

III. Clinical and Administrative Information

Supplies You May Need at an Immunization Clinic

Vaccines you may need*

Select the ones you need for the age of the patient you expect at your clinic.

Refrigerated (MMR may also be frozen)

- Diphtheria, tetanus, and pertussis (DTaP)
- DTaP-HepB-IPV (Pediatrix)
- DTaP-IPV/Hib (Pentacel)
- DTaP-IPV (Kinrix, Quadracel)
- Haemophilus influenzae* type b (Hib)
- Hib-MenCY (MenHibrix)
- Hepatitis A (HepA)
- Hepatitis B (HepB)
- HepA-HepB (Twinrix)
- HepB-Hib (Comvax)
- Human papillomavirus (HPV)
- Influenza, injectable (IIV) (in season)
- Influenza, live attenuated intranasal (LAIV) (in season)
- Measles, mumps, rubella (MMR)
- Meningococcal ACWY
- Meningococcal B
- Pneumococcal conjugate (PCV13)
- Pneumococcal polysaccharide (PPSV23)
- Polio, inactivated (IPV)
- Rotavirus (RV)
- Tetanus-diphtheria, adult (Td)
- Tetanus, diphtheria, and pertussis (Tdap)
- Diluent† for ActHIB, Hiberix, MMR, MenHibrix, Menveo, Pentacel, and Rotarix

Frozen (Never pack frozen vaccine with dry ice)

- Measles, mumps, rubella, varicella (MMRV)
- Varicella
- Zoster
- Diluent† for MMRV, Varivax, and Zostavax

For instructions on how to pack and transport vaccines, go to www.cdc.gov/vaccines/recs/storage/toolkit/storage-handling-toolkit.pdf, pages 69–72.

Immunization Clinic Documentation

- Vaccine standing orders and protocols‡
- Vaccination administration record sheets‡ (i.e., medical records, if needed)
- Billing forms, if needed
- Screening Checklist for Contraindications to Vaccines for Children and Teens‡
- Screening Checklist for Contraindications to HPV, MCV4, and Tdap for Teens‡

- Screening Checklist for Contraindications to Vaccines for Adults‡
- Summary of Recommendations for Child/Teen Immunization‡
- Summary of Recommendations for Adult Immunization‡
- Immunization record cards for patients (pediatric and adult)§
- Release of information forms
- Vaccine Adverse Events Reporting (VAERS) forms
- Schedules, including dates and times, of future immunization clinics

Emergency Supplies*

- Medical Management of Vaccine Reactions in Children and Teens‡
- Medical Management of Vaccine Reactions in Adults‡

First-line medication

- Epinephrine, aqueous 1:1000 dilution, in ampules, vials of solution, or prefilled syringes, including epinephrine auto-injectors (e.g., EpiPen and Auvi-Q). If autoinjectors are stocked, at least 3 should be available (both pediatric and adult formulation, as needed).

Second-line medications: H₁ antihistamines (either or both of these)

- Diphenhydramine (e.g., Benadryl) oral (12.5 mg/5 mL liquid, 25 or 50 mg capsules/tablets) or injectable (50 mg/mL solution)
- Hydroxyzine (e.g., Atarax, Vistaril) oral (10 mg/5 mL or 25 mg/5 mL liquid, 10 mg or 25 mg tablets, or 25 mg capsules)

Other supplies for emergencies:

- Syringes (1 and 3 cc) and needles (22 and 25g, 1", 1½", and 2") for epinephrine or diphenhydramine
- Alcohol wipes
- Tourniquet
- Pediatric and adult airways (small, medium, and large)
- Pediatric and adult size pocket masks with one-way valve
- Oxygen (if available)
- Stethoscope
- Sphygmomanometer (child, adult, and extra-large cuffs)
- Tongue depressors

- Light source (e.g., flashlight for examination of mouth and throat)
- Wristwatch with a second hand or other timing device
- Telephone access to call 911

Vaccine and Miscellaneous Supplies*

- Appropriate storage units and monitoring equipment (thermometers) to maintain vaccine cold chain (see www.eziz.org/assets/docs/IMM-983.pdf)
- 1 or 2 needle disposal “sharps” containers
- 1 box of 3 cc syringes
- 22 and 25g needles
 - ⅝"; 1"; 1½"; 2"
- 1 box of medical gloves (appropriate size range for staff)
- Alcohol wipes
- Spot bandaids Rectangular bandaids
- 1" gauze pads or cotton balls
- Thermometers along with probe covers
- Certified calibrated thermometer for vaccine cooler, if needed
- Paper towels
- Bleach solution in spray bottle

Vaccine Information Statements (VISs)*

- Most current version associated with each vaccine used in the clinic (*available in English and over 30 languages at www.immunize.org/vis*)

Office Supplies

- Calendar Stapler/staples
- Pens Tape
- File folders Paper clips
- Scissors Post-its
- Pad of paper

* Always check the expiration dates of all vaccines, medications, and medical supplies before using! In addition, be sure to check that you have the most current versions of the VISs. To learn more about VISs, visit www.immunize.org/vis.

† Diluent should never be frozen.

‡ These materials are available at www.immunize.org/handouts.

§ These materials may be purchased at www.immunize.org/shop.

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Standards for Child and Adolescent Immunization Practices
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Standards for Child and Adolescent Immunization Practices

National Vaccine Advisory Committee

ABBREVIATIONS. NVAC, National Vaccine Advisory Committee; ACIP, Advisory Committee on Immunization Practices; AAP, American Academy of Pediatrics; AAFP, American Academy of Family Physicians; VFC, Vaccines for Children Program; CDC, Centers for Disease Control and Prevention; VIS, Vaccine Information Statement; VAERS, Vaccine Adverse Events Reporting System; VICP, Vaccine Injury Compensation Program.

In 1992, the National Vaccine Advisory Committee (NVAC), in collaboration with the Ad Hoc Working Group for the Development of Standards for Pediatric Immunization Practices, a working group representing public and private agencies with input from state and local health departments, physician and nursing organizations, and public and private providers, developed a set of standards as to what constitutes the most essential and desirable immunization policies and practices. These standards were endorsed by a variety of medical and public health organizations and represented an important element in our national strategy to protect America's children against vaccine-preventable diseases.

Since that time, vaccine delivery in the United States has changed in several important ways. First, vaccination coverage rates among preschool children have increased substantially and are now monitored by the National Immunization Survey.^{1,2} Second, vaccination of children has shifted markedly from the public to the private sector,³⁻⁵ with an emphasis on vaccination in the context of primary care and the medical home.⁶ The Vaccines for Children Program has provided critical support to this shift by covering the cost of vaccines for the most economically disadvantaged children and adolescents. Third, the development and introduction of performance measures, such as the National Committee for Quality Assurance's Health Plan Employer Data and Information Set,⁷ have focused national attention on the quality of preventive care, including vaccination. Finally, high-quality research in health services has helped to refine strategies for raising and sustaining vaccination coverage levels among children, adolescents, and adults.⁸

Health care professionals who vaccinate children and adolescents continue to face important chal-

lenges. These challenges include a diminishing level of experience—among patients, parents, and physicians—with the diseases that vaccines prevent, the ready availability of vaccine-related information that may be inaccurate or misleading, the increasing complexity of the vaccination schedule, and the failure of many health plans to pay for the costs associated with vaccination. In addition, recommendations from the Advisory Committee on Immunization Practices (ACIP), the American Academy of Pediatrics (AAP), the American Academy of Family Physicians (AAFP), and the American Medical Association in 1996 underscored the need to focus on adolescent vaccination.⁹

In this context, NVAC, along with partners representing the federal agencies, state and local health departments, and professional organizations, revised and updated the standards during 2001–2002 to reflect these changes and challenges in vaccine delivery. The revision was approved by NVAC on February 8, 2002 (Table 1), and distributed widely among a variety of medical and public health organizations for review and endorsement. Table 2 lists those organizations that have formally endorsed the Standards for Child and Adolescent Immunization Practices.

The standards are directed toward "health care professionals," an inclusive term for the many people in clinical settings who share in the responsibility for vaccination of children and adolescents: physicians, nurses, midlevel practitioners (eg, nurse practitioners, physician assistants), medical assistants, and clerical staff. In addition to this primary audience, the standards are intended to be useful to public health professionals, policy makers, health plan administrators, employers who purchase health care coverage, and others whose efforts shape and support the delivery of vaccination services.

Of note, the use of the term "standards" should not be confused with a minimum standard of care. Rather, these standards represent the most desirable immunization practices, which health care professionals should strive to achieve. Given current resource limitations, some health care professionals may find it difficult to implement all of the standards, because of circumstances over which they have little control. The expectation is that, by summarizing best immunization practices in a clear and concise format, the standards will assist these providers in securing the resources necessary to implement this set of recommendations.

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TABLE 1. Standards for Child and Adolescent Immunization Practices

Availability of vaccines	1. Vaccination services are readily available.
	2. Vaccinations are coordinated with other health care services and provided in a medical home ⁶ when possible.
	3. Barriers to vaccination are identified and minimized.
	4. Patient costs are minimized.
Assessment of vaccination status	5. Health care professionals review the vaccination and health status of patients at every encounter to determine which vaccines are indicated.
	6. Health care professionals assess for and follow only medically accepted contraindications.
Effective communication about vaccine benefits and risks	7. Parents/guardians and patients are educated about the benefits and risks of vaccination in a culturally appropriate manner and in easy-to-understand language.
Proper storage and administration of vaccines and documentation of vaccinations	8. Health care professionals follow appropriate procedures for vaccine storage and handling.
	9. Up-to-date, written vaccination protocols are accessible at all locations where vaccines are administered.
	10. People who administer vaccines and staff who manage or support vaccine administration are knowledgeable and receive ongoing education.
	11. Health care professionals simultaneously administer as many indicated vaccine doses as possible.
	12. Vaccination records for patients are accurate, complete, and easily accessible.
	13. Health care professionals report adverse events after vaccination promptly and accurately to the Vaccine Adverse Events Reporting System (VAERS) and are aware of a separate program, the Vaccine Injury Compensation Program (VICP).
	14. All personnel who have contact with patients are appropriately vaccinated.
Implementation of strategies to improve vaccination coverage	15. Systems are used to remind parents/guardians, patients, and health care professionals when vaccinations are due and to recall those who are overdue.
	16. Office- or clinic-based patient record reviews and vaccination coverage assessments are performed annually.
	17. Health care professionals practice community-based approaches.

By adopting these standards, health care professionals can enhance their own policies and practices, making achievement of vaccination objectives for children and adolescents as outlined in *Healthy People 2010*, a nationwide health promotion and disease prevention agenda from the US Department of Health and Human Services,¹⁰ both feasible and likely. Achieving these objectives will improve the health and welfare of all children and adolescents as well as the communities in which they live.

THE STANDARDS

Availability of Vaccines

1. Vaccination Services Are Readily Available

All health care professionals who provide primary care to children and adolescents should always include routinely recommended vaccines as a part of the care that they deliver in the medical home.⁶ For some children and adolescents, the main contact with the health care system is not in a primary care provider's office; therefore, opportunities for vaccination may be missed. Thus, specialists and health care professionals in settings such as schools and school health clinics, sports physical clinics, family planning clinics, sexually transmitted disease clinics, and substance abuse treatment centers should assess each patient's vaccination status and either offer indicated vaccines or refer for vaccination if necessary. Information on vaccines administered outside the primary care setting should be communicated to the primary care provider.

2. Vaccinations Are Coordinated With Other Health Care Services and Provided in a Medical Home When Possible

Ideally, vaccines should be given as part of comprehensive health care. In primary care settings, vaccination services should be coordinated with routine well-care visits and other visits.⁶ Patients who are vaccinated in other settings should be encouraged to receive subsequent vaccines in their primary care setting. Patients without a primary care provider should be assisted with identifying one.

3. Barriers to Vaccination Are Identified and Minimized

Barriers to receiving vaccines include delays in scheduling appointments, requiring a well-care visit, long waiting periods in the office, and lack of culturally and age-appropriate educational materials. A physical examination, although an important part of well care, should not be required before administering vaccines: simply observing the patient and questioning about the patient's health status, immunization history, and vaccine contraindications are sufficient. In addition, vaccination-only visits should be available. Health care professionals should seek advice from parents/guardians and patients to identify ways to make vaccination services easier to use.

4. Patient Costs Are Minimized

Out-of-pocket costs—including vaccine, administration, and office visit fees—should be as low as possible for all patients, and no child or adolescent should be denied vaccination because of inability to pay. Resources should be identified to keep patient vaccination costs as low as possible. Free vaccine is

TABLE 2. Organizations That Provide Endorsement for the Revised Standards for Child and Adolescent Immunization Practices

Advisory Committee on Immunization Practices
Albert B. Sabin Vaccine Institute
Ambulatory Pediatric Association
American Academy of Family Physicians
American Academy of Pediatrics
American Academy of Physician Assistants
American College of Emergency Physicians
American College of Osteopathic Pediatricians
American College of Preventive Medicine
American Medical Association
American Nurses Association
American Osteopathic Association
American Public Health Association
Association of Immunization Program Managers
Association of Maternal and Child Health Programs
Association of State and Territorial Health Officials
Center for Pediatric Research
Centers for Medicare and Medicaid Services
Council of State and Territorial Epidemiologists
Every Child by Two
Health Resources and Services Administration
Immunization Action Coalition
Infectious Diseases Society of America
National Alliance for Hispanic Health
National Asian Women's Health Organization
National Assembly on School-Based Health Care
National Association for City and County Health Officials
National Association for Pediatric Nurse Practitioners
National Association of School Nurses
National Coalition for Adult Immunization
National Foundation for Infectious Diseases
National Institute of Allergy and Infectious Diseases
National Medical Association
National Network of Immunization Nurses and Associates
National Partnership for Immunization
National Perinatal Association
Partnership for Prevention
Pediatric Infectious Disease Society
Project Immunize Virginia
Rotary International
Society for Adolescent Medicine
Society for Teachers of Family Medicine
Vaccine Education Center at the Children's Hospital of Philadelphia

available through some public programs, although health care professionals who offer these vaccines may charge a reasonable administration fee. Sources of publicly funded vaccines include the Vaccines for Children Program (VFC), Public Health Service Section 317 grants to states, and state or local programs. Children and adolescents should be screened for their eligibility to receive vaccines through these programs. Vaccinations provided through VFC or Section 317 grants may not be denied because of an inability to pay the administration fee, and health care professionals should ensure that parents/guardians and patients are aware of this requirement (applies to all vaccines purchased using Centers for Disease Control and Prevention [CDC] contracts, regardless of the setting—private or public—in which the vaccines are administered).

To minimize costs for patients, health plans and insurance plans should include the provision and administration of all routinely recommended vaccines as a covered benefit for all children and adolescents. Furthermore, to minimize costs for health care professionals, purchasers and health plans

should reimburse health care professionals adequately for delivering vaccines, including the time required for vaccine administration and for communication about vaccine benefits and risks. The CDC maintains a web page about VFC at <http://www.cdc.gov/nip/vfc>.

Assessment of Vaccination Status

5. Health Care Professionals Review the Vaccination and Health Status of Patients at Every Encounter to Determine Which Vaccines Are Indicated

Health care professionals should review the vaccination status of all patients at all health care visits to minimize the number of missed opportunities to vaccinate. This review should determine whether the patient has received any vaccinations elsewhere or is at high risk for disease or undervaccination. This information should be documented in the patient's chart and preventive health summary. Health care professionals who do not offer vaccinations should refer patients to a primary care provider for needed vaccinations.

6. Health Care Professionals Assess for and Follow Only Medically Accepted Contraindications

Withholding vaccinations because of medical concerns that are not contraindications results in missed opportunities for prevention. Health care professionals should ask about any condition or circumstance that might indicate that a vaccination should be withheld or delayed and about previous adverse events temporally associated with any vaccination. Health care professionals should support their decisions about what constitutes a contraindication or deferral for each vaccine by consulting the Guide to Contraindications to Vaccinations published by the CDC (available at: <http://www.cdc.gov/nip/recs/contraindications.pdf>); the harmonized recommendations of the ACIP, the AAP, and the AAPF (available at: <http://www.cdc.gov/nip/recs/child-schedule.htm#Printable>); the AAP's *Red Book* and other relevant recommendations; Vaccine Information Statements; and manufacturers' package inserts. Contraindications and deferrals should be documented in the medical record.

Effective Communication About Vaccine Benefits and Risks

7. Parents/Guardians and Patients Are Educated About the Benefits and Risks of Vaccination in a Culturally Appropriate Manner and in Easy-to-Understand Language

Health care professionals should allow sufficient time with parents/guardians and adolescent patients to discuss the benefits of vaccines, the diseases that they prevent, any known risks from vaccines, the immunization schedule and the need to receive vaccines at the recommended ages, and the importance of bringing the patient's hand-held vaccination record to each health care visit. Health care professionals should encourage parents/guardians and adolescent patients to take responsibility for ensuring that the patient is fully vaccinated.

For all commonly used childhood vaccines, all

health care professionals are required by federal law to give a Vaccine Information Statement (VIS) to vaccine recipients or their parents/guardians at each visit. A VIS is a vaccine-specific, 2-page information sheet, produced by the CDC, that describes the benefits and risks of a vaccine. If necessary, health care professionals should supplement the VIS with oral explanations or other written materials that are culturally and linguistically appropriate. Health care professionals should review written materials with patients and their parents/guardians and address questions and concerns.

Health care professionals should encourage parents/guardians and adolescent patients to inform the health care professional of adverse events after the vaccine to be administered and explain how to obtain medical care, if necessary. (See Standard 13 for a description of the Vaccine Adverse Events Reporting System [VAERS]).

General vaccination information for health care professionals, parents, and members of the public may be obtained by calling the CDC National Immunization Information Hotline at 1-800-232-2522 (English) or 1-800-232-0233 (Spanish). Information about vaccine risk communication for health care professionals can be found at <http://www.cdc.gov/nip/vacsafe/research/peds.htm> and in the latest edition of the *Red Book*. VISs are available in English and numerous other languages from state health departments and at <http://www.cdc.gov/nip/publications/VIS/default.htm> and <http://www.immunize.org>. Recommendations for national standards for culturally and linguistically appropriate services in health care may be found at <http://www.omhrc.gov/omh/programs/2pgprograms/finalreport.pdf>.

Proper Storage and Administration of Vaccines and Documentation of Vaccinations

8. Health Care Professionals Follow Appropriate Procedures for Vaccine Storage and Handling

Vaccines should be handled and stored as recommended in the manufacturers' package inserts; the expiration date for each vaccine should be noted. Temperatures at which vaccines are stored and transported should be monitored and recorded twice daily. Summary information about vaccine storage and handling procedures are also available from state and local health departments and the CDC. Health care professionals should monitor vaccine inventory and undertake efforts to reduce wastage and loss. CDC-recommended storage and handling procedures are available from the CDC by calling 404-639-8222.

9. Up-to-Date, Written Vaccination Protocols Are Accessible at All Locations Where Vaccines Are Administered

To promote the safe and effective use of vaccines, health care professionals should maintain written protocols that detail the following: vaccine storage and handling; the recommended vaccination schedule, vaccine contraindications, and administration techniques; treatment and reporting of adverse events; vaccine benefit and risk communication; and

vaccination record maintenance and accessibility. These protocols should be consistent with established guidelines, reviewed frequently, and revised as needed to ensure that they remain up-to-date.

