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NEEDLE TIPS

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What's Inside

ACIP votes to broaden recommendations for use of Tdap vaccine

Cases of pertussis have increased in many states in the past decade. California is experiencing its largest outbreak in 60 years. Since January 2010, the state has reported 10 infant deaths, nine in infants younger than age 2 months, and more than 6,400 confirmed, probable, and suspected pertussis cases. In an effort to protect more people from pertussis, CDC's Advisory Committee on Immunization Practices (ACIP) recently voted to change the recommendations for the use of Tdap (tetanus-diphtheria-acellular pertussis) vaccine as follows:

- Tdap can be administered regardless of the interval since the last Td vaccine was given.
- All adolescents and adults ages 11 through 64 years who have not received a dose of Tdap or whose vaccination status is unknown should receive a single dose of Tdap as soon as feasible.
- Adults age 65 years and older who have not previously received Tdap, and who have or who anticipate having close contact with a child younger than age 12 months, should receive a single dose of Tdap to reduce the likelihood of transmitting pertussis to an infant. Other adults age 65 years and older who have not previously received Tdap may be given a single dose of Tdap in place of Td (tetanus and diphtheria toxoid).
- Children ages 7 through 10 years who did not complete a primary series of pertussis-containing vaccine (DTaP) should receive a single dose of Tdap as part of their catch-up schedule.

Though giving Tdap vaccine to people 7 through 9 years and 65 years and older is off-label use, CDC recommends use of the vaccine regardless.

For more information on ACIP's changes in Tdap vaccination recommendations, see the "Ask the Experts" feature below.

For information on the 35 states and the District of Columbia that have Tdap booster requirements for school attendance, see www.immunize.org/laws/tdap.asp.

Ask the Experts

IAC extends thanks to our experts, William L. Atkinson, MD, MPH, and Andrew T. Kroger, MD, MPH, medical epidemiologists at the National Center for Immunization and Respiratory Diseases, Centers for Disease Control and Prevention (CDC).

DTaP, Tdap, and Td vaccines

What are the new changes to recommendations for use of Tdap vaccine?

In response to an increased incidence of pertussis in the U.S., in October 2010, ACIP voted on the following new recommendations for the use of Tdap vaccine:

- Tdap can be given regardless of the interval since the last Td was given. There is NO need to wait 2–5 years to administer Tdap following a dose of Td.
- Adolescents should receive a one-time dose of Tdap (instead of Td) at the 11–12-year-old visit.
- Adolescents and adults younger than age 65 years who have not received a dose of Tdap, or for whom vaccine status is unknown, should be immunized as soon as feasible. (As stated above, Tdap can be administered regardless of interval since the previous Td dose.)
- Adults age 65 years and older who have not previously received a dose of Tdap, and who have or anticipate having close contact with children younger than age 12 months (e.g., grandparents, other relatives, child care providers, and healthcare personnel), should receive a one-time dose to protect infants. (As stated above, Tdap can be administered regardless of interval since the previous Td dose.)
- Other adults 65 years and older who are not in contact with an infant, and who have not previously received a dose of Tdap, may receive a single dose of Tdap in place of a dose of Td.
- Children ages 7–10 years who are not fully immunized against pertussis (i.e., did not complete a series of pertussis-containing vaccine before their seventh birthday) should receive a one-time dose of Tdap.

Aren't the October 2010 ACIP recommendations for expanded use of Tdap vaccine in children ages 7 through 9 years and in adults age 65 years and older different from what is on the package inserts?

Yes. Sometimes ACIP makes recommendations that differ from the FDA-approved package insert indications, and this is one of those instances. ACIP recommendations represent the standard of care for vaccination practice in the United States. In general, to determine recommendations for use, one should follow the recommendations of ACIP rather than the information in the package insert.

I need to know how to catch-up a child who is 12 years old and received 1 dose of DTaP vaccine at age 2 years and a one-time Tdap dose at age 11 years.

This child needs to complete the primary series with 1 dose of Td, administered no earlier than 6

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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)

Needle Tips

online at www.immunize.org/nt

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

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Associate Editor: Diane C. Peterson
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Edit./Opr. Asst.: Janelle Tangonan Anderson
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Check out IAC's 10 Most Visited Web Sections

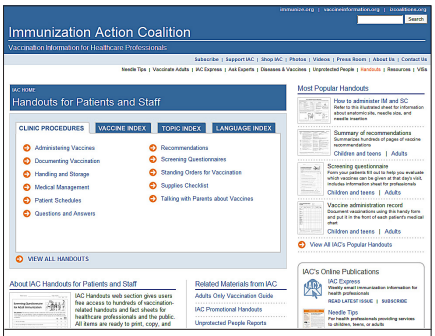
More than 4 million visitors accessed www.immunize.org during 2010

To discover why the Top 10 sections are so popular with healthcare professionals, read the section descriptions below and click on the links provided.

Handouts for Patients and Staff

www.immunize.org/handouts

Includes more than 250 information sheets for healthcare professionals and the public: All are free, ready-to-copy, and reviewed for technical accuracy by experts at the Centers for Disease Control and Prevention (CDC). Many are available in translation. Don't miss IAC's Standing Orders for administering vaccines to children and adults.



Handouts for Patients and Staff
www.immunize.org/handouts

For access to our handouts, go to the following sections:

- Most Popular Handouts
- Clinic Procedures
- Vaccine Index
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Vaccine Information Statements (VISs)

www.immunize.org/vis

The VIS section includes all VISs published in the U.S. and offers VISs in more than 35 languages.

- VISs by Vaccine
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- *IAC Express,* a free electronic digest of immunization news and information, is delivered to subscribers' email in-boxes at least once a week.
- *Needle Tips* and *Vaccinate Adults* are essential online publications for healthcare professionals who provide vaccination services.

Ask the Experts

www.immunize.org/askexperts

Experts from CDC answer challenging and timely questions about vaccines and their administration. These Q&As have been featured in issues of *IAC Express, Needle Tips,* and *Vaccinate Adults.*

Diseases and Vaccines

www.immunize.org/vaccines

IAC's Diseases and Vaccines web section presents a broad range of useful and reliable information on 21 diseases and vaccines. For each disease, IAC provides direct links to the following: relevant handouts for patients and staff; VISs; official vaccine recommendations and licensing information; state laws; photos and videos; case reports and personal accounts about people who have experienced VPDs; articles published in the main-stream media and academic journals; and more resources from others.

Vaccine Concerns

www.immunize.org/concerns

IAC's Vaccine Concerns web section provides healthcare professionals with background information and practical resources that will help them discuss immunization with concerned parents and patients.

Vaccine Policy and Licensure

www.immunize.org/vacpolicy

This section brings together vaccine recommendations, policy papers, and licensing information from CDC's Advisory Committee on Immunization Practices, the American Academy of Pediatrics, the Food and Drug Administration, the Institute of Medicine, and the World Health Organization.

Unprotected People Reports

www.immunize.org/reports

This collection of more than 100 personal testimonies, case summaries, and articles about people who have suffered or died from vaccine-preventable diseases provides compelling reasons to vaccinate.

State Information

www.immunize.org/stateinfo

IAC provides direct links to state immunization websites, tables and maps of state immunization mandates, and contact information for local, state, and territory immunization coordinators.

Directory of Immunization Resources

www.immunize.org/resources

IAC's Immunization Resources section brings together helpful resources from government, professional associations, nonprofit organizations, industry, and others.

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

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

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

To order, visit www.immunize.org/shop, or use the order form on page 17.
For 100 or more copies, contact us for discount pricing: admininfo@immunize.org

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

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

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

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

IAC Honors Healthcare Institutions With Stellar Influenza Vaccination Policies

IAC's Honor Roll for Patient Safety recognizes forward-looking hospitals, professional societies, and government entities that have taken a stand for patient safety by strengthening their mandatory influenza vaccination policies for healthcare workers. More than 90 organizations are now enrolled.

To read about the policies of organizations that are included, or to apply for the Honor Roll for Patient Safety, go to
www.immunize.org/honor-roll

Vaccine Highlights

Recommendations, schedules, and more

Editor's note: The information in Vaccine Highlights is current as of January 3, 2011.

CDC news

CDC will publish the annually updated Recommended Adult Immunization Schedule in *MMWR* on February 4, 2011, and the Recommended Immunization Schedule for Children and Adolescents in *MMWR* on February 11, 2011. For the past few years, both schedules have been published in *MMWR* in January. The move to a February publication date is expected to be permanent, beginning in 2011. The reason is to allow time to update the immunization schedules with recommendations that ACIP makes at its annual late-October meeting.

Influenza vaccine news

Policy Statements Issued for Mandatory Healthcare Worker Influenza Vaccination

The following professional societies have recently published mandatory influenza vaccination policies for healthcare workers. To obtain copies of these policy statements, click on the URLs below.

- **American Academy of Pediatrics (AAP):** http://pediatrics.aappublications.org/cgi/content/abstract/peds.2010-2376v1
- **American College of Physicians (ACP):** www.acponline.org/clinical_information/resources/adult_immunization/flu_hcw.pdf
- **Infectious Diseases Society of America (ISDA):** www.idsociety.org/redirector.aspx?id=15413
- **Society for Healthcare Epidemiology of America (SHEA):** www.journals.uchicago.edu/doi/full/10.1086/656558

To read about nearly 100 healthcare settings across the nation that have implemented mandatory influenza vaccination for healthcare workers, visit the Immunization Action Coalition's Honor Roll for Patient Safety at www.immunize.org/honor-roll.

On Oct. 29, CDC published a large-print version of the 2010–11 VIS for trivalent inactivated influenza vaccine (TIV; injectable). The intent is to make it easier for people with reduced vision or visual acuity to read the VIS. To access it, go to www.immunize.org/vis/flu_inactive_large_print.pdf.

To obtain hundreds of additional VISs in dozens of languages, visit www.immunize.org/vis.

