updated information regarding (1) vaccination of persons with conditions leading to compromise of the respiratory system; (2) vaccination of

healthcare workers; (3) clarification of the role of LAIV in vaccine shortage situations and more. To read the complete recommendations, go to www.cdc.gov/mmwr/PDF/rr/rr5408.pdf.

Tdap for adults & adolescents

ACIP is developing recommendations for the use of the new pertussis-tetanus-diphtheria-containing vaccines (Tdap) for adults. Adult recommendations should be available early in 2006. In the meantime, consult the package inserts. For information about ACIP adolescent recommendations, see "Ask the Experts," p. 4.

On June 10, FDA approved Adacel, a Tdap vaccine for single-booster immunization against pertussis, in combination with tetanus and diphtheria. Manufactured by Aventis Pasteur Limited, Toronto, it is intended for use in individuals ages 11–64 years. To view the package insert go to www.fda.gov/cber/label/tdapave061005LB.pdf.

On May 3, FDA approved GlaxoSmithKline's biologics license application for Boostrix, a Tdap vaccine for adolescents. This single-dose pertussis, tetanus, and diphtheria combination product is indicated for active booster immunization for individuals ages 10–18 years. To obtain the package insert, go to www.fda.gov/cber/label/tdapgla050305LB.pdf.

Meningococcal news

In August, the NIP website posted information that conjugated meningococcal vaccine (MCV4) is temporarily in short supply, owing to a high volume of demand. For more information, go to www.cdc.gov/nip/news/shortages.

On May 27, CDC published "Prevention and Control of Meningococcal Disease" in *MMWR*, Vol. 54 (RR-7). It includes new information regarding the use of meningococcal conjugate vaccine (MCV4) among persons ages 11–55 years, specifically the following: (1) routine vaccination of adolescents ages 11–12 years; (2) vaccination before high-school entry (at approximately age 15 years) for those persons who have not previously received MCV4; and (3) routine vaccination of college freshmen living in dormitories and for other populations at increased risk. It also provides updated recommendations regarding use of the tetravalent meningococcal polysaccharide vaccine (MPSV4) and on antimicrobial chemoprophylaxis. To read the complete recommendations, go to www.cdc.gov/mmwr/PDF/rr/rr5407.pdf.

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Questions? Email admin@immunize.org or call (651) 647-9009.

Is safeguarding your vaccine supply worth 23 minutes of your time?

That's the time it takes to view this newly updated CDC video, which covers temperature monitoring equipment, required documentation and record-keeping, storage and handling procedures, and action steps to take when a problem occurs.

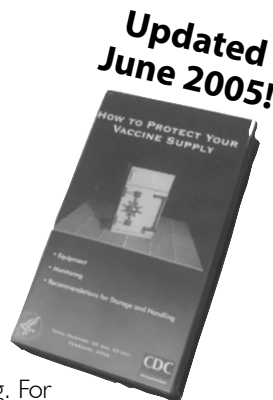
"How to Protect Your Vaccine Supply"

Cost \$15. For 20 or more copies, contact us for discount pricing. For more information or to order online, visit www.immunize.org/vachandling.

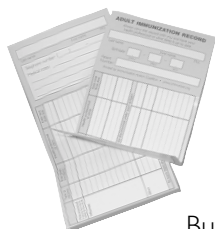
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Questions? Email admin@immunize.org or call (651) 647-9009.

(CDC's new CD-ROM, "Vaccine Storage and Handling Toolkit," is available free at www2.cdc.gov/nchstp_od/PIVWeb/niporderform.asp.)



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can now be stored in a conventional frost-free freezer. The vaccine must be stored in a freezer with a separate door that can reliably maintain 5°F (-15°C). Once thawed, LAIV cannot be refrozen. LAIV may be stored at refrigerator temperature but must be discarded if not used within 60 hours.

Is LAIV contraindicated for asthmatics?

Persons with asthma should not receive LAIV. All persons with chronic respiratory conditions should receive inactivated influenza vaccine.

What is the recommended interval for receiving influenza vaccine after an allergy injection?

Vaccines can be administered at any time before or after administration of an “allergy injection.”

Is giving patients VISs “mandatory” or is it “recommended” when administering influenza vaccine?

Although influenza vaccine is now included in the Vaccine Injury Compensation Program, use of the influenza Vaccine Information Statement (VIS) is recommended but not mandatory. Use of the VIS is not mandatory until the final VIS version is published. The current influenza VIS is an interim statement. A final version of the 2005 influenza VIS will probably not be available until at least October. We expect the final VIS version to be almost identical to the interim version.

What is the difference between the two new Tdap products, Adacel and Boostrix?

Both of these single-dose booster vaccines were licensed in 2005 to provide protection against pertussis, tetanus, and diphtheria. Adacel (sanofi-pasteur) is licensed for persons ages 11–64 years, and Boostrix (GlaxoSmithKline) is licensed for persons ages 10–18 years. Both are approved for one dose only, not multiple doses in a series. The two vaccines also contain a different number of pertussis antigens and different concentrations of pertussis antigen and diphtheria toxoid.