10. People Who Administer Vaccines and Staff Who Manage or Support Vaccine Administration Are Knowledgeable and Receive Ongoing Education

Health care professionals or others who administer vaccinations should be knowledgeable and receive continuing education in vaccine storage and handling; the recommended vaccine schedule, contraindications, and administration techniques; treatment and reporting of adverse events; vaccine benefit and risk communication; and vaccination record maintenance and accessibility. With appropriate training and in accordance with state law/regulation/policy, people other than physicians and nurses may administer vaccines. In addition, other staff should receive training and continuing education related to their specific roles and responsibilities that affect vaccination services.

The CDC sponsors distance-based training opportunities (eg, satellite broadcasts, web-based training, videotapes, self-administered print materials) for health care professionals. Information about training is available at <http://www.cdc.gov/nip/ed>.

11. Health Care Professionals Simultaneously Administer as Many Indicated Vaccine Doses as Possible

Administering vaccines simultaneously (at the same visit), in accordance with recommendations from the ACIP, the AAP, and the AAFP, is safe, effective and indicated. Although the immunization schedule provides age flexibility for administering certain vaccine doses, simultaneous administration decreases the number of visits needed and the potential for missed doses and enables earlier protection. When indicated vaccines are not simultaneously administered, arrangements should be made for the patient's earliest return to receive the needed vaccination(s). Additional information on the safety of simultaneous vaccination may be found at <http://www.cdc.gov/nip/vacsafe/research/simultaneous.htm>.

12. Vaccination Records for Patients Are Accurate, Complete, and Easily Accessible

Vaccination records for patients should be recorded on a standard form in an easily accessible location in the medical record to facilitate rapid review of vaccination status. Accurate record keeping helps to ensure that only needed vaccinations are given. As required by federal law (42 US Code 300aa-25), health care professionals should ensure that records contain the following information for each vaccination: the date of administration, the vaccine manufacturer and lot number, the signature and title of the person administering the vaccine, and the address where the vaccine was given. Vaccine refusal should also be documented.

The medical record maintained by the primary care provider should document all vaccines received, including those received at a specialist's office or in another health care setting. When a health care pro-

professional who does not routinely care for a patient vaccinates that patient, the patient's primary care provider should be informed.

All vaccinations administered should be reported to state or local immunization registries, where available, to ensure that each patient's vaccination history remains accurate and complete. Registries also may be useful for verifying the vaccination status of new patients, determining which vaccines are needed at a visit, printing official records, and providing reminders and recalls to parents, guardians, and patients.

Health care professionals should ensure that each patient has a hand-held vaccination record that documents each vaccine received, including the date and the name of the health care professional who administered the vaccine. Health care professionals should encourage parents/guardians and adolescent patients to bring the patient's hand-held record to each health care visit so that it can be updated.

The CDC maintains an Immunization Registry Clearinghouse. Information about this clearinghouse is available at <http://www.cdc.gov/nip/registry/>.

13. Health Care Professionals Report Adverse Events After Vaccination Promptly and Accurately to the Vaccine Adverse Events Reporting System (VAERS) and Are Aware of a Separate Program, the National Vaccine Injury Compensation Program (VICP)

Health care professionals should promptly report all clinically significant adverse events after vaccination to the VAERS even if the health care professional is not certain that the vaccine caused the event. Health care professionals should document in detail the adverse event in the patient's medical record as soon as possible. Providers should be aware that parents/guardians and patients may report to VAERS and that if they choose to do so, they are encouraged to seek the help of their health care provider.

The National Vaccine Injury Compensation Program (VICP) is a no-fault system that compensates people of any age for injuries or conditions that may have been caused by a vaccine recommended by the CDC for routine use in children. Health care professionals should be aware of the VICP to address questions raised by parents/guardians and patients.

Because VAERS and VICP are separate programs, a report of an event to VAERS does not result in the submission of a compensation claim to VICP. A brief description and contact information for both programs is provided on each VIS for those vaccines covered by the National Childhood Vaccine Injury Act.

Information about VAERS, as well as guidance about how to obtain and complete a VAERS form, can be found at <http://www.vaers.org> or by calling 1-800-822-7967. Information about the VICP is available at <http://www.hrsa.gov/osp/vicp> or by calling 1-800-338-2382.

14. All Personnel Who Have Contact With Patients Are Appropriately Vaccinated

Health care professionals and other personnel who have contact with patients should be appropriately

vaccinated. Offices and clinics should have policies to review and maintain the vaccination status of staff and trainees. ACIP recommendations for vaccinating health care workers are available at <ftp://ftp.cdc.gov/pub/publications/mmwr/rr/rr4618.pdf>.

Implementation of Strategies to Improve Vaccination Coverage

15. Systems Are Used to Remind Parents/Guardians, Patients, and Health Care Professionals When Vaccinations Are Due and to Recall Those Who Are Overdue

Evidence demonstrates that reminder/recall systems improve vaccination coverage.¹¹ Patient reminder/recall interventions inform individuals that they are due (reminder) or overdue (recall) for specific vaccinations. Patient reminders/recalls can be mailed or communicated by telephone; an autodialer system can be used to expedite telephone reminders. Patients who might be at high risk for not complying with medical recommendations, for example, those who have missed previous appointments, should receive more intensive follow-up. Similarly, provider reminder/recall systems alert health care professionals when vaccines are due or overdue. Notices should be placed in patient charts or communicated to health care professionals by computer or other means. Immunization registries can facilitate automatic generation of reminder/recall notices.

16. Office- or Clinic-Based Patient Record Reviews and Vaccination Coverage Assessments Are Performed Annually

Evidence shows that assessments are most effective in improving vaccination coverage in a practice when they combine chart reviews to determine coverage with the provision of results to health care professionals and staff.¹¹ Effective interventions also may incorporate incentives or compare performance with a goal or a standard. Coverage should be assessed regularly so that reasons for low coverage in the practice or in a subgroup of patients are identified and addressed. For assistance in conducting vaccination coverage assessments, health care professionals should contact their state or local immunization program.

17. Health Care Professionals Practice Community-Based Approaches

All health care professionals share in the responsibility to achieve the highest possible degree of community protection against vaccine-preventable diseases. Immunization protects the entire community as well as the individual. No community is optimally protected against vaccine-preventable diseases without high vaccination coverage. Therefore, health care professionals should consider the needs of the community (especially underserved populations) as well as those of their patients. Community-based approaches may involve working with partners in the community, including public health departments, managed care organizations, other service providers such as the US Department of Agriculture's Special Supplemental Nutrition Program for Women, Infants, and Children (WIC), advocacy groups, schools,

and service organizations to determine community needs and develop vaccination services that address these needs.

NATIONAL VACCINE ADVISORY COMMITTEE (NVAC)

The NVAC was chartered in 1988 to advise and make recommendations to the director of the National Vaccine Program and the assistant secretary for health, Department of Health and Human Services, on matters related to the prevention of infectious diseases through immunization and the prevention of adverse reactions to vaccines. The NVAC is composed of 15 members from public and private organizations representing vaccine manufacturers, physicians, parents, and state and local health agencies. In addition, representatives from governmental agencies involved in health care or allied services serve as ex-officio members of the NVAC.

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Standards for Child and Adolescent Immunization Practices
National Vaccine Advisory Committee
Pediatrics 2003;112:958-963

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ERRATA

Numerical errors occurred in the article by Holt et al, titled "Response to Intravenous Immunoglobulin Predicts Splenectomy Response in Children With Immune Thrombocytopenic Purpura," that was published in the January 2003 issue of *Pediatrics* (2003;111:87–90). On page 88, right column (fourth paragraph of the "Response to IVIG" section), the second sentence currently reads: "Response to IVIG was a sensitive predictor of response to splenectomy in 91% of patients, with a specificity of 66%, a positive predictive value of 87%, and a negative predictive value of 75%." It should read: "Response to IVIG was a sensitive predictor of response to splenectomy in 88% of patients, with a specificity of 75%, a positive predictive value of 91%, and a negative predictive value of 67%."

Two errors occurred in the article by the National Vaccine Advisory Committee, titled "Standards for Child and Adolescent Immunization Practices," that was published in the October 2003 issue of *Pediatrics* (2003;112:958–963). On page 958, left column (first footnote), the National Vaccine Advisory Committee is based in Washington, DC. On page 963, left column (second paragraph of the "National Vaccine Advisory Committee (NVAC)" section), the correct affiliation for Peter R. Paradiso, PhD, is Wyeth Vaccines.

Decimal errors occurred in the article by Verstraeten et al, titled "Safety of Thimerosal-Containing Vaccines: A Two-Phased Study of Computerized Health Maintenance Organization Databases," that was published in the November 2003 issue of *Pediatrics* (2003;112:1039–1048). On page 1039, right column (first paragraph), the fifth sentence currently reads: "... may have exceeded the 1995 EPA guidelines for exposure to organic Hg (1 $\mu\text{g}/\text{kg}/\text{d}$ vs 3 $\mu\text{g}/\text{kg}/\text{d}$). . . ." It should read: "... may have exceeded the 1995 EPA guidelines for exposure to organic Hg (0.1 $\mu\text{g}/\text{kg}/\text{d}$ vs 0.3 $\mu\text{g}/\text{kg}/\text{d}$). . . ."

Also in this article, as indicated, Thomas Verstraeten, MD, was an employee of the Centers for Disease Control and Prevention when he worked on the study. He is currently employed by GlaxoSmithKline.

Recommendations from the National Vaccine Advisory Committee: Standards for Adult Immunization Practice

NATIONAL VACCINE ADVISORY
COMMITTEE

The Advisory Committee on Immunization Practices (ACIP) makes recommendations for routine vaccination of adults in the United States.¹ Standards for implementing the ACIP recommendations for adults were published by the National Vaccine Advisory Committee (NVAC) in 2003² and by the Infectious Diseases Society of America in 2009.³ In addition, NVAC published a report in 2012 outlining a pathway for improving adult immunization rates.⁴ While most of these documents included guidelines for immunization practice, recent changes in the practice climate for adult immunization necessitated an update of existing adult immunization standards. Some of these changes include expansion of vaccination services offered by pharmacists and other community immunization providers both during and since the 2009 H1N1 influenza pandemic; vaccination at the workplace; increased vaccination by providers who care for pregnant women; and changes in the health-care system, including the Affordable Care Act (ACA), which requires first-dollar coverage of ACIP-recommended vaccines for people with certain private insurance plans, or those who are beneficiaries of expanded Medicaid plans.⁵ The ACA first-dollar provision is expected to increase the number of adults who will be insured for vaccines. Other changes include expanding the inclusion of adults in state immunization information systems (IISs) (i.e., registries) and the Centers for Medicare & Medicaid Services Meaningful Use Stage 2 requirements, which mandate provider reporting of immunizations to registries, including reporting of adult vaccination in states where such reporting is allowed.⁶ For the purposes of this report, provider refers to any individual who provides health-care services to adult patients, including physicians, physician assistants, nurse practitioners, nurses, pharmacists, and other health-care professionals.

While previous versions of the adult immunization standards have been published, recommendations for adult vaccination are published annually, and many health-care organizations have endorsed routine assessment and vaccination of adults, vaccination among adults continues to be low.^{7–15} Several barriers to adult vaccination include:

- Lack of health-care provider and patient knowledge about the need for vaccinating both healthy and high-risk adults.
- Medical management of acute and chronic illnesses, which usually receives priority over preventive services.
- Some providers not offering vaccines or offering only a subset of vaccines recommended for adults, and many adult patients unaware of their recommended vaccines.

- Private and public payer payment for vaccines complicated for providers, and not all those who vaccinate adults are recognized as providers by third-party payers.
- Medicare setting limits on coverage for vaccines based on the type of plan. For example:
 - Fully reimbursed vaccines through Medicare Part B are limited to vaccines against influenza, pneumococcal, tetanus-diphtheria (Td) (as part of wound management but not routine booster doses), and hepatitis B (for certain intermediate and high-risk groups such as patients with end-stage renal failure or diabetes).¹⁶
 - Medicare Part D provides limited coverage for the remainder of vaccines recommended for adults, often requiring significant out-of-pocket costs to patients (e.g., zoster vaccine; tetanus, diphtheria, and pertussis vaccine; and routine booster doses of Td vaccines).¹⁶
 - Vaccines included in Medicare Part D plans are pharmacy or drug benefits rather than medical benefits. Because most medical providers are not enrolled as pharmacy providers, receiving reimbursement for these vaccines is a challenge. Many providers, both medical and nonmedical, experience complexities in dealing with billing processes and the level of payment for Part D claims. Pharmacist vaccinators are established providers for Part D vaccines but are still challenged by coverage variability in insurance plans.
- Medicaid vaccination coverage and authorized vaccines vary by state, with some states covering only a subset of vaccines recommended for adults by ACIP. Medicaid coverage of ACIP-recommended vaccines is further complicated by the Supreme Court decision allowing states to opt out of increased Medicaid coverage.¹⁷
- Out-of-pocket costs to patients are a known barrier. For example:
 - While the ACA removed out-of-pocket costs for many privately insured people, not all providers and patients are likely to be aware of this provision.
 - Some providers may not be eligible for reimbursement under some health insurance plans because they are not authorized as in-network providers for vaccination services.
 - Many adults remain uninsured.

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- Patients may see many different providers, including specialists who may not be vaccine providers. The presence of multiple providers of health services may complicate coordination of care and reduce the likelihood that patients' vaccination needs are routinely assessed and needed vaccines are offered.

Despite these barriers, a number of strategies have been shown to improve receipt of adult immunizations. One of the most important predictors of vaccination receipt among adults is a health-care provider's recommendation and offer of vaccine during the same visit. The importance of a provider recommendation for vaccination has been demonstrated repeatedly.^{18–22} Other approaches shown to increase vaccination coverage include patient and provider reminder/recall systems; provider assessment and feedback about vaccination

practices; use of standing orders or protocols; reducing patient out-of-pocket costs; worksite interventions with on-site, actively promoted vaccination services; and other community-based and health-care system-based interventions implemented in combination.²¹

The need to review and revise earlier standards is based on several factors:

- Emphasis on the role of all providers, even non-vaccinating providers, to assess immunization status and recommend needed vaccines was not included in earlier adult immunization standards documents and is generally not included in clinical training programs.
- Community vaccinators and pharmacists are increasingly recognized as integral to achieving higher adult vaccination rates.
- Reliance on electronic health records (EHRs) is increasing and there are meaningful use incentives for eligible medical providers to enter patient immunization information into IISs for Medicare and Medicaid EHR incentive payments.
- A change in communication strategies for educating and contacting patients, with the availability of the Internet and social media, is underway.
- New opportunities are afforded by the ACA to provide vaccination within the shifting landscape of vaccine financing. There is also a shift in payment models away from fee-for-service toward payment for better outcomes of care.
- Federal funds for immunization programs that had been used for underinsured children may become available for purchasing vaccines for uninsured adults as the number of children insured for vaccines increases due to implementation of the ACA.

As such, the NVAC recommends that the Assistant Secretary for Health promote the use of the 2013 updated NVAC Standards for Adult Immunization Practice by all health-care professionals and payers in the public and private sectors who provide care for adults.

STANDARDS FOR ADULT IMMUNIZATION PRACTICE

Every health-care provider, in all settings, has a fundamental responsibility to ensure that all patients are up-to-date with respect to recommended immunizations. The purpose of the Standards for Adult Immunization Practice, which are summarized in the Figure, is to provide guidance to adult health-care providers across the spectrum of health care. This section addresses the

Figure. Summary of 2013 National Vaccine Advisory Committee's standards for adult immunization practices

Audience	Summary of standards
All providers	<ul style="list-style-type: none"> • Incorporate immunization needs assessment into every clinical encounter. • Strongly recommend needed vaccine(s) and either administer vaccine(s) or refer patient to a provider who can immunize. • Stay up-to-date on, and educate patients about, vaccine recommendations. • Implement systems to incorporate vaccine assessment into routine clinical care. • Understand how to access immunization information systems (i.e., immunization registries).
Non-immunizing providers	<ul style="list-style-type: none"> • Routinely assess the immunization status of patients, recommend needed vaccine(s), and refer patient to an immunizing provider. • Establish referral relationships with immunizing providers. • Follow up to confirm patient receipt of recommended vaccine(s).
Immunizing providers	<ul style="list-style-type: none"> • Ensure professional competencies in immunizations. • Assess immunization status in every patient care and counseling encounter and strongly recommend needed vaccine(s). • Ensure that receipt of vaccination is documented in patient medical record and immunization registry.
Professional health-care-related organizations/associations/health-care systems	<ul style="list-style-type: none"> • Provide immunization education and training of members, including trainees. • Provide resources and assistance to implement protocols and other systems to incorporate vaccine needs assessment and vaccination or referral into routine practice. • Encourage members to be up-to-date on their own immunizations. • Assist members in staying up-to-date on immunization information and recommendations. • Partner with other immunization stakeholders to educate the public. • Seek out collaboration opportunities with other immunization stakeholders. • Collect and share best practices for immunization. • Advocate policies that support adult immunization standards. • Insurers/payers/entities that cover adult immunization services should assure their network is adequate to provide timely immunization access and augment with additional vaccine providers if necessary.
Public health departments	<ul style="list-style-type: none"> • Determine community needs, vaccination capacity, and barriers to adult immunization. • Provide access to all ACIP-recommended vaccinations for insured and uninsured adults and work toward becoming an in-network provider for immunization services for insured adults. • Partner with immunization stakeholders and support activities and policies to improve awareness of adult vaccine recommendations, increase vaccination rates, and reduce barriers. • Ensure professional competencies in immunizations. • Collect, analyze, and disseminate immunization data. • Provide outreach and education to providers and the public. • Work to decrease disparities in immunization coverage and access. • Increase immunization registry access and use by vaccine providers for adult patients. • Develop capacity to bill for immunization of injured people. • Ensure preparedness for identifying and responding to outbreaks of vaccine-preventable diseases. • Promote adherence to applicable laws, regulations, and standards among adult immunization stakeholders.

ACIP = Advisory Committee on Immunization Practices

roles of all providers with regard to immunizations, including the role of all providers to conduct routine assessment of vaccination needs for their patients, recommend needed vaccines, and either administer

needed vaccines or, for providers who currently do not stock all recommended vaccines, refer patients to places where they can get recommended vaccines.

