

# Strengthening Adult Immunization: A Call to Action





Dear Colleague,

Vaccines arguably are the greatest technological development of the Twentieth Century. Immunization has wiped out mass killers such as smallpox and polio. Vaccines are **so** effective at preventing and even eradicating disease that many Americans now take them for granted.

Sadly, reality doesn't exactly square with that happy myth.

More than 40,000 American adults – including working-age men and women, healthcare workers, seniors and others – die each year from diseases that can be cheaply and effectively prevented by immunization. Hundreds of thousands more are hospitalized, enduring suffering and piling up medical bills that could have been prevented.

How can this be? There are huge gaps between our national adult immunization goals and actual vaccination rates. The sad – dare I say tragic – fact is that, although we've done a terrific job of protecting our children from vaccine-preventable diseases, millions of American adults are not protected. The ramifications of the gaps are far reaching. For example, low demand for adult vaccines has severely limited the number of manufacturers willing to produce for the U.S. market, leaving us vulnerable to shortages, as the 2004-05 influenza season has dramatically illustrated.

The time to act to narrow our nation's adult immunization gaps is now.

Health officials, doctors, nurses, scientists and vaccine makers have recognized this problem for years. Numerous meetings and forums have been held to discuss potential solutions. Now we must move beyond talking to advance the ball down field.

To catalyze action, Partnership for Prevention conferred with and convened the nation's leading immunization experts and stakeholders. We reached remarkable consensus on a half dozen actions the federal government and policy makers can take to close the adult immunization gaps. These actions range from a pilot program to vaccinate uninsured adults to a nationwide campaign to educate Americans about the value and continuing importance of adult vaccination.

Each of these solutions is effective, affordable and politically feasible. Their collective price tag is less than \$100 million – cheap compared to the lives they will save, and hospitalizations and lost productivity they will prevent.

Partnership calls on Congress and the Administration to act now to improve Americans' health by taking the actions recommended here to strengthen adult immunization in the U.S. I urge you to bring this important issue and opportunity to the attention of policy makers and those who influence them.

Sincerely,

John M. Clymer  
President

# Expert Panel on Strengthening Adult Immunization

## Chair

**Hugh H. Tilson, MD, DrPH**  
University of North Carolina  
School of Public Health

## Members

**Hon. Dale Bumpers**  
United States Senator (1975-1999)

**Ronald M. Davis, MD**  
Henry Ford Health System

**Ian Dixon, MPH**  
National Business Group on Health

**Jonathan E. Fielding, MD, MPH, MBA**  
Los Angeles County Department of Health  
Services

**Lynda Flowers, JD, MSN, RN**  
AARP

**Christine M. Grant, JD, MBA**

**J. Henry Hershey, MD, MPH**  
New River Health District

**Alan R. Hinman, MD, MPH**  
The Task Force for Child Survival and  
Development

**Pauline Lapin, MPH**  
Centers for Medicare & Medicaid Services

**Wayne M. Lednar, MD, PhD**  
Eastman Kodak

**Barbara Levine**  
Association of State and Territorial Health  
Officials

**David A. Neumann, PhD**  
National Partnership for Immunization

**Gary R. Noble, MD, MPH**

**Walter A. Orenstein, MD**  
Emory University

**Bob Rehm**  
America's Health Insurance Plans

**Sara Rosenbaum, JD**  
The George Washington University  
Medical Center  
School of Public Health and Health Services

**L.J. Tan, PhD**  
American Medical Association

**Herbert Young, MD, MA, FAAFP**  
American Academy of Family Physicians

## Staff:

John M. Clymer, Ashley B. Coffield,  
Nancy E. Maddox, Karen Sherwood, and  
Amy S. Stitcher

The staff thanks Nicole M. Smith,  
National Immunization Program,  
Centers for Disease Control and  
Prevention, for patiently providing  
extensive technical support.

Partnership for Prevention gratefully  
acknowledges support from  
GlaxoSmithKline, the Centers for Disease  
Control and Prevention, and the Agency for  
Healthcare Research and Quality.

*The opinions and recommendations in this  
report are solely those of Partnership and not of  
the sponsors.*

# Call To Action





Diseases that can be prevented by vaccines kill tens of thousands of American adults every year and send hundreds of thousands more to hospitals for treatment.

- 36,000 die from influenza.<sup>1</sup>
- 200,000 are hospitalized due to influenza complications<sup>1</sup> at a cost of roughly \$10,000 per case.<sup>2</sup>
- 33,000 suffer from invasive pneumococcal disease and 5,000 die.<sup>3</sup>
- 80,000 become newly infected with hepatitis B and 5,000 die.<sup>4</sup>

Fortunately, we have the technology – vaccines – to help prevent these diseases. (See Table 1 for vaccines recommended for adults.) But we do not deploy them as effectively as we must to reduce the incidence of infectious disease, leaving a gap between the number of cases that **could** be prevented and the number that actually **are**. (See Table 2 for vaccination rates among adults.)