What are the ACIP recommendations for the use of the new Tdap vaccines?

On June 30, 2005, ACIP voted to recommend that adolescents ages 11–18 years receive one of the two newly licensed Tdap vaccines in place of the currently recommended Td booster to protect them

against pertussis. To access the provisional Tdap recommendations for adolescents, go to: www.cdc.gov/nip/vaccine/tdap/tdap_acip_recs.pdf. ACIP will make recommendations for the use of Tdap in adults at a future meeting. In the meantime, consult the products’ package inserts (PIs) for their indications (see p. 2, col. 3 for links to PIs.)

Can Tdap be given with other vaccines?

Yes. Tdap should be administered with other vaccines that are indicated, such as influenza, meningococcal, and hepatitis B vaccines. Each vaccine should be administered at different anatomic sites using a separate syringe.

Can I administer Tdap to an adult who has had pertussis?

Persons with a pertussis history may receive Tdap.

When are VISs released for newly licensed vaccines?

A VIS is released as soon as possible after ACIP votes on recommendations for use of the vaccine. CDC only publishes VISs in English; all available translations have been developed by others. To access all currently available VISs in more than 30 languages and some alternative formats (audio/video), go to www.immunize.org/vis.

What is causing the Menactra shortage and what should we do for our patients?

The tremendous demand for the new meningococcal conjugate vaccine (MCV4 [Menactra]) has exceeded the available supply. This problem should resolve in the next few months. Until then, we recommend that providers limit use of MCV4 to the groups ACIP has specifically recommended to receive it. Meningococcal polysaccharide vaccine (MPSV4 [Menomune]) is an acceptable alternative if MCV4 is not available.

What is your recommendation relating to removing stoppers from bottles to prevent reaction to latex?

We do not recommend removing the rubber stopper from a vaccine vial to administer vaccine to a person with a severe life-threatening allergy to latex. The vaccine has already been exposed to the rubber stopper in the vial, which might be enough of an exposure to cause a reaction. These persons should not be given the vaccine.

When you inject a vaccine, why is it not necessary to aspirate?

ACIP does not recommend aspiration when administering vaccines because no data exist to justify the need for this practice. Intramuscular injections are not given in areas where large vessels are present. Given the size of the needle and the angle at which you inject the vaccine, it is difficult to cannulate a vessel without rupturing it and even more difficult to actually deliver the vaccine intravenously. We are aware of no reports of a vaccine being administered intravenously and causing harm in the absence of aspiration.

Hepatitis A and B

by Linda A. Moyer, RN, and Eric E. Mast, MD, MPH

How long should I wait to donate blood after receiving hepatitis B vaccination?

Because hepatitis B vaccine contains noninfectious HBsAg particles, it is possible that a person might have detectable noninfectious HBsAg in their serum up to 3 weeks after vaccination. For this reason, people who receive hepatitis B vaccine should delay donating blood for 30 days after vaccination.

I read that many hepatitis A lab tests are false positives. When is it appropriate to test my patients for hepatitis A?

The May 13, 2005, issue of *MMWR* included a report about this problem (www.cdc.gov/mmwr/preview/mmwrhtml/mm5418a1.htm). State health departments and CDC investigated persons with positive serologic tests for acute hepatitis A virus (HAV) infection (i.e., IgM anti-HAV) whose illness was not consistent with the surveillance case definition for acute hepatitis A. Findings in this investigation indicate that most persons who were tested for IgM anti-HAV and who did not have illness consistent with acute viral hepatitis had false positive test results. Thus, healthcare providers should limit use of IgM anti-HAV testing to persons with evidence of clinical hepatitis or to those who have had recent exposure to an HAV-infected person. Use of IgM anti-HAV as a screening tool for asymptomatic persons or as part of testing panels for the workup of non-acute liver function abnormalities should be discouraged.

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.

*On May 13, 2005, FDA approved Roche’s Pegasys (peginterferon alfa-2a) for the treatment of chronic hepatitis B virus infection.

Vaccinate Adults correction policy

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Summary of Recommendations for Adult Immunization

COPY THIS on card stock:
put one in every exam room

Adapted from the recommendations of the Advisory Committee on Immunization Practices (ACIP)* by the Immunization Action Coalition, August 2005

