Immunizations and Routine Obstetric–Gynecologic Care
A Guide for Providers and Patients

The American College of Obstetricians and Gynecologists
WOMEN’S HEALTH CARE PHYSICIANS
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Immunizations and Routine Obstetric–Gynecologic Care: A Guide for Providers and Patients was developed by the Immunization Expert Work Group. The information provided in this book should not be viewed as a body of rigid rules. The guidelines are general and intended to be adapted to many different situations, taking into account the needs and resources particular to the locality, the institution, or type of practice. Variations and innovations that improve the quality of patient care are to be encouraged rather than restricted. The purpose of these guidelines will be well served if they provide a firm basis on which local norms may be built.

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Preface

In 2010, the American Congress of Obstetricians and Gynecologists (ACOG) District II embarked upon the multi-faceted “Well-Woman Educational Initiative: Once a year, Every year.” The goal of this initiative was to increase health care provider and patient knowledge on aspects of the annual well-woman visit and to ensure that obstetrician–gynecologists are fully prepared to serve as a comprehensive primary resource for health care throughout a woman’s life. A component of the initiative was an immunization resource guide, Immunization Resource Guide for Ob-Gyns & Their Patients: Incorporating Vaccines Into Routine Care, a New York State-specific manual for health care providers.

Immunizations and Routine Obstetric–Gynecologic Care: A Guide for Providers and Patients was adapted from the District II immunization resource guide for national use by the American College of Obstetricians and Gynecologists’ (the College) Immunization Expert Work Group. This group was convened in 2010 to further enhance the role of obstetrician–gynecologists as vaccinators of adolescents and adult women. The Immunization Expert Work Group provided valuable contributions to this immunization resource guide. The College extends its appreciation to ACOG District II for its cooperation with this adaptation.

Immunizations and Routine Obstetric–Gynecologic Care: A Guide for Providers and Patients provides practical information and needed resources for administering immunizations in a practice. This guide contains information regarding the following:

• Communicating the importance of vaccine-preventable diseases
• Appropriate use of Vaccine Information Statements and where to obtain them
• Documentation and record keeping requirements
• When and where to report vaccine adverse events
• Tools for implementing a successful vaccination program into a practice
• Meaningful Use and electronic health record incentive programs and how they relate to administering immunizations
• Coding and reimbursement information for health care providers
• The College’s “Immunization for Women” web site, a comprehensive resource for health care providers and patients
• Additional immunization resources
The Opportunity to Vaccinate

Obstetrician–gynecologists have a tradition of providing preventive health care to women. An annual visit provides an excellent opportunity to counsel patients about healthy living, to screen for early disease detection, and to provide immunizations. The annual health assessment should include screening, evaluation, counseling, and immunizations based on age and risk factors. It is reported that 47% of reproductive-aged women consider their obstetrician–gynecologists to be their primary and overall health care providers (1). As such, patients may rely on obstetrician–gynecologists to recommend appropriate immunizations based on age and risk factors. This opportunity will play an extremely large role in helping to increase immunization rates in adults.

The immunization recommendations of the Centers for Disease Control and Prevention (CDC) are reviewed for endorsement annually by the American College of Obstetricians and Gynecologists (the College). The CDC recommends vaccinations from birth through adulthood. Although childhood vaccination rates are relatively high, most adults have not received the recommended immunizations, leaving them at risk of serious illnesses and even death from illnesses that are vaccine-preventable. Additionally, by preventing infections in adults, vulnerable infants and children also will be protected.

Many patients may not understand the need for immunizations because they have not been exposed to the devastating effects diseases have had on communities. According to a report from the Trust for America’s Health, approximately 95% of the 50,000 Americans who die every year from vaccine-preventable diseases or their related complications are adults (2). During most influenza seasons, 5–20% of the U.S. population becomes infected with seasonal influenza virus (3). Each year thousands of individuals die from influenza and even more require hospitalization. By age 50 years, 80% of women will have been infected with human papillomavirus (HPV) (4). The American Cancer Society has estimated that in 2012 there will have been 12,170 new cases and 4,220 deaths from cervical cancer in the United States. Rates of acute hepatitis B are highest among adults, with an estimated 45,000 new cases per year in the United States (5). During
the 2009 H1N1 influenza pandemic, the hospitalization rate for pregnant women compared with women who were not pregnant was significantly higher (55.3 per 100,000 compared with 7.7 per 100,000 individuals); indicating that women are more vulnerable during pregnancy (6).

As part of its initiative focused on adult immunization, the National Foundation for Infectious Diseases conducted a survey of U.S. adults to gauge awareness of vaccines and found that low awareness is complicated by complacency about contracting severe vaccine-preventable diseases. The survey results showed that interactions in physician offices are a key factor in vaccine administration (7).

- The vast majority of respondents (87% [N=1,005]) said they are very or somewhat likely to get a vaccine if their doctors recommend it.
- More than one half (55%) would not get a vaccine unless it was recommended by their doctors.
- Women who received both a health care provider recommendation and an offer for vaccination were twice as likely to be vaccinated as those who received a health care provider recommendation, but no offer.

Few adults can name more than one or two diseases that are vaccine-preventable. Approximately one half of respondents (49%) correctly named influenza as a vaccine-preventable disease; just 3–18% could name any of the other vaccine-preventable diseases.

The need for immunization may be most closely associated with infants and toddlers, but vaccines like the influenza and pneumococcal pneumonia vaccines have long been specifically recommended for older adults. More recently, human papillomavirus (HPV); shingles; and tetanus toxoid, reduced diphtheria toxoid and acellular pertussis (Tdap) vaccines have become available and are recommended for routine use in adults. Still other vaccines are recommended for catch-up immunization of adults who were not fully vaccinated as children. Some vaccines are recommended for special populations of adults who have certain underlying conditions or risk factors.

Pregnant women who are vaccinated for certain diseases can confer some immunity to their newborns for their first several weeks of life. A study published in the *Journal of Infectious Diseases* demonstrated that infants of mothers who were vaccinated while pregnant had transplacental acquired antibodies when tested for infection with influenza A virus (8, 9). This correlation suggests protective effects of vaccinating pregnant women against influenza. Transplacental antibodies from mother to fetus provide passive protection to the newborn. This is especially important because newborns cannot be immunized for some diseases until they are 2–6 months old. It is important that family members and caregivers who will
have close contact with the newborn also receive certain vaccinations (eg, Tdap) to provide a protective cocoon around the newborn (referred to as “cocooning.”)

Health care providers influence their patients’ receptiveness to vaccines, yet many health care providers lack the necessary resources to maintain an adequate vaccine supply and educational resources to stay abreast of current vaccine guidelines. Changing the behavior of health care providers and patients is a long-term process of education and reinforcement. Obstetricians and gynecologists should recognize that when they recommend and administer or refer patients for all appropriate vaccines, they are endorsing high-quality care and the safety of their patients and communities.

**Introducing Vaccination Discussions**

A key barrier to vaccine acceptance is a lack of knowledge about the benefits and safety of vaccinations. For pregnant adolescents and adults, advice and information from a trusted health care provider such as an obstetrician–gynecologist plays an important role in the decision to get vaccinated. Research has shown that a health care provider’s offer of vaccination is the strongest predictor of immunization. The Centers for Disease Control and Prevention’s statistics demonstrate a dramatic decrease in vaccine-preventable diseases when compared with the prevaccine era (Table 1).

The importance of immunizations should be discussed with patients and staff (see Frequently Asked Immunization Questions in Appendix A). Listed are steps to introduce discussions about vaccinations and to track patient immunization status:

- Make it standard practice to obtain and review patients’ immunization histories and offer indicated vaccinations during the well-woman visit, prenatal and postpartum visits, and, when indicated, to pregnant patients.
- Talk with practice staff about the importance of immunizations and encourage them to discuss immunizations with patients.
- Implement standing orders to ensure that all patients are offered indicated immunizations. (See examples of standing orders in Appendix B.)
- Use electronic health records (EHRs) and immunization registries to improve information sharing and health care coordination among various specialty providers.
- If a patient refuses an immunization, document this refusal and offer the immunization at the next office visit.
Table 1. Vaccine-Preventable Diseases

<table>
<thead>
<tr>
<th>Disease</th>
<th>Prevaccine Era Estimated Annual Morbidity*</th>
<th>Most Recent Reports or Estimates of U.S. Cases</th>
<th>Percent Decrease in Disease</th>
</tr>
</thead>
<tbody>
<tr>
<td>Diphtheria</td>
<td>21,053</td>
<td>1†</td>
<td>&gt;99%</td>
</tr>
<tr>
<td>H. influenza (invasive, less than 5 years of age)</td>
<td>20,000</td>
<td>438†</td>
<td>98%</td>
</tr>
<tr>
<td>Hepatitis A</td>
<td>117,333</td>
<td>11,049§</td>
<td>91%</td>
</tr>
<tr>
<td>Hepatitis B (acute)</td>
<td>66,232</td>
<td>11,269§</td>
<td>83%</td>
</tr>
<tr>
<td>Measles</td>
<td>530,217</td>
<td>54†</td>
<td>&gt;99%</td>
</tr>
<tr>
<td>Mumps</td>
<td>162,344</td>
<td>2,528§</td>
<td>99%</td>
</tr>
<tr>
<td>Pertussis</td>
<td>200,752</td>
<td>21,291§</td>
<td>90%</td>
</tr>
<tr>
<td>Pneumococcal disease (invasive, 5 years of age)</td>
<td>16,069</td>
<td>3,539‖</td>
<td>78%</td>
</tr>
<tr>
<td>Polio (paralytic)</td>
<td>16,316</td>
<td>0†</td>
<td>100%</td>
</tr>
<tr>
<td>Rubella</td>
<td>47,745</td>
<td>8†</td>
<td>&gt;99%</td>
</tr>
<tr>
<td>Congenital rubella syndrome</td>
<td>152</td>
<td>2†</td>
<td>99%</td>
</tr>
<tr>
<td>Smallpox</td>
<td>29,005</td>
<td>0†</td>
<td>100%</td>
</tr>
<tr>
<td>Tetanus</td>
<td>580</td>
<td>37†</td>
<td>94%</td>
</tr>
<tr>
<td>Varicella</td>
<td>4,085,120</td>
<td>449,363§</td>
<td>89%</td>
</tr>
</tbody>
</table>


Distributing the Vaccine Questionnaire

Many women are unaware of the potential risks of vaccine-preventable diseases and may question the safety or effectiveness of vaccines, especially during pregnancy. Furthermore, many women, including health care workers, fail to consider that immunization protects family and close contacts, as well as themselves (see Frequently Asked Immunization Questions in Appendix A).

