Step 1: Getting Started

If you work in a setting that serves adults in some way—for example, a family planning clinic, homeless shelter, STD clinic, OB/GYN practice, correctional facility, drug treatment program, or senior center—you work in a setting where you could prevent serious disease and even death by offering vaccinations to your patients, clients, inmates, or other adult population(s). Increasingly, vaccination in these "nontraditional" vaccination settings is seen by top-ranking immunization specialists as one of the best ways to deliver vaccines to adults. The National Vaccine Advisory Committee (NVAC) with the Centers for Disease Control and Prevention (CDC) has even written a report on the subject, stating that nontraditional settings are needed for two main reasons: "Some adults who need vaccination receive medical care but are not offered vaccine, whereas others might not have regular contact with traditional health-care settings." ("Adult Immunization Programs in Nontraditional Settings: Quality Standards and Guidance for Program Evaluation," *MMWR* [Vol. 49: RR-1] March 24, 2000)

This *Adults Only Vaccination* guide has been created by the Immunization Action Coalition (IAC) to help you implement a program within your facility to vaccinate susceptible adults against one or more infectious diseases. It comes with two invaluable videos that help teach both immunization techniques and vaccine handling and storage requirements. But remember, no guide or how-to manual is sufficient to turn you into a full-fledged vaccinator. You will need the assistance of a well-trained and experienced nurse who might already be within your own organization, or perhaps you can connect with someone from your local or state health department—just check the list of state

immunization coordinators on our website at www.immunize.org/coordinators

That said, please don't be intimidated by the seeming complexities of vaccination. It's true that vaccine dosages and schedules can be tricky, and official recommendations change. But like everything in health care, vaccination can be approached on many levels. Here we are going to approach it at its most basic level, assuming that readers who are interested will learn more about vaccine recommendations and scheduling intricacies as they go. Resources abound in print and on the Internet for keeping up-to-date with scheduling and other practical issues. Please consult our own award-winning website often for the latest information at www.immunize.org, especially the new page created for vaccinators called "Improving Immunization Practices." (We recently, too, launched a new website at www.vaccineinformation.org for parents, patients, health professionals, and the media that includes video clips, photos, case histories, and more resources. Refer your adult patients to this site for answers to all their vaccine questions.) And, lastly, be sure to read your hard copy of *NEEDLE TIPS*, our twice-yearly publication filled with useful articles and current advice.

These and other wonderful available resources will serve you well once you are up and running, but they tend to assume a basic vaccination competence that we don't want to assume here. They tend to start "in the middle of things" because they are directed at established vaccinators, which you soon will be. Here we want to start where you are now: at the beginning.

What we assume is that you don't necessarily have that basic vaccination competence (although you might). We assume that you don't necessarily know how vaccination services will fit in with your other clinical or program offerings. We assume that your main services may or may not be health care in nature.

Above all, we assume that you have a community in need of more opportunities to be vaccinated against threatening vaccine-preventable diseases; that you have a motivated staff with at least one part-time or full-time member who can make time to administer the program and one who can legally "give shots"; and that as an organization you are willing to invest time and probably some upfront money to contribute to individual and community health through vaccination.

In *Adults Only Vaccination*, we are stripping down this essential preventive medicine to its basic components, or steps. This step is the first of seven, all of which are grouped under "Vaccination Basics." The subsequent steps cover how to purchase vaccines, how to set up standing orders for vaccines, how to store vaccines, how to decide which people should receive vaccines, how to administer vaccines, and how to keep records related to vaccines. Don't worry: it will all come together, step by step.

The last step of "Vaccination Basics" even covers billing for vaccines, though this is a complex (may we say convoluted?) topic, and ultimately, offering vaccinations will likely not be a money-maker for your organization or setting. However, vaccination is definitely one of the most cost-effective medical interventions that exists with most of the savings coming from reduced treatments for illness and hospitalizations. In the best-case scenario, if you and your patients/clients do the paperwork required, you will get appropriate reimbursement for vaccinating adults. After all, Medicare has covered influenza and pneumococcal vaccines for years now, and those two vaccines are still woefully underused nationwide, even by Medicare beneficiaries. Many private insurance companies also do at least partially cover some adult vaccines. But there is no question that many patients or clients will have to pay out of pocket and/or you may need to find local sources of support in commercial groups or philan-

thropic clubs. In the worst-case scenario, vaccination will be a minor financial "loss leader" for you—however, you will be generating business indirectly by generating good health and good will in your community.