In the October issue of *Pediatrics,* the American Academy of Pediatrics (AAP) published "Policy Statement—Recommendations for Prevention and Control of Influenza in Children, 2010–2011." To read the statement, go to http://pediatrics.aappublications.org/cgi/reprint/peds.2010-2216v1.

On Sept. 17, CDC published "Prevention Strategies for Seasonal Influenza in Healthcare Settings." This guidance continues to emphasize the importance of a comprehensive influenza prevention strategy that can be applied across the entire spectrum of healthcare settings. It supersedes previous CDC guidance for both seasonal influenza and the Interim Guidance on Infection Control Measures for 2009 H1N1 Influenza in Healthcare Settings. To access the guidance, go to www.cdc.gov/flu/pdf/infectioncontrol_seasonalflu_ICU2010.pdf.

On Sept. 15, CDC published a "Dear Colleague" letter; signed by representatives of 10 organizations, the letter urges healthcare providers to recommend influenza vaccination to their pregnant and postpartum patients this season. To access the letter, go to www.cdc.gov/flu/pdf/influenza_and_pregnancy_letter.pdf.

On Sept. 27, the Dear Abby column published a letter from Dr. Deborah Wexler, executive director of the Immunization Action Coalition. The letter urges everyone 6 months and older to get vaccinated against influenza this year. To read the letter in Dear Abby's column, along with Abby's comments, go to www.uexpress.com/dearabby/?uc_full_date=20100927.

Pneumococcal vaccine news

On Dec. 10, *MMWR* published "Prevention of Pneumococcal Disease Among Infants and Children—Use of 13-Valent Pneumococcal Conjugate Vaccine and 23-Valent Pneumococcal Polysaccharide Vaccine." To read the recommendations, go to www.cdc.gov/mmwr/PDF/rr/rr5911.pdf.

IAC has created a table that explains how to use PCV13 to catch up children who have fallen behind on their PCV7 doses. It is available at www.immunize.org/catg.d/p2016.pdf. In addition, IAC has a standing orders protocol for administering PCV vaccine to children. Find it at www.immunize.org/catg.d/p3086.pdf.

On Sept. 3, CDC published "Updated Recommendations for Prevention of Invasive Pneumococcal Disease Among Adults Using the 23-Valent Pneumococcal Polysaccharide Vaccine (PPSV23)." To read the updated recommendations, go to www.cdc.gov/mmwr/PDF/wk/mm5934.pdf and see pages 1102–06.

Current VISs and dates

The use of most Vaccine Information Statements (VISs) is mandated by federal law. Listed below are the dates of the most current VISs. Check your stock of VISs against this list. If you have outdated VISs, print current ones from IAC's website at www.immunize.org/vis. You'll find VISs in more than 30 languages.

DTaP/DT/DTP	5/17/07	MMR	3/13/08
Hepatitis A	3/21/06	MMRV	5/21/10
Hepatitis B	7/18/07	PCV	4/16/10
Hib	12/16/98	PPSV	10/6/09
HPV (Cervarix)	3/30/10	Polio	1/1/00
HPV (Gardasil)	3/30/10	Rabies	10/6/09
Influenza (LAIV)	8/10/10	Rotavirus	12/6/10
Influenza (TIV)	8/10/10	Shingles	10/6/09
Japanese encephalitis		Td/Tdap	11/18/08
Ixiaro	3/1/10	Typhoid	5/19/04
JE VAX	3/1/10	Varicella	3/13/08
Meningococcal	1/28/08	Yellow fever	11/9/04

Multi-vaccine VIS 9/18/08
(for 6 vaccines given to infants/children: DTaP, IPV, Hib, HepB, PCV, RV)

(continued on page 5)

Rotavirus vaccine news

On Dec. 6, CDC published an updated edition of the interim VIS for rotavirus vaccine. It includes information about a possible increased risk of intussusception among vaccine recipients and revised wording on porcine circovirus, along with several minor changes.

Because the updated edition of the VIS refers to a potential adverse event not mentioned in the previous edition, CDC recommends that only the updated edition be used starting immediately. To access the VIS, go to www.immunize.org/vis/vis_rotavirus.asp.

Vaccine coverage 2009

On Sept. 17, CDC published "National, State, and Local Area Vaccination Coverage Among Children Aged 19–35 Months—United States, 2009" in *MMWR,* Vol. 59 (36). The National Immunization Survey (NIS) provides vaccination coverage estimates for children ages 19–35 months for each of the 50 states and 17 selected urban areas. To access the NIS report, go to www.cdc.gov/mmwr/preview/mmwrhtml/mm5936a2.htm.

On Nov. 17, CDC released "2009 Adult Vaccination Coverage, National Health Interview Survey (NHIS)." Estimates of vaccination coverage for hepatitis A, hepatitis B, herpes zoster (shingles), human papillomavirus, influenza (2008–09 season), pneumococcal disease, and tetanus with and without pertussis are presented overall and by selected characteristics (i.e., age, vaccination target group status, and race/ethnicity). To access the key findings and other information from the NHIS survey, go to www.cdc.gov/vaccines/stats-surv/nhis/2009-nhis.htm.

New Handouts from the Immunization Action Coalition in 2010

IAC developed the following handouts for healthcare professional staff and/or the general public. Download, print, and distribute them freely.

- **Evidence shows vaccines unrelated to autism**
  www.immunize.org/catg.d/p4028.pdf
- **Personal belief exemptions for vaccination put people at risk. Examine the evidence for yourself**
  www.immunize.org/catg.d/p2069.pdf
- **Need help responding to vaccine-hesitant parents? Science-based materials are available from these respected organizations**
  www.immunize.org/catg.d/p2070.pdf
- **Vaccines with diluents: How to use them**
  www.immunize.org/catg.d/p3040.pdf
- **Recommendations for pneumococcal vaccine use in children**
  www.immunize.org/catg.d/p2016.pdf
- **Sample text for admission orders for hepatitis B vaccine birth dose in newborn nursery**
  www.immunize.org/catg.d/p2131.pdf

Don't miss **Slide Set of Vaccine-Preventable Diseases**
www.immunize.org/resources/res_powerpoint.asp

To access all IAC's handouts (more than 250), go to www.immunize.org/handouts

Ask the Experts *. . . continued from page 1*

months after the Tdap dose given at age 11 years. After that, the child needs a booster dose of Td every 10 years. An easy way to determine how to catch-up a child is to consult "Recommended Immunization Schedules for Persons Aged 0 Through 18 Years, U.S." The schedule is approved by CDC, AAP, and AAFP and is released early in each calendar year. It includes a catch-up schedule for children who have fallen behind (see www.cdc.gov/vaccines/recs/schedules/child-schedule.htm).

Meningococcal vaccines

I understand that ACIP recently voted to recommend administering a routine booster dose of quadrivalent meningococcal conjugate vaccine (MCV4) to all teens. Can you tell me more?

At its October 2010 meeting, ACIP voted to recommend that providers administer the initial dose of MCV4 to all adolescents at age 11–12 years with a booster dose at age 16 years.

Why did ACIP vote to recommend a routine booster dose of MCV4 for adolescents age 16 years and older?

In October 2005, ACIP recommended routine MCV4 vaccination for all adolescents at ages 11–12 years to protect them from meningococcal disease as older teens. The peak age for meningococcal disease is 16–21 years. In 2005, ACIP reasoned that higher MCV4 vaccination rates could be achieved if administering the dose were coupled with giving the Td booster dose at the 11–12-year-old visit. (The Td dose for 11–12-year-olds was replaced by Tdap in 2006.) Current data now indicate that the protection provided by MCV4 wanes within 5 years following vaccination. For this reason, in October 2010, ACIP voted to recommend an MCV4 vaccine booster dose to provide continuing protection during the peak years of vulnerability.

We recently vaccinated an asplenic 65-year-old man against* Neisseria meningitidis; *unfortunately, we gave him MCV4, which isn't licensed for people older than 55. Should we now give him a dose of meningococcal polysaccharide vaccine (MPSV4; Menomune)?

No. Though giving MCV4 to a 65-year-old is off-label and a vaccine administration error, there is no need to repeat the dose. The error should be documented in the medical record, and the patient should be informed. Make sure staff are trained so this error is not repeated. MCV4 is not approved by FDA for people 56 years and older. People this age should receive meningococcal polysaccharide vaccine (MPSV4).

General vaccine questions

When will the 2011 recommended immunization schedules for children, adolescents, and adults be published?

The publication of these schedules in CDC's *MMWR* is expected in early February 2011. Publication of the annual schedules has been moved to February this year (and probably will continue to be in subsequent years) to allow time to update the immunization schedules with recommendations that ACIP makes at its annual late-October meeting.

When we have to give multiple injections, can we give two in the same limb?

If a patient requires more than one vaccine, ACIP and AAP consistently recommend administering all needed vaccines during a single office visit (unless there are contraindications or precautions). If you have the option of giving the vaccines in different anatomic sites, do so. If you need to give multiple injections in the same limb, separate two intramuscular injections by 1 inch or more in the body of the muscle, if possible, to reduce the likelihood of local reactions overlapping. Likewise, separate two subcutaneous injections by 1 inch or more in the fatty tissue.