1. Standards for all providers, including those who do and do not provide immunization services

Part of routine clinical care for all providers should include an assessment of their patients' immunization status and a recommendation to the patient and/or the patient's caregiver for needed vaccines. Assessment and recommendation can be accomplished through the following practices:

- a. Emphasize the importance of immunizations during patient encounters, incorporate patient assessment of vaccine needs into routine clinical practice, and document vaccination status in patient medical records. IISs and EHRs should be referenced as sources of data about a patient's vaccine history.
- b. Strongly recommend all immunizations that patients need.
- c. Provide all recommended vaccines to patients who need them at the time of the visit. If the vaccines are not given or, if the provider does not have the vaccines in stock, refer the patient to a vaccine provider known to be able to provide the recommended vaccinations. Because vaccine uptake is much higher among patients when the vaccine is recommended and offered at the same visit, providers who are able to stock vaccines for their patients are strongly encouraged to do so.¹⁸
- d. Ensure that they, and their practice staff, are up-to-date on their own vaccinations per ACIP health-care personnel vaccine recommendations²³ and consistent with professional guidelines. Examples of current professional association guidelines include the following:
 - i. The American Nurses Association (ANA) has a longstanding policy supporting immunizations for nurses and all people across the life span. ANA believes that nurses have a professional and ethical obligation to be immunized because it protects both the health of the nurse and the health of his/her patients and community.⁸
 - ii. The National Association of County and City Health Officials (NACCHO) urges health-care employers and local health departments to require influenza vaccination for all staff members as a condition of employment.⁹
 - iii. The American Pharmacists Association recommends that its members be up-to-date on immunizations as a professional standard.¹⁰

- iv. The American Medical Association's policy supports the vaccination of health-care professionals against communicable diseases to prevent transmission to their patients.¹¹
- v. The Infectious Diseases Society of America recommends that all health-care workers be fully immunized according to ACIP recommendations.¹²
- vi. The American Academy of Physician Assistants recommends that physician assistants (PAs) should be immunized against vaccine-preventable diseases for which health providers are at high risk. Doing so not only protects PAs, but also protects patients by preventing provider-to-patient transmission.¹³
- vii. The American College of Physicians recommends that all health-care providers be immunized against influenza; diphtheria; hepatitis B; measles, mumps, and rubella; pertussis (whooping cough); and varicella (chickenpox) according to ACIP recommendations.¹⁴
- viii. The American College of Obstetricians and Gynecologists (ACOG) recommends that College Fellows have an ethical obligation to follow recommendations for vaccination themselves and other safety policies put into place by their local or national public health authorities, such as the Centers for Disease Control and Prevention (CDC) and ACOG.¹⁵
- e. Implement systems to:
 - i. Incorporate vaccination assessment into routine care for outpatients.
 - ii. Identify patients for needed vaccines based on age, risk factor indications for vaccination, and prior vaccination history.
 - iii. Incorporate vaccination assessment and appropriate vaccination of hospitalized patients and those in long-term care facilities with recommended vaccines, especially influenza and pneumococcal vaccines.
 - iv. Ensure follow-up for needed vaccinations after hospital discharge.
- f. Educate patients about vaccines they need using understandable language, including the vaccine information statements for those vaccines covered by the Vaccine Injury Compensation Program.

- g. For providers in states that include adult immunization records in their state IIS or registry, understand how to access the IIS as a source to check for vaccines that a patient has already received or should have received. Checking the IIS at each patient encounter reduces the likelihood of unnecessary vaccinations and provides information about receipt of other vaccines and whether the patient has appropriately completed the vaccination series as recommended.

2. Standards for non-immunizing providers

Because data show that (1) patients are more likely to get vaccinated when vaccines are recommended by trusted health-care professionals and (2) vaccine uptake is higher when vaccine is provided at the same time, primary care providers are strongly urged to stock and provide all recommended adult vaccines. Providers whose facilities are unable to provide certain immunizations (e.g., medical specialists' offices, which do not routinely provide vaccines for adults) still have a significant role in ensuring that their patients receive needed vaccines. Non-vaccinating providers should:

- a. Routinely assess whether their patients are up-to-date on recommended vaccinations, strongly recommend said vaccines, and refer patients to vaccine providers for needed vaccines.
- b. Establish patient referral relationships with vaccine providers in their area.
 - i. Ensure that referral location does not create other barriers for the patient.
 1. Ensure that the vaccine provider offers the recommended vaccines, and that the provider is eligible for payment by patient's insurer to minimize out-of-pocket costs for the patient and any delay in vaccination.
 2. Provide information to the patient during the visit about which vaccines are needed, including a prescription when necessary and the contact information for the vaccination referral location.
 - ii. Ensure appropriate follow-up of vaccine receipt by the patient at the patient's next visit, and encourage the vaccine provider to document vaccination (e.g., in the IIS and/or the patient's medical record) and with the patient's primary care provider, if known.

3. Standards for immunizing providers

All providers who have a role as a primary source of health care for patients should stock all ACIP-recommended vaccines for adults. Standards for all providers who immunize adults include ensuring professional competencies in knowledge of vaccine recommendations, vaccine needs assessment, vaccine administration, vaccine storage and handling, documentation of vaccination, and communicating information about vaccination to the patient's medical home.

- a. Observe professional competencies regarding immunizations by ensuring that vaccine providers:
 - i. Are up-to-date on current ACIP vaccine recommendations, appropriate vaccine administration techniques, and vaccine storage and handling guidelines.
 - ii. Have up-to-date, culturally competent materials for patient counseling about the benefits and risks of vaccinations.
 - iii. Are knowledgeable regarding valid contraindications, adverse events, and reporting of adverse events.
 - iv. Use correct vaccine administration techniques.
 - v. Are knowledgeable about which vaccines may be administered at the same visit to reduce missed opportunities for vaccination.
 - vi. Have systems in place and training for appropriate response to adverse event(s) that may occur after vaccination, including severe allergic reactions.
 - vii. Have staff who are educated in appropriate vaccine storage and handling systems and vaccine monitoring in their practice.
- b. Assess and strongly recommend vaccinations during every patient care and counseling encounter.
 - i. Written vaccination assessment protocols are available and implemented after appropriate staff training.
 - ii. Protocols or standing orders are used (when appropriate for the setting and patient type) to administer routinely recommended vaccines, and protocols are kept up-to-date.
 - iii. Staff competencies in vaccine needs assessment, counseling, and vaccine administration as part of standing orders or protocols are periodically assessed.
 - iv. Reminder recall systems are in place to remind providers and patients about

needed vaccines and to ensure that vaccine series are completed to optimize vaccination benefits.

- c. Ensure receipt of vaccination is documented.
 - i. Record receipt of vaccination in the patient's EHR.
 - ii. Provide a record of vaccines administered to patients, either written or electronic.
 - iii. Use the IIS to record administered vaccines in states that allow adult vaccination information to be entered into the registry.
 - iv. If the vaccinator is not the patient's primary care provider, then communicate vaccine receipt with the patient's primary care provider, if known.

4. Standards for professional health-care-related organizations, associations, and health-care systems

Standards with respect to immunizations include:

- a. Integrate educational information on immunizations into professional training, including training of students in undergraduate and postgraduate training programs. This training includes support for incorporating modules on immunization into medical, nursing, and pharmacy schools, as well as allied health profession curricula.
- b. Provide resources and assistance for providers to implement protocols or standing orders, where feasible, and other systems changes to improve routine assessment of vaccine needs and vaccination.
- c. Encourage their members, trainees, and students to ensure that their own vaccinations are up-to-date as a standard of the profession.
- d. Assist their members, employees, trainees, and students in remaining current regarding ACIP immunization recommendations by providing updates through routine communications and continuing education.
- e. Make educational materials for patients regarding vaccine recommendations available to their memberships.
- f. Partner with community organizations, such as immunization coalitions or vaccine advocacy groups, to improve public awareness of adult immunizations.
- g. Participate in collaboration opportunities with other members of the immunization community (including public health, public and private medical, nursing and pharmacy services provid-

ers, patient advocacy, health systems, and other entities).

- h. Offer modules to help providers assess and improve adult vaccination coverage of their patients as a measure of quality improvement within clinical practices.
- i. Provide resources to assist providers in implementing and operationalizing immunization services within their practices, including helping providers understand the payment for vaccines based on insurance type and benefit design (e.g., private insurance, Medicare Part B, or Medicare Part D).
- j. Provide resources (i.e., forms and other tools) for collecting and sharing best practices among adult immunization stakeholders.
- k. Advocate public policies that support these adult immunization standards.
- l. Insurers/payers/entities that cover adult immunization services should ensure that their networks are adequate to provide timely immunization access and augment with additional vaccine providers, if necessary (e.g., public health departments, pharmacists, and worksites).

5. Standards for public health departments

Public health departments may provide vaccination services and, in that role, public health professionals should adhere to the standards of their profession. Additionally, the professional associations that represent public health professionals and public health departments (e.g., Association of State and Territorial Health Officials, NACCHO, Association of Immunization Managers, and the Council of State and Territorial Epidemiologists) should promote adherence to the standards of the public health profession, particularly as they relate to adult immunizations. Public health has additional roles in assessing immunization program needs and the impact of vaccination programs, including educating the public and providers about immunizations. These additional roles include the following:

- a. Determine community needs and capacity for adult immunization administration and barriers for patient access.
 - i. Work toward decreasing disparities in immunization access based on factors such as race/ethnicity, insurance status, poverty, and location (e.g., rural areas or medically underserved areas).
- b. Develop policies and/or regulations (legislation) that promote high vaccination rates and reduce

- immunization barriers for adult patients and their providers.
- c. Immunization programs should collaborate with existing public health programs that provide clinical services, such as sexually transmitted disease control programs, substance abuse treatment services, and tuberculosis control programs to incorporate vaccine administration and recordkeeping.
 - d. Ensure professional competency by providing or supporting education to adult health-care providers on routine adult immunizations.
 - e. Maintain surveillance for vaccine-preventable diseases to recognize potential disease outbreaks or problems with vaccines and to assist in the control of vaccine-preventable diseases in the event of outbreaks.
 - f. Collect, analyze, and disseminate available data on vaccine coverage to the public and health-care providers in their jurisdiction to identify and address gaps in coverage.
 - g. Provide resources and assistance for vaccine providers to implement protocols or standing orders, where feasible, and other systems changes to improve routine assessment of vaccine needs and vaccination.
 - h. Provide best practice examples to health-care providers and collaborate with providers in implementing these best practices.
 - i. Provide subject-matter expertise to train and educate vaccine providers and their staff on vaccine recommendations, proper storage and handling, and proper vaccine administration.
 - j. Collaborate with providers to assist in implementing and operationalizing immunization services within their practices.
 - k. Partner with professional medical, pharmacy, nursing, and other provider organizations; health-care networks; community organizations; and advocacy groups (e.g., mental health services, diabetes educators, asthma educators, correctional facilities, and substance abuse providers) to:
 - i. Increase awareness and knowledge of adult immunizations and methods to reach recommended target populations for immunization; and
 - ii. Educate their members and trainees regarding immunizations.
 - l. Provide outreach and education to the public and providers about vaccines.
 - i. Collaborate with professional medical, pharmacy, nursing, and other provider organizations; health-care networks; community organizations; business and civic groups; and advocacy groups (e.g., mental health services, diabetes educators, asthma educators, correctional facilities, and substance abuse providers) to:
 1. Increase public awareness and knowledge of adult immunizations and reach recommended target populations for immunization.
 2. Provide culturally competent public education through appropriate venues, including the use of social media and ethnic media.
 - m. Work toward including adults in all state IISs, reduce barriers to including adult vaccination records in IISs, and ensure that IISs meet new standards of EHR interoperability to track and maintain adult vaccination records.
 - n. Expand access to and provide training for IISs to all adult health-care providers.
 - o. Provide access to all ACIP-recommended vaccinations.
 - i. Ensure capacity to provide all ACIP-recommended vaccines and immunization services for insured and uninsured adults.
 - ii. Work toward becoming an in-network provider for immunization services for insured adults.
 - p. Ensure preparedness for, and investigate and work to control, outbreaks of vaccine-preventable diseases when they occur. Managing these outbreaks should include activities such as creating, maintaining, and practicing emergency preparedness plans for vaccine responses to outbreaks such as pandemic influenza.
 - q. Demonstrate accountability and good stewardship of public financing for vaccines.
 - r. Communicate information about vaccine shortages, when they occur, to providers and the public.
 - s. Communicate information on vaccine recalls and vaccine safety issues to providers and the public.
 - t. Promote adherence to applicable laws, regulations, and standards among adult immunization stakeholders.

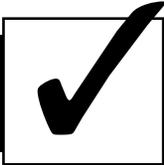
CONCLUSION

The environment surrounding adult immunizations has changed dramatically since the last Standards for Adult Immunization Practices were issued by NVAC in 2003.² These updated and revised Standards for Adult Immunization Practice represent a continued effort by NVAC to advance action to improve adult immunization coverage rates in the U.S. aligned with its 2011 report, “A Pathway to Leadership for Adult Immunization: Recommendations of the National Vaccine Advisory Committee.”⁴ With these Standards, NVAC provides a concise description of desirable immunization practices that will improve the provision of adult immunizations in the U.S. As an evolution of the work from the National Adult and Influenza Immunization Summit established by CDC, the Immunization Action Coalition, and the National Vaccine Program Office, these revised standards have been widely reviewed by major professional organizations and other partners in adult immunization. NVAC recommends that the Assistant Secretary for Health promote the use of these updated Standards for Adult Immunization Practices by all health-care professionals and health-care systems in the public and private sectors who provide and pay for care for adults. NVAC firmly advocates that all providers follow these Standards and believes that these Standards will be useful to inform immunization practice and immunization policy development.

The National Vaccine Advisory Committee (NVAC) voted in favor of this report at the September 10, 2013, NVAC meeting. Initial drafts of this document were developed by a National Adult and Influenza Immunization Summit writing committee including Anu Bhatt, Carolyn Bridges, Karen Donoghue, Columba Fernandez, Rebecca Gehring, Laura Lee Hall, Donna Lazoric, Marie-Michele Leger, Trini Mathew, Debbye Rosen, Mitch Rothholz, Litjen Tan, and LaDora Woods.

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Skills Checklist for Immunization

The Skills Checklist is a self-assessment tool for health care staff who administer immunizations. To complete it, review the competency areas below and the clinical skills, techniques, and procedures outlined for each of them. Score yourself in the Self-Assessment column. If you check **Need to Improve**, you indicate further study, practice, or change is needed. When you check **Meets or Exceeds**, you indicate you believe you are performing at the expected level of competence, or higher.

Supervisors: Use the Skills Checklist to clarify responsibilities and expectations for staff who administer vaccines. When you use it for performance reviews, give staff the opportunity to score themselves in advance. Next, observe their performance as they provide immunizations to several patients and score in the **Supervisor Review** columns. If improvement is needed, meet with them to develop a **Plan of Action** (p. 2) that will help them achieve the level of competence you expect; circle desired actions or write in others.

The DVD “Immunization Techniques: Best Practices with Infants, Children, and Adults” ensures that staff administer vaccines correctly. Order online at www.immunize.org/dvd

Competency	Clinical Skills, Techniques, and Procedures	Self-Assessment		Supervisor Review		
		Need to Improve	Meets or Exceeds	Need to Improve	Meets or Exceeds	Plan of Action*
A. Patient/Parent Education	1. Welcomes patient/family, establishes rapport, and answers any questions.					
	2. Explains what vaccines will be given and which type(s) of injection will be done.					
	3. Accommodates language or literacy barriers and special needs of patient/parents to help make them feel comfortable and informed about the procedure.					
	4. Verifies patient/parents received the Vaccine Information Statements for indicated vaccines and had time to read them and ask questions.					
	5. Screens for contraindications. (MA: score NA—not applicable—if this is MD function.)					
	6. Reviews comfort measures and after care instructions with patient/parents, inviting questions.					
B. Medical Protocols	1. Identifies the location of the medical protocols (i.e. immunization protocol, emergency protocol, reference material).					
	2. Identifies the location of the epinephrine, its administration technique, and clinical situations where its use would be indicated.					
	3. Maintains up-to-date CPR certification.					
	4. Understands the need to report any needlestick injury and to maintain a sharps injury log.					
C. Vaccine Handling	1. Checks vial expiration date. Double-checks vial label and contents prior to drawing up.					
	2. Maintains aseptic technique throughout.					
	3. Selects the correct needle size for IM and SC.					
	4. Shakes vaccine vial and/or reconstitutes and mixes using the diluent supplied. Inverts vial and draws up correct dose of vaccine. Rechecks vial label.					
	5. Labels each filled syringe or uses labeled tray to keep them identified.					
	6. Demonstrates knowledge of proper vaccine handling, e.g. protects MMR from light, logs refrigerator temperature.					

Adapted from California Department of Public Health • Immunization Branch

Competency	Clinical Skills, Techniques, and Procedures	Self-Assessment		Supervisor Review		
		Need to Improve	Meets or Exceeds	Need to Improve	Meets or Exceeds	Plan of Action*
D. Administering Immunizations	1. Rechecks the physician's order or instructions against prepared syringes.					
	2. Washes hands and if office policy puts on disposable gloves.					
	3. Demonstrates knowledge of the appropriate route for each vaccine.					
	4. Positions patient and/or restrains the child with parent's help; locates anatomic landmarks specific for IM or SC					
	5. Preps the site with an alcohol wipe using a circular motion from the center to a 2" to 3" circle. Allows alcohol to dry.					
	6. Controls the limb with the non-dominant hand; holds the needle an inch from the skin and inserts it quickly at the appropriate angle (45° for SC or 90° for IM).					
	7. Injects vaccine using steady pressure; withdraws needle at angle of insertion.					
	8. Applies gentle pressure to injection site for several seconds with a dry cotton ball.					
	9. Properly disposes of needle and syringe in sharps container. Properly disposes of live vaccine vial.					
	10. Encourages comfort measures before, during and after the procedure.					
E. Records Procedures	1. Fully documents each immunization in patient's chart: date, lot number, manufacturer, site, VIS date, name/initials.					
	2. If applicable, demonstrates ability to use IZ registry or computer to call up patient record, assess what is due today, and update computer immunization history.					
	3. Asks for and updates patient's record of immunizations and reminds them to bring it to each visit.					

Plan of Action:

Circle desired next steps and write in the agreed deadline and date for the follow-up performance review. **a.** Watch video on immunization techniques. **b.** Review office protocols. **c.** Review manuals, textbooks, wall charts or other guides. **d.** Review package inserts. **e.** Review vaccine handling guidelines or video. **f.** Observe other staff with patients. **g.** Practice injections. **h.** Read Vaccine Information Statements. **i.** Be mentored by someone who has these skills. **j.** Role play with other staff interactions with parents and patients, including age-appropriate comfort measures. **k.** Attend a skills training or other courses or training. **l.** Attend health care customer satisfaction or cultural competency training. **m.** Renew CPR certification. **Other:** _____

Employee Signature

Date

Supervisor Signature

Date

_____ Plan of Action Deadline
_____ Date of Next Performance Review

Determining Eligibility for Vaccines Provided by the North Carolina Immunization Program (NCIP) Indicated as VFC-Only
Effective October 1, 2012

What does VFC-only mean?

Most vaccines provided by the NCIP, as indicated on the NCIP coverage criteria document, are available to children who are VFC-eligible only. That is, most vaccines are no longer universally available to all children. VFC children are those who are birth through 18 years of age, and fall into one or more of the following four categories:

1) Medicaid-eligible, 2) uninsured*, 3) American Indian or Alaskan Native, and 4) *underinsured*. Effective October 1, 2012, children who are underinsured may be provided VFC vaccines at certain pre-approved provider sites only. The NCIP provider agreement states that VFC eligibility screening must take place with **each** visit, and the patient screening form only needs to be updated when the eligibility status of the child changes.

According to the provider agreement, giving NCIP vaccine to ineligible children may result in Financial Restitution.

*Children seen in family planning or STD clinics without insurance information, and minors who are in detention or incarcerated who have lost their insurance benefits, are considered uninsured for VFC purposes.

Who is considered *underinsured* for VFC purposes?

All providers must assess whether insured patients fall into the VFC category of *underinsured*, making them eligible for VFC vaccines. The CDC states that any of the following situations qualify a child who has insurance as *underinsured*:

- 1) The child's insurance plan does not have a wellness (or preventive benefits) provision. OR
- 2) The child's insurance plan has a wellness provision but benefits are "capped" at a certain dollar amount or number of visits, and that cap has been met. (Therefore preventive benefits are not accessible to the child.) OR
- 3) The child's insurance plan "picks and chooses" which vaccines they will cover, making the child insured for those covered, and underinsured for those not covered.

Note: Not having met a deductible or having to pay a co-payment does **not** make a patient underinsured for VFC purposes. If these conditions were met, and their insurance covers vaccines, they would be considered insured, and therefore, not VFC eligible.