The College Vaccine Questionnaire is a suggested resource intended for patient completion during each well-woman office visit (see Appendix C). During scheduled appointments, patients should be handed the questionnaire by a member of the staff to complete in the reception area. The patient should check whether they fall into any of the risk groups or not. If a patient checks a box, it does not necessarily mean she needs to be vaccinated; it simply implies that additional questions must be asked to further determine the need for vaccination. It is important that patients’ vaccine questionnaires remain on file and that they are updated at each well-woman visit. Documenting and keeping a thorough record of these discussions will be useful for patients’ future visits.

During the well-woman visit, the questionnaire can be reviewed with a patient to determine if vaccines are needed and to answer any questions about the vaccines (see Appendix C). The College has a web page dedicated to well-woman care with links to age-based recommendations for screening, laboratory and other tests, evaluation and counseling, and immunizations (see Appendix D). Additionally, the site offers a comprehensive list of College guidance on annual women’s health care (www.acog.org/wellwoman) (see Appendix D). This approach is easy and offers the opportunity to conduct an open dialogue about the importance of immunizations.

What You Should Know

- Develop a system to identify when to distribute the vaccine questionnaire to patients (eg, during the well-woman, prenatal, and postpartum visits).
- Assign staff to distribute the vaccine questionnaire daily to patients.
Communication Strategies: How to Have a Successful Dialogue

During the health care visit, a successful discussion about vaccines involves a two-way conversation, with both parties sharing information and asking questions. These communication principles can encourage an open, honest, and productive dialogue.

Take Time to Listen
Restate the patient’s concerns to help understand her viewpoint. A willingness to listen will play a large role in helping a patient with her decision to get vaccinated.

Don’t Be Offended
Some patients may come to the visit with a list of questions or information from a variety of sources. Do not interpret this as a lack of respect on the part of the patient. Dialogue may shut down and trust may be eroded if a physician appears offended by a patient’s questions.

Science Versus Anecdote
Too much scientific information may frustrate some patients, while too little may frustrate others. Many women, especially during pregnancy, want to know if a vaccine is safe for themselves as well as for their infants. For many patients, a personal story about an unvaccinated patient will help connect the disease to the community. Which approach to use will depend on the obstetrician–gynecologist’s knowledge of the patient. Be prepared to use a mix of scientific information and personal stories that will be most effective in addressing a patient’s questions. College resources and other immunization resources provide safety data on specific vaccines. Families Fighting Flu (www.familiesfightingflu.org), the CDC (www.cdc.gov/vaccines/vpd-vac/unprotected-stories.htm), and the Immunization Action Coalition (www.immunize.org/reports/) have information that contains personal stories about the consequences of being unvaccinated.

Acknowledge Benefits and Risks
It is important to emphasize the benefits of vaccination and also explain that vaccines may vary in their efficacy. It is honest and important to say that not vaccinating a patient puts them at risk of disease. Never state that vaccines are risk-free and always discuss the known adverse effects. It is important to use Vaccine Information Statements (VISs) to support this discussion.
Refusal

The choice for immunization rests with the patient (or her parent or guardian). Visit the College’s “Immunization for Women” web site (www.immunizationforwomen.org) for more information on providing patient education for those patients who refuse immunizations. Always properly document when a patient (or her parent or guardian) refuses recommended immunizations and be sure to offer it again at the next visit.

Immunization recommendations are frequently updated, for the most current immunization recommendations for patients, visit the College’s immunization web site. Resources and information for special populations, such as pregnant and breastfeeding women, adolescents, patients with chronic illnesses, and those traveling outside of the United States, also can be obtained from this site. Each section of the web site is designated for obstetrician–gynecologists or for patients.

After the Office Visit

Educating patients by providing them with the information to make informed decisions is essential in encouraging them to receive recommended vaccinations. Nurses and other office staff can play a

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Examples

**Question 1:** “I’m worried about the side effects of vaccines. I don’t think I want a vaccine today.”

**Answer 1:** “I am worried about you not getting vaccinated today. Let’s look at the Vaccine Information Statements together and talk about how rare vaccine side effects are.”

**Question 2:** “Are vaccines safe for me? Are vaccines safe for my baby?”

**Answer 2:** “Vaccines help protect you and your baby from disease that you both are at risk of and can make you both seriously ill. Vaccination is safe for you and your baby.”
significant role in establishing and maintaining a practice-wide commitment to communicating information about vaccines and maintaining high vaccination rates. High vaccination rates can be achieved by providing patients with educational materials, being available to answer questions, and making sure that patients who schedule extra visits for vaccines keep their appointments. Vaccine mandates for entering school helped make vaccinations a standard part of early-childhood medical office visits, in turn leading to the success of the Childhood Immunization Program. Because mandates for adult vaccination are unlikely, it is even more important to make ongoing education and awareness a part of routine patient care.

**Vaccine Information Statements**

Supplying patients with accurate information on vaccine safety and disease prevention is essential so that patients are actively involved in making decisions that affect their health or the health of their children. When patients are not informed about vaccine adverse events, even common, mild events, they may lose trust in health care providers and vaccines. The Vaccine Information Statement (VIS) provides a standardized way to present objective information about vaccine benefits and adverse events.

A VIS is an information sheet produced and updated often by the CDC. A VIS informs vaccine recipients (or parents or guardians) about the benefits and risks of a vaccine. Federal law (National Childhood Vaccine Injury Act of 1986) requires that a VIS be given out before the administration of each dose of certain vaccines. Vaccine Information Statements are available online in more than 30 languages at www.cdc.gov/vaccines/pubs/vis/default.htm and www.immunize.org/vis/. Also, most are available as audio files for patients who are unable to read. The most up-to-date VIS must be given to each patient. It is important to visit the CDC web site to sign up for e-mail updates of VISs.

All current VISs are available on the Internet, and can be downloaded as a PDF file and printed. Free single hard copies of a VIS can be ordered using online publication order forms. The CDC has information and tools about VISs, including an application to download these statements to mobile devices. For further information on VISs, call the CDC Contact Center at 1-800-CDC-INFO or e-mail cdcinfo@cdc.gov. Listed as follows are steps for offering VISs to patients:

- Always offer the patient (or her parent or guardian) a copy of the appropriate VIS to read during the immunization visit and a copy
(either paper or electronic) to take home. Always offer the patient an opportunity to ask questions.

- It is acceptable to make a VIS available to be read before the immunization visit (eg, by giving the patient [or her parent or guardian] a copy to take home during a prior visit, or telling them how to download or view a copy from the Internet). These patients (or parents or guardians) must still be offered a copy to read during the immunization visit.
- The patient may be offered a permanent (eg, laminated) office copy of the VIS to read during the immunization visit instead of her own paper copy.
- Always encourage the patient to take a copy of each appropriate VIS home when she leaves the office. This is because some information (eg, the routine schedule or how to recognize or report an adverse event) can be useful later. Offer the patient a paper copy, or if they prefer to download the VIS onto a mobile device, direct them to the CDC’s patient VIS download web page.

**What You Should Know**

**Myth** Health care providers can modify a VIS to better suit their practices.

**Fact** Health care providers should not change a VIS or write their own. It is permissible to add a practice’s name, address, or phone number to an existing VIS. Health care providers are encouraged to supplement a VIS with additional patient education material.

**Myth** If there isn’t enough time to have the patient read the VIS before the vaccine is given, the patient can read a copy at home.

**Fact** The idea behind a VIS is to provide information about the vaccine and the disease before the patient is to receive the vaccine. However, it is acceptable to hand out a VIS before administering vaccines as long as a VIS is provided right before administering a vaccine (eg, at a prenatal visit or at birth for an infant who will receive vaccines during infancy).
• As needed, supplement a VIS with discussion, audiovisuals, or additional printed materials that will help patients understand the disease and the vaccine.
• Record the required information on the patient's medical record or on a permanent office log (the record should be both permanent and accessible).

Documentation and Record Keeping

Documentation of patient vaccinations is an essential part of any vaccination program that helps to ensure that those in need of a vaccine receive it (see Appendix E, Appendix F, and Appendix G). It is also important to document episodes of adverse events in the permanent medical record of the patient (see also Vaccine Adverse Event Reporting System in Appendix D).

Health care providers who administer one or more of the vaccines covered by the National Vaccine Injury Compensation Program are required to ensure that the permanent medical record (or a permanent office log or file) of the patient states the following:
• Date the vaccine was administered
• Vaccine manufacturer, lot number, and expiration date
• Name, address (location where the information will be stored), and signature and title of the individual who administers the vaccine (this also may be indicated in a general consent for treatment)
• The date of publication of the VIS given to the patient that is found on the bottom of the back of the VIS

The Advisory Committee on Immunization Practices recommends that this information be kept for all vaccines, not only for those required by the National Vaccine Injury Act.