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)
<p>Influenza Trivalent inactivated influenza vaccine (TIV) <i>Give IM</i></p>	<ul style="list-style-type: none"> • 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. • All healthcare workers and other persons who provide direct care to at-risk people. • Household contacts and out-of-home caregivers of children ages 0–23m. • 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. 	<ul style="list-style-type: none"> • Given every year. • October through November is the <i>optimal</i> time to receive annual influenza vaccination to maximize protection; however vaccination may occur in December and throughout the influenza season (typically December through March) or at other times when the risk of influenza exists. 	<p>Contraindication Previous anaphylactic reaction to this vaccine, to any of its components, or to eggs.</p> <p>Precaution Moderate or severe acute illness.</p>
<p>Influenza Live attenuated influenza vaccine (LAIV) <i>Give intranasally</i></p>	<ul style="list-style-type: none"> • Healthy, non-pregnant persons age 49yrs and younger who meet any of the conditions listed below. <ul style="list-style-type: none"> - 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 (excluding persons in close contact with severely immunosuppressed persons). - Household contacts and out-of-home caregivers of children ages 0–23m. - 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. 		<p>Contraindications</p> <ul style="list-style-type: none"> • 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. <p>Precaution Moderate or severe acute illness.</p>
<p>Pneumococcal polysaccharide (PPV23) <i>Give IM or SC</i></p>	<ul style="list-style-type: none"> • 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. 	<ul style="list-style-type: none"> • 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. 	<p>Contraindication Previous anaphylactic reaction to this vaccine or to any of its components.</p> <p>Precaution Moderate or severe acute illness.</p> <p>Note: Pregnancy and breastfeeding are not contraindications to the use of this vaccine.</p>

*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 yearly. 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, and Linda Moyer, RN, from CDC's Division of Viral Hepatitis, for their 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)
<p>Hepatitis B (Hep B) <i>Give IM</i></p> <p>Brands may be used interchangeably.</p>	<ul style="list-style-type: none"> All adolescents. 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. <p>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.</p>	<ul style="list-style-type: none"> 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. <p>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.</p>	<p>Contraindication Previous anaphylactic reaction to this vaccine or to any of its components.</p> <p>Precaution Moderate or severe acute illness.</p> <p>Note: Pregnancy and breastfeeding are not contraindications to the use of this vaccine.</p>
<p>Hepatitis A (Hep A) <i>Give IM</i></p> <p>Brands may be used interchangeably.</p>	<ul style="list-style-type: none"> 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; illegal 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. <p>Note: Prevacination 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.</p>	<ul style="list-style-type: none"> Two doses are needed. The minimum interval between dose #1 and #2 is 6m. If dose #2 is delayed, do not repeat dose #1. Just give dose #2. 	<p>Contraindication Previous anaphylactic reaction to this vaccine or to any of its components.</p> <p>Precautions</p> <ul style="list-style-type: none"> Moderate or severe acute illness. Safety during pregnancy has not been determined, so benefits must be weighed against potential risk. <p>Note: Breastfeeding is not a contraindication to the use of this vaccine.</p>
<p>Td (Tetanus, diphtheria) <i>Give IM</i></p> <p>Note: As of 8/24/05, ACIP has not issued recommendations for the use of acellular pertussis combination vaccines (Tdap). See note in next column.</p>	<ul style="list-style-type: none"> All adolescents and adults. After the primary series has been completed, a booster dose is recommended every 10yrs. Make sure your patients have received a primary series of 3 doses. A booster dose for wound management may be needed as early as 5yrs after receiving a previous dose, so consult ACIP recommendations.* Use Td, not tetanus toxoid (TT), for all indications. <p>Note: Two Tdap products, Boostrix (GSK) and Adacel (sanofi pasteur), were licensed by the FDA in 2005 for use in adults and/or adolescents. Consult package inserts for more information. It is anticipated that ACIP will issue recommendations for these products in late 2005.</p>	<ul style="list-style-type: none"> Give booster dose every 10yrs after the primary series has been completed. For those who are unvaccinated or behind, complete the primary series (spaced at 0, 1–2m, 6–12m intervals). Don't restart the series, no matter how long since the previous dose. 	<p>Contraindication Previous anaphylactic or neurologic reaction to this vaccine or to any of its components.</p> <p>Precautions</p> <ul style="list-style-type: none"> Moderate or severe acute illness. Guillain-Barré syndrome within 6wks of receiving a previous dose of tetanus toxoid-containing vaccine. <p>Note: Pregnancy and breastfeeding are not contraindications to the use of this vaccine.</p>
<p>Polio (IPV) <i>Give IM or SC</i></p>	<p>Not routinely recommended for persons age 18yrs and older.</p> <p>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.</p>	<ul style="list-style-type: none"> Refer to ACIP recommendations* regarding unique situations, schedules, and dosing information. 	<p>Contraindication Previous anaphylactic or neurologic reaction to this vaccine or to any of its components.</p> <p>Precautions</p> <ul style="list-style-type: none"> Moderate or severe acute illness. Pregnancy. <p>Note: Breastfeeding is not a contraindication to the use of this vaccine.</p>