For children whose medical home is with a non-deputized provider, and who meet any of the definitions above as underinsured, the provider should notify the patient/family that the patient is VFC eligible, and could be provided VFC vaccines if they choose to go to a deputized provider. A list of deputized providers is on the NCIP web site at: www.immunize.nc.gov. If the patient/family chooses to receive vaccines at their non-deputized medical home, the patient/family would receive purchased vaccine, and would be financially responsible for the purchased vaccine and administration fees. The CDC wants the family to be informed of their options.

Are children who are covered by North Carolina Health Choice (NCHC) eligible for VFC vaccines?

For VFC purposes, the CDC considers patients **insured** who are covered by a state's Children's Health Insurance Program (CHIP). In North Carolina the CHIP is known as NCHC. Therefore, NCHC children are generally considered **insured**, and are **not** eligible for VFC vaccines, and would need to be given purchased vaccines. The only **exception** to this rule is that American Indian or Alaska Native (AI/AN), who are always VFC eligible, and are participating in NCHC are VFC eligible.

Is a child who has both Medicaid and an additional insurance plan in force eligible for VFC vaccines?

Children from birth through 18 years who are covered by both Medicaid's *Health Check* and another insurance plan (for example, BC/BS, Prudential, etc.) simultaneously (on the same date of service) are considered Medicaid-eligible, and therefore, *are* eligible for VFC vaccines. The CDC says that providers must offer the family a choice of what is the most cost effective for them: either 1) provide VFC vaccine and bill Medicaid (admin fee only), or 2) provide purchased vaccine and bill the insurance plan (for both the vaccine and the admin fee). The provider should honor the family's request.

When the provider is not an enrolled provider with the patient's insurance company, or is out of network, can the patient be automatically considered underinsured for VFC vaccines?

No. Because VFC eligibility status must be determined at each encounter, the provider needs to determine whether vaccines are covered by the plan, in order to determine if the patient is underinsured, and is therefore eligible for VFC vaccine at a pre-approved deputized provider. See the second question above for details on handling underinsured patients. If insurance will cover the full cost, patients should be referred to providers who accept their insurance.

For additional information, contact Janie Ward-Newton, 919-707-5578.

Updated 4/13

Filename: determining eligibility for vaccines indicated as VFC-only4-13

Healthcare Personnel Vaccination Recommendations

VACCINES AND RECOMMENDATIONS IN BRIEF

Hepatitis B – If previously unvaccinated, give 3-dose series (dose #1 now, #2 in 1 month, #3 approximately 5 months after #2). Give intramuscularly (IM). For HCP who perform tasks that may involve exposure to blood or body fluids, obtain anti-HBs serologic testing 1–2 months after dose #3.

Influenza – Give 1 dose of influenza vaccine annually. Inactivated injectable vaccine is given IM, except when using the intradermal influenza vaccine. Live attenuated influenza vaccine (LAIV) is given intranasally.

MMR – For healthcare personnel (HCP) born in 1957 or later without serologic evidence of immunity or prior vaccination, give 2 doses of MMR, 4 weeks apart. For HCP born prior to 1957, see below. Give subcutaneously (SC).

Varicella (chickenpox) – For HCP who have no serologic proof of immunity, prior vaccination, or diagnosis or verification of a history of varicella or herpes zoster (shingles) by a healthcare provider, give 2 doses of varicella vaccine, 4 weeks apart. Give SC.

Tetanus, diphtheria, pertussis – Give 1 dose of Tdap as soon as feasible to all HCP who have not received Tdap previously and to pregnant HCP with each pregnancy (see below). Give Td boosters every 10 years thereafter. Give IM.

Meningococcal – Give 1 dose to microbiologists who are routinely exposed to isolates of *Neisseria meningitidis* and boost every 5 years if risk continues. Give MCV4 IM; if necessary to use MPSV4, give SC.

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

Hepatitis B

Unvaccinated healthcare personnel (HCP) and/or those who cannot document previous vaccination should receive a 3-dose series of hepatitis B vaccine at 0, 1, and 6 months. HCP who perform tasks that may involve exposure to blood or body fluids should be tested for hepatitis B surface antibody (anti-HBs) 1–2 months after dose #3 to document immunity.

- If anti-HBs is at least 10 mIU/mL (positive), the vaccinee is immune. No further serologic testing or vaccination is recommended.
- If anti-HBs is less than 10 mIU/mL (negative), the vaccinee is not protected from hepatitis B virus (HBV) infection, and should receive 3 additional doses of HepB vaccine on the routine schedule, followed by anti-HBs testing 1–2 months later. A vaccinee whose anti-HBs remains less than 10 mIU/mL after 6 doses is considered a “non-responder.”

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

For HCP with documentation of a complete 3-dose HepB vaccine series but no documentation of anti-HBs of at least 10 mIU/mL (e.g., those vaccinated in childhood): HCP who are at risk for occupational blood or body fluid exposure might undergo anti-HBs testing upon hire or matriculation. See references 2 and 3 for details.

Influenza

All HCP, including physicians, nurses, paramedics, emergency medical technicians, employees of nursing homes and chronic care facilities, students in these professions, and volunteers, should receive annual vaccination against influenza. Live attenuated influenza vaccine (LAIV) may be given only to non-pregnant healthy HCP age 49 years and younger. Inactivated injectable influenza vaccine (IIV) is preferred over LAIV for HCP who are in close contact with severely immunosuppressed patients (e.g., stem cell transplant recipients) when they require protective isolation.

Measles, Mumps, Rubella (MMR)

HCP who work in medical facilities should be immune to measles, mumps, and rubella.

- HCP born in 1957 or later can be considered immune to measles, mumps, or rubella only if they have documentation of (a) laboratory confirmation of disease or immunity or (b) appropriate vaccination against measles, mumps, and rubella (i.e., 2 doses of live measles and mumps vaccines given on or after

the first birthday and separated by 28 days or more, and at least 1 dose of live rubella vaccine). HCP with 2 documented doses of MMR are not recommended to be serologically tested for immunity; but if they are tested and results are negative or equivocal for measles, mumps, and/or rubella, these HCP should be considered to have presumptive evidence of immunity to measles, mumps, and/or rubella and are not in need of additional MMR doses.

- Although birth before 1957 generally is considered acceptable evidence of measles, mumps, and rubella immunity, 2 doses of MMR vaccine should be considered for unvaccinated HCP born before 1957 who do not have laboratory evidence of disease or immunity to measles and/or mumps. One dose of MMR vaccine should be considered for HCP with no laboratory evidence of disease or immunity to rubella. For these same HCP who do not have evidence of immunity, 2 doses of MMR vaccine are recommended during an outbreak of measles or mumps and 1 dose during an outbreak of rubella.

Varicella

It is recommended that all HCP be immune to varicella. Evidence of immunity in HCP includes documentation of 2 doses of varicella vaccine given at least 28 days apart, laboratory evidence of immunity, laboratory confirmation of disease, or diagnosis or verification of a history of varicella or herpes zoster (shingles) by a healthcare provider.

Tetanus/Diphtheria/Pertussis (Td/Tdap)

All HCPs who have not or are unsure if they have previously received a dose of Tdap should receive a dose of Tdap as soon as feasible, without regard to the interval since the previous dose of Td. Pregnant HCP should be revaccinated during each pregnancy. All HCPs should then receive Td boosters every 10 years thereafter.

Meningococcal

Vaccination with MCV4 is recommended for microbiologists who are routinely exposed to isolates of *N. meningitidis*.

REFERENCES

- 1 CDC. Immunization of Health-Care Personnel: Recommendations of the Advisory Committee on Immunization Practices (ACIP). *MMWR*, 2011; 60(RR-7).
- 2 CDC. CDC Guidance for Evaluating Health-Care Personnel for Hepatitis B Virus Protection and for Administering Postexposure Management. *MMWR*, 2013; 62(10):1–19.
- 3 IAC. Pre-exposure Management for Healthcare Personnel with a Documented Hepatitis B Vaccine Series Who Have Not Had Post-vaccination Serologic Testing. Accessed at www.immunize.org/catg.d/p2108.pdf.

For additional specific ACIP recommendations, visit CDC's website at www.cdc.gov/vaccines/hcp/acip-recs/index.html or visit IAC's website at www.immunize.org/acip.

Technical content reviewed by the Centers for Disease Control and Prevention

**NORTH CAROLINA IMMUNIZATION PROGRAM (NCIP)
COVERAGE CRITERIA FOR ALL CHILDREN PRESENT IN NORTH CAROLINA
Effective: August 5, 2015**

The purpose of this document is to distinguish which cohorts of persons, present in North Carolina, are eligible for vaccine from the North Carolina Immunization Program (NCIP). North Carolina Immunization Program (NCIP) vaccine is generally available for children through the age of 18 in compliance with recommendations made by the Advisory Committee for Immunization Practices (ACIP) and the Vaccines for Children (VFC) program. Exceptions for adult vaccine usages are noted below. ACIP recommends certain vaccines for certain cohorts who are not covered by NCIP vaccine. Health care providers must use privately-purchased vaccine for those cohorts who wish to have vaccine and are not covered by this coverage criteria. For the current recommendations for each vaccine, please see the ACIP statements found at: <http://www.cdc.gov/vaccines/pubs/ACIP-list.htm>. Current Procedural Terminology ® (CPT) codes have been added for your reference.

VACCINE	AGES COVERED	Cohort	CPT Code	ELIGIBILITY CRITERIA FOR NCIP VACCINE USAGE
DT Pediatric	≥2 months through 6 years	UNIVERSAL	90702	Only administered when pertussis-containing vaccine is medically contraindicated.
DTaP	≥2 months through 6 years	VFC ONLY	90700	
DTaP, Hep B, and polio combination (Pediarix)	≥ 2 months through 6 years	VFC ONLY	90723	
DTaP, polio, and Hib combination (Pentacel)	≥ 2 months through 4 years	VFC ONLY	90698	
DTaP/IPV combination (Kinrix)	≥ 4 years through 6 years	VFC ONLY	90696	
EIPV (Polio)	≥2 months through 17 years	VFC ONLY	90713	
HepA/HepB Combination (Twinrix)	≥ 18 years	UNINSURED ADULT USE	90636	Any uninsured adult who meets one or more of the ACIP recommended coverage groups can receive a three dose series of the combination Hep A/Hep B vaccine at the local health department or at Federally Qualified Health Centers (FQHC) and Rural Health Centers (RHC). State-supplied Hep A/Hep B vaccine <u>cannot</u> be used for the accelerated schedule, four dose series or for persons with documented history of a completed hepatitis A or B series.
Hepatitis A Pediatric use	12 months through 18 years	VFC ONLY	90633	
Hepatitis B Pediatric use	Birth through 18 years	VFC ONLY	90744 (pediatric product)	1. The birth dose of Hepatitis B vaccine is available universally. 2. Other doses of hepatitis B vaccine may be given to children through 18 years of age who are VFC-eligible only. 3. Children through 18 years of age, regardless of insurance status who are household, sexual or needle sharing contacts of an acute or chronic Hepatitis B infected person may receive Hepatitis B vaccine <u>at the local health department</u> . All household, sexual, or needle sharing contacts of an acute or chronic Hepatitis B infected person must be referred to the local health department for testing and vaccination.

VACCINE	AGES COVERED	Cohort	CPT Code	ELIGIBILITY CRITERIA FOR NCIP VACCINE USAGE
Hepatitis B Pediatric use Engerix-B ® GSK Recombivax ® Merck	Certain adults 19 years of age	UNINSURED 19 YEARS OF AGE	90744 (pediatric product)	<ol style="list-style-type: none"> Any uninsured adult 19 years of age may receive state-supplied Hep B if the first dose of Hep B is before the 19th birthday. The series must be complete before the 20th birthday if using state-supplied vaccine. Uninsured immigrants with refugee status who are from endemic countries who are 19 years of age may receive Hepatitis B vaccine at the local health department. All immigrants with refugee status must be referred to the local health department for testing and vaccination. Adults 19 years of age, who are household, sexual or needle sharing contacts of an acute or chronic Hepatitis B infected person may receive Hepatitis B vaccine <u>at the local health department</u>. All household, sexual, or needle sharing contacts of an acute or chronic Hepatitis B infected person must be referred to the local health department for testing and vaccination.
Hepatitis B Adult use	Certain adults ≥ 20 years of age may receive state-supplied Hep B	ADULT USE	90746 (adult product)	<ol style="list-style-type: none"> Individuals who are ≥20 years of age, regardless of insurance status, who are household, sexual or needle sharing contacts of an acute or chronic Hepatitis B infected person may receive Hepatitis B vaccine at <u>the local health department</u>. All household, sexual, or needle sharing contacts of an acute or chronic Hepatitis B infected person must be referred to the local health department for testing and vaccination. Uninsured immigrants with refugee status who are from endemic countries who are ≥ 20 years of age may receive Hepatitis B vaccine <u>at the local health department</u>. All immigrants with refugee status must be referred to the local health department for testing and vaccination.
Hib	≥2 months through 4 years High-risk	VFC ONLY	90647--PRP-OMP, PedvaxHIB 90648— PRP-T, ActHIB	Certain high-risk children >59 months through 18 years of age, who are not appropriately vaccinated, may receive one dose.
4vHPV (Gardasil) 9vHPV (Gardasil 9)	Females and males 9 through 18 years of age	VFC ONLY	90649 (Gardasil) 90651 (Gardasil 9)	State-supplied Gardasil (quadrivalent) and Gardasil 9 (9-valent) vaccines for HPV are available for females and males 9 through 18 years of age. The series must be complete prior to the 19th birthday.
2vHPV (Cervarix)	Females 9 through 18 years of age	VFC ONLY	90650	State-supplied Cervarix vaccine for HPV is available for females only 9 through 18 years of age. The series must be complete prior to the 19th birthday.
Influenza Pediatric use	≥ 6 months through 18 years	VFC ONLY	90686 preservative-free 3 years & up 90685 preservative free 6-35 mos 90687 & 90688 Preservative containing 6 mos & up 90672	

VACCINE	AGES COVERED	Cohort	CPT Code	ELIGIBILITY CRITERIA FOR NCIP VACCINE USAGE
			Preservative-free Intranasal, live, 2 yrs & up	
Influenza Adult use IIV4 (Fluzone and Fluarix only)	Certain adults, (19 and older) without insurance	UNINSURED FEMALE ADULT USE	90686 Preservative-free, 3 yrs. & up 90688 Preservative-containing, 3 yrs. & up	State-supplied influenza vaccine is available to: <ul style="list-style-type: none"> • Non-Medicaid, uninsured women who are pregnant during flu season, and receiving services at the Local Health Department (LHD), Federally Qualified Health Center, or Rural Health Center. • Females enrolled in the Be Smart family planning program receiving services at LHDs, Federally Qualified Health Center, or Rural Health Center.
Meningococcal Conjugate (High-Risk)	6 weeks through 18 years of age	VFC ONLY	90734 (Menveo and Menactra) 90644 (MenHibrix)	Available only for high-risk children Menactra is licensed starting at 9 months of age Menveo starts at 2 months of age MenHibrix is licensed for 6 weeks through 23 months of age
Meningococcal Conjugate (routine) Menactra Menveo	11 through 18 years of age	VFC ONLY	90734 (Menveo and Menactra)	
Meningococcal Conjugate	Adults 19 years through 55 years	UNINSURED ADULT USE	90734	A single dose of meningococcal vaccine is available for uninsured unvaccinated first year college students <u>living in dormitories</u>
Meningococcal Serogroup B (High Risk) Bexsero Trumenba	10 through 18 years of age	VFC ONLY	90620 (Bexsero) 90621 (Trumenba)	Available for high-risk children ages 10-18. Children aged 16 through 18 years without high risk conditions may also be vaccinated based on the provider's clinical judgement for children who are at increased risk for disease.
MMR Pediatric use	≥ 12 months through 18 years	VFC ONLY	90707	
MMR Adult use	Certain adults (19 and older) without insurance	UNINSURED ADULT USE	90707	One dose of MMR vaccine is available for: <ol style="list-style-type: none"> 1. Uninsured immigrants with refugee status of any age without documentation of a prior MMR may receive MMR at the <u>local health department</u>. 2. All uninsured susceptible persons without documentation of a prior MMR may receive MMR at the local health department, Federally Qualified Health Center (FQHC), or Rural Health Center (RHC). Two doses of MMR vaccine are available for: <ol style="list-style-type: none"> 1. Any uninsured person entering a four-year college or university in North

VACCINE	AGES COVERED	Cohort	CPT Code	ELIGIBILITY CRITERIA FOR NCIP VACCINE USAGE
				<p>Carolina for the first time, in addition to, any uninsured adults attending any other post-high school educational institutions (i.e. community colleges and technical schools because:</p> <p>2 doses of measles containing vaccine is required by law for</p> <ul style="list-style-type: none"> ➤ all persons born in 1957 or later entering a North Carolina college/university*** for the first time on or after July 1, 1994 and that <p>Two doses of mumps are also recommended and available for all uninsured adult students attending post-high school educational institutions (i.e. community colleges and technical schools).</p> <p>2. All uninsured women ages 19-44 years at <u>the local health department</u>.</p>
MMRV	≥ 12 months through 12 years	VFC ONLY	90710	
Pneumococcal Conjugate 13-valent (PCV13)	All children ≥ 2 through 59 months High risk	VFC ONLY	90670	Certain children ≥60 months through 18 years with high risk conditions
Pneumococcal Polysaccharide 23-valent (PPSV23)	≥ 2 years through 18 years	VFC ONLY	90732	Available only for high-risk children
Rotavirus	≥ 6 weeks through 7 months	VFC ONLY	90680—3-dose (Rotateq) 90681—2-dose (Rotarix)	
Td Pediatric use	≥ 7 years through 18 years	VFC ONLY	90714	
Td Adult use	Certain adults (19 and older) without insurance	UNINSURED ADULT USE	90714	<ol style="list-style-type: none"> 1. Can be given to any uninsured person 19 years of age or older entering a North Carolina college/university*** (where Td is required by NC Immunization Law) for the first time who has not had a booster in 10 years, or has not completed the 3 dose primary series. 2. Any uninsured person 19 years of age or older can receive Td at the local health department, FQHC, or RHC. 3. Can be given to any uninsured person 19 years of age or older being seen in a hospital emergency department for wound management.
Tdap Pediatric use	Children 7 through 18 years	VFC ONLY	90715	

VACCINE	AGES COVERED	Cohort	CPT Code	ELIGIBILITY CRITERIA FOR NCIP VACCINE USAGE
Tdap Adult use	≥ 19 years	UNINSURED ADULTS	90715	<p>1. One dose of state-supplied vaccine may be administered to any uninsured adult for whom Tdap is indicated.</p> <p>2. Local health departments (LHDs) may administer state-supplied Tdap vaccine to uninsured pregnant women 19 years and older (at any time during pregnancy regardless of prior vaccine history of Tdap, but preferably between 27-36 weeks gestation). In addition, uninsured postpartum women 19 years and older may receive one dose of state supplied Tdap if there is no documentation of a previous Tdap vaccination. Both pregnant and postpartum women must be being served by the LHD in any capacity.</p>
Varicella (Chickenpox)	> 12 months through 18 years	VFC ONLY	90716	
Varicella (Chickenpox)	Certain adults, (19 and older) without insurance	UNINSURED FEMALE ADULT USE	90716	<p>One dose of varicella vaccine is available for:</p> <p>1. Uninsured women ages 19-44 years at <u>the local health department</u>.</p>

VFC- Vaccines for Children: Children through 18 years of age that meet at least one of the following criteria are eligible for VFC vaccine: Medicaid eligible, Uninsured, American Indian or Alaskan Native, Underinsured or Unaccompanied minors without proof of insurance presenting to local health department Title X clinics.