Public health and medical authorities have recognized this gap for years. Over the last decade, expert studies and policy reports have generated an array of possible solutions to close the gap, but few, if any, of these solutions have ever been implemented. The result is a steady burden of needless deaths and hospitalizations and accruing medical costs.

To close the adult immunization gap, Partnership for Prevention convened a blue ribbon panel of experts to identify feasible policies to increase vaccination rates. These policy recommendations are listed below and are described in greater detail beginning on page 12. Partnership's objective is to move the nation beyond discussion toward adoption of policies that will better protect American adults from infectious disease.

### **1. Purchase and Distribute Influenza Vaccine for Uninsured Adults.**

Establish a multi-year pilot program in at least 4 states to purchase and distribute influenza vaccine for uninsured adults aged 19 to 64 years who meet the criteria identified by the Advisory Committee on Immunization Practices.

### **2. Ensure First-Dollar Coverage for the Influenza and Pneumococcal Vaccines in the Federal Employee Health Benefit Program.**

Require the Federal Employee Health Benefit Program (FEHBP) to stipulate that participating health insurance plans provide first dollar coverage of influenza and pneumococcal vaccines for adults who meet the criteria identified by the Advisory Committee on Immunization Practices.

# Call To Action

### **3. Expand Section 317 of the Public Health Service Act to Address Adult Immunization Needs.**

Earmark additional funding in the Section 317 program specifically to address challenges related to adult immunization.

### **4. Launch a National Campaign to Educate Americans about the Value of Adult Immunizations.**

Earmark additional funding for DHHS to conduct an educational campaign on the importance of adult immunizations. Educational efforts should target the general public and specific target populations with particularly low vaccination rates, as well as providers, insurers, and employers.

### **5. Expand and Assess CMS Quality Initiatives.**

Direct the Centers for Medicare & Medicaid Services (CMS) to expand its quality initiatives and consistently measure adult vaccination rates among patients and health care workers. Earmark additional funding for the Agency for Healthcare Research and Quality to assess CMS efforts and those of private health care organizations (e.g., health plans, hospitals, and nursing homes) to identify the most effective approaches to “reward quality.”

### **6. Make Vaccination of Healthcare Workers a Quality Indicator.**

Direct the Centers for Medicare & Medicaid Services to reach agreement with the Joint Commission on Accreditation of Healthcare Organizations to include immunization of healthcare workers as one of the standards that must be met for accreditation of hospitals, nursing homes, home health agencies, and other regulated facilities.

## **IT IS TIME TO STRENGTHEN ADULT IMMUNIZATION**

Fifteen years ago, large gaps existed between expert recommendations for childhood immunization and the actual immunization rates. Today, vaccination rates among children are near all-time highs. Public policy changes and improved practices have closed the gaps, nearly wiping out several deadly diseases in the U.S. Although adult vaccination in the U.S. lags far behind childhood immunization, the nation's success in protecting children points the way to protecting adults as well.



“It’s an open question as to what the fundamental underlying demand will be (for vaccine during the 2005-2006 influenza season). Companies want to be reasonably sure of selling this stuff. How can you calculate what to do?”

*Vaccine industry analyst quoted in Washington Post 1/25/05*

A strengthened adult immunization system will enable the U.S. to use its health care dollars more wisely. Recommended adult immunizations work and are cost-effective.

- Influenza vaccine saves \$182 in medical costs per person vaccinated aged 65+<sup>6</sup> and \$14.71 per person vaccinated aged 18 to 64.<sup>7</sup>
- Pneumococcal vaccine saves \$8.87 in medical costs per person vaccinated aged 65+.<sup>5</sup>

(All figures in 2000 dollars)

A strengthened adult immunization system will prepare the U.S. to respond to major disease outbreaks and to take advantage of new vaccines that are being developed.

- Making immunizations an integral part of adult health care will help the nation prepare for pandemic influenza<sup>†</sup> and for possible bioterrorism involving anthrax, smallpox or other highly contagious microbes. Today, America is ill-equipped for wide-scale, rapid vaccine delivery to adults. Improving adult immunization policies now could save tens or hundreds of thousands of lives if an outbreak occurs.