If patients receive vaccinations outside of the obstetrician–gynecologists' office, it is important to have the proper vaccination documentation to update their immunization records. However, obstetrician–gynecologists frequently encounter patients who have no adequate documentation of vaccinations. Although vaccinations should not be postponed if records are not readily available, an attempt to locate missing records should be made by contacting previous health care providers. If records cannot be located, patients should be considered susceptible and should be started on the age-appropriate immunization schedule. A sample vaccine administration record/log has been developed and is included in Appendix G. It is important for patients to understand the importance of this record as an
Vaccine Storage and Handling

Proper vaccine storage and handling are essential elements of an immunization program. Vaccines only work when they are viable, intact, and undamaged. For this reason, the appropriate handling and storage of vaccines are vital aspects of an immunization program.

Receiving Vaccine Shipments

Ideally, vaccine deliveries should only be made when a designated vaccine coordinator or backup coordinator is present. Packages should be opened immediately and inspected for any damage. The vaccine coordinator should check the quantities, lot numbers, and expiration dates against the packing slip in addition to the condition of the vaccines. Packages will often have temperature indicators that should be checked to ensure that the vaccines have not been exposed to improper temperatures. If there are no temperature indicators, verify that the container includes appropriate
insulation and refrigerant (eg, dry ice, gel packs, or ice packs). When the shipment arrives, verify that the inactivated vaccines are cold, but not frozen; inactivated vaccines are damaged by freezing.

Live virus varicella-containing vaccine must arrive frozen. Measles, mumps, and rubella vaccine may be frozen, but this is not required. If the product seems to have been exposed to any extreme temperatures (by appearance or by package temperature indicator), separate the vaccine in a marked container (labeled “DO NOT USE”), store in the refrigerator at the proper temperature, and immediately contact the source of shipment for further instructions.

**Proper Storage of Vaccine**

All vaccines, except live varicella-containing vaccine, can safely be kept in the refrigerator within a temperature range of 2–8°C (35–46°F). The refrigerator temperature should be set at 40°F (5°C). It is important to have a thermometer for temperature monitoring. Vaccines should be stored in trays in the middle of the refrigerator or freezer, never in the door of the compartment. The oldest vaccines should be stored toward the front of the shelf. When new vaccines arrive, they should be placed behind the older vaccines. This allows the older vaccines to be used before their expiration date.

Temperature log sheets should be maintained. The temperature of each compartment is recorded twice each day—once in the morning and once in the afternoon immediately before closing. See Appendix H for a sample temperature log from the CDC. These can be downloaded and printed from the Immunization Action Coalition or CDC web site.

In the event of a refrigeration failure, all vaccines should be placed immediately in a preplanned location that has adequate refrigeration. Any vaccine exposed to temperatures out of range because of power failure or mismanagement of any type should be separated from undamaged vaccines, and refrigerator and freezer temperatures should be noted. The manufacturer or state health department should be contacted with this information for instructions on handling the damaged vaccine. If it is deemed appropriate to use the vaccines in question, a revised expiration date may be assigned to these vaccines. In the event of an emergency, from a natural disaster or other unforeseen event, it is important to have a backup plan in place in order to protect vaccine supply. The CDC gives emergency procedures for protecting vaccine inventories to help offices make preparations to keep vaccines safe.

Always safeguard the electrical supply to the refrigeration unit. The unit should be plugged into a protected outlet that will not be accidentally
or intentionally disconnected. Label the refrigeration unit, the electrical cord, the outlet, and plugs with a “DO NOT UNPLUG” notation to further safeguard the electrical supply. If possible, connect the refrigeration unit to a circuit with emergency backup power. There are alarm systems that can be purchased to provide timely warning of electrical failure when the practice is not staffed. See Practice Management in Appendix D for resources on handling vaccines and common handling and storage errors.

Vaccine Adverse Event Reporting System

The Vaccine Adverse Event Reporting System is a national vaccine safety surveillance program. It collects information about adverse events (possible side effects) that occur after the administration of vaccines licensed for use in the United States. The Vaccine Adverse Event Reporting System is a mechanism by which adverse events following immunization may be reported, analyzed, and made available to the public. Experts from the CDC and the U.S. Food and Drug Administration analyze Vaccine Adverse Event Reporting System reports to monitor vaccine safety by uncovering the following:

- Patterns of previously unrecognized vaccine-related events
- An unusual increase in the rate at which a previously reported vaccine-related event occurs
- Potential patient risk factors for particular types of adverse events
- Specific vaccine lot numbers associated with reported events

The National Childhood Vaccine Injury Act requires health care professionals and manufacturers to report adverse events. Reporting to the Vaccine Adverse Event Reporting System is voluntary, and anyone may report vaccine adverse events. Adverse events are reported by physicians, nurses, vaccine manufacturers, parents, persons affected by adverse events, and others. Adverse events can be reported online or by fax or mail. Health care providers should report all significant adverse events that occur after the vaccination of adults and children, even if they are not sure whether the vaccine caused the adverse event. For more information on how to file a Vaccine Adverse Event report, see Appendix D.

Office Readiness Tools

It is essential to designate a vaccine coordinator to coordinate the processes involved with ensuring that an office is able to offer immunizations. The vaccine coordinator—a physician, nurse, or manager—would be
responsible for ordering and maintaining a vaccine inventory with necessary supplies, keeping track of medical protocols, ensuring office staff are able to administer vaccinations and have a clear understanding about current immunization recommendations, keeping current on vaccination recommendations, and monitoring vaccine storage and record keeping. In addition, at least one additional office staff member should be aware of all these processes, to serve as a backup coordinator and support to the vaccine coordinator. See Appendix I for office readiness checklists.

**Patient Referrals**

Depending on the size of a practice and services provided, there may not be the means to supply and offer age-appropriate immunizations. If immunizations cannot be offered in a practice, patients should be referred to alternative health care providers when possible. It would be helpful if patients were provided with specific locations where they could obtain recommended vaccines. City and county health departments or local hospitals often hold clinics to administer influenza, pneumococcal, hepatitis A, and hepatitis B vaccines. Clinics also may be available in grocery stores, senior centers, and other community settings. The www.flu.gov web site provides an interactive map for ease of locating facilities that provide the flu shot in a specific area. State, county, and city health departments can assist obstetrician–gynecologists and their patients in locating information such as specific vaccine program details, clinic locations, schedules, and fees (if any). If patients receive immunizations outside of the obstetrician–gynecologist’s office, it is important for them to provide proper vaccine documentation so a patient’s immunization record can be updated.

**Additional Health Care Provider Support**

Immunization coalitions bring together groups and individuals, combining their resources and talents toward projects that increase immunization rates. Groups that often form a coalition include health departments, hospitals, insurers, health maintenance organizations, private practices, nonprofit organizations, vaccine company representatives, and individuals. Visit the College’s “Immunization for Women” web site External Links section for an up-to-date list of contacts for state immunization coalitions.

**Meaningful Use and Immunization Reporting**

In July 2010, the Centers for Medicare & Medicaid Services (CMS) and the Office of the National Coordinator for Health Information Technology published the final rule under the American Recovery and Reinvestment Act of 2009 and the Health Information Technology for Economic and Clinical
Health Act of 2009, authorizing incentive payments to health care providers and hospitals that demonstrate “Meaningful Use” of certified EHRs.

Simply put, “Meaningful Use” means health care providers show that they are using certified EHR technology in ways that meet the reporting requirements as defined by the federal government. Electronic health record technologies that meet the certification requirements for the Medicare and Medicaid EHR Incentive Programs are listed on the Office of the National Coordinator for Health Information Technology web site (http://oncchpl.force.com/ehrcert). Using EHRs to help prevent vaccine-preventable diseases is a public health goal of Meaningful Use. To view Core Set Measures, Menu Set Measures, and Clinical Quality Measures that relate not only to immunizations but the overall well-woman visit, please visit www.cms.gov/EHRIncentivePrograms.

The CDC, together with public and private health care professionals and software developers, has defined a set of electronic messages that support the national standards for exchanging immunization data. Using Health Level Seven standards enables interoperability between EHRs and administrative and billing systems.

In order to show Meaningful Use, health care providers who are currently sending immunization data to a registry will need to send at least one test message reporting immunization data through their EHRs. Check with the registry to determine their ability to accept electronic reporting. See the CMS Incentive Program web site (www.cms.gov/EHRIncentivePrograms) for details regarding eligibility and reporting requirements.

### Coding and Reimbursement

Immunization is coming to the forefront of obstetric–gynecologic practices. Therefore, the College and the Immunization Expert Work Group recognized a need for a coding guide solely focused on immunization. Correct coding enables practices to receive appropriate payment for immunizations and satisfies payer scrutiny. The College has published *Immunization Coding for Obstetrician–Gynecologists 2013*, a coding guide solely focused on immunization. This coding guide provides information and tips for how to obtain maximum reimbursement for immunizations (see Appendix D for information on *Immunization Coding for Obstetrician–Gynecologists 2013*). The College’s “Immunization for Women” web site has a section on coding and reimbursement (see Appendix D). The College’s Coding department maintains a section on the College web site that addresses coding issues for obstetrician–gynecologists.

Many obstetrician–gynecologists and other health care providers perceive a lack of reimbursement as a major barrier to including immunization...
in their practices. However, with proper coding, reimbursement for immunization can be maximized. A common question from obstetrician–gynecologists is “Are immunizations part of the global fee for prenatal care?” Immunizations are not bundled into payments for obstetric care. Reimbursement will depend on the specific payer because not all payers follow Current Procedural Terminology Coding System (CPT) guidelines for the global obstetric package content. An additional factor to consider is whether the patient’s plan has coverage for the service. The following example explains billing for immunization services for a pregnant patient:

**A 25-year-old nulligravid patient is receiving prenatal care in the office. At 12 weeks of gestation, she requests an influenza vaccination.**

**Comment:**
Pregnant patients will request, and in some instances require, vaccinations during their pregnancies. Vaccination services performed during pregnancy should be billed separately at the time of the service. A secondary *International Classification of Diseases, 9th Revision, Clinical Modification* (ICD-9-CM) code to indicate any condition that puts the patient at a high risk of influenza also can be linked to the immunization on the claim. This will facilitate payment from plans that only cover vaccinations for patients identified as “high-risk patients.” A separate Evaluation and Management (E/M) service should not be reported because the office visit is part of the global obstetric package.