Underinsured children are children who have commercial (private) health insurance but the coverage does not include vaccines; children whose insurance covers only selected vaccines (VFC-eligible for non-covered vaccines only), or children whose insurance caps vaccine coverage at a certain amount - once that coverage amount is reached, these children are categorized as underinsured. Note: Children whose health insurance covers vaccinations are not eligible for VFC vaccines, even when a claim for the cost of the vaccine and its administration would be denied for payment by the insurance carrier because the plan's deductible had not been met or because the insurance did not cover the total cost of the vaccine. Children who are covered by North Carolina Health Choice (NCHC) are considered insured, with one exception: NCHC children who are American Indian or Alaskan Native are eligible for VFC vaccines.

VFC vaccine cannot be used for allergy skin testing prior to vaccination.

**** ACIP Recommendation Highlights** - Information in this section is abbreviated and **NOT** inclusive of all recommendations, precautions, or contraindications. Review the full ACIP Recommendations for each vaccine on the CDC website at <http://www.cdc.gov/vaccines/pubs/ACIP-list.htm> Full and final recommendations are published as MMWR Recommendations and Reports. Updates are often sent out as Provisional Recommendations with the most pertinent information included before the final recommendations are released. There is also separate documentation for **Contraindication/Precautions** for all vaccines on the CDC web site at: <http://www.cdc.gov/vaccines/recs/vac-admin/contraindications-vacc.htm>.

***Students attending colleges within the North Carolina Community College System are exempt from North Carolina Immunization Law for college/university entry. However, some programs at community colleges, such as medical programs, may have requirements specific to their program, but this does not allow them to receive state supplied vaccine unless it is specifically stated in the coverage criteria.

**** Persons covered by the Be Smart Family Planning Program are considered uninsured and may receive certain state-supplied vaccines as noted in this coverage criteria for uninsured adults if receiving services at a Local Health Department, Federally Qualified Health Center or Rural Health Clinic.

Local health department (LHD) providers may administer NCIP vaccine offsite, without requesting permission from the Branch, as long as certain conditions are met. Refer to the memo dated May 6, 2011 for complete details.

Unless specifically stated above, no NCIP vaccine may be administered to an insured individual unless the patient is an underinsured child at an FQHC, RHC, Local Health Department or deputized provider.

Screening Checklist for Contraindications to Vaccines for Children and Teens

PATIENT NAME _____

DATE OF BIRTH _____ / _____ / _____
month day year

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?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
2. Does the child have allergies to medications, food, a vaccine component, or latex?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
3. Has the child had a serious reaction to a vaccine in the past?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
4. Has the child had a health problem with lung, heart, kidney or metabolic disease (e.g., diabetes), asthma, or a blood disorder? Is he/she on long-term aspirin therapy?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
5. If the child to be vaccinated is 2 through 4 years of age, has a healthcare provider told you that the child had wheezing or asthma in the past 12 months?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
6. If your child is a baby, have you ever been told he or she has had intussusception?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
7. Has the child, a sibling, or a parent had a seizure; has the child had brain or other nervous system problems?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
8. Does the child have cancer, leukemia, HIV/AIDS, or any other immune system problem?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
9. In the past 3 months, has the child taken medications that affect the immune system such as prednisone, other steroids, or anticancer drugs; drugs for the treatment of rheumatoid arthritis, Crohn's disease, or psoriasis; or had radiation treatments?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
10. In the past year, has the child received a transfusion of blood or blood products, or been given immune (gamma) globulin or an antiviral drug?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
11. Is the child/teen pregnant or is there a chance she could become pregnant during the next month?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
12. Has the child received vaccinations in the past 4 weeks?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

FORM COMPLETED BY _____ DATE _____

FORM REVIEWED BY _____ DATE _____

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

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

Information for Healthcare Professionals about the Screening Checklist for Contraindications (Children and Teens)

Are you interested in knowing why we included a certain question on the screening checklist? If so, read the information below. If you want to find out even more, consult the references listed at the end.

1. Is the child sick today? [all vaccines]

There is no evidence that acute illness reduces vaccine efficacy or increases vaccine adverse events (1, 2). However, as a precaution with moderate or severe acute illness, all vaccines should be delayed until the illness has improved. Mild illnesses (such as otitis media, upper respiratory infections, and diarrhea) are NOT contraindications to vaccination. Do not withhold vaccination if a person is taking antibiotics.

2. Does the child have allergies to medications, food, a vaccine component, or latex? [all vaccines]

An anaphylactic reaction to latex is a contraindication to vaccines that contain latex as a component or as part of the packaging (e.g., vial stoppers, prefilled syringe plungers, prefilled syringe caps). If a person has anaphylaxis after eating gelatin, do not administer vaccines containing gelatin. A local reaction to a prior vaccine dose or vaccine component, including latex, is not a contraindication to a subsequent dose or vaccine containing that component. For information on vaccines supplied in vials or syringes containing latex, see reference 3; for an extensive list of vaccine components, see reference 4. An egg-free recombinant influenza vaccine (RIV3) may be used in people age 18 years and older with egg allergy of any severity who have no other contraindications. Children and teens younger than age 18 years who have experienced a serious systemic or anaphylactic reaction (e.g., hives, swelling of the lips or tongue, acute respiratory distress, or collapse) after eating eggs can usually be vaccinated with inactivated influenza vaccine (IIV); consult ACIP recommendations (see reference 4).

3. Has the child had a serious reaction to a vaccine in the past? [all vaccines]

History of anaphylactic reaction (see question 2) to a previous dose of vaccine or vaccine component is a contraindication for subsequent doses (1). History of encephalopathy within 7 days following DTP/DTaP is a contraindication for further doses of pertussis-containing vaccine. Precautions to DTaP (not Tdap) include the following: (a) seizure within 3 days of a dose, (b) pale or limp episode or collapse within 48 hours of a dose, (c) continuous crying for 3 or more hours within 48 hours of a dose, and (d) fever of 105°F (40°C) within 48 hours of a previous dose. There are other adverse events that might have occurred following vaccination that constitute contraindications or precautions to future doses. Under normal circumstances, vaccines are deferred when a precaution is present. However, situations may arise when the benefit outweighs the risk (e.g., during a community pertussis outbreak).

4. Has the child had a health problem with lung, heart, kidney, or metabolic disease (e.g., diabetes), asthma, or a blood disorder? Is he/she on long-term aspirin therapy? [LAIV]

The safety of LAIV in children and teens with lung, heart, kidney, or metabolic disease (e.g., diabetes), or a blood disorder has not been established. These conditions, including asthma in children ages 5 years and older, should be considered precautions for the use of LAIV. Children on long-term aspirin therapy should not be given LAIV; instead, they should be given IIV.

5. If the child to be vaccinated is 2 through 4 years of age, has a healthcare provider told you that the child had wheezing or asthma in the past 12 months? [LAIV]

Children ages 2 through 4 years who have had a wheezing episode within the past 12 months should not be given LAIV. Instead, these children should be given IIV.

6. If your child is a baby, have you ever been told that he or she has had intussusception? [Rotavirus]

Infants who have a history of intussusception (i.e., the telescoping of one portion of the intestine into another) should not be given rotavirus vaccine.

7. Has the child, a sibling, or a parent had a seizure; has the child had brain or other nervous system problem? [DTaP, Td, Tdap, IIV, LAIV, MMRV]

DTaP and Tdap are contraindicated in children who have a history of encephalopathy within 7 days following DTP/DTaP. An unstable progressive neurologic problem is a precaution to the use of DTaP and Tdap. For children with stable neurologic disorders (including seizures) unrelated to vaccination, or for children with a family history of seizures,

vaccinate as usual (exception: children with a personal or family [i.e., parent or sibling] history of seizures generally should not be vaccinated with MMRV; they should receive separate MMR and VAR vaccines). A history of Guillain-Barré syndrome (GBS) is a consideration with the following: 1) Td/Tdap: if GBS has occurred within 6 weeks of a tetanus-containing vaccine and decision is made to continue vaccination, give age-appropriate Tdap instead of Td if no history of prior Tdap, to improve pertussis protection; 2) Influenza vaccine (IIV or LAIV): if GBS has occurred within 6 weeks of a prior influenza vaccination, vaccinate with IIV if at high risk for severe influenza complications.

8. Does the child have cancer, leukemia, HIV/AIDS, or any other immune system problem? [LAIV, MMR, MMRV, RV, VAR]

Live virus vaccines (e.g., MMR, MMRV, varicella, rotavirus, and the intranasal live, attenuated influenza vaccine [LAIV]) are usually contraindicated in immunocompromised children. However, there are exceptions. For example, MMR is recommended for asymptomatic HIV-infected children who do not have evidence of severe immunosuppression. Likewise, varicella vaccine should be considered for HIV-infected children with age-specific CD4+ T-lymphocyte percentage at 15% or greater and may be considered for children age 8 years and older with CD4+ T-lymphocyte counts of greater than or equal to 200 cells/μL. Immunosuppressed children should not receive LAIV. Infants who have been diagnosed with severe combined immunodeficiency (SCID) should not be given a live virus vaccine, including rotavirus (RV) vaccine. Other forms of immunosuppression are a precaution, not a contraindication, to rotavirus vaccine. For details, consult the ACIP recommendations (1, 6, 7, 8).

9. In the past 3 months, has the child taken medications that affect the immune system such as prednisone, other steroids, or anticancer drugs; drugs for the treatment of rheumatoid arthritis, Crohn's disease, or psoriasis; or had radiation treatments? [LAIV, MMR, MMRV, VAR]

Live virus vaccines (e.g., LAIV, MMR, VAR, ZOS) should be postponed until after chemotherapy or long-term high-dose steroid therapy has ended. For details and length of time to postpone, consult the ACIP statement (1). Some immune mediator and immune modulator drugs (especially the antitumor-necrosis factor agents adalimumab, infliximab, and etanercept) may be immunosuppressive. The use of live vaccines should be avoided in persons taking these drugs (MMWR 2011;60 [RR2]:23). To find specific vaccination schedules for stem cell transplant (bone marrow transplant) patients, see reference 9. LAIV can be given only to healthy non-pregnant people ages 2 through 49 years.

10. In the past year, has the child received a transfusion of blood or blood products, or been given immune (gamma) globulin or an antiviral drug? [LAIV, MMR, MMRV, VAR]

Certain live virus vaccines (e.g., LAIV, MMR, MMRV, varicella) may need to be deferred, depending on several variables. Consult the most current ACIP recommendations or the current Red Book for the most current information on intervals between antiviral drugs, immune globulin or blood product administration and live virus vaccines (1, 2).

11. Is the child/teen pregnant or is there a chance she could become pregnant during the next month? [LAIV, MMR, MMRV, VAR]

Live virus vaccines (e.g., MMR, MMRV, varicella, LAIV) are contraindicated one month before and during pregnancy because of the theoretical risk of virus transmission to the fetus (1, 2). Sexually active young women who receive a live virus vaccine should be instructed to practice careful contraception for one month following receipt of the vaccine (7, 10). On theoretical grounds, inactivated poliovirus vaccine should not be given during pregnancy; however, it may be given if risk of exposure is imminent (e.g., travel to endemic areas) and immediate protection is needed. 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 (5, 11).

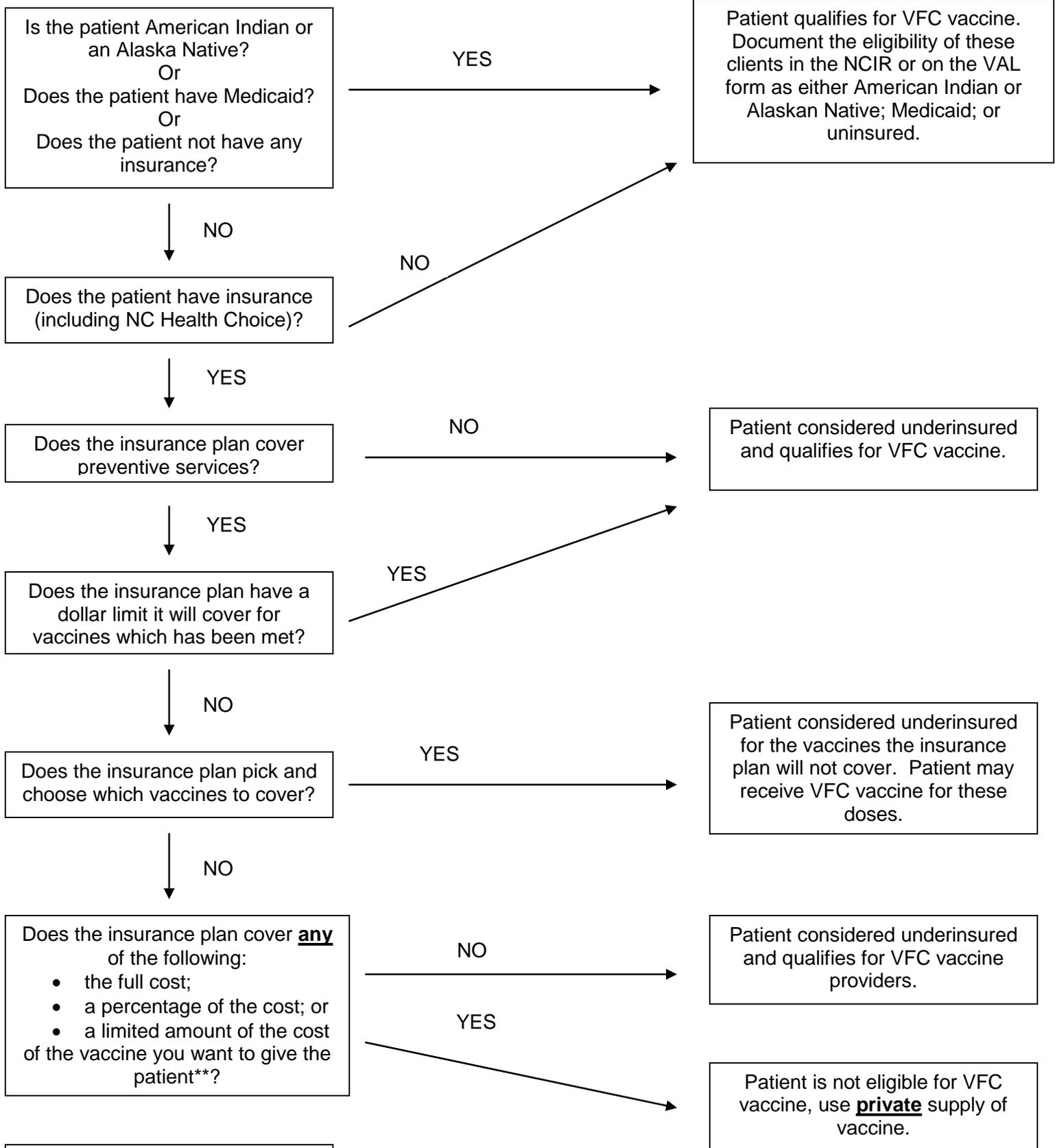
12. Has the child received vaccinations in the past 4 weeks? [LAIV, MMR, MMRV, VAR, yellow fever]

Children who were given either LAIV or an injectable live virus vaccine (e.g., MMR, MMRV, varicella, yellow fever) should wait 28 days before receiving another vaccination of this type. Inactivated vaccines may be given at the same time or at any spacing interval.

REFERENCES

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11. CDC. Prevention of pertussis, tetanus, and diphtheria among pregnant and postpartum women and their infants: Recommendations of the ACIP. MMWR 2008; 57 (RR-4).

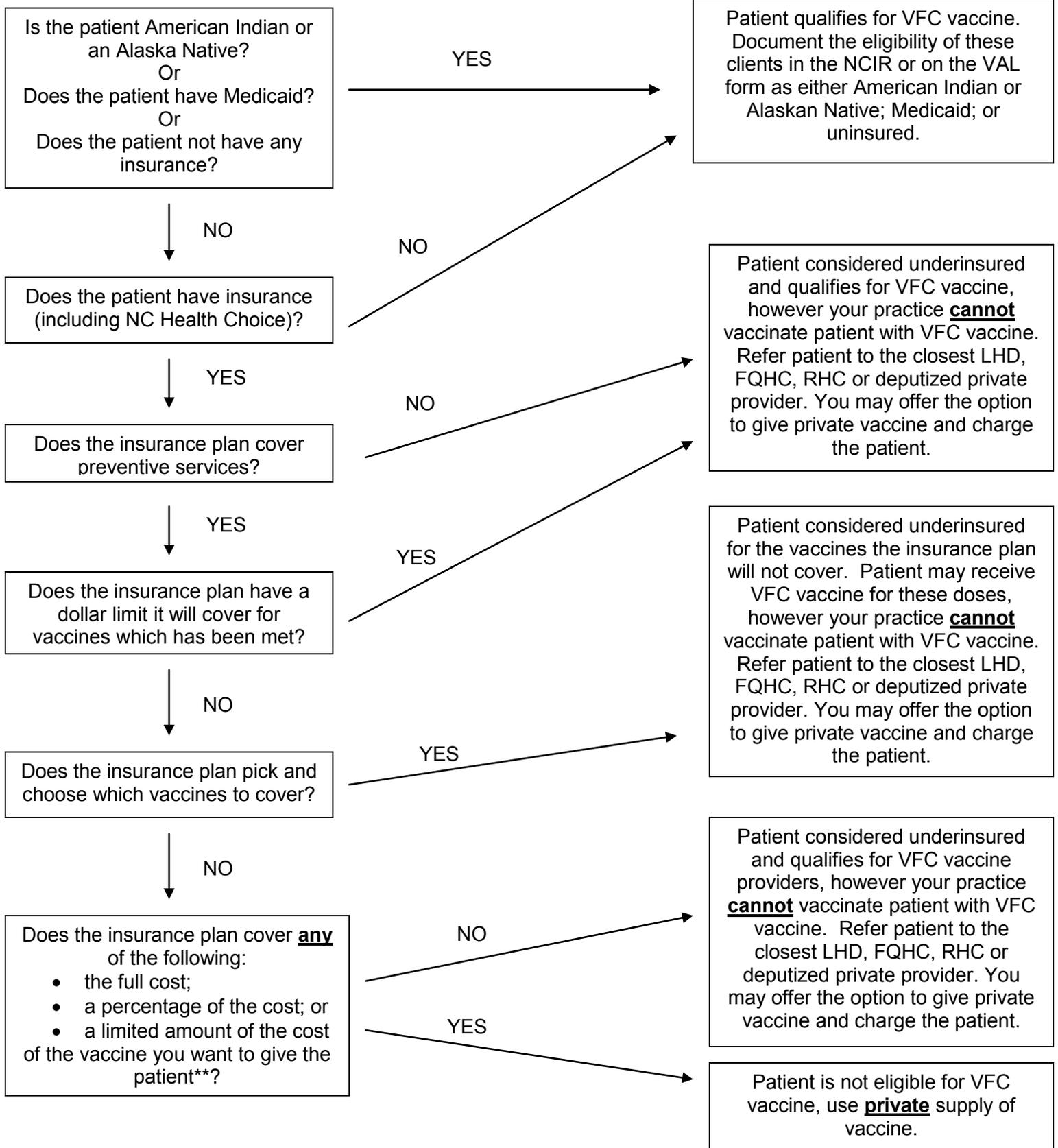
For LHDs, FQHCs, RHCs, and deputized Private Providers
Determining Eligibility for VFC Vaccines Flow Chart (Patients 18 years of age or less*)
Starting January 1, 2013



* Refer to the current coverage criteria for details on which state vaccines are eligible for adults.