You recently published a Q&A about cleaning the vaccine vial stopper with an alcohol wipe after removing the protective cap from a vac-

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Needle Tips correction policy

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

Summary of Recommendations for Child/Teen Immunization *(Ages birth through 18 years)* (Page 1 of 4)

Vaccine name and route	Schedule for routine vaccination and other guidelines (any vaccine can be given with another)	Schedule for catch-up vaccination and related issues	Contraindications and precautions (mild illness is not a contraindication)
Hepatitis B (HepB) *Give IM*	• Vaccinate all children age 0 through 18yrs. • Vaccinate all newborns with monovalent vaccine prior to hospital discharge. Give dose #2 at age 1–2m and the final dose at age 6–18m (the last dose in the infant series should not be given earlier than age 24wks). After the birth dose, the series may be completed using 2 doses of single-antigen vaccine or up to 3 doses of Comvax (ages 2m, 4m, 12–15m) or Pediarix (ages 2m, 4m, 6m), which may result in giving a total of 4 doses of hepatitis B vaccine. • **If mother is HBsAg-positive:** give the newborn HBIG + dose #1 within 12hrs of birth; complete series at age 6m or, if using Comvax, at age 12–15m. • **If mother's HBsAg status is unknown:** give the newborn dose #1 within 12hrs of birth. If preterm, also give HBIG within 12hrs. If mother is subsequently found to be HBsAg positive, give infant HBIG within 7d of birth and follow the schedule for infants born to HBsAg-positive mothers.	• Do not restart series, no matter how long since previous dose. • 3-dose series can be started at any age. • Minimum intervals between doses: 4wks between #1 and #2, 8wks between #2 and #3, and at least 16wks between #1 and #3 (e.g., 0-, 2-, 4m; 0-, 1-, 4m). **Special Notes on Hepatitis B Vaccine (HepB)** **Dosing of HepB:** Monovalent vaccine brands are interchangeable. For people age 0 through 19yrs, give 0.5 mL of either Engerix-B or Recombivax HB. **Alternative dosing schedule for unvaccinated adolescents age 11 through 15yrs:** Give 2 doses Recombivax HB 1.0 mL (adult formulation) spaced 4–6m apart. (Engerix-B is not licensed for a 2-dose schedule.) **For preterm infants:** Consult ACIP hepatitis B recommendations (*MMWR* 2005; 54 [RR-16]).*	**Contraindication** Previous anaphylaxis to this vaccine or to any of its components. **Precaution** Moderate or severe acute illness.
DTaP, DT (Diphtheria, tetanus, acellular pertussis) *Give IM*	• Give to children at ages 2m, 4m, 6m, 15–18m, 4–6yrs. • May give dose #1 as early as age 6wks. • May give #4 as early as age 12m if 6m have elapsed since #3. • Do not give DTaP/DT to children age 7yrs and older. • If possible, use the same DTaP product for all doses.	• #2 and #3 may be given 4wks after previous dose. • #4 may be given 6m after #3. • If #4 is given before 4th birthday, wait at least 6m for #5 (age 4–6yrs). • If #4 is given after 4th birthday, #5 is not needed.	**Contraindications** • Previous anaphylaxis to this vaccine or to any of its components. • For DTaP/Tdap only: encephalopathy within 7d after DTP/DTaP. **Precautions** • Moderate or severe acute illness. • History of Arthus reaction following a prior dose of tetanus- and/or diphtheria-toxoid-containing vaccine, including MCV4. • Guillain-Barré syndrome (GBS) within 6wks after previous dose of tetanus-toxoid-containing vaccine. • For DTaP only: Any of these events following a previous dose of DTP/DTaP: 1) temperature of 105°F (40.5°C) or higher within 48hrs; 2) continuous crying for 3hrs or more within 48hrs; 3) collapse or shock-like state within 48hrs; 4) convulsion with or without fever within 3d. • For DTaP/Tdap only: Unstable neurologic disorder. • For Td in teens: Progressive neurologic disorder. **Note:** Tdap may be given to pregnant women at the provider's discretion.
Td, Tdap (Tetanus, diphtheria, acellular pertussis) *Give IM*	• Give 1-time Tdap dose to adolescents age 11–12yrs if 5yrs have elapsed since last dose DTaP; then boost every 10yrs with Td. • Give 1-time dose of Tdap to all adolescents who have not received previous Tdap. Special efforts should be made to give Tdap to people age 11yrs and older who are 1) in contact with infants younger than age 12m and 2) healthcare workers with direct patient contact. • In pregnancy, when indicated, give Td or Tdap in 2nd or 3rd trimester. If not administered during pregnancy, give Tdap in immediate postpartum period. • Tdap can be given regardless of interval since previous Td.	• Children as young as age 7yrs and teens who are unvaccinated or behind schedule should complete a primary Td series (spaced at 0, 1–2m, and 6–12m intervals); substitute a 1-time Tdap for any dose in the series, preferably as dose #1.	
Polio (IPV) *Give SC or IM*	• Give to children at ages 2m, 4m, 6–18m, 4–6yrs. • May give dose #1 as early as age 6wks. • Not routinely recommended for U.S. residents age 18yrs and older (except certain travelers).	• The final dose should be given on or after the 4th birthday and at least 6m from the previous dose. • If dose #3 is given after 4th birthday, dose #4 is not needed if dose #3 is given at least 6m after dose #2.	**Contraindication** Previous anaphylaxis to this vaccine or to any of its components. **Precautions** • Moderate or severe acute illness. • Pregnancy.

*This document was adapted from the recommendations of the Advisory Committee on Immunization Practices (ACIP). To obtain copies of the recommendations, call the CDC-INFO Contact Center at (800) 232-4636; visit CDC's website at www.cdc.gov/vaccines/pubs/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/childrules to make sure you have the most current version.

Technical content reviewed by the Centers for Disease Control and Prevention, January 2011.

www.immunize.org/catg.d/p2010.pdf • Item #P2010 (1/11)

Summary of Recommendations for Child/Teen Immunization *(Ages birth through 18 years)*

Vaccine name and route	Schedule for routine vaccination and other guidelines (any vaccine can be given with another)	Schedule for catch-up vaccination and related issues	Contraindications and precautions (mild illness is not a contraindication)
Seasonal Influenza Trivalent inactivated influenza vaccine (TIV) *Give IM* — Live attenuated influenza vaccine (LAIV) *Give intranasally*	• Vaccinate all children and teens age 6m through 18yrs. • LAIV may be given to healthy, non-pregnant people age 2–49yrs. • Give 2 doses to first-time vaccinees age 6m through 8yrs, spaced 4wks apart. • For TIV, give 0.25 mL dose to children age 6–35m and 0.5 mL dose if age 3yrs and older. • If LAIV and either MMR, Var, and/or yellow fever vaccine are not given on the same day, space them at least 28d apart.		**Contraindications** • Previous anaphylaxis to this vaccine, to any of its components, or to eggs. • For LAIV only: age younger than 2yrs; pregnancy; chronic pulmonary (including asthma), cardiovascular (except hypertension), renal, hepatic, neurological/neuromuscular, hematologic, or metabolic (including diabetes) disorders; immunosuppression (including that caused by medications or HIV); for children and teens ages 6m through 18yrs, current long-term aspirin therapy; for children age 2 through 4yrs, wheezing or asthma within the past 12m, per healthcare provider statement. **Precautions** • Moderate or severe acute illness. • History of Guillain-Barré syndrome (GBS) within 6wks of a previous influenza vaccination. • For LAIV only: - Close contact with an immunosuppressed person when the person requires protective isolation. - Receipt of specific antivirals (i.e., amantadine, rimantadine, zanamivir, or oseltamivir) 48hrs before vaccination. Avoid use of these antiviral drugs for 14d after vaccination.
Varicella (Var) (Chickenpox) *Give SC*	• Give dose #1 at age 12–15m. • Give dose #2 at age 4–6yrs. Dose #2 of Var or MMRV may be given earlier if at least 3m since dose #1. • Give a 2nd dose to all older children and adolescents with history of only 1 dose. • MMRV may be used in children age 12m through 12yrs (see note below). **Note:** For the first dose of MMR and varicella given at age 12–47mos, either MMR and Var or MMRV may be used. Unless the parent or caregiver expresses a preference for MMRV, CDC recommends that MMR and Var should be given for the first dose in this age group.	• If younger than age 13yrs, space dose #1 and #2 at least 3m apart. If age 13yrs or older, space at least 4wks apart. • May use as postexposure prophylaxis if given within 5d. • If Var and either MMR, LAIV, and/or yellow fever vaccine are not given on the same day, space them at least 28d apart.	**Contraindications** • Previous anaphylaxis to this vaccine or to any of its components. • Pregnancy or possibility of pregnancy within 4wks. • Children on high-dose immunosuppressive therapy or who are immunocompromised because of malignancy and primary or acquired cellular immunodeficiency, including HIV/AIDS (although vaccination may be considered if CD4+ T-lymphocyte percentages are either 15% or greater in children ages 1 through 8yrs or 200 cells/μL or greater in children age 9yrs and older). **Precautions** • Moderate or severe acute illness. • 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. • Receipt of specific antivirals (i.e., acyclovir, famciclovir, or valacyclovir) 24hrs before vaccination, if possible; delay resumption of these antiviral drugs for 14d after vaccination. • For MMRV only, personal or family (i.e., sibling or parent) history of seizures. **Note:** For patients with humoral immunodeficiency or leukemia, see ACIP recommendations*.
MMR (Measles, mumps, rubella) *Give SC*	• Give dose #1 at age 12–15m. • Give dose #2 at age 4–6yrs. Dose #2 may be given earlier if at least 4wks since dose #1. For MMRV: dose #2 may be given earlier if at least 3m since dose #1. • Give a 2nd dose to all older children and teens with history of only 1 dose. • MMRV may be used in children age 12m through 12yrs (see note above).	• If MMR and either Var, LAIV, and/or yellow fever vaccine are not given on the same day, space them at least 28d apart. • When using MMR for both doses, minimum interval is 4wks. • When using MMRV for both doses, minimum interval is 3m. • Within 72hrs of measles exposure, give 1 dose of MMR as postexposure prophylaxis to susceptible healthy children age 12m and older.	**Contraindications** • Previous anaphylaxis to this vaccine or to any of its components. • Pregnancy or possibility of pregnancy within 4wks. • Severe immunodeficiency (e.g., hematologic and solid tumors; receiving chemotherapy; congenital immunodeficiency; long-term immunosuppressive therapy, or severely symptomatic HIV). Note: HIV infection is NOT a contraindication to MMR for children who are not severely immunocompromised (consult ACIP MMR recommendations [*MMWR* 1998;47 [RR-8] for details*). **Precautions** • Moderate or severe acute illness. • If blood, plasma, or immune globulin given in past 11m, see ACIP statement *General Recommendations on Immunization** regarding time to wait before vaccinating. • History of thrombocytopenia or thrombocytopenic purpura. • For MMRV only, personal or family (i.e., sibling or parent) history of seizures. **Note:** MMR is not contraindicated if a TST (tuberculosis skin test) was recently applied. If TST and MMR are not given on same day, delay TST for at least 4wks after MMR.