90656  Preservative-free influenza vaccine (drug), IM
V04.81  Need for prophylactic vaccination— influenza
V22.2  Pregnancy (single) (uterine) (without sickness)

90471  Vaccine administration
V04.81  Need for prophylactic vaccination— influenza
V22.2  Pregnancy (single) (uterine) (without sickness)

**Frequently Asked Coding Questions**

Many obstetric–gynecologic practices now routinely offer immunization services to their patients. Correct coding enables a physician’s office to report these services to third-party payers and to receive appropriate reimbursement for these services.

The College provides several resources to help physicians and their staff with coding and reimbursement issues related to immunization services. These include 1) a coding guide publication solely focused on immunization services, 2) a section on the “Immunization for Women” web site dedicated
to coding and reimbursement, 3) the Department of Health Economics coding page on the College web site, and 4) College coding staff responds to specific coding questions (sent to coding@acog.org) from College Fellows at no charge. The College feels that proper coding will allow practices to overcome barriers caused by lack of reimbursement.

What codes should I submit for vaccine administration services?
The appropriate CPT vaccine administration code should be submitted in addition to the appropriate CPT or Healthcare Common Procedure Coding System vaccine product code. These codes should be linked to the appropriate ICD-9 code to support the medical necessity of the vaccine administration services.

Are vaccine administration services included in a preventive medicine service?
Although the general discussion of vaccines is part of age-appropriate preventive medicine counseling, the actual administration of the vaccine and the vaccine product should be billed separately.

Are vaccine administration services included in global obstetric care?
No. Vaccination services performed during pregnancy should be billed separately at the time of the service. A separate E/M service should not be reported because the obstetric office visit is part of the global obstetric package.

How are vaccine administration services reported when a nurse or qualified health care professional provides the service?
The appropriate CPT vaccine administration code and CPT or Healthcare Common Procedure Coding System vaccine product code should be reported and linked to the appropriate ICD-9 code. If a significant separately identifiable E/M service is performed by the nurse at the time of the visit, it may be appropriate to report E/M code 99211 in addition to the vaccine administration services.

What services are considered inherent components of a vaccine administration code?
Inherent components include making an appointment for the patient, pulling the chart, billing, and filing the chart. Clinical services such as greeting the patient, taking vital signs, reviewing vaccine history and allergies, and noting vaccine administration on the chart are also considered inherent components of this service.
Does Medicare cover vaccine administration services?
Medicare covers the cost and administration of influenza vaccine (yearly), pneumococcal vaccine (once per lifetime), and hepatitis B vaccine (for those in medium-risk to high-risk categories). Medicare does not cover other vaccines unless they are directly related to the treatment of an injury or direct exposure to a disease or condition (eg, tetanus or rabies exposure).

Is physician counseling bundled into vaccine administration services?
If the patient is aged 18 years or younger, CPT codes that include counseling by a physician or other qualified health care professional may be reported if the physician or qualified health care professional provides face-to-face counseling during administration of the vaccine. If the patient is older than 18 years, it may be appropriate to bill an E/M visit code in addition to the vaccine administration code if the counseling by the physician or qualified health care provider exceeds the usual services included in vaccine administration.

How do I code for multiple vaccines administered at the same visit?
Report the appropriate CPT “add-on” administration code for each additional vaccine given on the same date of service in addition to the appropriate vaccine product codes (CPT or Health Care Common Procedure Coding System) for the additional vaccines.

Is it appropriate to report a vaccine administration code with a problem-oriented E/M service?
If a significant, separately identifiable E/M service is performed, the appropriate E/M service code should be reported in addition to the vaccine administration code.
References


Frequently Asked Immunization Questions

Who makes vaccine recommendations?
The Advisory Committee on Immunization Practices (ACIP) consists of experts in fields associated with immunization who have been selected by the Secretary of the U.S. Department of Health and Human Services to provide advice and guidance to the Secretary, the Assistant Secretary for Health, and the Centers for Disease Control and Prevention on the control of vaccine-preventable diseases.

The ACIP develops written recommendations for the routine administration of vaccines to children and adults in the civilian population; recommendations include age for vaccine administration, number of doses and dose interval, and precautions and contraindications. The ACIP is the only entity in the federal government that makes such recommendations. The College has liaison members on the ACIP.

How many vaccines can be given during an office visit?
No limit exists for the number of vaccines that can be administered during an office visit. The ACIP and American Academy of Pediatrics consistently recommend that physicians optimize time with their patients and administer all needed vaccines while the patient is in the office.

Are there vaccines that cannot be administered at the same office visit, at the same time?
No. All routine vaccines can be administered during an office visit, as long as a different syringe is used for each vaccine.

Is it necessary to routinely test young women for pregnancy before administering vaccines?
No. However, women of childbearing age should be asked about the possibility of their being pregnant before they are given any vaccine for which pregnancy is a contraindication or precaution. The patient’s answer should be documented. If the patient thinks she might be pregnant, a pregnancy test should be performed before administering live virus vaccines.

Which vaccines can be given to breastfeeding women?
All routinely recommended vaccines may be administered to women who are breastfeeding. Smallpox and yellow fever vaccines are not recommended while breastfeeding.
Why the concern about influenza?
Although many individuals think of influenza as the “flu” or just a common cold, it is really a specific and serious respiratory disease that can result in hospitalization and death. The risk of complications, hospitalizations, and deaths are higher among individuals aged 65 years and older, young children, and individuals of any age who have certain medical conditions. Pregnancy can increase the risk of serious medical complications and even death from influenza.

Which flu vaccine can be administered to pregnant women?
Vaccination with inactivated influenza vaccine is recommended during any trimester for patients who will be pregnant during the influenza season. Live, attenuated influenza vaccine is contraindicated for pregnant women because of the theoretic risk of transmission of the vaccine virus to the fetus.

What if a pregnant woman inadvertently receives a live-virus vaccine?
If a live-virus vaccine is inadvertently given to a pregnant woman, or if a woman becomes pregnant within 4 weeks after vaccination, she should be counseled about the potential effects on the fetus. However, measles, mumps, and rubella or varicella vaccination during pregnancy should not be considered a reason to terminate pregnancy. Please visit http://www.cdc.gov/vaccines/pubs/preg-guide.htm for guidelines for vaccinating pregnant women. Some manufacturers of live-virus vaccines have established registries for pregnant women. Patients and health care providers are encouraged to report to these registries when an inadvertent exposure occurs.
Appendix B

Sample Standing Orders
B-1. Standing Orders Protocol Document for Pneumococcal Polysaccharide Vaccine

Standing Orders for Administering Pneumococcal (PPSV23 and PCV13) Vaccine to Adults

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

**Policy:** Under these standing orders, eligible nurses and other healthcare professionals (e.g., pharmacists), where allowed by state law, may vaccinate adults who meet any of the criteria below.

**Procedure**

1. Identify adults in need of vaccination with pneumococcal polysaccharide vaccine (PPSV23) based on the following criteria:
   a. Age 65 years or older with no or unknown history of prior receipt of PPSV
   b. Age 64 years or younger with no or unknown history of prior receipt of PPSV and any of the following conditions:
      i. cigarette smoker
      ii. chronic cardiovascular disease (e.g., congestive heart failure, cardiomyopathies)
      iii. chronic pulmonary disease (e.g., chronic obstructive pulmonary disease, emphysema, asthma)
      iv. diabetes mellitus, alcoholism or chronic liver disease (cirrhosis).
      v. candidate for or recipient of cochlear implant; cerebrospinal fluid leak
      vi. functional or anatomic asplenia (e.g., sickle cell disease, splenectomy)
      vii. immunocompromising condition (e.g., HIV infection, congenital immunodeficiency, hematologic and solid tumors)
      viii. immunosuppressive therapy (e.g., alkytating agents, immunetabolites, long-term systemic corticosteroids, radiation therapy)
   ix. organ or bone marrow transplantation; chronic renal failure or nephrotic syndrome

2. Identify adults in need of an additional dose of PPSV23 if 5 or more years have elapsed since the previous dose of PPSV and the patient meets one of the following criteria:
   a. Age 65 years or older and received prior PPSV vaccination before age 65 years
   b. Age 64 years or younger and at highest risk for serious pneumococcal infection or likely to have a rapid decline in pneumococcal antibody levels (i.e., categories 1.xi.-ix. above)

3. Identify adults age 19 years and older in need of vaccination with pneumococcal conjugate vaccine (PCV13) who are at highest risk for serious pneumococcal infection or likely to have a rapid decline in pneumococcal antibody levels (i.e., categories 1.x.-1.ix. above).

4. Screen all patients for contraindications and precautions to pneumococcal vaccine:
   a. **Contraindication:** a history of a serious reaction (e.g., anaphylaxis) after a previous dose of pneumococcal vaccine (PPSV or PCV) or to a vaccine component. For a list of vaccine components, go to www.cdc.gov/vaccines/pubs/pinkbook/downloads/appendices/B/exception-table-2.pdf.
   b. **Precaution:** moderate or severe acute illness with or without fever

5. Provide all patients with a copy of the most current federal Vaccine Information Statement (VIS). Although not required by federal law, it is prudent to document in the patient’s medical record or office log, the publication date of the VIS and the date it was given to the patient. Provide non-English speaking patients with a copy of the VIS in their native language, if available; these can be found at www.immunize.org/vis.