The appendices, "Resources to Use for Vaccinating Adults," include some of the many educational and screening materials for you to use in doing all the things discussed in "Vaccination Basics." If the previous section consists of instructions, this section is the tool kit. All of the high-quality forms and lists and flyers are included here with information on how to download the most current version. You will also want to obtain a copy of what is known informally as "The Pink Book" — the Centers for Disease Control and Prevention's (CDC's) *Epidemiology and Prevention of Vaccine-Preventable Diseases* (8th edition). You can order The Pink Book by calling (800) 418-7246 or (877) 252-1200 or download it for free from CDC's website at www.cdc.gov/nip. It is an essential vaccine reference text for all vaccinators.

Now, if you are already convinced of the need to vaccinate and are eager to get started, please feel free to skip the rest of this introductory chapter and move ahead to "Step 2: Setting Up for Vaccination Services." If you want more background on how and why you should begin offering vaccination services to adults, please read on.

Why adults only?

The simple answer to "why adults only?" is that adult vaccination needs have suffered from inattention for too long. It's time to complement our nation's excellent immunization infrastructure for children with better immunization opportunities for adults.

In the United States, fewer adults than children are fully vaccinated, and adults are much more likely to die from vaccine-preventable diseases than are children. The reasons for this "vaccination gap" are many; a main one is that many adults do not go to doctors regularly, or do not have a primary care doctor, or they change doctors often and their immunization status simply falls through the cracks. Many adults think vaccines are only for children. Patients in high-risk groups with chronic medical conditions often see several different specialists, none of whom takes primary responsibility for immunization and all of whom can mistakenly assume that it's someone else's job. That's how an unvaccinated 21-year-old child care worker can die from varicella after exposure to a child with chickenpox when a simple blood test followed by a two-dose series could have saved her life. That's how a 56-year-old woman can miss a month of work after complications from influenza when a one-minute flu shot at her annual gynecological visit could have spared her the pain, lost income, and medical expense. And that's how a graduate student can discover he has chronic hepatitis B that might have been prevented with a series of three shots at his visits to the college health service or STD clinic.

In a report by the National Vaccine Program Office (NVPO), the public health burden of vaccine-preventable diseases among adults is stated as follows:

> "Approximately 45,000 adults in the United States die annually of complications from influenza, pneumococcal infections, and hepatitis B—the primary vaccine-preventable diseases affecting adults. The total economic cost of treating these vaccine-preventable diseases among adults, excluding the value of years of life lost, exceeds $10 billion each year. Although effective vaccines to prevent these diseases are available, they are widely

> underutilized." (*Adult Immunization Action Plan: Report of the Workgroup on Adult Immunization*. U.S. Department of Health and Human Services, CDC, 1998)

Bruce G. Gellin, M.D., et al., note that varicella (chickenpox) vaccine is also important for adults:

> "Although adults account for fewer than 5% of all chickenpox (varicella) cases, more than 50% of the deaths that result from this infection occur in this age group. Adolescents and adults in whom chickenpox develops are ten times more likely than children to require hospitalization or contract pneumonia, sepsis, and encephalitis. In addition, those suffering from shingles or herpes zoster experience significant disability." [Ed. Note: So-called natural varicella immunity does not protect against shingles, whereas immunity from vaccination does.] ("Adult Immunization: Principles and Practice," *Advances in Internal Medicine*, Vol. 44, 1999)

These depressing numbers will only change one shot at a time, one clinic or nontraditional setting at a time. As a frustrated Pierce Gardner, M.D., wryly concluded in a speech on "Standards for Adult Immunization," the rates for adult immunization "are improving from abysmal to just bad." He noted that the total number of adult deaths *each year* from pneumococcal disease, influenza, and hepatitis B roughly equals the number of names on the Vietnam Veterans Memorial Wall in Washington, D.C.

You and your organization can make a difference by vaccinating "grown-ups." You can help rates for adult immunization improve from "just bad" to "darn respectable" or even to—what might Dr. Gardner say?—maybe "phenomenal."