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)
<p>Varicella (Var) (Chickenpox) <i>Give SC</i></p>	<p>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.</p> <p>Note: At its June 2005 meeting, ACIP voted to regard birth in the U.S. in 1965 or earlier as presumptive evidence of varicella immunity, with or without a history of having had chickenpox. Persons born in 1966–1997 with a reliable history of chickenpox (such as self or parental report of disease) can be assumed to be immune. For persons who have no reliable history, serologic testing may be cost effective, since most persons with a negative or uncertain history of varicella are immune.</p>	<ul style="list-style-type: none"> • 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. 	<p>Contraindications</p> <ul style="list-style-type: none"> • 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 <i>MMWR</i> 1999, Vol. 48, No. RR-6.) Note: For those on high-dose immunosuppressive therapy, consult ACIP recommendations regarding delay time.* <p>Precautions</p> <ul style="list-style-type: none"> • If blood, plasma, and/or immune globulin (IG or VZIG) were given in past 11m, see ACIP statement <i>General Recommendations on Immunization</i>* regarding time to wait before vaccinating. • Moderate or severe acute illness. <p>Note: Breastfeeding is not a contraindication to the use of this vaccine.</p>
<p>Meningococcal Conjugate vaccine (MCV4) <i>Give IM</i> Polysaccharide vaccine (MPSV4) <i>Give SC</i></p>	<ul style="list-style-type: none"> • 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 during the dry season [Dec–June]). • Microbiologists who are routinely exposed to isolates of <i>N. meningitidis</i>. • Military recruits. 	<ul style="list-style-type: none"> • MCV4 is preferred over MPSV4 for persons age 55 yrs 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. 	<p>Contraindication</p> <p>Previous anaphylactic or neurologic reaction to this vaccine or to any of its components, including diphtheria toxoid (for MCV4).</p> <p>Precaution</p> <p>Moderate or severe acute illness.</p> <p>Note: Pregnancy and breastfeeding are not contraindications to the use of either vaccine.</p>
<p>MMR (Measles, mumps, rubella) <i>Give SC</i></p>	<ul style="list-style-type: none"> • Persons born in 1957 or later (including those born outside the U.S.) should receive at least one dose of MMR if there is no serologic proof of immunity or documentation of a dose given on or after 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 may be desirable for healthcare workers. • Women of childbearing age (i.e., adolescent girls and premenopausal adult women) who do not have acceptable evidence of rubella immunity or vaccination. • Special attention should be given to immunizing women born outside the U.S. in 1957 or later. 	<ul style="list-style-type: none"> • 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. 	<p>Contraindications</p> <ul style="list-style-type: none"> • 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. <p>Precautions</p> <ul style="list-style-type: none"> • If blood, plasma, and/or immune globulin were given in past 11m, see ACIP statement <i>General Recommendations on Immunization</i>* regarding time to wait before vaccinating. • Moderate or severe acute illness. • History of thrombocytopenia or thrombocytopenic purpura. <p>Note: Breastfeeding is not a contraindication to the use of this vaccine.</p> <p>Note: MMR is not contraindicated if a tuberculin skin test (i.e., PPD) was recently applied. If PPD and MMR not given on same day, delay PPD for 4–6wks after MMR.</p>

Hepatitis B Facts: Testing and Vaccination

— Who needs hepatitis B vaccine? —

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

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

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

There is no medical reason not to give hepatitis B vaccine to anyone who wants to be protected against HBV infection.

— Hepatitis B lab nomenclature —

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

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

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

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

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

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

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

— Who needs serologic testing? —

Serologic testing prior to vaccination may be undertaken based on your assessment of your patient’s level of risk and your or your patient’s need for definitive information. If you decide to test, draw the blood first, and then give the first dose of vaccine at the same office visit. Vaccination can then be continued, if needed, based on the results of the tests. If you are not sure who needs hepatitis B screening, call your liver disease consultant or your state or local health department.

Tests	Results	Interpretation	Vaccinate?
HBsAg anti-HBc anti-HBs	negative negative negative	susceptible	vaccinate if indicated
HBsAg anti-HBc anti-HBs	negative negative positive with $\geq 10\text{mIU/mL}^*$	immune due to vaccination	no vaccination necessary
HBsAg anti-HBc anti-HBs	negative positive positive	immune due to natural infection	no vaccination necessary
HBsAg anti-HBc IgM anti-HBc anti-HBs	positive positive positive negative	acutely infected	no vaccination necessary
HBsAg anti-HBc IgM anti-HBc anti-HBs	positive positive negative negative	chronically infected	no vaccination necessary (may need treatment)
HBsAg anti-HBc anti-HBs	negative positive negative	four interpretations possible [†]	use clinical judgment

*Postvaccination testing, when it is recommended, should be performed 1–2 months after the last dose of vaccine. Infants born to HBsAg-positive mothers should be tested 3–9 months after the last dose.

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

— Managing chronic HBV infection —

When you identify a patient who is chronically infected, make sure you consult a specialist knowledgeable in the treatment of liver disease so your patient’s care is optimized. Chronically infected persons need medical evaluation every 6–12 months to assess the status of their liver health and their need for antiviral therapy, as well as to screen for liver cancer. Persons with HBV infection should also be educated about their disease and how to protect others.