6. Administer vaccine as follows:
   a. For adults identified in 1. and 2. above, administer 0.5 mL PPSV23 vaccine either intramuscularly (22–25g, 1–1½” needle) in the deltoid muscle or subcutaneously (23–25g, ¼” needle) in the posteriorlateral fat of the upper arm.
   b. For adults identified in 3. above, administer 0.5 mL PCV13 intramuscularly (22–25g, 1–1½” needle) in the deltoid muscle. For adults previously vaccinated with PPSV, give PCV13 at least 12 months following PPSV. If not previously vaccinated with PPSV, give PCV13 first, followed by PPSV23 in 8 weeks.
      (Note: A ¼” needle may be used for IM injection for patients who weigh less than 130 lbs [<60kg] for injection in the deltoid muscle, only if the subcutaneous tissue is not bunched and the injection is made at a 90-degree angle.)

7. Document each patient’s vaccine administration information and follow up in the following places:
   a. **Medical chart:** Record the date the vaccine was administered, the manufacturer and lot number, the vaccination site and route, and the name and title of the person administering the vaccine. If vaccine was not given, record the reason(s) for non-receipt of the vaccine (e.g., medical contraindication, patient refusal).
   b. **Personal Immunization record card:** Record the date of vaccination and the name/location of the administering clinic.

8. Be prepared for management of a medical emergency related to the administration of vaccine by having a written emergency medical protocol available, as well as equipment and medications.

9. Report all adverse reactions to PPSV23 and PCV13 to the federal Vaccine Adverse Event Reporting System (VAERS) at www.vaers.hhs.gov or by calling (800) 822-7967. VAERS report forms are available at www.vaers.hhs.gov.

This policy and procedure shall remain in effect for all patients of the _______ until rescinded or until _______.

(name of practice or clinic)

Medical Director’s signature: _______________ Effective date: _______________

For standing orders for other vaccines, go to www.immunize.org/standing-orders

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

Standing Orders for Administering Human Papillomavirus Vaccine to Adults

**Purpose:** To reduce morbidity and mortality from human papillomavirus (HPV) infection by vaccinating all adults who meet the criteria established by the Centers for Disease Control and Prevention’s Advisory Committee on Immunization Practices.

**Policy:** Under these standing orders, eligible nurses and other healthcare professionals (e.g., pharmacists), where allowed by state law, may vaccinate adults who meet the criteria below.

**Procedure**
1. Identify adults in need of vaccination against human papillomavirus (HPV) based on the following criteria:
   a. Female, age 26 years or younger
   b. Male, age 21 years or younger
   c. Male, age 22 through 26 years meeting any of the following conditions:
      i. Immunocompromised as a result of infection (including HIV), disease, or medications
      ii. Has sex with other males
      iii. Wants to be vaccinated and lacks any of the above criteria

2. Screen all patients for contraindications and precautions to HPV vaccine:
   a. **Contraindication:** a history of a severe allergic reaction (e.g., anaphylaxis) after a previous dose of HPV vaccine or to a HPV vaccine component (e.g., yeast for quadrivalent HPV vaccine [HPV 4: Gardasil, Merck] or latex for bivalent HPV vaccine [HPV2: Cervarix, GSK]). For information on vaccine components, refer to the manufacturers’ package insert (www.immunize.org/packageinserts) or go to www.cdc.gov/vaccines/pubs/pinkbook/downloads/appendices/B/Excipient-table-2.pdf.
   b. **Precautions:**
      - Moderate or severe acute illness with or without fever
      - Pregnancy; delay vaccination until after completion of the pregnancy

3. Provide all patients with a copy of the most current federal Vaccine Information Statement (VIS). You must document, in the patient’s medical record or office log, the publication date of the VIS and the date it was given to the patient. Provide non-English speaking patients with a copy of the VIS in their native language, if available and preferred; these can be found at www.immunize.org/vis.

4. Provide 1) either HPV2 or HPV4 to women or 2) HPV4 to men. Provide either vaccine in a 3-dose schedule at 0, 2, and 6 calendar months. Administer 0.5 mL HPV vaccine intramuscularly (22–25g, 1–1½” needle) in the deltoid muscle; the anterolateral thigh muscle may be used if deltoid is inadequate. (Note: a ⅜” needle may be used for adults weighing less than 130 lbs [60 kg] for injection in the deltoid muscle only if the subcutaneous tissue is not bunched and the injection is made at a 90° angle.)

5. For adults who have not received HPV vaccine at the intervals specified in #4, administer subsequent doses of HPV vaccine to complete each patient’s 3-dose schedule by observing a minimum interval of 4 weeks between the first and second doses, 12 weeks between the second and third dose, and at least 24 weeks between the first and third doses. Men age 27 years and older who meet the criteria of 1.c.i. or 1.c.ii. above and women age 27 years and older who have received at least 1 dose before their 27th birthday should complete the 3-dose series as soon as feasible. Men age 22 years and older who have received at least 1 dose before their 22nd birthday should also complete the 3-dose series as soon as feasible.

6. Document each patient’s vaccine administration information and follow up in the following places:
   a. **Medical chart:** Record the date the vaccine was administered, the manufacturer and lot number, the vaccination site and route, and the name and title of the person administering the vaccine. If vaccine was not administered, record the reason(s) for non-receipt of the vaccine (e.g., medical contraindication, patient refusal).
   b. **Personal immunization record card:** Record the date of vaccination and the name/location of the administering clinic.

7. Be prepared for management of a medical emergency related to the administration of vaccine by having a written emergency medical protocol available, as well as equipment and medications. To prevent syncope, vaccinate patients while seated or lying down and consider observing them for 15 minutes after receipt of the vaccine.

8. Report all adverse reactions to HPV vaccine to the federal Vaccine Adverse Event Reporting System (VAERS) at www.vaers.hhs.gov or by calling (800) 822-7967. VAERS report forms are available at www.vaers.hhs.gov.

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

Medical Director’s signature: ____________________________ Effective date: ____________________________

For standing orders for other vaccines, go to www.immunize.org/standing-orders


| Standing Orders for Administering Tdap/Td to Adults |

**Purpose:** To reduce morbidity and mortality from tetanus, diphtheria, and pertussis by vaccinating all adults who meet the criteria established by the Centers for Disease Control and Prevention’s Advisory Committee on Immunization Practices.

**Policy:** Under these standing orders, eligible nurses and other healthcare professionals (e.g., pharmacists), where allowed by state law, may vaccinate adults who meet the criteria below.

**Procedure**

1. Identify adults in need of vaccination against tetanus, diphtheria, and pertussis based on the following criteria:
   a. lack of documentation of receiving a single dose of pertussis-containing vaccine (i.e., Tdap) as an adolescent or adult
   b. lack of documentation of receiving at least 3 doses of tetanus- and diphtheria-containing toxoids
   c. completion of a 3-dose primary series of tetanus- and diphtheria-containing toxoids with no documentation of receiving a booster dose within the previous 10 years
   d. recent deep and dirty wound (e.g., contaminated with dirt, feces, saliva) and lack of evidence of having received tetanus toxoid-containing vaccine in the previous 5 years

2.Screen all patients for contraindications and precautions to tetanus and diphtheria toxoids (Td) and, if applicable, pertussis vaccine (Tdap):
   a. **Contraindications:**
      - a history of a severe allergic reaction (e.g., anaphylaxis) after a previous dose of Td or to a Td or Tdap component. For information on vaccine components, refer to the manufacturers’ package insert (www.immunize.org/packageinserts) or go to www.cdc.gov/vaccines/pubs/pinkbook/downloads/appendices/B/excipient-table-2.pdf.
      - for Tdap only, a history of encephalopathy within 7 days following DTP/DTPa not attributable to another identifiable cause
   b. **Precautions:**
      - history of Guillain-Barré syndrome within 6 weeks of previous dose of tetanus toxoid-containing vaccine
      - history of an arthritic-type hypersensitivity reaction after a previous dose of tetanus or diphtheria toxoid-containing vaccine; defer vaccination until at least 10 years have elapsed since the last tetanus-containing vaccine
      - moderate or severe acute illness with or without fever
      - for Tdap only, progressive or unstable neurologic disorder, uncontrolled seizures or progressive encephalopathy until a treatment regimen has been established and the condition has stabilized

3. Provide all patients with a copy of the most current federal Vaccine Information Statement (VIS). You must document, in the patient’s medical record or office log, the publication date of the VIS and the date it was given to the patient. Provide non-English speaking patients with a copy of the VIS in their native language, if available and preferred; these can be found at www.immunize.org/vis.

4. Administer 0.5 mL Td or Tdap vaccine intramuscularly (22–25g, 1–1½” needle) in the deltoid muscle or, alternatively, the anterolateral thigh also can be used. (Note: a ½” needle may be used for adults weighing less than 130 lbs [60 kg] for injection in the deltoid muscle only if the subcutaneous tissue is not bunched and the injection is made at a 90 degree angle.)

5. Provide subsequent doses of either Tdap or Td to adults as follows:
   a. to complete the primary 3-dose schedule: observe a minimum interval of 4 weeks between the first and second doses, and 6 calendar months between the second and third doses.*
   b. to boost with Tdap or Td after primary schedule is complete; prioritize use of Tdap if not previously given (Note: there is no need to observe a minimum interval between Td and the subsequent Tdap). If Tdap was already administered, boost with Td routinely every 10 years.*
   c. in pregnancy, if a one-time dose of Tdap has never been administered, administer Tdap in the third or late second trimester (after 20 weeks gestation). If not administered during pregnancy, give Tdap in immediate postpartum period.

6. Document each patient’s vaccine administration information and follow up in the following places:
   a. **Medical chart:** Record the date the vaccine was administered, the manufacturer and lot number, the vaccination site and route, and the name and title of the person administering the vaccine. If vaccine was not administered, record the reason(s) for non-receipt of the vaccine (e.g., medical contraindication, patient refusal).
   b. **Personal immunization record card:** Record the date of vaccination and the name/location of the administering clinic.

7. Be prepared for management of a medical emergency related to the administration of vaccine by having a written emergency medical protocol available, as well as equipment and medications. To prevent syncope, vaccinate patients while they are seated or lying down and consider observing them for 15 minutes after receipt of the vaccine.