** If the patient's insurance plan covers vaccine, but the deductible has not been met, the patient must be considered insured, and is not eligible for VFC vaccines.

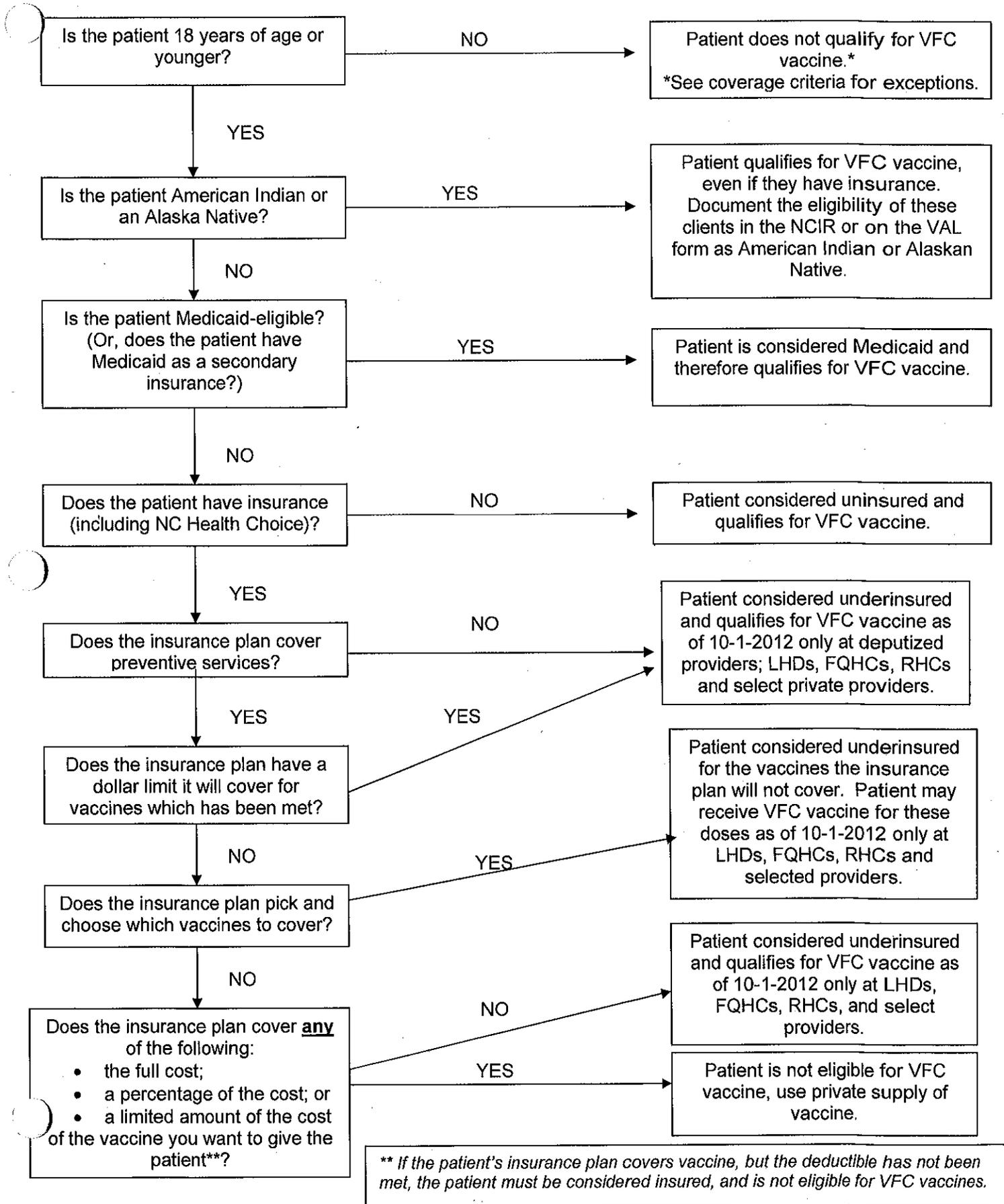
For Private Providers (Not deputized)
Determining Eligibility for VFC Vaccines Flow Chart (Patients 18 years of age or less*)
Effective January 1, 2013



** If the patient's insurance plan covers vaccine, but the deductible has not been met, the patient must be considered insured, and is not eligible for VFC vaccines.

* Refer to the current coverage criteria for details on which state vaccines are eligible for adults.

Determining Eligibility for VFC Vaccines Flow Chart



It's Federal Law! You must give your patients current Vaccine Information Statements (VISs)

What are Vaccine Information Statements (VISs)?

Vaccine Information Statements (VISs) are documents produced by the Centers for Disease Control and Prevention (CDC), in consultation with panels of experts and parents, to properly inform vaccinees (or their parents/legal representatives) about the risks and benefits of each vaccine. VISs are not meant to replace interactions with health care providers, who should address any questions or concerns that the vaccinee (or parent/legal representative) may have.

Using VISs is legally required!

Federal law (under the National Childhood Vaccine Injury Act) requires a health care provider to give a copy of the current VIS to an adult patient or to a child's parent/legal representative before vaccinating an adult or child with a dose of the following vaccines: diphtheria, tetanus, pertussis, measles, mumps, rubella, polio, hepatitis A, hepatitis B, *Haemophilus influenzae* type b (Hib), influenza, pneumococcal conjugate, meningococcal, rotavirus, human papillomavirus (HPV), or varicella (chickenpox only).

Where to get VISs

All available VISs can be downloaded from the websites of the Immunization Action Coalition at www.immunize.org/vis or CDC at www.cdc.gov/vaccines/hcp/vis/index.html. Ready-to-copy versions may also be available from your state or local health department.

Translations: You can find VISs in more than 30 languages on the Immunization Action Coalition website at www.immunize.org/vis.

To obtain translations of VIS in languages other than English, go to www.immunize.org/vis.

According to CDC, the appropriate VIS must be given:

- Prior to the vaccination (and prior to each dose of a multi-dose series);
- Regardless of the age of the vaccinee;
- Regardless of whether the vaccine is given in a public or private health care setting.



Top 10 Facts About VISs

FACT 1 It's federal law! You must give current VISs to all your patients before vaccinating them.

Federal law requires that VISs must be used for patients of **ALL** ages when administering these vaccines:

- DTaP (includes DT)
- Td and Tdap
- Hib
- hepatitis A
- hepatitis B
- HPV
- influenza (inactivated and live, intranasal vaccines)
- MMR and MMRV
- meningococcal
- pneumococcal conjugate
- polio
- rotavirus
- varicella (chickenpox)

For the vaccines not covered under the National Childhood Vaccine Injury Act (i.e., adenovirus, anthrax, Japanese encephalitis, pneumococcal polysaccharide, rabies, shingles, typhoid, and yellow fever), providers are not required by federal law to use VISs unless they have been purchased under CDC contract. However, CDC recommends that VISs be used whenever these vaccines are given.

FACT 2 VISs can be given to patients in a variety of ways.

In most medical settings, VISs are provided to patients (or their parents/legal representatives) in paper form. However, VISs also may be provided using electronic media. Regardless of the format used, the goal is to provide a current VIS just prior to vaccination.

CONTINUED ON NEXT PAGE ►

Most current versions of VISs (table)

As of April 18, 2016, the most recent versions of the VISs are as follows:

Adenovirus	6/11/14	MMR	4/20/12
Anthrax	3/10/10	MMRV	5/21/10
Chickenpox	3/13/08	Multi-vaccine	11/5/15
DTaP	5/17/07	PCV13	11/5/15
Hib	4/2/15	PPSV	4/24/15
Hepatitis A	10/25/11	Polio	11/8/11
Hepatitis B	2/2/12	Rabies	10/6/09
HPV-Cervarix	5/3/11	Rotavirus	4/15/15
HPV-Gardasil	5/17/13	Shingles	10/6/09
HPV-Gardasil 9	3/31/16	Td	2/24/15
Influenza	8/7/15	Tdap	2/24/15
Japanese enceph	1/24/14	Typhoid	5/29/12
MCV4/MPSV4	3/31/16	Yellow fever	3/30/11
MenB	8/14/15		

A handy list of current VIS dates is also available at www.immunize.org/catg.d/p2029.pdf.

(For information on special circumstances involving vaccination of a child when a parent/legal representative is not available at the time of vaccination, see CDC's *Frequently Asked Questions* at www.cdc.gov/vaccines/hcp/vis/about/vis-faqs.html.)

Prior to vaccination, VIS may be:

- Provided as a paper copy
- Offered on a permanent, laminated office copy
- Downloaded by the vaccinee (parent/legal representative) to a smartphone or other electronic device (VISs have been specially formatted for this purpose)
- Made available to be read before the office visit, e.g., by giving the patient or parent a copy to take home during a prior visit, or telling them how to download or view a copy from the Internet. These patients must still be offered a copy in one of the formats described previously to read during the immunization visit, as a reminder.

Regardless of the way the patient is given the VIS to read, providers must still offer a copy (which can be an electronic copy) of each appropriate VIS to take home following the vaccination. However, the vaccinee may decline.

FACT 3 VISs are required in both public and private sector health care settings.

Federal law requires the use of VISs in both public and private sector settings, regardless of the source of payment for the vaccinee.

FACT 4 You must provide a current VIS *before* a vaccine is administered to the patient.

A VIS provides information about the disease and the vaccine and must be given to the patient **before** a vaccine is administered. It is also acceptable to hand out the VIS well before administering vaccines (e.g., at a prenatal visit or at birth for vaccines an infant will receive during infancy), as long as you still provide a current VIS right before administering vaccines.

FACT 5 You must provide a current VIS for *each* dose of vaccine you administer.

The most current VIS must be provided before **each dose** of vaccine is given, including vaccines given as a series of doses. For example, if 5 doses of a single vaccine are required (e.g., DTaP), the patient (parent/legal representative) must have the opportunity to read the information on the VIS before each dose is given.

FACT 6 You must provide VISs whenever you administer combination vaccines.

If you administer a combination vaccine that does not have a stand-alone VIS (e.g., Kinrix, Quadracel, Pediarix, Pentacel, Twinrix) you should provide the patient with individual VISs for the component vaccines, or use the Multi-Vaccine VIS (see below).

The Multi-Vaccine VIS may be used in place of the individual VISs for DTaP, Hib, hepatitis B, polio, and pneumococcal when two or more of these vaccines are administered during the same visit. It may be used for infants as well as children through 6 years of age. The Multi-Vaccine VIS should not be used for adolescents or adults.

FACT 7 VISs should be given in a language /format that the recipient can understand, whenever possible.

For patients who don't read or speak English, the law requires that providers ensure all patients (parent/legal representatives) receive a VIS, regardless of their ability to read English. To obtain VISs in more than 30 languages, visit the Immunization Action Coalition website at www.immunize.org/vis. Providers can supplement VISs with visual presentations or oral explanations as needed.

FACT 8 Federal law does not require signed consent in order for a person to be vaccinated.

Signed consent is not required by federal law for vaccination (although some states may require it).

FACT 9 To verify that a VIS was given, providers must record in the patient's medical record (or permanent office log or file) the following information:

- The edition date of the VIS (found on the back at the right bottom corner)
- The date the VIS is provided (i.e., the date of the visit when the vaccine is administered)
- The office address and name and title of the person who administers the vaccine
- The date the vaccine is administered
- The vaccine manufacturer and lot number

In addition, providers must record:

FACT 10 VISs should not be altered before giving them to patients, but you can add some information.

Providers should not change a VIS or write their own VISs. However, it is permissible to add a practice's name, address, and contact information to an existing VIS.

Additional resources on VISs and their use are available from the following organizations:

Immunization Action Coalition

- VIS general information and translations in more than 30 languages: www.immunize.org/vis
- Current Dates of Vaccine Information Statements: www.immunize.org/catg.d/p2029.pdf

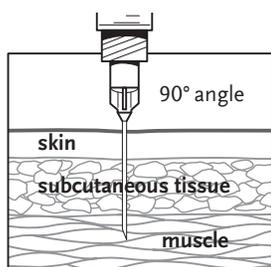
Centers for Disease Control and Prevention

- VIS website: www.cdc.gov/vaccines/hcp/vis
- VIS Facts: www.cdc.gov/vaccines/hcp/vis/about/facts-vis.html
- VIS FAQs: www.cdc.gov/vaccines/hcp/vis/about/vis-faqs.html

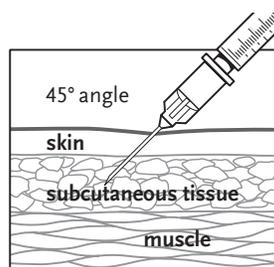
Administering Vaccines: Dose, Route, Site, and Needle Size

Vaccine	Dose	Route	Injection Site and Needle Size		
Diphtheria, Tetanus, Pertussis (DTaP, DT, Tdap, Td)	0.5 mL	IM	Subcutaneous (Subcut) injection Use a 23–25 gauge needle. Choose the injection site that is appropriate to the person's age and body mass.		
<i>Haemophilus influenzae</i> type b (Hib)	0.5 mL	IM	AGE	NEEDLE LENGTH	INJECTION SITE
Hepatitis A (HepA)	≤18 yrs: 0.5 mL ≥19 yrs: 1.0 mL	IM	Infants (1–12 mos)	5/8"	Fatty tissue over anterolateral thigh muscle
Hepatitis B (HepB) <i>Persons 11–15 yrs may be given Recombivax HB (Merck) 1.0 mL adult formulation on a 2-dose schedule.</i>	≤19 yrs: 0.5 mL ≥20 yrs: 1.0 mL	IM	Children 12 mos or older, adolescents, and adults	5/8"	Fatty tissue over anterolateral thigh muscle or fatty tissue over triceps
Human papillomavirus (HPV)	0.5 mL	IM	Intramuscular (IM) injection Use a 22–25 gauge needle. Choose the injection site and needle length that is appropriate to the person's age and body mass.		
Influenza, live attenuated (LAIV)	0.2 mL (0.1 mL in each nostril)	Intranasal spray	AGE	NEEDLE LENGTH	INJECTION SITE
Influenza, inactivated (IIV); recombinant (RIV), for ages 18 years and older	6–35 mos: 0.25 mL ≥3 yrs: 0.5 mL	IM	Newborns (1st 28 days)	5/8"	Anterolateral thigh muscle
Influenza (IIV) Fluzone Intradermal, for ages 18 through 64 years	0.1 mL	ID	Infants (1–12 mos)	1"	Anterolateral thigh muscle
Measles, Mumps, Rubella (MMR)	0.5 mL	Subcut	Toddlers (1–2 years)	1–1¼"	Anterolateral thigh muscle
Meningococcal conjugate (MCV4 [MenACWY])	0.5 mL	IM		5/8–1"	Deltoid muscle of arm
Meningococcal serogroup B (MenB)	0.5 mL	IM	Children and teens (3–18 years)	5/8–1"* 1–1¼"	Deltoid muscle of arm Anterolateral thigh muscle
Meningococcal polysaccharide (MPSV)	0.5 mL	Subcut	Adults 19 years or older		
Pneumococcal conjugate (PCV)	0.5 mL	IM	Female or male <130 lbs	5/8–1"*	Deltoid muscle of arm
Pneumococcal polysaccharide (PPSV)	0.5 mL	IM or Subcut	Female or male 130–152 lbs	1"	Deltoid muscle of arm
Polio, inactivated (IPV)	0.5 mL	IM or Subcut	Female 153–200 lbs Male 130–260 lbs	1–1½"	Deltoid muscle of arm
Rotavirus (RV)	Rotarix: 1.0 mL Rotateq: 2.0 mL	Oral	Female 200+ lbs Male 260+ lbs	1½"	Deltoid muscle of arm
Varicella (Var)	0.5 mL	Subcut	* A 5/8" needle may be used for patients weighing less than 130 lbs (<60 kg) for IM injection in the deltoid muscle only if the skin stretched tight, the subcutaneous tissue is not bunched, and the injection is made at a 90-degree angle.		
Zoster (Zos)	0.65 mL	Subcut	NOTE: Always refer to the package insert included with each biologic for complete vaccine administration information. CDC's Advisory Committee on Immunization Practices (ACIP) recommendations for the particular vaccine should be reviewed as well. Access the ACIP recommendations at www.immunize.org/acip .		
Combination Vaccines					
DTaP-HepB-IPV (Pediarix) DTaP-IPV/Hib (Pentacel) DTaP-IPV (Kinrix; Quadracel) Hib-HepB (Comvax) Hib-MenCY (MenHibrix)	0.5 mL	IM			
MMRV (ProQuad)	≤12 yrs: 0.5 mL	Subcut			
HepA-HepB (Twinrix)	≥18 yrs: 1.0 mL	IM			

Intramuscular (IM) injection



Subcutaneous (Subcut) injection



Intradermal (ID) administration of Fluzone ID vaccine



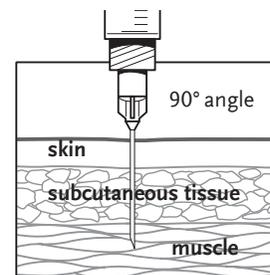
Intranasal (NAS) administration of Flumist (LAIV) vaccine



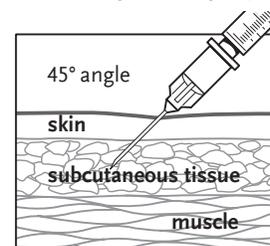
Administering Vaccines to Adults: Dose, Route, Site, and Needle Size

VACCINE	DOSE	ROUTE
Hepatitis A (HepA)	≤18 yrs: 0.5 mL ≥19 yrs: 1.0 mL	IM
Hepatitis B (HepB)	≤19 yrs: 0.5 mL ≥20 yrs: 1.0 mL	IM
HepA-HepB (Twinrix)	≥18 yrs: 1.0 mL	IM
Human papillomavirus (HPV)	0.5 mL	IM
Influenza, live attenuated (LAIV)	0.2 mL (0.1 mL into each nostril)	NAS (Intranasal spray)
Influenza, inactivated (IIV) and recombinant (RIV)	0.5 mL	IM
Influenza (IIV) Fluzone Intradermal, for ages 18 through 64 years	0.1 mL	ID (Intradermal)
Measles, Mumps, Rubella (MMR)	0.5 mL	SubCut
Meningococcal conjugate (MenACWY)	0.5 mL	IM
Meningococcal protein (MenB)	0.5 mL	IM
Meningococcal serogroup B (MenB)	0.5 mL	IM
Meningococcal polysaccharide (MPSV)	0.5 mL	SubCut
Pneumococcal conjugate (PCV13)	0.5 mL	IM
Pneumococcal polysaccharide (PPSV)	0.5 mL	IM or SubCut
Tetanus, Diphtheria (Td) with Pertussis (Tdap)	0.5 mL	IM
Varicella (VAR)	0.5 mL	SubCut
Zoster (HZV)	0.65 mL	SubCut

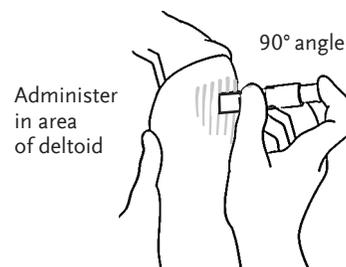
Intramuscular (IM) injection



Subcutaneous (SubCut) injection



Intradermal (ID) administration of Fluzone ID vaccine



Intranasal (NAS) administration of Flumist (LAIV) vaccine



NOTE: Always refer to the package insert included with each biologic for complete vaccine administration information. CDC's Advisory Committee on Immunization Practices (ACIP) recommendations for the particular vaccine should be reviewed as well. Access the ACIP recommendations at www.immunize.org/acip.