Household members and sex partners should be tested for HBV infection and given the first dose of hepatitis B vaccine at the same visit. (Vaccinating a person who has already been infected will do no harm). If testing indicates HBV susceptibility, complete the hepatitis B vaccination series. If testing indicates HBV infection, further evaluation is needed.

www.immunize.org/catg.d/p2110.pdf • Item #P2110 (8/05)

Healthcare Worker Vaccination Recommendations

Vaccine	Recommendations in brief
Hepatitis B	Give 3-dose series (dose #1 now, #2 in 1 month, #3 approximately 5 months after #2). Give IM. Obtain anti-HBs serologic testing 1–2 months after dose #3.
Influenza	Give 1 dose of TIV or LAIV annually. Give IM or intranasally, respectively.
MMR	For persons born in 1957 or later without serologic evidence of immunity or prior vaccination, give 2 doses of MMR, 4 weeks apart. Give SC.
Varicella (chickenpox)	For persons who have no serologic proof of immunity, prior vaccination, or history of varicella disease, give 2 doses of varicella vaccine, 4 weeks apart. Give SC.
Tetanus/diphtheria	All adults need a Td booster dose every 10 years, following the completion of the primary 3-dose series. Give IM. Note: As of Aug. 2005, CDC’s Advisory Committee on Immunization Practices (ACIP) is in discussion about the use of acellular pertussis vaccine in healthcare workers (HCWs).
Meningococcal	Give 1 dose to microbiologists who are routinely exposed to isolates of <i>N. meningitidis</i> .

Hepatitis A, typhoid, and polio vaccines are not routinely recommended for HCWs who may have on-the-job exposure to fecal material.

Hepatitis B

Healthcare workers (HCWs) who perform tasks that may involve exposure to blood or body fluids should receive a 3-dose series of hepatitis B vaccine at 0-, 1-, and 6-month intervals. Test for hepatitis B surface antibody (anti-HBs) to document immunity 1–2 months after dose #3.

- If anti-HBs is at least 10 mIU/mL (positive), the patient is immune. No further serologic testing or vaccination is recommended.
- If anti-HBs is less than 10 mIU/mL (negative), the patient is unprotected from HBV infection; revaccinate with a 3-dose series. Retest anti-HBs 1–2 months after dose #3.
 - If anti-HBs is positive, the patient is immune. No further testing or vaccination is recommended.
 - If anti-HBs is negative following 6 doses of vaccine, the patient is a **non-responder**.

For non-responders: Persons who are non-responders should be considered susceptible to HBV and should be counseled regarding precautions to prevent HBV infection and the need to obtain HBIG prophylaxis for any known or probable parenteral exposure to hepatitis B surface antigen (HBsAg)-positive blood.* It is also possible that non-responders are persons who are HBsAg positive. Testing should be considered. Persons found to be HBsAg positive should be counseled and medically evaluated.

Note: Anti-HBs testing is not recommended routinely for previously vaccinated HCWs who were not tested 1–2 months after their original vaccine series. These HCWs should be tested for anti-HBs when they have an exposure to blood or body fluids. If found to be anti-HBs negative, the HCW should be protected.*

Influenza

Trivalent (Inactivated) Influenza Vaccine (TIV): May give to any HCW. **Live, Attenuated Influenza Vaccine (LAIV):** May give to any non-pregnant healthy HCW age 49 years and younger.

1. All HCWs should receive annual influenza vaccine. Groups that should be targeted include all personnel (including volunteers) in hospitals, outpatient, and home-health settings who have any patient contact.
2. TIV is preferred over LAIV for HCWs who are in close contact with severely immunosuppressed persons (e.g., stem cell transplant patients) when patients require a protective environment.

Measles, Mumps, Rubella (MMR)

Persons who work in medical facilities should be immune to measles and rubella. Immunity to mumps is highly desirable.

- Persons born in 1957 or later can be considered immune to measles, mumps, or rubella only if they have documentation of (a) physician-diag-

nosed measles or mumps disease; or (b) laboratory evidence of measles, mumps, or rubella immunity (persons who have an “indeterminate” or “equivocal” level of immunity upon testing should be considered nonimmune); or (c) appropriate vaccination against measles, mumps, and rubella (i.e., administration on or after the first birthday of two doses of live measles vaccine separated by 28 days or more, at least one dose of live mumps vaccine, and at least one dose of live rubella vaccine).

- Although birth before 1957 generally is considered acceptable evidence of measles and rubella immunity, healthcare facilities should consider recommending a dose of MMR vaccine to unvaccinated HCWs born before 1957 who are in either of the following categories: (a) do not have a history of measles disease or laboratory evidence of measles immunity and (b) do not have laboratory evidence of rubella immunity.

Varicella

It is recommended that all HCWs be immune to varicella, either from a reliable history of varicella disease or vaccination. Serologic screening for varicella immunity need not be done before vaccinating unless the healthcare institution considers it cost effective. Routine postvaccination testing of HCWs for antibodies to varicella is not recommended because commercial tests are often not sensitive enough to measure vaccine-induced immunity.

Tetanus/Diphtheria (Td)

All persons should receive a Td booster every 10 years. A 3-dose primary series of a tetanus/diphtheria-containing product (DTP, DTaP, DT, Td) is necessary before a booster dose is given. **Note:** As of Aug. 2005, ACIP is in discussion about the use of acellular pertussis vaccine in HCWs.