8. Report all adverse reactions to Td and Tdap vaccines to the federal Vaccine Adverse Event Reporting System (VAERS) at www.vaers.hhs.gov or (800) 822-7967. VAERS report forms are available at www.vaers.hhs.gov.

*When feasible, administer Booster Tdap vaccine to adults age 65 years and older; however, either Tdap vaccine product administered to a person age 65 years and older provides protection against pertussis and is considered valid.

This policy and procedure shall remain in effect for all patients of the ___________ until rescinded or until __________ (date).

Medical Director’s signature: ____________________________ Effective date: ____________

For standing orders for other vaccines, go to www.immunize.org/standing-orders

Appendix C

Patient Vaccine Information

C-1. Patient Vaccine Questionnaire

Patient Name: _______________________________________________________
Age: __________

Do I need any vaccinations today?

Vaccines are not just for children, they are a very important part of women’s health. So at each office visit, just as we routinely check your weight and blood pressure, we will check to see if you are up to date with all the vaccines that you need and either administer vaccines you need or refer you to another health care provider who can vaccinate you.

Please check all the boxes below that apply to you.

- I am planning to become pregnant in the near future
- I am pregnant now or I have had a baby in the past 6 months
- I travel outside of the United States
- I work in a hospital or health care facility
- I care for children or the elderly
- I have a chronic illness that affects your heart, kidney, liver, lungs, or immune system

• Flu vaccine is recommended for everyone over age 6 months every year.
• Hepatitis B and HPV are vaccine-preventable infections that are easily spread by sexual contact and can cause cancer. Hepatitis B is not contraindicated in pregnancy; however, the HPV vaccine should not be administered during pregnancy.
• If you do not get the vaccines that you need before you plan a pregnancy, you can get them after delivery.
• If you take care of patients, children, or the elderly, vaccines have two purposes—they will protect you from getting infections and also prevent you from giving infections to the people you care for.
• Depending upon where you travel, you might need other vaccines as well. Discuss your specific travel destination with your health care provider.
• If you have a chronic medical problem, vaccinations are likely to be very important to your health and should be coordinated with your primary care provider. The vaccines recommended for you will depend on your specific health conditions.

• For varicella and measles, mumps, and rubella vaccines, women should avoid becoming pregnant within 1 month of receiving these vaccines.

This card was discussed and reviewed during my annual obstetric–gynecologic visit.

Patient Initials: ___________
Reviewed By: _______________________
Date: ________________________________

Note: For pregnancy specific guidance on immunizations from CDC, which includes information on breastfeeding, visit: http://www.cdc.gov/vaccines/parents/pregnant.html.
### C-2. Patient Vaccine Checklist

<table>
<thead>
<tr>
<th>Vaccines you may need today</th>
<th>Under age 26 years</th>
<th>Planning pregnancy</th>
<th>Pregnant</th>
<th>Postdelivery</th>
<th>Travel outside of the United States</th>
<th>Health care worker and/or care for children or elderly</th>
<th>Chronic illness</th>
<th>Age 50–64 years</th>
<th>Age 65 years or older</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hepatitis A</td>
<td></td>
<td></td>
<td>X*</td>
<td></td>
<td>X</td>
<td>X</td>
<td></td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>Hepatitis B</td>
<td>X</td>
<td>X</td>
<td>X*</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>Human papillomavirus (HPV)</td>
<td></td>
<td></td>
<td>X</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>Influenza</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>Measles, mumps, and rubella (MMR)</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>Meningococcal</td>
<td>X†</td>
<td></td>
<td>X</td>
<td></td>
<td>X</td>
<td>X</td>
<td></td>
<td></td>
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<tr>
<td>Tetanus, diphtheria, pertussis (Tdap)</td>
<td>X</td>
<td>X</td>
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<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>Pneumococcal polysaccharide</td>
<td></td>
<td></td>
<td>X*</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Varicella (chickenpox)</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Zoster (shingles)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>X</td>
<td></td>
<td>(age 60 years and older)</td>
</tr>
</tbody>
</table>

*Pregnant women who are identified as being at risk of certain vaccine-preventable diseases should consult their health care providers to determine which vaccines they may need.

†Meningococcal vaccination is recommended for first-year college students up to age 21 years who will be living in residence halls if they have not received a dose on or after their 16th birthday.

C-3. Immunization and Pregnancy Chart

<table>
<thead>
<tr>
<th>Vaccine</th>
<th>Before pregnancy</th>
<th>During pregnancy</th>
<th>After pregnancy</th>
<th>Type of Vaccine</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hepatitis A</td>
<td>Yes, if indicated</td>
<td>Yes, if indicated</td>
<td>Yes, if indicated</td>
<td>Inactivated</td>
</tr>
<tr>
<td>Hepatitis B</td>
<td>Yes, if indicated</td>
<td>Yes, if indicated</td>
<td>Yes, if indicated</td>
<td>Inactivated</td>
</tr>
<tr>
<td>Human Papillomavirus (HPV)</td>
<td>Yes, if indicated, through 26 years of age</td>
<td>No, under study</td>
<td>Yes, if indicated, through 26 years of age</td>
<td>Inactivated</td>
</tr>
<tr>
<td>Influenza IV</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Inactivated</td>
</tr>
<tr>
<td>Influenza LAIV</td>
<td>Yes, if less than 50 years of age and healthy; avoid conception for 4 weeks</td>
<td>No</td>
<td>Yes, if less than 50 years of age and healthy; avoid conception for 4 weeks</td>
<td>Live</td>
</tr>
<tr>
<td>MMR</td>
<td>Yes, if indicated, avoid conception for 4 weeks</td>
<td>No</td>
<td>Yes, if indicated, give immediately postpartum if susceptible to rubella</td>
<td>Live</td>
</tr>
<tr>
<td>Meningococcal: • polysaccharide • conjugate</td>
<td>If indicated</td>
<td>If indicated</td>
<td>If indicated</td>
<td>Inactivated</td>
</tr>
<tr>
<td>Pneumococcal Polysaccharide</td>
<td>If indicated</td>
<td>If indicated</td>
<td>If indicated</td>
<td>Inactivated</td>
</tr>
<tr>
<td>Tdap</td>
<td>Yes, if indicated</td>
<td>Yes, vaccinate during each pregnancy ideally between 27 and 36 weeks of gestation</td>
<td>Yes, immediately postpartum, if not received previously</td>
<td>Toxoid/ Inactivated</td>
</tr>
<tr>
<td>Tetanus/Diphtheria Td</td>
<td>Yes, if indicated</td>
<td>Yes, if indicated, Tdap preferred</td>
<td>Yes, if indicated</td>
<td>Toxoid</td>
</tr>
<tr>
<td>Varicella</td>
<td>Yes, if indicated, avoid conception for 4 weeks</td>
<td>No</td>
<td>Yes, if indicated, give immediately postpartum if susceptible</td>
<td>Live</td>
</tr>
</tbody>
</table>

For information on all vaccines, including travel vaccines, use this table with [www.cdc.gov/vaccines](http://www.cdc.gov/vaccines)

Get an answer to your specific question by e-mailing cdcinfo@cdc.gov or calling 800-CDC-INFO (232-4636) • English or Spanish

National Center for Immunization and Respiratory Diseases
Immunization Services Division

Note: Check CDC’s web site regularly for updates to Immunizations & Pregnancy Recommendations.
Appendix D

Immunization Resources

The following resources are for information purposes only. Referral to these sources and web sites does not imply the endorsement of the American College of Obstetricians and Gynecologists. These resources are not meant to be comprehensive. The exclusion of a source or web site does not reflect the quality of that source or web site. Please note that web sites are subject to change without notice.

The American College of Obstetricians and Gynecologists

Immunization for Women
www.immunizationforwomen.org

The College has designed an immunization web site to provide obstetrician–gynecologists and their patients with a central, trusted source of up-to-date information related to immunizations.

The College’s immunization web site is meant to be used as a reference guide on immunizing women. Resources and information for special populations, such as pregnant and breastfeeding women, adolescents, patients with chronic illness, and those traveling outside the United States can be obtained from this site. In addition, there is access to information on the seasonal flu and other vaccine-preventable diseases, including immunization facts and safety information, immunization schedules, clinical and practice management guidelines, and links to other reliable immunization resources. Each section of the web site as follows is designated for obstetrician–gynecologists or for patients.

Immunization Facts

Immunizations are one of the greatest public health achievements that save thousands of lives every year. By offering immunizations, not only do women receive protection from disease, communities are healthier by preventing the spread of disease.

Patients will have differing immunization needs based on stage of life and lifestyle choices. The “Immunization Facts” page will provide information related to vaccine-preventable diseases, specific immunizations based on patient risk factors, links to current immunization schedules, and more.

Practice Management

Beginning or expanding an office immunization program offers the ability to better fulfill the mission of keeping women healthy. Managing an
efficient and effective practice is essential for obstetrician–gynecologists and their patients. Although the initial addition of providing immunizations will require the full support of the physician and staff, after it has been implemented, it is very manageable to maintain a program. This section of the web site provides the following:

- How to set-up an office-based immunization program
- How to order, store, and handle vaccines and keep the vaccines safe
- *Immunization Coding for Obstetrician–Gynecologists 2013*, a coding guide to help office efficiency
- Information on financing, liability, patient refusal, communicating effectively with patients, immunization rates, and vaccines for health care workers

**Vaccine Safety**

Although vaccines are effective in preventing the spread of disease, concern sometimes arises regarding their safety. Some patients may express concern about adverse effects of vaccines, especially patients who are pregnant or who are thinking about becoming pregnant.

Anyone who gives or receives a licensed vaccine in the United States is encouraged to report any significant health problem or unexpected event (even if there is uncertainty that the vaccine caused the event) for any vaccine. As the primary health care providers for most women, obstetrician–gynecologists are in a unique position to educate their patients about the benefits of immunization against seasonal flu and other vaccine-preventable diseases and to provide them with (or refer them for) all their recommended vaccinations.