Summary of Recommendations for Child/Teen Immunization *(Ages birth through 18 years)*

Vaccine name and route	Schedule for routine vaccination and other guidelines (any vaccine can be given with another)	Schedule for catch-up vaccination and related issues	Contraindications and precautions (mild illness is not a contraindication)
Hib (*Haemophilus influenzae* type b) *Give IM*	• ActHib (PRP-T): give at age 2m, 4m, 6m, 12–15m (booster dose). • PedvaxHIB or Comvax (containing PRP-OMP): give at age 2m, 4m, 12–15m (booster dose). • Dose #1 of Hib vaccine should not be given earlier than age 6wks. • The last dose (booster dose) is given no earlier than age 12m and a minimum of 8wks after the previous dose. • Hib vaccines are interchangeable; however, if different brands of Hib vaccines are administered for dose #1 and dose #2, a total of 3 doses are necessary to complete the primary series in infants. • Any Hib vaccine may be used for the booster dose. • Hib is not routinely given to children age 5yrs and older. • Hiberix is approved ONLY for the booster dose at age 15m through 4yrs.	**All Hib vaccines:** • If #1 was given at 12–14m, give booster in 8wks. • Give only 1 dose to unvaccinated children ages 15 through 59m. **ActHib:** • #2 and #3 may be given 4wks after previous dose. • If #1 was given at age 7–11m, only 3 doses are needed; #2 is given 4–8wks after #1, then boost at age 12–15m (wait at least 8wks after dose #2). **PedvaxHIB and Comvax:** • #2 may be given 4wks after dose #1.	**Contraindications** • Previous anaphylaxis to this vaccine or to any of its components. • Age younger than 6wks. **Precaution** Moderate or severe acute illness.
Pneumococcal conjugate (PCV13) *Give IM*	As soon as feasible, replace existing stock of PCV7 with PCV13. • Give at ages 2m, 4m, 6m, 12–15m. • Dose #1 may be given as early as age 6wks. • When children are behind on PCV schedule, minimum interval for doses given to children younger than age 12m is 4wks; for doses given at 12m and older, it is 8wks. • Give 1 dose to unvaccinated healthy children age 24–59m. • For high-risk** children ages 24–71m: Give 2 doses at least 8wks apart if they previously received fewer than 3 doses; give 1 dose at least 8wks after the most recent dose if they previously received 3 doses. • PCV13 is not routinely given to healthy children age 5yrs and older.	• For minimum intervals, see 3rd bullet at left. • For age 7–11m: If history of 0 doses, give 2 doses 4wks apart, with a 3rd dose at age 12–15m; if history of 1 or 2 doses, give 1 dose with a 2nd dose at age 12–15m. • For age 12–23m: If unvaccinated or history of 1 dose before age 12m, give 2 doses 8wks apart; if history of 1 dose at or after age 12m or 2 or 3 doses before age 12m, give 1 dose at least 8wks after most recent dose. • For age 24–59m and healthy: If unvaccinated or any incomplete schedule or if 4 doses of PCV7 or any other age-appropriate complete PCV7 schedule, give 1 dose at least 8wks after the most recent dose. • For age 24–71m and at high risk**: If unvaccinated or any incomplete schedule of 1 or 2 doses, give 2 doses, 1 at least 8wks after the most recent dose and another dose at least 8wks later; if any incomplete series of 3 doses, or if 4 doses of PCV7 or any other age-appropriate complete PCV7 schedule, give 1 dose at least 8wks after the most recent dose. • For children ages 6 through 18yrs with functional or anatomic asplenia (including sickle cell disease), HIV infection or other immunocompromising condition, cochlear implant, or CSF leak, consider giving 1 dose of PCV13 regardless of previous history of PCV7 or PPSV.	**Contraindication** Previous anaphylaxis to a PCV vaccine, to any of its components, or to any diphtheria toxoid-containing vaccine. **Precaution** Moderate or severe acute illness.
Pneumococcal polysaccharide (PPSV) *Give IM or SC*	****High-risk:** Those with sickle cell disease; anatomic or functional asplenia; chronic cardiac, pulmonary, or renal disease; diabetes; cerebrospinal fluid leaks; HIV infection; immunosuppression; diseases associated with immunosuppressive and/or radiation therapy; or who have or will have a cochlear implant. • Give 1 dose at least 8wks after final dose of PCV to high-risk children age 2yrs and older. • For children who have an immunocompromising condition or have sickle cell disease or functional or anatomic asplenia, give a 2nd dose of PPSV 5yrs after previous PPSV (consult ACIP PPSV recommendations at www.cdc.gov/vaccines/pubs/ACIP-list.htm*).		**Contraindication** Previous anaphylaxis to this vaccine or to any of its components. **Precaution** Moderate or severe acute illness.

Summary of Recommendations for Child/Teen Immunization *(Ages birth through 18 years)*

Vaccine name and route	Schedule for routine vaccination and other guidelines (any vaccine can be given with another)	Schedule for catch-up vaccination and related issues	Contraindications and precautions (mild illness is not a contraindication)
Rotavirus (RV) *Give orally*	• Rotarix (RV1): give at age 2m, 4m. • RotaTeq (RV5): give at age 2m, 4m, 6m. • May give dose #1 as early as age 6wks. • Give final dose no later than age 8m 0 days.	• Do not begin series in infants older than age 14wks 6 days. • Intervals between doses may be as short as 4wks. • If prior vaccination included use of different or unknown brand(s), a total of 3 doses should be given.	**Contraindications** • Previous anaphylaxis to this vaccine or to any of its components. If allergy to latex, use RV5. • Diagnosis of severe combined immunodeficiency (SCID). **Precautions** • Moderate or severe acute illness. • Altered immunocompetence. • Moderate to severe acute gastroenteritis or chronic pre-existing gastrointestinal disease. • History of intussusception.
Hepatitis A (HepA) *Give IM*	• Give 2 doses spaced 6m apart to all children at age 1yr (12–23m). • Vaccinate all previously unvaccinated children and adolescents age 2yrs and older who - Want to be protected from HAV infection. - Live in areas where vaccination programs target older children. - Travel anywhere except U.S., W. Europe, N. Zealand, Australia, Canada, or Japan. - Have chronic liver disease, clotting factor disorder, or are adolescent males who have sex with other males. - Are users of illicit drugs (injectable or non-injectable). - Anticipate close personal contact with an international adoptee from a country of high or intermediate endemicity during the first 60 days following the adoptee's arrival in the U.S.	• Minimum interval between doses is 6m. • Children who are not fully vaccinated by age 2yrs can be vaccinated at subsequent visits. • Consider routine vaccination of children age 2yrs and older in areas with no existing program. • Give 1 dose as postexposure prophylaxis to incompletely vaccinated children age 12m and older who have recently (during the past 2wks) been exposed to hepatitis A virus.	**Contraindication** Previous anaphylaxis to this vaccine or to any of its components. **Precautions** • Moderate or severe acute illness. • Pregnancy.
Meningococcal conjugate, quadrivalent (MCV4) Menactra (ages 2–55yrs) Menveo (ages 11–55yrs) *Give IM* —— **Meningococcal polysaccharide** (MPSV4) *Give SC*	• Give MCV4 #1 routinely at age 11 through 12yrs and a booster dose at age 16yrs. • Give MCV4 to all unvaccinated teens ages 13 through 18yrs; if vaccinated at age 13–15yrs, give booster dose at age 16–18yrs. • Vaccinate all college freshmen living in dorms who have not been vaccinated. • Vaccinate all children age 2yrs and older who have any of the following risk factors: - Anatomic or functional asplenia, or persistent complement component deficiency; give 2 doses, separated by 8wks. - Travel to or reside in countries in which meningococcal disease is hyperendemic or epidemic (e.g., the "meningitis belt" of Sub-Saharan Africa). **Note:** Use MPSV4 ONLY if there is a permanent contraindication or precaution to MCV4.	• If previously vaccinated with MPSV4 or MCV4 and risk of meningococcal disease persists, revaccinate with Menactra in 3yrs (if first dose given at age 2 through 6yrs) or revaccinate with either brand of MCV4 in 5yrs (if previous dose given at age 7yrs or older). Then, give additional booster doses every 5yrs if risk continues. • For children with HIV infection, give 2 initial doses, separated by 8wks.	**Contraindication** Previous anaphylaxis to any meningococcal vaccine or to any of its components, including diphtheria toxoid (for MCV4). **Precautions** • Moderate or severe acute illness. • In pregnancy, studies of vaccination with MPSV4 have not documented adverse effects so may use MPSV4 if indicated. No data are available on the safety of MCV4 during pregnancy.
Human papillomavirus (HPV) (HPV2, Cervarix) (HPV4, Gardasil) *Give IM*	• Give 3-dose series to girls at age 11–12yrs on a 0, 1–2, 6m schedule. (May be given as early as age 9yrs.) • Vaccinate all older girls and women (through age 26yrs) who were not previously vaccinated. • Consider giving HPV4 to males age 9 through 26yrs to reduce their likelihood of acquiring genital warts.	Minimum intervals between doses: 4wks between #1 and #2; 12 wks between #2 and #3. Overall, there must be at least 24wks between doses #1 and #3. If possible, use the same vaccine product for all doses.	**Contraindication** Previous anaphylaxis to this vaccine or to any of its components. **Precautions** • Moderate or severe acute illness. • Pregnancy.