Injection Site and Needle Size

Subcutaneous (SubCut) injection – Use a 23–25 gauge, $\frac{5}{8}$ " needle. Inject in fatty tissue over triceps.

Intramuscular (IM) injection – Use a 22–25 gauge needle. Inject in deltoid muscle of arm. Choose the needle length as indicated below:

Gender/Weight	Needle Length	
Female or male less than 130 lbs	$\frac{5}{8}$ "*–1"	* A $\frac{5}{8}$ " needle may be used for patients weighing less than 130 lbs (<60 kg) for IM injection in the deltoid muscle only if the subcutaneous tissue is not bunched and the injection is made at a 90-degree angle.
Female or male 130–152 lbs	1"	
Female 153–200 lbs	1–1½"	
Male 153–260 lbs		
Female 200+ lbs	1½"	
Male 260+ lbs		

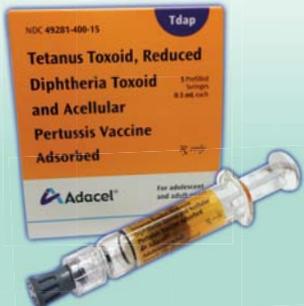
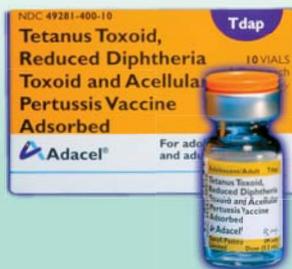
Tdap or DTaP

Pertussis is widespread—are your patients protected?

Tdap: Tetanus toxoid, Reduced Diphtheria toxoid, Acellular Pertussis vaccine

For Those Age 7 Years or Older

ADACEL™ (sanofi pasteur)



Boostrix® (GlaxoSmithKline)

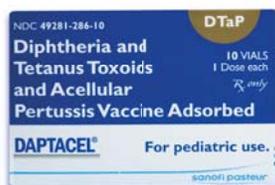


DTaP: Diphtheria and Tetanus toxoid, Acellular Pertussis vaccine

For Those Ages 6 Weeks Through 6 Years

DTaP only

DAPTACEL® (sanofi pasteur)



Infanrix® (GlaxoSmithKline)



Combination: DTaP + Others

DTaP + HepB + IPV

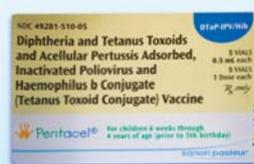
Pediarix® (GlaxoSmithKline)
Ages 6 weeks through 6 years



Indicated for use as a 3-dose series.

DTaP + IPV + Hib

Pentacel® (sanofi pasteur)
Ages 6 weeks through 4 years



DTaP + IPV

Kinrix® (GlaxoSmithKline)
Ages 4 years through 6 years



Booster Dose Only

Use Tdap or DTaP to stop pertussis. For more info, visit EZIZ.org

- PURPOSE:** (1) To improve accuracy of doses administered reporting; (2) to meet state and federal requirements; (3) to fulfill Vaccines for Children (VFC) documentation requirements; and (4) to provide patient specific immunization information to local health departments.
- INSTRUCTIONS:** **ONLY USE BLUE OR BLACK BALLPOINT PEN** **DO NOT USE PENCIL OR FELT-TIP PENS.**
- *Report Month:** Fill in month and year on **every page**. Please do not include more than one MONTH on a VAL form. Additions and corrected copies from different months should be documented on separate VAL forms rather than on the VAL form(s) for the current month being reported.
- * Federal ID number and two digit site number** Record the 9 digit federal tax identification number and the 2 digit site number for your **FACILITY** that has been assigned to you by the Immunization Branch as an identifier. The two-digit number is necessary to differentiate between facilities owned by the same group. Record the 11 digit number on **every page**.
- *Provider Name:** Record the official name of your **FACILITY** on **every page** of the log. For example, if Dr. Jones is the solo physician in a facility called "Jones Family Practice", record "Jones Family Practice".
- * Address:** Record the street address and city for your facility on the first page of the logs. **Only required on the first page.**
- *Page__of __:** Number every page. Include total number of pages on the first and last page submitted, i.e. "Page 1 of 24", "Page 24 of 24".
- *Contact Person:** Print the name and telephone number of the contact person 1) whose responsibility it is to ensure the logs are received by the North Carolina Immunization Program (NCIP) by the 10th of each month, and 2) whom you want the Immunization Branch to call with questions.
- *Contact Phone:** **Only required on the first page.**
- *Zero Doses Given:** If no vaccines were given during the month, complete the top of the form, fill in the circle indicating that zero doses were given in this month and mail form to the Immunization Branch by the 10th of the month.
- *Patient Name:** Legibly print the full name of the patient in the appropriate areas for last name, first name, and middle initial.
- *Birth Date:** Print the date of birth as "MM DD YYYY". Fill in the full year i.e., "1999, 2000, etc" (ex: 03-24-2000).
- *Eligibility Insurance:** Fill in the appropriate circle. Only fill in **one** circle. If a patient qualifies under more than one eligibility category, fill in the **first** eligibility category for which the patient is eligible. For example: if the patient is American Indian and Medicaid, fill in "A". If you can not obtain information as to whether a patient's insurance covers immunizations, fill in "I".
- A** = American Indian or Alaska Native **U** = Underinsured (only at LHD, FQHC, RHC & Deputized Providers-insurance does not cover the cost of immunizations)
M = Medicaid **H** = NC Health Choice for Children (NC=s CHIP plan)
N = Not insured (no health insurance) **I** = Insured (insurance covers immunizations)
- *Service Date:** Print the service date as "MM DD YY".
- *Vaccine Type** For each patient, record the vaccine type given to a patient on that date. **Use this column for state supplied vaccine only.** Do not record any historical data or privately purchased vaccine in this column. For example:
- ◆ If you give a patient a dose of MMR, please fill in the circle under MMR.
- *Notes:** Record privately purchased vaccine given to a patient who does not meet the coverage criteria under the NCIP. Space can also be used to document lot number, manufacturer name, expiration date, date printed on Vaccine Information Statement (VIS), date VIS given, chart number, brand/type, etc. **Use of this space is not required.**
- *Column Totals:** Total the number of doses given in each vaccine column. Record column totals at the bottom of every page.
- *Preparation:**
1. Complete the log and return Part 1 (white copy) and Part 2 (yellow copy) to the Immunization Branch. **Keep Part 3 (pink copy) for your files.**
 2. **MAIL** Part 1 (white copy) and Part 2 (yellow copy) to: Immunization Branch, 1917 Mail Service Center, Raleigh, NC 27699-1917. The **logs must be received by the Immunization Branch by the 10th of each month.** The Immunization Branch will mail the copy to the local health department in your county. **DO NOT FAX OR EMAIL.** Faxes or emails will not be accepted.
- *Disposition:** You must keep your copy, Part 3 (pink copy) for 3 years.
- *Mistakes:** If you make a mistake, draw a line through the entire row that includes the incorrect data. Verify that corrections are transferred to all copies.



State of North Carolina • Department of Health and Human Services • Division of Public Health
 Women's and Children's Health Section • Immunization Branch
 www.ncdhhs.gov • www.ncdhhs.gov/divisions/dph

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VACCINES ADMINISTERED LOG, VAL122, 5/2016

1. Last Name First Name MI

2. Patient Number

3. Date of Birth
 Month Day Year

4. Race 1. White 2. Black 3. Am. Indian/Alaskan Native 4. Asian/Pacific Islander 5. Other: Ethnicity: Hispanic Origin? 1. Yes 2. No

5. Sex 1. Male 2. Female

6. County of Residence

N.C. Department of Health and Human Services
 Division of Public Health
 Immunization Branch

Vaccine Administration Record

*I/parental designee have received the "Vaccine Information Statements" (VIS) about the disease(s) and vaccine(s). I have had a chance to review the VIS(s) and to ask questions that were answered to my satisfaction. I understand the benefits and risks of the vaccine(s) and request the vaccine(s) indicated below be given to me or the person named above for whom I am authorized to make this request.

Eligibility Status ¹	Vaccine Administered (circle one)	Date Admin.	Admin. Site ² /Route ³	Mfr. and Lot No.	Expiration Date	Contra-indication	*Consent or Authorization Signature	**Provider's Signature	Date Printed on VIS
	DTaP/DTP/DT #1								
	DTaP/DTP/DT #2								
	DTaP/DTP/DT #3								
	DTaP/DTP/DT #4								
	DTaP/DTP/DT #5								
	Hib/DTP-HIB #1								
	Hib/DTP-HIB #2								
	Hib/DTP-HIB #3								
	Hib/DTP-HIB #4								
	IPV/OPV #1								
	IPV/OPV #2								
	IPV/OPV #3								
	IPV/OPV #4								
	HBIG***								
	Hep B #1								
	Hep B #2								
	Hep B #3								
	MMR/MR #1								
	MMR/MR #2								
	Varicella #1								
	Varicella #2								
	PCV #1								
	PCV #2								
	PCV #3								
	PCV #4								
	Td #1								
	Td #2								
	Td #3								
	PPV23 #1								
	PPV23 #2								
	Influenza								
	Influenza								
	Hep A #1								
	Hep A #2								
	RV #1								
	RV #2								
	RV #3								
	Tdap								
	Meningococcal								
	HPV #1								
	HPV #2								
	HPV #3								

Vaccine Administration Record

Name: _____ DOB: _____
(Last) (First) (Middle) Mo. Day Year

*I/parental designee have received the "Vaccine Information Statements" (VIS) about the disease(s) and vaccine(s). I have had a chance to review the VIS(s) and to ask questions that were answered to my satisfaction. I understand the benefits and risks of the vaccine(s) and request the vaccine(s) indicated below be given to me or the person named above for whom I am authorized to make this request.

Eligibility Status ¹	Vaccine Administered <small>(circle one)</small>	Date Admin.	Admin. Site ² / Route ³	Mfr. and Lot No.	Expiration Date	Contra-indication	*Consent or Authorization Signature	**Provider's Signature	Date Printed on VIS

Allergies, TB Skin Test, Notes: _____

¹I am authorized by the parent, guardian, or person standing in loco parentis of the above-named child to obtain needed immunizations for the child.
^{**}I have asked about immunizations and prior reactions. According to informant, none have occurred.
^{***}An infant receiving HBIG should be evaluated for hepatitis B vaccine (Engerix 10 mcg/0.5ml OR Recombivax 5 mcg/0.5ml) within 12 hours of birth, and at and 6 months of age.

- | | |
|--|---|
| <p>¹Eligibility Status: A – American Indian /Alaskan Native
 M – Medicaid
 N – Not Insured
 U – Underinsured (insurance does not cover full cost of immunizations)
 H – NC Health Choice for Children
 I – Insured</p> | <p>²Admin. Site: RA = Right Arm
 LA = Left Arm
 RT = Right Thigh
 LT = Left Thigh</p> <p>³Admin. Route: IM = Intramuscular
 SC = Subcutaneous
 Oral</p> |
|--|---|

Purpose: To document vaccines administered.

Preparation: Update demographic information and complete at each vaccine administration.

Directions: Complete all requested information for each vaccine administered.

Distribution: Health Care Provider will maintain Vaccine Administration Record in individual's medical record.

Disposition: This form is to be retained in accordance with the *Records Retention and Disposition Schedule* of medical records as issued by the NC Division of Archives and History.

Ordering Information: Additional forms may be ordered from:
 Division of Public Health – Immunization Branch
 NC Department of Health and Human Services
 1917 Mail Service Center
 Raleigh, NC 27699-1917
 Phone (877) 873-6247
 FAX (800) 544-3058

1. Last Name	First Name	MI
2. Patient Number		— H
3. Date of Birth	Month	Day
4. Race	<input type="checkbox"/> 1. White <input type="checkbox"/> 2. Black <input type="checkbox"/> 3. Am. Indian/Alaskan Native <input type="checkbox"/> 4. Asian/Pacific Islander <input type="checkbox"/> 5. Other: _____	
5. Sex	<input type="checkbox"/> 1. Male <input type="checkbox"/> 2. Female	
6. County of Residence		

N.C. Department of Health and Human Services
 Division of Public Health
 Immunization Branch

Adult Vaccine Administration Record

Before administering any vaccines, give the patient copies of all pertinent Vaccine Information Statements (VISs) and make sure he/she understands the risks and benefits of the vaccine(s). Update the patient's personal record card or provide a new one whenever you administer the vaccine.

Vaccine	Date given (mo/day/yr)	Route	Site given (RA, LA)	Vaccine		Expiration date	Date on VIS ¹	Consent signature	Signature/initials of vaccinator
				lot #	mfr.				
Tetanus and Diphtheria (e.g., Td)									
Tetanus, Diphtheria, Pertussis (Tdap)									
Hepatitis A ² (e.g., HepA, HepA-HepB)									
Hepatitis B ² (e.g., HepB, HepA-HepB)									
Measles, Mumps, Rubella (MMR)									
Varicella (Var)									
Pneumococcal Conjugate (PCV13)									
Pneumococcal Polysaccharide (PPSV23)									
Zoster (Shingles) (Zos)									
Meningococcal Conjugate (MCV4)									
Human Pappillomavirus (HPV)									
Influenza (Flu)									

¹Record the publication date of each VIS given to the patient. According to federal law, VISs must be given to patients before administering each dose of vaccine.
²For combination vaccines, fill in the row for each individual antigen composing the combination.

MEDICAL EXEMPTION STATEMENT

Purpose: To provide physicians, licensed to practice medicine in North Carolina, a mechanism to document a true medical contraindication/precaution to an immunization(s). This form does not need approval from the State Health Director. This form can be accepted by agencies that require proof of immunizations. For medical exemptions NOT listed in the table below, submit the Physician's Request for Medical Exemption form (Form: DHHS 3995) to the State Health Director for approval, available at <http://www.immunize.nc.gov/schools/ncoxemptions.htm>

Name of Patient _____ DOB _____

Name of Parent/Guardian _____ Primary Phone () _____

Home Address (Patient/Parent) _____ County _____

Name of Child Care/School/College/University _____

Medical contraindications and precautions for immunizations are described in the most recent recommendations of the Advisory Committee on Immunization Practices (ACIP), available at <http://www.cdc.gov/vaccines/recs/vac-admin/contraindications.htm>

A **contraindication** is a condition in a recipient that increases the risk for a serious adverse reaction. A vaccine will not be administered when a contraindication is present. A **precaution** is a condition in a recipient that might increase the risk for a serious adverse reaction or that might compromise the ability of the vaccine to produce immunity. Under normal conditions, vaccinations should be deferred when a precaution is present.

Vaccine	Check all true contraindications and precautions that apply to this patient below:
<input type="checkbox"/> Diphtheria, tetanus, pertussis (DTaP) <input type="checkbox"/> Tetanus, diphtheria, pertussis (Tdap) <input type="checkbox"/> Tetanus, diphtheria (DT, Td)	<p>Contraindications</p> <ul style="list-style-type: none"> <input type="checkbox"/> Severe allergic reaction (e.g., anaphylaxis) after a previous dose or to a vaccine component. <input type="checkbox"/> For pertussis-containing vaccines: encephalopathy (e.g., coma, decreased level of consciousness, prolonged seizure) not attributable to another identifiable cause within 7 days of administration of DTaP or DTP (for DTaP); or of previous dose of DTaP, DTP, or Tdap (for Tdap). <p>Precautions</p> <ul style="list-style-type: none"> <input type="checkbox"/> Moderate or severe acute illness with or without fever. <input type="checkbox"/> Guillain-Barré syndrome (GBS) within 6 weeks after a previous dose of tetanus toxoid-containing vaccine. <input type="checkbox"/> History of arthus-type hypersensitivity reaction after a previous dose of a tetanus or diphtheria toxoid-containing vaccine; defer until at least 10 years have elapsed since the last tetanus-toxoid containing vaccine. <input type="checkbox"/> For pertussis-containing vaccines: progressive or unstable neurologic disorder (including infantile spasms for DTaP), uncontrolled seizures, or progressive encephalopathy until a treatment regimen has been established and the condition has stabilized. <p>Additional Precautions that only apply to DTaP</p> <ul style="list-style-type: none"> <input type="checkbox"/> Temperature of 105° F or higher (40.5° C or higher) within 48 hours after vaccination with a previous dose of DTP/DTaP. <input type="checkbox"/> Collapse or shock-like state (i.e., hypotonic hyporesponsive episode) within 48 hours after receiving a previous dose of DTP/DTaP. <input type="checkbox"/> Seizure within 3 days after receiving a previous dose of DTP/DTaP. <input type="checkbox"/> Persistent, inconsolable crying lasting 3 or more hours within 48 hours after receiving a previous dose of DTP/DTaP.
<input type="checkbox"/> Measles, mumps, rubella (MMR)	<p>Contraindications</p> <ul style="list-style-type: none"> <input type="checkbox"/> Severe allergic reaction (e.g., anaphylaxis) after a previous dose or to a vaccine component. <input type="checkbox"/> Known severe immunodeficiency (e.g., congenital immunodeficiency, malignancy, chemotherapy, long-term immunosuppressive therapy, or human immunodeficiency virus [HIV] infection with CD4+ T-lymphocyte count ≤ 15%). <input type="checkbox"/> Pregnancy. <p>Precautions</p> <ul style="list-style-type: none"> <input type="checkbox"/> Moderate or severe acute illness with or without fever. <input type="checkbox"/> Recent (within 11 months) receipt of antibody-containing blood product (specific interval depends on product). <input type="checkbox"/> History of thrombocytopenia or thrombocytopenic purpura. <input type="checkbox"/> Need for tuberculin skin testing (Measles vaccine might suppress tuberculin reactivity temporarily)

<input type="checkbox"/> Varicella (Var)	<p>Contraindications</p> <ul style="list-style-type: none"> <input type="checkbox"/> Severe allergic reaction (e.g., anaphylaxis) after a previous dose or to a vaccine component. <input type="checkbox"/> Known severe immunodeficiency (e.g., congenital immunodeficiency, malignancy, chemotherapy, long-term immunosuppressive therapy, or human immunodeficiency virus (HIV) infection with CD4+ T-lymphocyte count ≤ 15%. <input type="checkbox"/> Pregnancy. <p>Precautions</p> <ul style="list-style-type: none"> <input type="checkbox"/> Moderate or severe acute illness with or without fever <input type="checkbox"/> Recent (within 11 months) receipt of antibody-containing blood product (specific interval depends on product) <input type="checkbox"/> Receipt of specific antivirals (e.g., acyclovir, famciclovir, or valacyclovir) 24 hours before vaccination. Avoid use of these antivirals for 14 days after vaccination.
<input type="checkbox"/> Inactivated Polio Virus (IPV)	<p>Contraindications</p> <ul style="list-style-type: none"> <input type="checkbox"/> Severe allergic reaction (e.g., anaphylaxis) after a previous dose or to a vaccine component. <p>Precautions</p> <ul style="list-style-type: none"> <input type="checkbox"/> Moderate or severe acute illness with or without fever. <input type="checkbox"/> Pregnancy.
<input type="checkbox"/> Hepatitis B (Hep B)	<p>Contraindications</p> <ul style="list-style-type: none"> <input type="checkbox"/> Severe allergic reaction (e.g., anaphylaxis) after a previous dose or to a vaccine component. <p>Precautions</p> <ul style="list-style-type: none"> <input type="checkbox"/> Moderate or severe acute illness with or without fever. <input type="checkbox"/> Infant weighing less than 2000 grams (4 lbs, 6.4 oz) if mother is documented hepatitis B surface antigen (HbsAg) negative at the time of the infant's birth.
<input type="checkbox"/> Haemophilus Influenza type B (HIB)	<p>Contraindications</p> <ul style="list-style-type: none"> <input type="checkbox"/> Severe allergic reaction (e.g., anaphylaxis) after a previous dose or to a vaccine component. <input type="checkbox"/> Age younger than 6 weeks. <p>Precautions</p> <ul style="list-style-type: none"> <input type="checkbox"/> Moderate or severe acute illness with or without fever.
<input type="checkbox"/> Pneumococcal (PCV13)	<p>Contraindications</p> <ul style="list-style-type: none"> <input type="checkbox"/> Severe allergic reaction (e.g., anaphylaxis) after a previous dose or to a vaccine component, including any diphtheria toxoid-containing vaccine. <p>Precautions</p> <ul style="list-style-type: none"> <input type="checkbox"/> Moderate or severe acute illness with or without fever.
<input type="checkbox"/> Meningococcal (MCV4)	<p>Contraindications</p> <ul style="list-style-type: none"> <input type="checkbox"/> Severe allergic reaction (e.g., anaphylaxis) after a previous dose or to a vaccine component <p>Precautions</p> <ul style="list-style-type: none"> <input type="checkbox"/> Moderate or severe acute illness with or without fever

A physician (M.D. or D.O) licensed to practice medicine in North Carolina must complete and sign this form.