**News & Media**

Vaccine and vaccine preventable disease information is frequently discussed in the national and international media. The College wants its Fellows to be aware of recent research and recommendations related to immunizing patients.

Visit the “News & Media” page to see the latest alerts regarding vaccines, updates in women’s immunizations, and articles on women’s immunizations and vaccine-preventable diseases. There are many projects going on nationally and in specific areas to help educate health care providers and their patients about the importance of immunizations. Visit the “News & Media” page to learn more about these projects and how to get involved.

**Resources**

Immunization guidelines and resources are updated during each influenza season and as new information evolves. The College strives to keep Fellows informed about new guidelines, resources, and research, and how to best incorporate new findings into practice.
Surveys
The College and other medical organizations conduct surveys about which immunizations are being given, who is giving them, and the results of these immunization studies. The “Resources” page has surveys to participate in and available data from recent surveys.

Education (Webcasts, Training, and Conference Calls)
If obstetrician–gynecologists or staff want to learn more about vaccines with on-line education and training, please visit this page for educational opportunities.

Other Languages
If a patient speaks a language other than English, visit this page for vaccine resources in other languages.

Health Care Provider Materials
This page offers information for health care providers, including print and electronic materials.

FAQs
The “FAQs” page will assist with any questions health care providers or patients may have concerning which vaccines they may need. Questions pertaining to seasonal influenza, vaccine-preventable diseases, and where to obtain immunization schedules can all be found on this page.

Immunization Applet
The ACOG App includes an interactive Immunization Applet. The ACOG App can be obtained from the iTunes App store. Information to obtain the App is also on the ACOG web site at www.acog.org and on the “Immunization for Women” web site at www.immunizationforwomen.org.

Well-Woman Visits
www.acog.org/wellwoman
The College web site has a web page about well-woman care with links to recommendations for immunizations and ongoing health assessments. The page offers information by age about health topics such as screening, laboratory and other testing, evaluation and counseling, and immunizations.

Additional College Resources
The College has developed numerous immunization guidelines and other resources for professionals and patients. See www.acog.org/Resources_And_Publications/Committee_Opinions_List for a current listing of these College materials.


Frequently Asked Questions tear pads for patients and Physician Scripts

This material is available on the “Immunization for Women” web site and the College Bookstore

  Frequently Asked Questions for Patients Concerning Tdap Vaccination
  Frequently Asked Questions for Patients Concerning Vaccine Safety
  Flu Shot for Pregnant Patients: Frequently Asked Questions
  Physician Script Concerning Tdap Vaccination & Coding Information on Tdap Immunization
  Physician Script on Influenza Immunization During Pregnancy & Coding Information on Influenza Immunization for Pregnant Patients

Physician FAQs on implementing the new Tdap recommendations. These FAQs can be found on the College’s “Immunization for Women” web site

  www.immunizationforwomen.org/immunization_facts/vaccine-preventable_diseases/tetanusdiphtheria

“How I Practice” Video Series

Video about offering vaccinations

  http://www.acog.org/About_ACOG/ACOG_Departments/Patient_Safety_and_Quality_Improvement/The_How_I_Practice_Video_Series
**The American College of Obstetricians and Gynecologists District Resources**

**Well-Woman District II (New York)**
www.nywellwoman.org

Health care provider and patient education and topics related to what comprises a well-woman visit as well as a web-based version of this resource guide.

*District V and the American College of Obstetricians and Gynecologists Immunization Project*

The Centers for Disease Control and Prevention funded the College to select 60 obstetric–gynecologic practices in District V to pilot and evaluate an innovative, office-based training program to motivate and educate obstetrician–gynecologists to improve immunization services within their practices. Previously, state health department officials in these states (Indiana, Kentucky, Michigan, and Ohio) cited challenges in accessing obstetric–gynecologic practices for immunizations. In addition, many women view their obstetrician–gynecologists as their primary care providers, thus, reinforcing the need to be able to receive immunizations from their obstetrician–gynecologists. Obstetrician–gynecologists indicated that their practices could benefit from having additional education and local resources they could contact about immunization.

Before implementing the pilot training program, a pretest survey was administered to the 60 participating practices to assess current immunization practice. A 3-month follow-up posttest survey was administered to determine to what extent practices made improvements to their office-based immunization programs; 97% of participating practices responded to the posttest survey as follows:

- 29% of practices reported they have increased vaccine doses from their pretest rate
- 48% of practices from Indiana, Michigan, and Ohio are now participating in the state immunization registry; an additional 12% are interested in enrolling.
- 83% reported they now have the name of a state health department contact person they can reach with questions about immunizations, a increase from 48% at the time of the pretest.
- More than three quarters of participating practices have a vaccine coordinator.
- The largest increases in types of immunization in practices were Tdap; hepatitis B; and measles, mumps, and rubella vaccines.
Obstetric–gynecologic practices in the program stated that they were more likely to promote immunizations within the office if they knew the leadership at the national and district levels endorsed it. In addition, having a vaccine coordinator was very important to the sustainability of the practice’s immunization efforts because it established a point of contact. On-site training was useful because it provided needed educational information and also required minimal disruption of the practice if staff attended a 1-hour on-site training session. A key benefit of the training was having a local immunization expert that obstetric–gynecologic practices could contact for immunization information and resources. All of these factors helped motivate obstetrician–gynecologists to increase their level of immunization activities in the 3 months following the pretest. Immunization programs can be sustained within obstetric–gynecologic practices, creating opportunities for obstetrician–gynecologists to provide more comprehensive care to their patients. This project was funded by the Centers for Disease Control and Prevention Grant Number 5U66 IP 0001 18-03.

**National Organizations and Resources**

**American Academy of Family Physicians**
www.aafp.org
The mission of the American Academy of Family Physicians is to improve the health of patients, families, and communities by serving the needs of members with professionalism and creativity. It looks to assume a leadership role in health promotion, disease prevention, and chronic disease management involving family physicians in targeted public health activities; specifically tobacco, obesity, exercise, and immunizations.

**American Academy of Pediatrics**
www.aap.org
The American Academy of Pediatrics’ mission is to attain optimal physical, mental, and social health and well-being for all infants, children, adolescents, and young adults. For additional detailed information regarding childhood immunizations, please visit the American Academy of Pediatrics Immunization web page.

**American Medical Association**
www.ama-assn.org
The American Medical Association’s mission is to promote the art and science of medicine and the betterment of public health.
Association of Immunization Managers
www.immunizationmanagers.org
The Association of Immunization Managers was created in 1999 to enable immunization managers to work together to effectively prevent and control vaccine-preventable diseases and improve immunization coverage in the United States and its territories.

Association of State and Territorial Health Officials
www.astho.org
The Association of State and Territorial Health Officials is the national nonprofit organization representing public health agencies in the United States, the U.S. Territories, and the District of Columbia, and more than 100,000 public health professionals these agencies use.

Centers for Disease Control and Prevention
www.cdc.gov/vaccines
Access to the Advisory Committee on Immunization Practices’ recommendations, immunization schedules, vaccine shortage and delay information, statistics and surveillance, education and training, vaccine adverse effects and safety, requirements and laws, Vaccine Information Statements, publications, and more can be found at this web site. Also, visit their pregnancy-specific web page, which includes information on breastfeeding.

www.cdc.gov/vaccines/vpd-vac/unprotected-stories.htm
www.cdc.gov/vaccines/pubs/vis/default.htm
www.cdc.gov/vaccines/recs/schedules/index.html
www.cdc.gov/vaccines/parents/pregnant.html

Centers for Medicare & Medicaid Services
www.cms.gov/EHRIncentivePrograms
Information regarding eligibility and reporting requirements for Meaningful Use and Electronic Health Records Incentive Programs can be found here.

Immunization Action Coalition
www.immunize.org
Printable Vaccine Information Statements are available in multiple languages at this web site. The Immunization Action Coalition works to increase immunization rates and prevent disease by creating and distributing educational materials for health professionals and the public.
Flu Vaccine Finder
www.flu.gov
An interactive U.S. map for ease of locating facilities that provide the flu shot.

National Adult and Influenza Vaccine Summit
www.preventinfluenza.org
The National Adult and Influenza Vaccine Summit is dedicated to addressing and resolving influenza and influenza vaccine issues.

National Foundation for Infectious Diseases
www.nfid.org
The National Foundation for Infectious Diseases (NFID) is a non-profit, tax-exempt 501(c)(3) organization founded in 1973 dedicated to educating the public and health care professionals about the causes, treatment, and prevention of infectious diseases. The NFID carries out its mission by educating the public, educating health care professionals, supporting research and training in infectious diseases, building coalitions, honoring scientific and public health achievement, legislative contributions, and philanthropy in infectious diseases.

National Network for Immunization Information
www.immunizationinfo.org
The National Network for Immunization Information provides up-to-date, science-based information to health care professionals, the media, and the public: everyone who needs to know the facts about vaccines and immunization.

Trust for America’s Health
www.healthyamericans.org
The Trust for America’s Health focuses on prevention, protection, and communities. Access to reports, policy information, and latest news on immunizations can be found at this web site.

Vaccine Adverse Event Reporting System
www.vaers.hhs.gov/index
A 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.
Appendix E

Patient Vaccine Record Card

The College has developed an adult vaccine record card for patients to keep an ongoing record of their immunizations. This will help to assess whether their vaccine status is up-to-date. This card can be viewed electronically at the College’s “Immunization for Women” web site at www.immunizationforwomen.org and purchased at sales.acog.org.
Adult Immunization Record

Keep this record with you at all times and present to your health care provider prior to receiving any vaccination.