Summary of Recommendations for Adult Immunization *(Age 19 years & older)* (Page 1 of 4)

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)
Seasonal Influenza Trivalent inactivated influenza vaccine (TIV) *Give IM* —— Live attenuated influenza vaccine (LAIV) *Give intranasally*	For people through age 18 years, consult "Summary of Recs for Child/Teen Immunization" at www.immunize.org/catg.d/p2010.pdf. • Beginning with the 2010–11 influenza season, vaccination is recommended for all adults. (This includes healthy adults ages 19–49yrs without risk factors.) • LAIV is only approved for healthy nonpregnant people age 2–49yrs. • Adults ages 65yrs and older may be given standard-dose TIV or, alternatively, a high-dose TIV. **Note:** LAIV may not be given to some adults; see contraindications and precautions listed in far right column.	• Give 1 dose every year in the fall or winter. • Begin vaccination services as soon as vaccine is available and continue until the supply is depleted. • Continue to give vaccine to unvaccinated adults throughout the influenza season (including when influenza activity is present in the community) and at other times when the risk of influenza exists. • If 2 or more of the following live virus vaccines are to be given—LAIV, MMR, Var, and/or yellow fever—they should be given on the same day. If they are not, space them by at least 28d.	**Contraindications** • Previous anaphylactic reaction to this vaccine, to any of its components, or to eggs. • For LAIV only: pregnancy; chronic pulmonary (including asthma), cardiovascular (except hypertension), renal, hepatic, neurological/neuromuscular, hematologic, or metabolic (including diabetes) disorders; immunosuppression (including that caused by medications or HIV). **Precautions** • Moderate or severe acute illness. • History of Guillain-Barré syndrome (GBS) within 6wks following previous influenza vaccination. • For LAIV only: close contact with an immunosuppressed person when the person requires protective isolation. • For LAIV only: receipt of specific antivirals (i.e., amantadine, rimantadine, zanamivir, or oseltamivir) 48hrs before vaccination. Avoid use of these antiviral drugs for 14d after vaccination.
Pneumococcal polysaccharide (PPSV) *Give IM or SC*	For people through age 18 years, consult "Summary of Recs for Child/Teen Immunization" at www.immunize.org/catg.d/p2010.pdf. • People age 65yrs and older. • People younger than age 65yrs who have chronic illness or other risk factors, including chronic cardiac or pulmonary disease (including asthma), chronic liver disease, alcoholism, diabetes, CSF leaks, cigarette smoking, as well as candidates for or recipients of cochlear implants and people living in special environments or social settings (including American Indian/Alaska Natives age 50 through 64yrs if recommended by local public health authorities). • Those at highest risk of fatal pneumococcal infection, including people who - Have anatomic or functional asplenia, including sickle cell disease. - Have an immunocompromising condition, including HIV infection, leukemia, lymphoma, Hodgkin's disease, multiple myeloma, generalized malignancy, chronic renal failure, or nephrotic syndrome. - Are receiving immunosuppressive chemotherapy (including corticosteroids). - Have received an organ or bone marrow transplant.	• Give 1 dose if unvaccinated or if previous vaccination history is unknown. • Give a 1-time revaccination to people - Age 65yrs and older if 1st dose was given prior to age 65yrs and 5yrs have elapsed since dose #1. - Age 19 through 64yrs who are at highest risk of fatal pneumococcal infection or rapid antibody loss (see the 3rd bullet in the box to left for listings of people at highest risk) and 5yrs have elapsed since dose #1.	**Contraindication** Previous anaphylactic reaction to this vaccine or to any of its components. **Precaution** Moderate or severe acute illness.

*This document was adapted from the recommendations of the Advisory Committee on Immunization Practices (ACIP). To obtain copies of these recommendations, call the CDC-INFO Contact Center at (800) 232-4636; visit CDC's website at www.cdc.gov/vaccines/pubs/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.

Technical content reviewed by the Centers for Disease Control and Prevention, January 2011.

www.immunize.org/catg.d/p2011.pdf • Item #P2011 (1/11)

Summary of Recommendations for Adult Immunization *(Age 19 years & older)*

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)
MMR (Measles, mumps, rubella) *Give SC*	For people through age 18 years, consult "Summary of Recs for Child/Teen Immunization" at www.immunize.org/catg.d/p2010.pdf. • People born in 1957 or later (especially those born outside the U.S.) should receive at least 1 dose of MMR if there is no laboratory evidence of immunity or documentation of a dose given on or after the first birthday. • People in high-risk groups, such as healthcare personnel (paid, unpaid, or volunteer), students entering college and other post–high school educational institutions, and international travelers, should receive a total of 2 doses. • People born before 1957 are usually considered immune, but evidence of immunity (serology or documented history of 2 doses of MMR) should be considered for healthcare personnel. • Women of childbearing age who do not have acceptable evidence of rubella immunity or vaccination.	• Give 1 or 2 doses (see criteria in 1st and 2nd bullets in box to left). • If dose #2 is recommended, give it no sooner than 4wks after dose #1. • If a pregnant woman is found to be rubella susceptible, give 1 dose of MMR postpartum. • If 2 or more of the following live virus vaccines are to be given—LAIV, MMR, Var, Zos, and/or yellow fever—they should be given on the same day. If they are not, space them by at least 28d. • Within 72hrs of measles exposure, give 1 dose as postexposure prophylaxis to susceptible adults. **Note:** Routine post-vaccination serologic testing is not recommended.	**Contraindications** • Previous anaphylactic reaction to this vaccine or to any of its components. • Pregnancy or possibility of pregnancy within 4wks. • Severe immunodeficiency (e.g., hematologic and solid tumors; receiving chemotherapy; congenital immunodeficiency; long-term immunosuppressive therapy; or severely symptomatic HIV). **Note:** HIV infection is NOT a contraindication to MMR for those who are not severely immunocompromised (i.e., CD4+ T-lymphocyte counts are greater than or equal to 200 cells/µL). **Precautions** • Moderate or severe acute illness. • 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. • History of thrombocytopenia or thrombocytopenic purpura. **Note:** If TST (tuberculosis skin test) and MMR are both needed but not given on same day, delay TST for 4–6wks after MMR.
Varicella (chickenpox) (Var) *Give SC*	For people through age 18 years, consult "Summary of Recs for Child/Teen Immunization" at www.immunize.org/catg.d/p2010.pdf. • All adults without evidence of immunity. **Note:** Evidence of immunity is defined as written documentation of 2 doses of varicella vaccine; a history of varicella disease or herpes zoster (shingles) based on healthcare-provider diagnosis; laboratory evidence of immunity; and/or birth in the U.S. before 1980, with the exceptions that follow. - Healthcare personnel (HCP) born in the U.S. before 1980 who do not meet any of the criteria above should be tested or given the 2-dose vaccine series. If testing indicates they are not immune, give the 1st dose of varicella vaccine immediately. Give the 2nd dose 4–8 wks later. - Pregnant women born in the U.S. before 1980 who do not meet any of the criteria above should either 1) be tested for susceptibility during pregnancy and if found susceptible, given the 1st dose of varicella vaccine postpartum before hospital discharge, or 2) not be tested for susceptibility and given the 1st dose of varicella vaccine postpartum before hospital discharge. Give the 2nd dose 4-8wks later.	• Give 2 doses. • Dose #2 is given 4–8wks after dose #1. • If dose #2 is delayed, do not repeat dose #1. Just give dose #2. • If 2 or more of the following live virus vaccines are to be given—LAIV, MMR, Var, Zos, and/or yellow fever—they should be given on the same day. If they are not, space them by at least 28d. • May use as postexposure prophylaxis if given within 5d. **Note:** Routine post-vaccination serologic testing is not recommended.	**Contraindications** • Previous anaphylactic reaction to this vaccine or to any of its components. • Pregnancy or possibility of pregnancy within 4wks. • Persons on high-dose immunosuppressive therapy or who are immunocompromised because of malignancy and primary or acquired cellular immunodeficiency, including HIV/AIDS (although vaccination may be considered if CD4+ T-lymphocyte counts are greater than or equal to 200 cells/µL. See *MMWR* 2007;56,RR-4). **Precautions** • Moderate or severe acute illness. • 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. • Receipt of specific antivirals (i.e., acyclovir, famciclovir, or valacyclovir) 24hrs before vaccination, if possible; delay resumption of these antiviral drugs for 14d after vaccination.