One of the goals set by the U.S. Department of Health and Human Services *Healthy People 2010* initiative is vastly increased vaccination coverage for all adults. The goal for adults ages 65 and older is 90 percent coverage against both influenza and pneumococcal disease, up from the "abysmal" rates of 51 and 28 percent, respectively, in 1993. For noninstitutionalized high-risk adults ages 18–64 years, the coverage goal for these two vaccines is a modest 60 percent.

In the words of adult immunization advocate William Schaffner, M.D., chair of the Department of Preventive Medicine at Vanderbilt University School of Medicine in Nashville, Tennessee, "Where we are with adult immunization is where we were 25 years ago with children's immunizations." Using the metaphor of tap water to describe efforts to immunize adults, he says, "It's like a drip coming out of the faucet. For children it's turned on full force." Indeed, in contrast to adult levels, vaccine coverage levels for children have now, in some places in the United States, exceeded 90 percent. Consequently, disease rates for almost all childhood vaccine-preventable diseases have decreased by 95 to 100 percent, including *Haemophilus influenzae* type B (Hib) disease, for which the vaccine has been available scarcely more than a decade. That is dramatic progress in improving children's health.

While we wait for the discovery of new vaccines to prevent incurable diseases such as AIDS, let's turn on the tap full force to wash out the deadly vaccine-preventable diseases now striking adults.

Because adults need different vaccines depending on their health, age, lifestyle, and occupational factors—unlike most children, who just need vaccines based on age—it's a little more complicated to figure out which vaccine(s) a given individual

needs. One size does not fit all. The good news is that adults almost always need fewer vaccines than do children; they get their shots in fewer parts of the body; and the vaccines they need cost less than pediatric vaccines.

What vaccines do adults need?

At the end of the day, after all the statistics have been compiled and analyses conducted, here is what the Infectious Diseases Society of America (IDSA) deems the bottom line for adult immunizations and the standard that those of you who choose to offer immunizations will help to meet:

> "All adults should be immune to measles, mumps, rubella, tetanus, and diphtheria; people 50 years of age and older or in groups at high risk for infection should receive annual influenza immunizations; and people 65 years of age and older or in high-risk groups should receive pneumococcal vaccine. Adults who are susceptible to hepatitis A, hepatitis B, varicella, and/or meningococcal disease should be given appropriate immunizations if they are at special risk for exposure to these agents." (Pierce Gardner, M.D., et al., "Guidelines for Quality Standards for Immunization," *Clinical Infectious Diseases*, Vol. 35, September 2002)

This deceptively simple statement reflects the new "harmonized" immunization schedule for adults, officially known as the "Recommended Adult Immunization Schedule by Age Group and Medical Conditions, United States, 2003-2004" (*MMWR* [Vol. 52: No. 40] October 10, 2003). This schedule is approved by the Advisory Committee on Immunization Practices (ACIP) for the Centers for Disease Control and Prevention (CDC) and accepted by the American College of Obstetricians and Gynecologists and the American Academy of Family Physicians (hence it is "harmonized" among these groups).

To help you decide which vaccine(s) to offer, you'll find a handy chart later on page 37. You will also learn how to vaccinate those of your patients/clients who already have a chronic infection, who participate in a lifestyle that places them at higher risk, or who might be in a higher risk ethnic or racial category.

Not for kids, not for travel

In this guide, we discuss only adult vaccinations for the sake of simplification. For instance, vaccine dosages for children and adults are sometimes different. If you are only going to be dealing with adults, why should we confuse matters by presenting you with pediatric information? Resources are plentiful for health professionals working in childhood immunization.

Is there a strict definition of "adult" for the purposes of this guide based on chronological age or physical size or sexual development? Can this guide help the immunization coordinator at an STD clinic who needs answers about a 250-pound 17-year-old male client? Or an 18-year-old female client covered as a child by Medicaid? We will note exceptions, but for the most part, an "adult" vaccinee is at least 18 years of age.

Similarly, we will limit this guide to routine preventive vaccinations in the United States and not include specific information on vaccinations required for international travel. Information on immunizations needed for travel to different countries can be found at www.cdc.gov/travel.

Concluding thoughts

Vaccinating adults is looking surprisingly manageable (and surprisingly important), isn't it? Now that you have read this introduction and have chosen to become a vaccinator, you are ready to proceed with your vaccination services program, one

step at a time. You (and the adults you vaccinate in the months and years to come) will be glad you did.