Last Name

First Name

Date of Birth:

Month Day Year

Allergies or other notes:

<table>
<thead>
<tr>
<th>Adult Vaccines</th>
<th>Health care professional or clinic name</th>
<th>Date given</th>
<th>Type given</th>
<th>Vaccine</th>
<th>Route</th>
<th>Lot #</th>
<th>Date next dose due</th>
<th>Influenza*</th>
</tr>
</thead>
<tbody>
<tr>
<td>Diphtheria, tetanus, and pertussis (DTP, DT, or Tetap)</td>
<td></td>
<td></td>
<td></td>
<td>Human papillomavirus</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Influenza</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Distributed by the American College of Obstetricians and Gynecologists

www.immunizationforwomen.org
## Adult Vaccines (continued)

<table>
<thead>
<tr>
<th>Vaccine</th>
<th>Type given</th>
<th>Date given</th>
<th>Health care professional or clinic name</th>
<th>Date next dose due</th>
<th>Lot #</th>
<th>Route</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hepatitis B</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Meningococcal</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Pneumococcal</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Zoster</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

## Vaccines Indicated in Pregnancy

<table>
<thead>
<tr>
<th>Vaccine</th>
<th>Type given</th>
<th>Date given</th>
<th>Health care professional or clinic name</th>
<th>Date next dose due</th>
<th>Lot #</th>
<th>Route</th>
</tr>
</thead>
<tbody>
<tr>
<td>Diphtheria, tetanus and pertussis (Tdap preferred)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Hepatitis B*</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Hepatitis A*</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Meningococcal*</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Influenza (given annually, safe in any trimester)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

*Can be administered in pregnancy when certain risk factors are present*
*All live vaccines are contraindicated in pregnancy, including live intranasal influenza, MMR, and varicella vaccines. All women who will be pregnant during influenza season (October through May) should receive inactivated influenza vaccine at any point in gestation. Administer the MMR and varicella vaccines postpartum if needed.

Abbreviations: Tdap, diphtheria and reduced tetanus toxoids and acellular pertussis; Td, tetanus and diphtheria toxoid; MMR, measles, mumps, and rubella.
Before administering any vaccines, give the patient copies of all pertinent Vaccine Information Statements (VISs) and make sure she understands the risks and benefits of the vaccine(s). Always provide or update the patient's personal record.

<table>
<thead>
<tr>
<th>Vaccine</th>
<th>Type of Vaccine</th>
<th>Date Given (mo/day/yr)</th>
<th>Site</th>
<th>Vaccine</th>
<th>Vaccine Information Statement</th>
<th>Vaccinator</th>
<th>Lot #</th>
<th>Manufacturer</th>
<th>Exp.Date</th>
<th>Date on VIS</th>
<th>(Signature &amp; Title)</th>
</tr>
</thead>
</table>

## Temperature Log for Refrigerator — Fahrenheit

**Month/Year:** _____________  **Days 1–15**

### Take Action!
- If temperature is too warm (above 46°F) or too cold (below 35°F):
  1. Store the vaccine under proper conditions as quickly as possible.
  2. Temporarily mark exposed vaccine “do not use” until you have verified whether or not the vaccine may be used.
  3. Call the immunization program at your state or local health department and/or the vaccine manufacturer to determine whether the potency of the vaccine(s) has been affected: _____________.
  4. Document the action taken on the reverse side of this log.

### Completing this temperature log:
- Check the temperature in the refrigerator compartment of your vaccine storage unit at least twice each working day.
- Place an “X” in the box that corresponds with the temperature, the time of the temperature reading, and your initials. Once the month has ended, save each month’s completed form for 3 years, unless state or local jurisdictions require a longer time period.

### If the recorded temperature is warmer than 46°F or colder than 35°F:
This represents an unacceptable temperature range. You must take action!

### Staff Initials

<table>
<thead>
<tr>
<th>Day of Month</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
<th>7</th>
<th>8</th>
<th>9</th>
<th>10</th>
<th>11</th>
<th>12</th>
<th>13</th>
<th>14</th>
<th>15</th>
</tr>
</thead>
<tbody>
<tr>
<td>Room Temp.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Exact Time</td>
<td>am pm am pm am pm am pm am pm am pm am pm am pm am pm am pm</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
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<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

*Write any unacceptable temps (above 46°F or below 35°F) on these lines. Then take action!*

### Danger! Temperatures above 46°F are too warm!
Write any unacceptable temperature on the lines above* and call your state or local health department immediately!

### Acceptable Temperatures

<table>
<thead>
<tr>
<th>46°F</th>
<th>45°F</th>
<th>44°F</th>
<th>43°F</th>
<th>42°F</th>
<th>41°F</th>
</tr>
</thead>
<tbody>
<tr>
<td>40°F</td>
<td>39°F</td>
<td>38°F</td>
<td>37°F</td>
<td>36°F</td>
<td>35°F</td>
</tr>
</tbody>
</table>

*Danger! Temperatures below 35°F are too cold! Write any unacceptable temperature on the lines above* and call your state or local health department immediately!

---

Adapted with permission from California Department of Public Health.

See back for "Vaccine Storage Troubleshooting Record".
## Appendix I

### Office Checklists

#### I-1. Proper Vaccine Administration Checklist

**Preparing for Vaccine Administration**

<table>
<thead>
<tr>
<th>Yes</th>
<th>No</th>
</tr>
</thead>
<tbody>
<tr>
<td>☐</td>
<td>☑</td>
</tr>
</tbody>
</table>

Our practice has access to the most recent vaccination schedules for adults and adolescents.

<table>
<thead>
<tr>
<th>Yes</th>
<th>No</th>
</tr>
</thead>
<tbody>
<tr>
<td>☐</td>
<td>☑</td>
</tr>
</tbody>
</table>

We are aware of the contraindications for all the vaccine types our practice orders.

<table>
<thead>
<tr>
<th>Yes</th>
<th>No</th>
</tr>
</thead>
<tbody>
<tr>
<td>☐</td>
<td>☑</td>
</tr>
</tbody>
</table>

Our practice offers patients educational materials about vaccines.

<table>
<thead>
<tr>
<th>Yes</th>
<th>No</th>
</tr>
</thead>
<tbody>
<tr>
<td>☐</td>
<td>☑</td>
</tr>
</tbody>
</table>

Our practice screens patients with a questionnaire to determine if they require vaccinations at each visit.

<table>
<thead>
<tr>
<th>Yes</th>
<th>No</th>
</tr>
</thead>
<tbody>
<tr>
<td>☐</td>
<td>☑</td>
</tr>
</tbody>
</table>

**Administering a Vaccine**

The immunization coordinator and at least one backup coordinator are familiar with vaccine administration as follows:

<table>
<thead>
<tr>
<th>Yes</th>
<th>No</th>
</tr>
</thead>
<tbody>
<tr>
<td>☐</td>
<td>☑</td>
</tr>
</tbody>
</table>

Are thoroughly familiar with the procedures for preparing vaccines that require reconstitution.

<table>
<thead>
<tr>
<th>Yes</th>
<th>No</th>
</tr>
</thead>
<tbody>
<tr>
<td>☐</td>
<td>☑</td>
</tr>
</tbody>
</table>

Are thoroughly familiar with the use of vaccines that come in multi-dose vials, when applicable.

<table>
<thead>
<tr>
<th>Yes</th>
<th>No</th>
</tr>
</thead>
<tbody>
<tr>
<td>☐</td>
<td>☑</td>
</tr>
</tbody>
</table>

Are thoroughly familiar with the procedures for giving vaccines intramuscularly and subcutaneously and understand which vaccines are given in each manner.

<table>
<thead>
<tr>
<th>Yes</th>
<th>No</th>
</tr>
</thead>
<tbody>
<tr>
<td>☐</td>
<td>☑</td>
</tr>
</tbody>
</table>

Understand that all needed vaccines should be given at each office visit.

<table>
<thead>
<tr>
<th>Yes</th>
<th>No</th>
</tr>
</thead>
<tbody>
<tr>
<td>☐</td>
<td>☑</td>
</tr>
</tbody>
</table>

Understand how to safely dispose of syringes and used needles.

<table>
<thead>
<tr>
<th>Yes</th>
<th>No</th>
</tr>
</thead>
<tbody>
<tr>
<td>☐</td>
<td>☑</td>
</tr>
</tbody>
</table>

Are familiar with the guidelines on accidental needle-stick.

<table>
<thead>
<tr>
<th>Yes</th>
<th>No</th>
</tr>
</thead>
<tbody>
<tr>
<td>☐</td>
<td>☑</td>
</tr>
</tbody>
</table>
Required

The practice has the necessary supplies on hand to deal with an anaphylactic reaction of a patient. 

The immunization coordinator and at least one backup person are familiar with the procedure for reporting adverse reactions to the Vaccine Adverse Event Reporting System.

The practice has copies on hand of the most recent Vaccine Information Statements for each vaccine stocked, and gives them to all patients prior to vaccination.

Vaccination information is always recorded in the patient’s medical record or permanent office log.

All patients receive a personal vaccination record that is updated every visit.

If any of the answers above are “no”, a staff person(s) is being assigned to implement needed changes.

I-2. Office Readiness Checklist

Logistics
(Obtaining, storing, and handling vaccines.)

Designating a vaccine coordinator and a backup coordinator
Purchasing supplies (not including vaccines)
Adequate refrigerator and freezer storage
Understanding proper vaccine storage (refrigerator and freezer)
Inventory control
Vaccine ordering
Receiving vaccine shipments
Access to vaccine resources

Protocols
(Who to vaccinate and how to do it.)

Access to current immunization schedules
Knowledge of contraindications
Patient education
Patient screening (who to vaccinate)
Vaccine preparation/reconstitution
Administering vaccines (ie, giving injections)
Responding to accidental needle-sticks
Adverse reactions (eg, anaphylaxis)
State and federal requirements for vaccinations
Use of Vaccine Information Statements
Record keeping and documentation
Adverse event reporting

Reimbursement
(Getting reimbursed for vaccination services.)

Access to current coding requirements