Summary of Recommendations for Adult Immunization *(Age 19 years & older)* (Page 3 of 4)

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)
Td, Tdap (Tetanus, diphtheria, pertussis) *Give IM* *Using tetanus toxoid (TT) instead of Tdap or Td is not recommended.*	For people through age 18 years, consult "Summary of Recommendations for Child/Teen Immunization" at www.immunize.org/catg.d/p2010.pdf. • All people who lack written documentation of a primary series consisting of at least 3 doses of tetanus- and diphtheria-toxoid-containing vaccine. • A booster dose of Td or Tdap may be needed for wound management, so consult ACIP recommendations.* • In pregnancy, when indicated, give Td or Tdap in 2nd or 3rd trimester. If not administered during pregnancy, give Tdap in immediate postpartum period. **For Tdap only:** • Adults younger than age 65yrs who have not already received Tdap. • Adults of any age, including adults age 65yrs and older, in contact with infants younger than age 12m (e.g., parents, grandparents, childcare providers, healthcare personnel) who have not received a dose of Tdap should be prioritized for vaccination. • Healthcare personnel who work in hospitals or ambulatory care settings and have direct patient contact and who have not received Tdap. • Adults age 65yrs and older without a risk indicator (e.g., not in contact with an infant) may also be vaccinated with Tdap.	• For people who are unvaccinated or behind, complete the primary Td series (spaced at 0, 1–2m, 6–12m intervals); substitute a one-time dose of Tdap for one of the doses in the series, preferably the first. • Give Td booster every 10yrs after the primary series has been completed. • Tdap can be given regardless of interval since previous Td.	**Contraindications** • Previous anaphylactic reaction to this vaccine or to any of its components. • For Tdap only, history of encephalopathy within 7d following DTP/DTaP. **Precautions** • Moderate or severe acute illness. • Guillain-Barré syndrome within 6wks following previous dose of tetanus-toxoid-containing vaccine. • Unstable neurologic condition. • History of Arthus reaction following a previous dose of tetanus- and/or diphtheria-toxoid-containing vaccine, including MCV4. **Note:** Tdap may be given to pregnant women at the provider's discretion.
Hepatitis A (HepA) *Give IM* Brands may be used interchangeably.	For people through age 18 years, consult "Summary of Recommendations for Child/Teen Immunization" at www.immunize.org/catg.d/p2010.pdf. • All people who want to be protected from hepatitis A virus (HAV) infection. • People who travel or work anywhere EXCEPT the U.S., Western Europe, New Zealand, Australia, Canada, and Japan. • People with chronic liver disease; injecting and non-injecting drug users; men who have sex with men; people who receive clotting-factor concentrates; people who work with HAV in experimental lab settings; food handlers when health authorities or private employers determine vaccination to be appropriate. • People who anticipate close personal contact with an international adoptee from a country of high or intermediate endemicity during the first 60 days following the adoptee's arrival in the U.S. • Adults age 40yrs or younger with recent (within 2 wks) exposure to HAV. For people older than age 40yrs with recent (within 2 wks) exposure to HAV, immune globulin is preferred over HepA vaccine.	• Give 2 doses. • The minimum interval between doses #1 and #2 is 6m. • If dose #2 is delayed, do not repeat dose #1. Just give dose #2. For Twinrix (hepatitis A and B combination vaccine [GSK]) for patients age 18yrs and older only: give 3 doses on a 0, 1, 6m schedule. There must be at least 4wks between doses #1 and #2, and at least 5m between doses #2 and #3. An alternative schedule can also be used at 0, 7d, 21–30d, and a booster at 12m.	**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.
Hepatitis B (HepB) *Give IM* Brands may be used interchangeably.	For people through age 18 years, consult "Summary of Recommendations for Child/Teen Immunization" at www.immunize.org/catg.d/p2010.pdf. • All adults who want to be protected from hepatitis B virus infection. • Household contacts and sex partners of HBsAg-positive people; injecting drug users; sexually active people not in a long-term, mutually monogamous relationship; men who have sex with men; people with HIV; persons seeking STD evaluation or treatment; hemodialysis patients and those with renal disease that may result in dialysis; healthcare personnel and public safety workers who are exposed to blood; clients and staff of institutions for the developmentally disabled; inmates of long-term correctional facilities; certain international travelers; and people with chronic liver disease. **Note:** Provide serologic screening for immigrants from endemic areas. If patient is chronically infected, assure appropriate disease management. For sex partners and household contacts of HBsAg-positive people, provide serologic screening and administer initial dose of HepB vaccine at same visit.	Give 3 doses on a 0, 1, 6m schedule. • Alternative timing options for vaccination include 0, 2, 4m; 0, 1, 4m; and 0, 1, 2, 12m (Engerix brand only). • There must be at least 4wks between doses #1 and #2, and at least 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.	**Contraindication** Previous anaphylactic reaction to this vaccine or to any of its components. **Precaution** Moderate or severe acute illness.

Summary of Recommendations for Adult Immunization *(Age 19 years & older)*

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)
Human papillomavirus (HPV) (HPV2, Cervarix) (HPV4, Gardasil) *Give IM*	For people through age 18 years, consult "Summary of Recommendations for Child/Teen Immunization" at www.immunize.org/catg.d/p2010.pdf. • All previously unvaccinated women through age 26yrs. • Consider giving HPV4 to men through age 26yrs to reduce their likelihood of acquiring genital warts.	• Give 3 doses on a 0, 2, 6m schedule. • There must be at least 4wks between doses #1 and #2 and at least 12wks between doses #2 and #3. Overall, there must be at least 24wks between doses #1 and #3. If possible, use the same vaccine product for all three doses.	**Contraindication** Previous anaphylactic reaction to this vaccine or to any of its components. **Precautions** • Moderate or severe acute illness. • Data on vaccination in pregnancy are limited. Vaccination should be delayed until after completion of the pregnancy.
Zoster (shingles) (Zos) *Give SC*	• People age 60yrs and older.	• Give 1-time dose if unvaccinated, regardless of previous history of herpes zoster (shingles) or chickenpox. • If 2 or more of the following live virus vaccines are to be given—MMR, Zos, and/or yellow fever—they should be given on the same day. If they are not, space them by at least 28d.	**Contraindications** • Previous anaphylactic reaction to any component of zoster vaccine. • Primary cellular or acquired immunodeficiency. • Pregnancy. **Precautions** • Moderate or severe acute illness. • Receipt of specific antivirals (i.e., acyclovir, famciclovir, or valacyclovir) 24hrs before vaccination, if possible; delay resumption of these antiviral drugs for 14d after vaccination.
Meningococcal conjugate vaccine, quadrivalent (MCV4) Menactra, Menveo *Give IM* ——— **Meningococcal** polysaccharide vaccine (MPSV4) *Give SC*	For people through age 18 years, consult "Summary of Recommendations for Child/Teen Immunization" at www.immunize.org/catg.d/p2010.pdf. • People with anatomic or functional asplenia or persistent complement component deficiency. • People 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 routinely exposed to isolates of *N. meningitidis.* • Unvaccinated college freshmen who live in dormitories.	• Give 2 initial doses separated by 2m to adults with anatomic or functional asplenia, persistent complement component deficiencies, or HIV infection. • Give 1 initial dose to all other adults with risk factors (see 2nd–4th bullets in column to left). • Give booster doses every 5yrs to adults with continuing risk (see the 1st–3rd bullets in column to left for listings of people with possible continuing risk). • MCV4 is preferred over MPSV4 for people age 55yrs and younger; use MPSV4 ONLY if age 56yrs or older or if there is a permanent contraindication/precaution to MCV4.	**Contraindication** Previous anaphylactic reaction to this vaccine or to any of its components, including diphtheria toxoid (for MCV4). **Precautions** • Moderate or severe acute illness. • In pregnancy, studies of vaccination with MPSV4 have not documented adverse effects so may use MPSV4, if indicated. No data are available on the safety of MCV4 during pregnancy.
Polio (IPV) *Give IM or SC*	For people through age 18 years, consult "Summary of Recommendations for Child/Teen Immunization" at www.immunize.org/catg.d/p2010.pdf. • Not routinely recommended for U.S. residents 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 1 booster dose if traveling to polio endemic areas or to areas where the risk of exposure is high.	• Refer to ACIP recommendations* regarding unique situations, schedules, and dosing information.	**Contraindication** Previous anaphylactic reaction to this vaccine or to any of its components. **Precautions** • Moderate or severe acute illness. • Pregnancy.

Screening questionnaires for vaccine contraindications

Save staff time — have patients fill these out while waiting to be seen

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

Screening Questionnaire for Child and Teen Immunization

For parents/guardians: The following questions will help us determine which vaccines your child may be given today. If you answer "yes" to any question, it does not necessarily mean 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 child sick today?	☐	☐	☐
2. Does the child have allergies to medications, food, a vaccine component,			
3. Has the child had a serious reaction to a vaccine in the past?			
4. Has the child had a health problem with lung, heart, kidney or metabolic (e.g., diabetes), asthma, or a blood disorder? Is he/she on long-term aspir			
5. If the child to be vaccinated is between the ages of 2 and 4 years, has a h provider told you that the child had wheezing or asthma in the past 12 m			
6. Has the child, a sibling, or a parent had a seizure; has the child had brain nervous system problems?			
7. Does the child have cancer, leukemia, AIDS, or any other immune syster			
8. In the past 3 months, has the child taken cortisone, prednisone, other ste or anticancer drugs, or had radiation treatments?			
9. In the past year, has the child received a transfusion of blood or blood pr or been given immune (gamma) globulin or an antiviral drug?			
10. Is the child/teen pregnant or is there a chance she could become pregnar the next month?			
11. Has the child received vaccinations in the past 4 weeks?			

Form completed by: _____

Form reviewed by: _____

Did you bring your child's immunization record card with you?

It is important to have a personal record of your child's vaccinations. If you don't healthcare provider to give you one with all your child's vaccinations on it. Keep th you every time you seek medical care for your child. Your child will need this impo life to enter day care or school, for employment, or for international travel.

Technical content reviewed by the Centers for Disease Control and Prevention, October 2010 ww

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These questionnaires will help you quickly identify contraindications — screen every time you vaccinate!

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, a vaccine component, or latex?	☐	☐	☐
3. Have you ever had a serious reaction after receiving a vaccination?	☐	☐	☐
4. Do you have a long-term health problem with heart disease, lung disease, asthma, kidney disease, metabolic disease (e.g., diabetes), anemia, or other blood disorder?	☐	☐	☐
5. Do you have cancer, leukemia, AIDS, or any other immune system problem?	☐	☐	☐
6. Do you take cortisone, prednisone, other steroids, or anticancer drugs, or have you had radiation treatments?	☐	☐	☐
7. Have you had a seizure or a brain or other nervous system problem?	☐	☐	☐
8. During the past year, have you received a transfusion of blood or blood products, or been given immune (gamma) globulin or an antiviral drug?	☐	☐	☐
9. For women: Are you pregnant or is there a chance you could become pregnant during the next month?	☐	☐	☐
10. 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 personal record, ask your healthcare provider to give you one. Keep this record in a safe place and bring it with you every time you seek medical care. Make sure your healthcare provider records all your vaccinations on it.