Meningococcal

Vaccination is recommended for microbiologists who are routinely exposed to isolates of *N. meningitidis*. Use of MCV4 is preferred among persons ages 11–55 years; give IM. If MCV4 is unavailable, MPSV4 is an acceptable alternative for persons ages 11–55 years. Use of MPSV4 is recommended for persons older than age 55; give SC.

References

*Table 3: “Updated U.S. Public Health Service Guidelines for the Management of Occupational Exposures to HBV, HCV, and HIV and Recommendations for Postexposure Prophylaxis,” *MMWR*, June 29, 2001, Vol. 50, RR-11.

For additional specific ACIP recommendations, refer to the official ACIP statements published in *MMWR*. To obtain copies, 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.

Adapted with thanks from the Michigan Department of Community Health

www.immunize.org/catg.d/p2017.pdf • Item #P2017 (9/05)

Influenza Standing Orders & Screening Questionnaires

For a ready-to-copy 8½" x 11" version of standing orders for children, go to www.immunize.org/catg.d/p3074a.pdf

For a ready-to-copy 8½" x 11" version of standing orders for adults, go to www.immunize.org/catg.d/p3074.pdf

Standing Orders for Administering Influenza Vaccines to Children & Adolescents

Purpose: To reduce morbidity and mortality from influenza by vaccinating all children and adolescents who meet the criteria established by the Centers for Disease Control and Prevention's Advisory Committee on Immunization Practices.

Policy: Under these standing orders, eligible nurses may vaccinate children and adolescents who meet the criteria below.

Procedure:

- Identify children and adolescents in need of influenza vaccination based on meeting any of the following criteria:
 - Age 6-23 months
 - Age 2 years and older with any of the following conditions:
 - chronic disorder of the pulmonary or cardiovascular system, including asthma
 - chronic metabolic disease (e.g., diabetes mellitus), renal dysfunction, hemoglobinopathy, or immunosuppression (e.g., caused by medications, HIV) that has required regular medical follow-up or hospitalization during the preceding year
 - 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)
 - will be pregnant during the influenza season
 - long-term aspirin therapy (applies to a child or adolescent 6 months-18 years of age)
 - Residence in a nursing home or other chronic-care facility that houses persons of any age who have chronic medical conditions
 - In an occupation or living situation that puts one in proximity to persons at high risk, including
 - a healthcare worker, caregiver, or household member in contact with person(s) at high risk of developing complications from influenza
 - a household contact or out-of-home caretaker of a child 0-23 months of age
 - Wish to reduce the likelihood of becoming ill with influenza
- Screen all patients for contraindications and precautions to influenza vaccine:
 - Contraindications:** serious reaction (e.g., anaphylaxis) after ingesting eggs or after receiving a previous dose of influenza vaccine or an influenza vaccine component. For a list of vaccine components, go to www.cdc.gov/hiv/publications/pink/appendices/a/except.pdf. Do not give live attenuated influenza vaccine (LAIV) to pregnant adolescents or immunosuppressed persons. Use of inactivated influenza vaccine is preferred over LAIV for close contacts of severely immunosuppressed persons during periods when the immunocompromised person requires a protective environment.
 - Precautions:** moderate or severe acute illness with or without fever
- Provide all patients (or, in the case of a minor, their parent or legal representative) with a copy of the most current federal Vaccine Information Statement (VIS). Although not required by federal law, it is prudent to document in the patient's medical record or office log, the publication date of the VIS and the date it was given to the patient. Provide non-English speakers with a VIS in their native language if available; these can be found at www.immunize.org/vis.
- Administer injectable trivalent inactivated vaccine (TIV) IM (22-25g, 1-1½" needle) as follows: 0.25 mL for children 6-35 months and 0.5 mL for all others age 3 years and older. Alternatively, healthy children age 5 years and older without contraindications may be given 0.5 mL of intranasal LAIV; 0.25 mL is sprayed into each nostril while the patient is in an upright position. Children age 8 years and under who are receiving influenza vaccine for the first time should receive 2 doses (separated by at least 4 weeks for TIV and at least 6 weeks for LAIV).
- Document each patient's vaccine administration information and follow up in the following places:
 - Medical chart:** Record the date the vaccine was administered, the manufacturer and lot number, the vaccination site and route, and the name and title of the person administering the vaccine. If vaccine was not given, record the reason(s) for non-receipt of the vaccine (e.g., medical contraindication, patient refusal).
 - Personal immunization record card:** Record vaccination date and the name/location of the administering clinic.
- Be prepared for management of a medical emergency related to the administration of vaccine by having a written emergency medical protocol available, as well as equipment and medications.
- Report all adverse reactions to influenza vaccine to the federal Vaccine Adverse Event Reporting System (VAERS) at www.vaers.hhs.gov or (800) 822-7967. VAERS report forms are available at www.vaers.hhs.gov.