Date exemption ends: _____

N.C. Physician's Name (please print) _____ Phone _____

Address _____

N.C. Physician's Signature _____ Date _____

Instructions:

1. Complete and sign the form.
2. **Attach a copy of the most current immunization record.**
3. Retain a copy for the patient's medical record.
4. Return the original to the person requesting this form.

For questions call (919) 707-5550

Additional copies of this form can be accessed at: <http://www.immunize.nc.gov/schools/ncexemptions.htm>

PHYSICIAN'S REQUEST FOR MEDICAL EXEMPTION

Purpose: To provide physicians, licensed to practice medicine in North Carolina, with a mechanism to request a medical exemption from the State Health Director that is not specified in the North Carolina Administrative Code (10 NCAC 41A.0404) and not listed on the Medical Exemption Statement form (Form: DHHS 3987), available at <http://www.immunize.nc.gov/schools/ncexemptions.htm>

Name of Patient _____ DOB _____

Name of Parent/Guardian _____ Primary Phone () _____

Home Address (Patient/Parent) _____ County _____

Name of Child Care/School/College/University _____

G.S. 130A-156. Medical exemption. The Commission for Health Services shall adopt by rule a list of medical contraindications to immunizations required by G.S. 130A-152. If a physician licensed to practice medicine in this State certifies that a required immunization is or may be detrimental to a person's health due to the presence of one of the contraindications listed by the Commission, the person is not required to receive the specified immunization as long as the contraindication persists. The State Health Director may, upon request by a physician licensed to practice medicine in this State, grant a medical exemption to a required immunization for a contraindication not on the list adopted by the Commission.

Please mark the vaccine(s) that the proposed medical exemption(s) apply to:

- | | | |
|---|--|--|
| <input type="checkbox"/> DTaP | <input type="checkbox"/> MMR | <input type="checkbox"/> Hepatitis B |
| <input type="checkbox"/> Tdap | <input type="checkbox"/> Varicella | <input type="checkbox"/> Hib |
| <input type="checkbox"/> DT/Td | <input type="checkbox"/> IPV | <input type="checkbox"/> Meningococcal |
| <input type="checkbox"/> Pneumococcal Conjugate | <input type="checkbox"/> Other (Specify) _____ | |

For each vaccine marked above, please describe the contraindication(s) and the proposed length of time that would apply: _____

A physician (M.D. or D.O.) licensed to practice medicine in NC must complete and sign this form.

N.C. Physician's Name (please print) _____ Phone _____

Address _____

N.C. Physician's Signature _____ Date _____

INSTRUCTIONS

1. Complete and sign the form.
2. Provide documentation to support the request (clinic notes, labs, etc).
3. **Attach a copy of the most current immunization record.**
4. Retain a copy for the patient's file.
5. Provide a copy to the person requesting the medical exemption.
6. Send the completed form, supporting documentation and the current immunization record to:

State Health Director
Department of Health and Human Services
Immunization Branch
1917 Mail Service Center
Raleigh, NC 27699-1917

For questions call (919)707-5550.

Additional copies of this form can be accessed at: <http://www.immunize.nc.gov/schools/ncexemptions.htm>



N.C. Department of Health and Human Services



North Carolina Immunization Branch

North Carolina Immunization Program (NCIP) Requirements

Clinical and Administrative

Vaccine Adverse Events Reporting System (VAERS)

The National Childhood Vaccine Injury Act of 1986 requires all health professionals and vaccine manufacturers report specific adverse events (possible side effects) that occur after the administration of routinely recommended vaccines. Those reports are submitted via the Vaccine Adverse Event Reporting System (VAERS). [↗](#)

Adverse events that must be reported include:

- Any adverse event listed by the vaccine manufacturer as a contraindication to further doses of the vaccine; or
- Any adverse event listed in the VAERS Table of Reportable Events Following Vaccination [↗](#) that occurs within the specified time period after vaccination.

Individuals may report any adverse event (possible side effect) that occurs after the administration of a vaccine licensed in the United States, even if they are unsure whether a vaccine caused the event. Learn more on the VAERS website. [↗](#)

Search web site:

- [Report an Adverse Event](#)
- [About VAERS](#)
- [VAERS Data](#)
- [Information for Healthcare Professionals](#)
- [Information for U.S. States and Territories](#)
- [Vaccine Resources](#)

The **Vaccine Adverse Event Reporting System (VAERS)** is a national vaccine safety surveillance program co-sponsored by the Centers for Disease Control and Prevention (CDC) and the Food and Drug Administration (FDA). VAERS is a post-marketing safety surveillance program, collecting information about adverse events (possible side effects) that occur after the administration of vaccines licensed for use in the United States.

VAERS provides a nationwide mechanism by which adverse events following immunization may be reported, analyzed, and made available to the public. VAERS also provides a vehicle for disseminating vaccine safety-related information to parents and guardians, health care providers, vaccine manufacturers, state vaccine programs, and other constituencies. [more...](#)

Have you or your child had a reaction following vaccination?

1. **Contact your health care provider**
2. **Report the reaction**
3. **Submit Follow-Up Information**
4. **Visit the National Vaccine Injury Compensation (if appropriate)**

Important note: CDC and FDA do not provide individual medical treatment, advice, or diagnosis. If you need individual medical or health care advice, consult a qualified health care provider.

¿Ha tenido usted o su hijo una reacción adversa después de recibir una vacuna?

1. **Contacte a su proveedor de salud**
2. **Reporte una reacción adversa**
3. **Visite el Programa Nacional de Compensación por Daños Derivados de Vacunas (si es necesario)**

[Search VAERS Data](#)



Featured Resources

Seasonal Flu Update

- [Summary of 2011-2012 Trivalent Influenza Vaccine Data](#)

Government Agencies

- [Immunization Safety Office](#)
- [National Center for Immunization and Respiratory Diseases](#)
- [National Vaccine Injury Compensation Program](#)
- [National Vaccine Program Office](#)
- [Center for Biologics Evaluation and Research](#)

Health Topics

- [Vaccine Safety](#)
- [Immunization Schedules](#)
- [Preventing Flu with Vaccination](#)
- [Traveler's Health: Vaccinations](#)
- [Vaccine-Preventable Diseases](#)
- [CDC en Español: Inmunización](#)

[Browse All Vaccine Resources](#)

[Site Map](#) | [Privacy Policies & Disclaimers](#) | info@vaers.org
 Call VAERS at (800) 822-7967 | Fax VAERS at (877) 721-0366
 VAERS is co-sponsored by the Centers for Disease Control and Prevention (CDC) and the Food and Drug Administration (FDA), agencies of the U.S. Department of Health and Human Services.





VACCINE ADVERSE EVENT REPORTING SYSTEM

24 Hour Toll-Free Information 1-800-822-7967
P.O. Box 1100, Rockville, MD 20849-1100

PATIENT IDENTITY KEPT CONFIDENTIAL

For CDC/FDA Use Only

VAERS Number _____

Date Received _____

Patient Name:

Last First M.I.

Address

City State Zip

Telephone no. (____) _____

Vaccine administered by (Name):

Responsible Physician _____

Facility Name/Address _____

City State Zip

Telephone no. (____) _____

Form completed by (Name): _____

Relation Vaccine Provider Patient/Parent to Patient Manufacturer Other
Address (if different from patient or provider) _____

City State Zip

Telephone no. (____) _____

1. State

2. County where administered

3. Date of birth
mm / dd / yy

4. Patient age

5. Sex M F

6. Date form completed
mm / dd / yy

7. Describe adverse events(s) (symptoms, signs, time course) and treatment, if any

8. Check all appropriate:
 Patient died (date mm / dd / yy)
 Life threatening illness
 Required emergency room/doctor visit
 Required hospitalization (____ days)
 Resulted in prolongation of hospitalization
 Resulted in permanent disability
 None of the above

9. Patient recovered YES NO UNKNOWN

10. Date of vaccination
mm / dd / yy AM
Time _____ PM

11. Adverse event onset
mm / dd / yy AM
Time _____ PM

12. Relevant diagnostic tests/laboratory data

Vaccine (type)	Manufacturer	Lot number	Route/Site	No. Previous Doses
a. _____	_____	_____	_____	_____
b. _____	_____	_____	_____	_____
c. _____	_____	_____	_____	_____
d. _____	_____	_____	_____	_____

14. Any other vaccinations within 4 weeks prior to the date listed in no. 10

Vaccine (type)	Manufacturer	Lot number	Route/Site	No. Previous doses	Date given
a. _____	_____	_____	_____	_____	_____
b. _____	_____	_____	_____	_____	_____

15. Vaccinated at:
 Private doctor's office/hospital Military clinic/hospital
 Public health clinic/hospital Other/unknown

16. Vaccine purchased with:
 Private funds Military funds
 Public funds Other/unknown

17. Other medications

18. Illness at time of vaccination (specify)

19. Pre-existing physician-diagnosed allergies, birth defects, medical conditions (specify)

20. Have you reported this adverse event previously?
 No To health department
 To doctor To manufacturer

Only for children 5 and under
22. Birth weight _____ lb. _____ oz.
23. No. of brothers and sisters _____

21. Adverse event following prior vaccination (check all applicable, specify)

Adverse Event	Onset Age	Type Vaccine	Dose no. in series
<input type="checkbox"/> In patient _____	_____	_____	_____
<input type="checkbox"/> In brother or sister _____	_____	_____	_____

Only for reports submitted by manufacturer/immunization project
24. Mfr./imm. proj. report no. _____
25. Date received by mfr./imm.proj. _____
26. 15 day report? Yes No
27. Report type Initial Follow-Up

Health care providers and manufacturers are required by law (42 USC 300aa-25) to report reactions to vaccines listed in the Table of Reportable Events Following Immunization. Reports for reactions to other vaccines are voluntary except when required as a condition of immunization grant awards.

"Fold in thirds, tape & mail — DO NOT STAPLE FORM"



NO POSTAGE
NECESSARY
IF MAILED
IN THE
UNITED STATES
OR APO/FPO

BUSINESS REPLY MAIL

FIRST-CLASS MAIL PERMIT NO. 1895 ROCKVILLE, MD

POSTAGE WILL BE PAID BY ADDRESSEE



VAERS
P.O. Box 1100
Rockville MD 20849-1100



DIRECTIONS FOR COMPLETING FORM

(Additional pages may be attached if more space is needed.)

GENERAL

- Use a separate form for each patient. Complete the form to the best of your abilities. Items 3, 4, 7, 8, 10, 11, and 13 are considered essential and should be completed whenever possible. Parents/Guardians may need to consult the facility where the vaccine was administered for some of the information (such as manufacturer, lot number or laboratory data.)
- Refer to the Reportable Events Table (RET) for events mandated for reporting by law. Reporting for other serious events felt to be related but not on the RET is encouraged.
- Health care providers other than the vaccine administrator (VA) treating a patient for a suspected adverse event should notify the VA and provide the information about the adverse event to allow the VA to complete the form to meet the VA's legal responsibility.
- These data will be used to increase understanding of adverse events following vaccination and will become part of CDC Privacy Act System 09-20-0136, "Epidemiologic Studies and Surveillance of Disease Problems". Information identifying the person who received the vaccine or that person's legal representative will not be made available to the public, but may be available to the vaccinee or legal representative.
- Postage will be paid by addressee. Forms may be photocopied (must be front & back on same sheet).

SPECIFIC INSTRUCTIONS

Form Completed By: To be used by parents/guardians, vaccine manufacturers/distributors, vaccine administrators, and/or the person completing the form on behalf of the patient or the health professional who administered the vaccine.

- Item 7: Describe the suspected adverse event. Such things as temperature, local and general signs and symptoms, time course, duration of symptoms, diagnosis, treatment and recovery should be noted.
- Item 9: Check "YES" if the patient's health condition is the same as it was prior to the vaccine, "NO" if the patient has not returned to the pre-vaccination state of health, or "UNKNOWN" if the patient's condition is not known.
- Item 10: Give dates and times as specifically as you can remember. If you do not know the exact time, please and 11: indicate "AM" or "PM" when possible if this information is known. If more than one adverse event, give the onset date and time for the most serious event.
- Item 12: Include "negative" or "normal" results of any relevant tests performed as well as abnormal findings.
- Item 13: List ONLY those vaccines given on the day listed in Item 10.
- Item 14: List any other vaccines that the patient received within 4 weeks prior to the date listed in Item 10.
- Item 16: This section refers to how the person who gave the vaccine purchased it, not to the patient's insurance.
- Item 17: List any prescription or non-prescription medications the patient was taking when the vaccine(s) was given.
- Item 18: List any short term illnesses the patient had on the date the vaccine(s) was given (i.e., cold, flu, ear infection).
- Item 19: List any pre-existing physician-diagnosed allergies, birth defects, medical conditions (including developmental and/or neurologic disorders) for the patient.
- Item 21: List any suspected adverse events the patient, or the patient's brothers or sisters, may have had to previous vaccinations. If more than one brother or sister, or if the patient has reacted to more than one prior vaccine, use additional pages to explain completely. For the onset age of a patient, provide the age in months if less than two years old.
- Item 26: This space is for manufacturers' use only.

Report Vaccine Errors

The **Institute for Safe Medication Practices Vaccine Error Reporting Program (ISMP VERP)** now gives practitioners a way to provide crucial information on the unique causes and consequences of errors with vaccines. The data collected helps ISMP develop practical prevention strategies to share with the entire healthcare community.

The **ISMP VERP** was designed with the assistance of the California Department of Public Health and with input from experts in the field.

How to Report

Go online to: <http://verp.ismp.org>. All reports are kept confidential; ISMP is a federally recognized Patient Safety Organization (PSO), which confers privilege and high level protection for all information reported.

Who Should Report

Healthcare professionals from all practice settings—including physician's offices—are encouraged to report mistakes related to vaccines, regardless of whether harm resulted.

How Reports Are Used

Information from the ISMP VERP is shared with the U.S. Food and Drug Administration (FDA), and forwarded to the vaccine manufacturer when applicable.

Non-Vaccine Errors

ISMP also runs the National Medication Error Reporting Program (ISMP MERP); to report a medication error that does not involve a vaccine, go to: <https://www.ismp.org/orderforms/reporterrortoism.asp>

What Is ISMP?

We are a multidisciplinary healthcare nonprofit organization dedicated to preventing medication errors. We are not a government, regulatory, licensing, inspecting, or accrediting agency. While we work collaboratively with these types of agencies, we do not set or enforce healthcare standards.



Report errors, close calls or hazardous conditions involving vaccines to the ISMP Vaccine Error Reporting Program

<http://verp.ismp.org>

www.ismp.org

**ISMP**
INSTITUTE FOR SAFE MEDICATION PRACTICES



North Carolina Immunization Program (NCIP) Billing Brief Effective November 2, 2009

What may we charge for services involving state-supplied vaccines?

Providers may not charge for state-supplied vaccine itself, because the vaccine has been purchased with state and federal tax dollars. However, providers may bill a fee for administering vaccine either to the patient's insurance plan, or under certain circumstances, to the patient directly (an out-of-pocket fee). According to the NCIP provider contract, the provider may not withhold vaccine if a patient or accompanying adult states an inability to pay the administration fee for an NCIP-provided vaccine. If the patient/parent states an inability to pay, the administration fee must be waived.

Private providers may charge an administration fee out-of-pocket to a patient who does not state an inability to pay out-of-pocket. The **maximum** amount the provider may charge a patient is based on the Medicaid rate on the date of service. Because Medicaid rates are subject to change, providers should periodically check the fee schedule at the Medicaid web site, www.ncdhhs.gov/dma. (To access the fee schedules, select "For Providers", "Fee Schedules/Cost Reports", then "Fee Schedules", and "Physician Services". Note that this is a lengthy table which lists all the services by Current Procedural Terminology® (CPT®) code that Medicaid reimburses each provider type.)

A change in state law allows local health departments (LHDs) to charge the patient an out-of-pocket administration fee for state-supplied vaccine unless: 1) the patient is uninsured or underinsured, **and** 2) the family income is below 200% of the federal poverty level. If these two conditions apply, the patient's administration fee must be waived. If the LHD chooses to charge an out-of-pocket administration fee for state-supplied vaccine, the **maximum** amount is based on the state Medicaid rate on the date of service. LHDs should check the LHD rate table provided annually by the DPH. Patients who state an inability to pay should have the administration fee waived. For more details on how LHDs may charge for administering state-supplied vaccines, see the memo addressed to LHDs on changes to the North Carolina Immunization Program dated October 30, 2009 at: www.immunizenc.com/memos.htm

How does Medicaid reimbursement for vaccine administration work?

Medicaid-eligible patients from birth through 18 years of age in the *Health Check* program are eligible for all state-supplied vaccines. Because NCIP provides the vaccine for these patients, Medicaid covers the administration fee only for recipients in this age group. For *Health Check* recipients who are 19 through 20 years old, that is, until the 21st birthday, and who are not generally eligible for NCIP vaccine, Medicaid will reimburse for purchased vaccine as well as the administration fee.

Where is detailed information available on Medicaid immunization billing procedures?

For complete billing guidance for Medicaid-eligible children, refer to the current *Health Check Billing Guide*, Medicaid Special Bulletin, on the Medicaid web site, www.ncdhhs.gov/dma. Details on billing procedures for all Health Check services, including details such as vaccine CPT® codes and ICD-9® (diagnosis) codes are included in the billing guide.

What if we have questions about billing Medicaid for immunization-related services?

Many Medicaid questions can be answered by consulting the Medicaid web site at www.ncdhhs.gov/dma. When a new vaccine is launched by NCIP, Medicaid publishes a general bulletin article explaining the vaccine's coverage criteria and billing details. These bulletins are posted on the Medicaid web site in the General Bulletins section. Another resource for Medicaid questions is the Provider Services toll-free number, 1-800-688-6696.

Are we limited in what we may charge an insurance company for the administration of vaccine?

Questions about commercial insurance plans should be addressed with the insurance carrier directly.

For questions about immunization billing, contact Janie Ward-Newton, 919-707-5578.