Technical content reviewed by the Centers for Disease Control and Prevention, October 2010. www.immunize.org/catg.d/p4065.pdf • Item#P4065 (10/10)

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Screening questionnaire for child and teen immunization: www.immunize.org/catg.d/p4060.pdf

Screening questionnaire for adult immunization: www.immunize.org/catg.d/p4065.pdf

Standing Orders for Administering Td/Tdap Vaccines

These documents are ready for you to download, copy, and use!

Standing Orders for Administering Td/Tdap to Children Ages 7 Years and Older

Purpose: To reduce morbidity and mortality from tetanus, diphtheria, and pertussis by vaccinating all children and teens 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 and other healthcare professionals (e.g., pharmacists), where allowed by state law, may vaccinate children and teens who meet the criteria below.

Procedure

1. Identify children and teens ages 7 years and older in need of vaccination against diphtheria, tetanus, and pertussis based on the following criteria:
   a. lack of documentation of at least 3 doses of diphtheria, tetanus, and (if indicated) pertussis vaccine
   b. lack of history of pertussis-containing vaccine given at age 10 years or older
   c. completion of a 3-dose primary series of diphtheria and tetanus toxoid-containing vaccine with receipt of the last dose being 10 years ago or longer.
2. Screen all patients for contraindications and precautions to Td or Tdap:
   a. **Contraindications:**
      • a history of a severe allergic reaction (e.g., anaphylaxis) after a previous dose of
      of vaccine components, go to www.cdc.gov/vaccines/pubs/pinkbook/downloads/
      • for Tdap only, a history of encephalopathy within 7 days following DTP/DTaP n
   b. **Precautions:**
      • history of Guillain-Barré syndrome within 6 weeks of previous dose of tetanus to
      • history of an Arthus reaction following a previous dose of tetanus-containing and
      including meningococcal conjugate vaccine
      • moderate or severe acute illness with or without fever
      • For Tdap only, progressive or unstable neurologic disorder, uncontrolled seizure
      Note: Use of Td or Tdap is not contraindicated in pregnancy. At the provider's disc
      during the 2nd or 3rd trimester.
3. Provide all patients (parent/legal representative) with a copy of the most current federa
must document, in the patient's medical record or office log, the publication date of the
(parent/legal representative). Provide non-English speaking patients with a copy of the
these can be found at www.immunize.org/vis.
4. Administer 0.5 mL Td (or a one-time dose of Tdap, if indicated) intramuscularly (22–
5. Schedule vaccination as follows:
   a. For children and teens ages 7 years and older who have not completed a primary se
   ria toxoid-containing vaccines, give one dose at the earliest opportunity and then co
   observing minimum intervals of 4 weeks between the first and second doses, and 6
   A one-time dose of Tdap should be substituted for one of the doses of Td, preferab
   b. For children and teens age 11–18 years without a history of pertussis-containing va
   Tdap routinely at age 11–12 years or as catch-up at 13–18 years; no minimum inter
   c. Give further boosters as Td every 10 years.
   d. In pregnancy, when indicated, give Td or Tdap in 2nd or 3rd trimester. If not admini
   immediate postpartum period.
6. Document each patient's vaccine administration information and follow up in the follo
   a. **Medical chart:** Record the date the vaccine was administered, the manufacturer an
   and the name and title of the person administering the vaccine. If vaccine was not g
   the vaccine (e.g., medical contraindication, patient refusal).
   b. **Personal immunization record card:** Record the date of vaccination and the nam
7. Be prepared for management of a medical emergency related to the administration of v
cal protocol available, as well as equipment and medications.
8. Report all adverse reactions to Td and Tdap vaccines to the federal Vaccine Adverse E
www.vaers.hhs.gov or (800) 822-7967. VAERS report forms are available at www.vac

This policy and procedure shall remain in effect for all patients of the_____ (name of practice c
_____ (date).

Medical Director's signature: _____ Effective c

Technical content reviewed by the Centers for Disease Control and Prevention, January 2011. w

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Download these Td/Tdap standing orders and use them as is or modify them to suit your work setting.

Standing Orders for Administering Tetanus-Diphtheria Toxoids & Pertussis Vaccine (Td/Tdap) to Adults

Purpose: To reduce morbidity and mortality from tetanus, diphtheria, and pertussis 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 and other healthcare professionals (e.g., pharmacists), where allowed by state law, may vaccinate adults who meet the criteria below.

Procedure

1. Identify adults in need of vaccination against tetanus, diphtheria, and pertussis based on the following criteria:
   a. lack of documentation of at least 3 doses of tetanus- and diphtheria-containing toxoids
   b. lack of documentation of pertussis-containing vaccine given since age 7 years in adults who
      • are younger than age 65 years
      • are age 65 years or older who have contact with an infant younger than age 12 months, are a healthcare worker, or simply want protection against pertussis
   c. completion of a 3-dose primary series of tetanus- and diphtheria-containing toxoids with receipt of the last dose being 10 years ago or longer
   d. recent deep and dirty wound (e.g., contaminated with dirt, feces, saliva) and lack of evidence of having received tetanus toxoid-containing vaccine in the previous 5 years
   e. age 65 years or older and wanting to be protected against pertussis
2. Screen all patients for contraindications and precautions to tetanus and diphtheria toxoids (Td) and, if applicable, pertussis vaccine (Tdap):
   a. **Contraindications:**
      • a history of a severe allergic reaction (e.g., anaphylaxis) after a previous dose of Td or to a Td or Tdap component. For a list of vaccine components, go to www.cdc.gov/vaccines/pubs/pinkbook/downloads/appendices/B/excipient-table-2.pdf.
      • for Tdap only, a history of encephalopathy within 7 days following DTP/DTaP not attributable to another identifiable cause
   b. **Precautions:**
      • history of Guillain-Barré syndrome within 6 weeks of previous dose of tetanus toxoid-containing vaccine
      • history of an Arthus reaction following a previous dose of tetanus-containing and/or diphtheria-containing vaccine, including meningococcal conjugate vaccine
      • moderate or severe acute illness with or without fever
      • for Tdap only, progressive or unstable neurologic disorder, uncontrolled seizures or progressive encephalopathy

      Note: Use of Td or Tdap is not contraindicated in pregnancy. At the provider's discretion, either vaccine may be administered during the 2nd or 3rd trimester.
3. Provide all patients with a copy of the most current federal Vaccine Information Statement (VIS). You must 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 speaking patients with a copy of the VIS in their native language, if available; these can be found at www.immunize.org/vis.
4. Administer 0.5 mL Td or Tdap vaccine intramuscularly (22–25g, 1–1½" needle) in the deltoid muscle.
5. Provide subsequent doses of either Td or Tdap to adults as follows:
   a. to complete the primary 3-dose schedule: observe a minimum interval of 4 weeks between the first and second doses, and 6 months between the second and third doses.
   b. to boost with Tdap or Td after primary schedule is complete: **for Tdap**, there is no minimum interval following Td; **for Td booster**, boost routinely every 10 years.
   c. In pregnancy, when indicated, give Td or Tdap in 2nd or 3rd trimester. If not administered during pregnancy, give Tdap in immediate postpartum period if the one-time Tdap dose has never been administered.
6. Document each patient's vaccine administration information and follow up in the following places:
   a. **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).
   b. **Personal immunization record card:** Record the date of vaccination and the name/location of the administering clinic.
7. 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.
8. Report all adverse reactions to Td and Tdap vaccines 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_____ (name of practice or clinic) until rescinded or until _____ (date).

Medical Director's signature: _____ Effective date: _____

Technical content reviewed by the Centers for Disease Control and Prevention, January 2011. www.immunize.org/catg.d/p3078.pdf • Item #P3078 (1/11)

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Additional sets of standing orders for all routinely recommended vaccines are available at www.immunize.org/standing-orders

Td/Tdap vaccination standing orders for children ages 7 & older: www.immunize.org/catg.d/p3078a.pdf

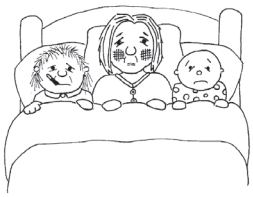
Td/Tdap vaccination standing orders for adults: www.immunize.org/catg.d/p3078.pdf

For patients: Influenza can have serious consequences

These materials are ready for you to copy and hand out to patients

COPY THIS FOR YOUR PATIENTS

Don't take chances with your family's health – make sure you all get vaccinated against influenza every year!



Here's how influenza can hurt your family . . .

Influenza can make you, your children, or your parents really sick.

Influenza usually comes on suddenly
chills, headaches, exhaustion, sore t
Some people say, "It felt like a truck h
Regardless, when influenza strikes yo
work and school.

Influenza spreads easily from person to person.

An infected person can spread influe
talk near others. They can also sprea
that someone else touches later. And
sick to be contagious: they can sprea
well – before their symptoms have ev

Influenza and its complications can be so serious that they can put you, your children, or your parents in the hospital – or lead to death.

Each year, more than 200,000 people
influenza and its complications. Betw
how unpredictable influenza can be.
and die are infants, young children, o
have conditions such as heart or lung
youngest, oldest, or sickest who die:
otherwise healthy.

Influenza can be a very serious disease for you, your family, and friends – but you can all be protected by getting vaccinated.

There's no substitute for yearly vacci
from influenza. Either type of influen
will help keep you and your loved on
Get vaccinated every year, and make
vaccinated, too.

Get vaccinated every year! Get your children
Be sure your parents

Technical content reviewed by t

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COPY THIS FOR YOUR PATIENTS

Seek emergency medical care if you or a family member shows the signs below – a life could be at risk!

It's a fact – every year, people of all ages in the U.S. die from influenza and its complications.

Emergency warning signs for children or teens with influenza

Any child or teen who shows the following emergency warning signs needs urgent medical attention – take them to an emergency room or call 9-1-1.