This policy and procedure shall remain in effect for all patients of the _____ until rescinded or until _____ (date).
(name of practice or clinic)

Medical Director's signature: _____ Effective date: _____

www.immunize.org/catg.d/p3074a.pdf • Item #P3074a(8/05)

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Standing Orders for Administering Influenza Vaccine to Adults

Purpose: To reduce morbidity and mortality from influenza by vaccinating all adults who meet the criteria established by the Centers for Disease Control and Prevention's Advisory Committee on Immunization Practices.

Policy: Under these standing orders, eligible nurses may vaccinate patients who meet the criteria below.

Procedure:

- Identify adults in need of influenza vaccination based on meeting any of the following criteria:
 - Age 50 years or older
 - Having any of the following conditions:
 - chronic disorder of the pulmonary or cardiovascular system, including asthma
 - chronic metabolic disease (e.g., diabetes mellitus), renal dysfunction, hemoglobinopathy, or immunosuppression (e.g., caused by medications, HIV) that has required regular medical follow-up or hospitalization during the preceding year
 - 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)
 - will be pregnant during the influenza season
 - Residence in a nursing home or other chronic-care facility that houses persons of any age who have chronic medical conditions
 - In an occupation or living situation that puts one in proximity to persons at high risk, including
 - a healthcare worker, caregiver, or household member in contact with person(s) at high risk of developing complications from influenza
 - a household contact or out-of-home caretaker of a child 0-23 months of age
 - Wish to reduce the likelihood of becoming ill with influenza
- Screen all patients for contraindications and precautions to influenza vaccine:
 - Contraindications:** serious reaction (e.g., anaphylaxis) after ingesting eggs or after receiving a previous dose of influenza vaccine or an influenza vaccine component. For a list of vaccine components, go to www.cdc.gov/hiv/publications/pink/appendices/a/except.pdf. Do not give live attenuated influenza vaccine (LAIV) to pregnant women or immunosuppressed persons. Use of inactivated influenza vaccine is preferred over LAIV for close contacts of severely immunosuppressed persons during periods when the immunocompromised person requires a protective environment.
 - Precautions:** moderate or severe acute illness with or without fever
- Provide all patients with a copy of the most current federal Vaccine Information Statement (VIS). Although not required by federal law, it is prudent to document in the patient's medical record or office log, the publication date of the VIS and the date it was given to the patient. Provide non-English speakers with a VIS in their native language if available; these can be found at www.immunize.org/vis.
- Administer 0.5 mL of injectable trivalent inactivated influenza vaccine (TIV) IM (22-25g, 1-1½" needle) in the deltoid muscle. Alternatively, healthy persons 5-49 years of age without contraindications may be given 0.5 mL of intranasal LAIV; 0.25 mL is sprayed into each nostril while the patient is in an upright position.
- Document each patient's vaccine administration information and follow up in the following places:
 - Medical chart:** Record the date the vaccine was administered, the manufacturer and lot number, the vaccination site and route, and the name and title of the person administering the vaccine. If vaccine was not given, record the reason(s) for non-receipt of the vaccine (e.g., medical contraindication, patient refusal).
 - Personal immunization record card:** Record vaccination date and the name/location of the administering clinic.
- Be prepared for management of a medical emergency related to the administration of vaccine by having a written emergency medical protocol available, as well as equipment and medications.
- Report all adverse reactions to influenza vaccine to the federal Vaccine Adverse Event Reporting System (VAERS) at www.vaers.hhs.gov or (800) 822-7967. VAERS report forms are available at www.vaers.hhs.gov.

This policy and procedure shall remain in effect for all patients of the _____ until rescinded or until _____ (date).
(name of practice or clinic)

Medical Director's signature: _____ Effective date: _____

www.immunize.org/catg.d/p3074.pdf • Item #P3074(8/05)

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For a ready-to-copy 8½" x 11" version of this questionnaire, go to www.immunize.org/catg.d/p4067.pdf

For a ready-to-copy 8½" x 11" version of this questionnaire, go to www.immunize.org/catg.d/p4066.pdf

SAVE TIME: Ask patients to fill this out while waiting. Review their answers before administering vaccine.

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

Screening Questionnaire for Intranasal Influenza Vaccination

For adult patients as well as parents of children to be vaccinated: The following questions will help us determine if there is any reason we should not give you or your child intranasal influenza vaccine today. If you answer "yes" to any question, it does not necessarily mean you (or your child) should not be vaccinated. It just means additional questions must be asked. If a question is not clear, please ask your health care provider to explain it.

	Yes	No	Don't Know
1. Is the person to be vaccinated sick today?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
2. Does the person to be vaccinated have an allergy to eggs or to a component of the influenza vaccine?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
3. Has the person to be vaccinated ever had a serious reaction to intranasal influenza vaccine in the past?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
4. Is the person to be vaccinated younger than 5 or older than 49 years of age?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
5. Does the person to be vaccinated have a long-term health problem with heart disease, lung disease, asthma, kidney disease, metabolic disease (e.g., diabetes), anemia, or other blood disorders?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
6. Does the person to be vaccinated have a weakened immune system because of HIV/AIDS or another disease that affects the immune system, long-term treatment with drugs such as steroids, or cancer treatment with x-rays or drugs?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
7. Is the person to be vaccinated between the ages of 5 and 17 years and receiving aspirin therapy or aspirin-containing therapy?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
8. Is the person to be vaccinated pregnant or could she become pregnant within the next month?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
9. Has the person to be vaccinated ever had Guillain-Barré Syndrome?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
10. Does the person to be vaccinated live with or expect to have close contact with a person whose immune system is severely compromised and who must be in a protective environment (such as in a hospital room with reverse air flow)?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Form completed by: _____ Date: _____
Form reviewed by: _____ Date: _____

www.immunize.org/catg.d/p4067.pdf • Item #P4067(7/05)

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

SAVE TIME: Ask patients to fill this out while waiting. Review their answers before administering vaccine.

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

Screening Questionnaire for Injectable Influenza Vaccination

For adult patients as well as parents of children to be vaccinated: The following questions will help us determine if there is any reason we should not give you or your child injectable influenza vaccination today. If you answer "yes" to any question, it does not necessarily mean you (or your child) 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. Is the person to be vaccinated sick today?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
2. Does the person to be vaccinated have an allergy to eggs or to a component of the vaccine?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
3. Has the person to be vaccinated ever had a serious reaction to influenza vaccine in the past?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Form completed by: _____ Date: _____
Form reviewed by: _____ Date: _____

www.immunize.org/catg.d/p4066.pdf • Item #P4066(7/05)

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Essential Immunization Resources from IAC

IAC's website (www.immunize.org/free) provides you with all our free print materials for health professionals and their patients (more than 100 items). IAC's print materials are CDC reviewed, ready to copy, and available for your immediate use. Please use them or adapt them to meet your practice's needs. In addition to using our print materials, we hope you'll send a donation if you can.

When you make a donation of \$75 or more, we'll send you a CD containing all IAC's ready-to-print materials in English as well as any translations available in Spanish. The CD also includes VISs in English and Spanish.

You can also receive the CD when you contribute \$75 or more online at www.immunize.org/join.

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3. To order by purchase order, include your purchase order number in the Method of Payment section below. Mail this form to the address above or **fax it to (651) 647-9131**.

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Qty.		Amt.
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Adult Vaccination Guide

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Record cards (see p. 3)

_____ R2005 Adult immunization record cards: 250 cards/box; 1 box—\$35;
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Your support is vital to IAC's expanding work in disease prevention!



Deborah L. Wexler, MD
IAC Executive Director

Dear Friend of Immunization,

For 15 years, IAC's most important work has been providing you with timely and reliable immunization information. In 1990, that meant developing and distributing immunization materials for health professionals and their patients.

In 2005, it means all that, *plus* publishing three periodicals—*Vaccinate Adults*, *Needle Tips*, and *Vaccinate Women*—and mailing them to more than 300,000 health professionals twice a year, publishing two email news services, maintaining four websites, and much more. At IAC, we keep ourselves informed

about immunization news, whether it's reported in academic journals, on government websites, or in the popular press. Then, we make that information available to you through the mail and online.

Following are IAC's three most popular online resources. If you haven't done so already, please take a few minutes to review them. You'll find them to be sources of authoritative vaccine information—ones to which you can direct your colleagues, patients, and others with confidence.

★**IAC Express**, our weekly email listserv, gives you a "heads up" on vaccine news, and alerts you to sources of valuable materials for health professionals and patients. (To subscribe, go to www.immunize.org/express.)

★**www.immunize.org**, our main website for health professionals, puts *thousands* of practical resources at your fingertips—comprehensive information about vaccine delivery; VISs in more than 30 languages; new vaccine recommendations, and CDC-reviewed, ready-to-copy materials for patients.

★**www.vaccineinformation.org**, our website for the public and health professionals, is a reliable, user-friendly source of immunization information. It includes Q&As on vaccines and vaccine-preventable diseases (VPDs), as well as compelling video clips and hundreds of photos of people with VPDs.

Providing you with high-quality print and online resources is costly for IAC. Please consider taking a few minutes now to make a year-end contribution. Your donation is tax deductible, serves the worthwhile goal of disease prevention, is vital to IAC's work, and is—most of all—deeply appreciated.

Deborah L. Wexler, MD
Deborah L. Wexler, MD
Executive Director

Can you please help us save lives? No amount is too small.

Thank you to CDC!

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Thank you, readers!

We greatly appreciate your financial support and your comments and suggestions.

Thank you to our major supporters!

We deeply appreciate your generosity.

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October 2005

Immunization saves lives. Your tax-deductible contribution will help hundreds of thousands of health professionals and patients access reliable immunization information. When you contribute \$75 or more, you'll receive an extensive collection of IAC's ready-to-print materials on a CD in English, as well as any translations available in Spanish. The CD also contains VISs in English and Spanish.

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