- Fast breathing or trouble breathing
- Bluish skin color
- Not waking up or not interacting
- Being so irritable that the child does not want to be held
- Not drinking enough fluids
- Not urinating or no tears when crying
- Severe or persistent vomiting
- Influenza-like symptoms improve but then return with fever and worse cough

Emergency warning signs for adults with influenza

Any adult who shows the following emergency warning signs needs urgent medical attention – take them to an emergency room or call 9-1-1.

- Difficulty breathing or shortness of breath
- Pain or pressure in the chest or abdomen
- Confusion
- Severe or persistent vomiting
- Sudden dizziness
- Influenza-like symptoms improve but then return with fever and worse cough

Keep this handy! Post it on your refrigerator or another place where it will be easy to find!

Adapted from the Centers for Disease Control and Prevention
Technical content reviewed by the Centers for Disease Control and Prevention, August 2010.

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www.immunize.org/catg.d/p4073.pdf • Item #P4073 (8/10)

Don't take chances with your family's health: www.immunize.org/catg.d/p4069.pdf

Seek emergency medical care: www.immunize.org/catg.d/p4073.pdf

Order Essential Immunization Resources from IAC

New DVD! Immunization Techniques: Best Practices with Infants, Children, and Adults

New in 2010 from the California Department of Public Health's Immunization Branch, this 25-minute DVD helps ensure that staff administer vaccines correctly to all age groups. An excellent training tool, the DVD provides detailed information on these major topics:

- Preparing vaccines—Mixing, reconstituting, and drawing up a variety of vaccine products and preparations
- Administering vaccines—Identifying correct needle lengths, insertion angles, and injection sites, and giving injectable, oral, and nasal-spray vaccines.
- Communicating with parents and patients—Providing VISs, answering questions, and observing patients after vaccination

To order the new DVD or any of our other essential immunization resources, print out and mail or fax the form below or place your order online at www.immunize.org/shop.

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

Order Essential Immunization Resources

CD-ROM of IAC print materials

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

Qty. **NEW DVD! Immunization Techniques: Best Practices with Infants, Children, and Adults (details p. 3; call for discounts on bulk orders)** **Amt.**

1-9 copies–$17 each; 10-24 copies–$10.25 each; 25-49 copies–$7 each

____ D2021 Immunization Techniques: Best Practices with Children/Teens/Adults.... $ _____

Patient Immunization Record Cards — for children & teens, for adults, and for a lifetime! (all are wallet-sized; details p. 3; call for discounts on bulk orders)

250 cards/box; 1 box–$45; 2 boxes–$40 each; 3 boxes–$37.50 each; 4 boxes–$34.50 each

____ R2003 Child/teen immunization record cards ..... $ _____

____ R2005 Adult immunization record cards ..... $ _____

____ R2004 Lifetime immunization record cards ..... $ _____

Total for Purchases $ _____

Make a Charitable Contribution

I am a ❑ new ❑ renewing contributor.

Here is my contribution:

❑ $25 ❑ $50 ❑ $75 ❑ $100 ❑ $125

❑ $150 ❑ $200 ❑ $250 other: $_____

❒ As a thank-you gift, I'd like a packet of some of IAC's most popular print pieces.

❒ I'm contributing $75 or more and would like the additional thank-you gift of a CD containing all of IAC's English- and Spanish-language print materials, plus Vaccine Information Statements in English and Spanish.

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

Total for Purchases and Contribution $ _____

How to Place an Order

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

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

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

Mail the page to: Immunization Action Coalition
1573 Selby Avenue, Suite 234
St. Paul, MN 55104

Our federal ID# is 41-1768237.

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

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

Method of payment: ❑ **Check enclosed** (payable to Immunization Action Coalition)

❑ **Purchase order #** _____

❑ Visa ❑ Mastercard ❑ Am. Express ❑ Discover

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

Expiration Date mo/yr | | | | | CV Code #* | | | |

*The CV Code is the Credit Verification Code, the additional 3- or 4-digit number on your credit card.

Name/Title

Organization

Shipping address (Check one: This is my ❑ organization address ❑ home address)

City/State/Zip

Telephone

Email address

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

cine or diluent vial. Do you have to wait for the alcohol to dry before you insert the needle in to the stopper?
The stopper of a single-dose vial is often *assumed* to be sterile. However, not all vaccine manufacturers guarantee the tops of unused vials are sterile, and the manner in which the cover over the stopper is removed can potentially contaminate the stopper. Therefore, using friction and a sterile alcohol pad to swab the stopper may help to assure aseptic technique in preparing the single-dose vial prior to inserting a sterile syringe. Alcohol evaporates quickly and will dry while the needle is being prepared for insertion into the vial.

In cleaning the vaccine vial stopper, is it okay to use a non-sterile cotton ball or do we need to use a pre-packaged sterile alcohol prep pad?
Using a pre-packaged sterile alcohol prep pad is recommended to maintain aseptic technique. Not only are cotton balls not sterile, but neither is a bottle of sterile alcohol, once it's opened.

(Golden Oldie): When giving a vaccine that requires a series of doses, is it necessary to start the series over if the patient doesn't come back for a dose at the recommended time? Suppose the delay has been a year or more?
In general, no vaccination series needs to be restarted because of a prolonged interval between doses, even if it's been a year or more. The only exception to this rule is oral typhoid vaccine, a vaccine administered for travel to certain destinations.

(Golden Oldie): What is the law regarding patients/parents signing consent for vaccination?
There is no federal requirement for signed consent for vaccination. Local governmental units, institutions, and clinics may have their own requirements.

Editor's note: On October 1, 2010, IAC published several "Golden Oldie" immunization questions in a special issue of our free weekly e-mail news service, *IAC Express.* To access these "Golden Oldie" Q&As, go to www.immunize.org/express/issue891.asp.

"Ask the Experts" Q&As are published several times each year as a regular feature of *IAC Express.* If you do not already receive *IAC Express* every Monday, you can subscribe at www.immunize.org/subscribe. There is no charge for this service.

Rotavirus vaccine

Many babies to whom we've given rotavirus oral vaccine spit out most or all of it. How can we be sure that they have ingested enough to confer immunity?
No matter how little vaccine the child has ingested, do not repeat the dose. Instead, document that you administered the dose and how much of the dose you think the child spit out.

The best thing you can do to optimize the delivery of oral vaccines is to follow general guidelines for oral vaccine administration. First, give this vaccine while the baby is still happy—before you administer injections or perform other procedures that might cause discomfort. Second, make every effort to administer the liquid down one side of the inside of the cheek toward the back of the baby's mouth, but don't go so far back that you cause a gag reflex. Never administer (or spray) the vaccine directly into the throat.

Influenza vaccine

We are trying to provide influenza vaccination to all eligible patients during their stay in our hospital. If a patient does not remember if he or she has already received the vaccine this season, should we go ahead and vaccinate?
If a patient or family member cannot remember if the patient received influenza vaccine this season and no record is available, proceed with administering influenza vaccine, even if it might mean an extra dose is given. When a patient reports that they HAVE received influenza vaccine but does not have written documentation, ACIP states that in the specific case of influenza vaccination, patient self-report of being vaccinated should be accepted as evidence of vaccination.

We have inadvertently been giving 0.5 mL of Fluvirin (inactivated influenza vaccine, Novartis) to 3-year-old children. We recently learned that this product is licensed only for use in people age 4 years and older. Can we count these as valid doses?
Yes. These doses should be counted as valid, but administering these doses was off-label and a vaccine administration error. These children were given a product that is not licensed for their age group. This error should be documented in the medical record, and the patients' parents should be notified. If a child needs a second dose of influenza vaccine this season, wait 4 weeks and make sure the proper vaccine is used for the second dose. IAC has published a handout that lists all the influenza vaccine products, the age groups for which they are indicated, and other helpful information. See www.immunize.org/catg.d/p4072.pdf.

PCV and PPSV vaccines

I want to increase pneumococcus immunity in my highest-risk adult patients. Can I give them a dose of 13-valent pneumococcal conjugate vaccine (PCV13) in addition to pneumococcal polysaccharide vaccine (PPSV)?
PCV13 is neither licensed nor routinely recommended for adults. It is approved only for children ages 6 weeks through 71 months. However, ACIP recommends that PCV13 can be administered off-label to children through age 18 years who have certain medical conditions. For specific information, see IAC's handout "Recommendations for Pneumococcal Vaccine Use in Children": www.immunize.org/catg.d/p2016.pdf.

The pneumococcal polysaccharide vaccine (PPSV) package insert says to routinely vaccinate all adults age 50 and older, but ACIP recommends that PPSV vaccination for healthy people begin at age 65. Which should I follow?
This is another instance where ACIP recommendations and the package insert do not agree. ACIP recommends routine vaccination for immunocompetent people age 65 and older (which is also noted in a footnote in the package insert). It's best to follow the ACIP recommendations since ACIP recommendations reflect the standard of care for vaccine use in the United States.

Zoster (shingles) vaccine

If a patient who received Zostavax shingles vaccine (Merck) a week ago comes in for a TST (tuberculin skin test), do we need to wait 4 weeks from the time the patient received the vaccine before applying the skin test? This is what we currently do with patients who show up for a TST after receiving MMR vaccine.
Yes. If you've recently vaccinated the patient with zoster vaccine, you should delay the TST for 4 weeks from the date of the vaccine dose. Ideally, when TST screening and zoster vaccination are both needed, TST screening should be scheduled prior to or on the same day as the zoster vaccination. ACIP's recommendations for use of zoster vaccine do not address the interval between vaccination and TST screening. However, ACIP's *General Recommendations on Immunization* state that in the absence of specific recommendations, when scheduling TST screening and administering other live-attenuated virus vaccines, clinicians should follow guidelines for measles-containing vaccine (please refer to the *General Recommendations on Immunization,* page 30).