- New vaccines will provide additional opportunities for disease prevention. For example, new vaccines are in the pipeline to prevent infection with the virus that causes cervical cancer and to prevent shingles – a painful, debilitating and lasting illness. Experts expect these vaccines will soon be recommended. A strong adult immunization system will enable American adults to capitalize on such advances.

### **FOCUS ON CONSUMER DEMAND IS CRITICAL TO ENSURE ADEQUATE VACCINE SUPPLY AND DELIVERY TO PATIENTS**

Partnership’s Call to Action focuses on strengthening demand for adult vaccination because steady and growing demand is necessary to increase immunization rates. Predictable demand is also a prerequisite to stimulate vaccine supply. Volatile consumer demand makes it difficult for manufacturers to know how much vaccine to produce and deters the capital investment necessary for vaccine production.

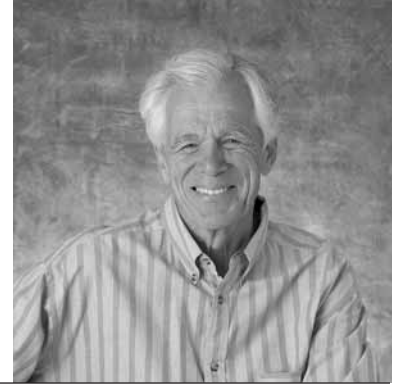
*{Continued on page 10}*

<sup>†</sup> Pandemic influenza generally results when an animal virus gains the ability to infect people and becomes capable of efficient person-to-person transmission. The new virus has never been “seen” by the human immune system and immunity is consequently quite low, leaving large swaths of the population vulnerable to infection.

# Call To Action

**Table 1. Immunizations Recommended for Adults, ACIP, 2005†**

<p><i>Adult vaccines addressing the greatest burden of preventable illness:</i></p> <ul style="list-style-type: none"> <li>• <b>Influenza Vaccine</b> — Annually for adults 50 years and older, adults 19-49 years with certain medical conditions (e.g., asthma, diabetes, cardiovascular disease, HIV infection, pregnancy), persons in long-term care facilities, household contacts of persons at risk of complications due to influenza, healthcare workers of any age</li> <li>• <b>Pneumococcal Vaccine</b> — Once and one-time revaccination for adults 65 years and older, adults 19-64 years with certain medical conditions (e.g., cardiovascular disease, diabetes, chronic liver disease, HIV infection), residents of long-term care facilities</li> <li>• <b>Hepatitis B Vaccine</b> — 3 doses for all adults at risk of hepatitis B infection such as hemodialysis patients, injection drug users, persons with more than one sex partner in previous 6 months or a recently acquired STD, men who have sex with men, correctional facility inmates, sex or household contacts of people with chronic HBV infection, people at occupational risk of blood exposure</li> <li>• <b>Hepatitis A Vaccine</b> — 2 doses for adults with chronic liver disease, men who have sex with men, users of illegal drugs, adults traveling in certain countries</li> </ul>
<p><i>Other vaccines recommended for adults:</i></p> <ul style="list-style-type: none"> <li>• <b>Tetanus-Diphtheria Vaccine</b> — all adults, every 10 years</li> <li>• <b>Measles-Mumps-Rubella (MMR) Vaccine</b> — susceptible adults</li> <li>• <b>Varicella or Chickenpox Vaccine</b> — susceptible adults</li> <li>• <b>Meningococcal Vaccine</b> — adults at risk</li> </ul>
<p>† The Advisory Committee on Immunization Practices (ACIP) — made up of 15 independent experts selected by the Secretary of the U.S. Department of Health and Human Services — issues science-based recommendations for routine immunizations in the United States.</p> <p>Detailed recommendations are posted at: <a href="http://www.cdc.gov/nip/recs/adult-schedule.htm">www.cdc.gov/nip/recs/adult-schedule.htm</a></p>



**Table 2. Falling Short**

<i>Low Immunization Rates = More Adults at Risk for Preventable Disease</i>			
Vaccines	Population	Percent Immunized	
		Most Recent Data (year)	2010 Goal*
Influenza Vaccine in Past 12 Months <sup>†</sup>	All Adults Aged 65+	69.5% (2004)	90%
	Hispanic Adults Aged 65+	59.3% (2004)	90%
	Non-Hispanic Black Adults Aged 65+	48.0% (2004)	90%
	High Risk Adult Aged 50-64	36.8% (2003)	60%
	High Risk Adult Aged 18-49	24.2% (2003)	60%
	Household Contacts of High Risk 50-64	38.4% (2003)	*
	Household Contacts of High Risk 18-49	14.9% (2003)	*
	Pregnant Women	12.8% (2003)	*
Pneumococcal Vaccine At Least Once in Lifetime <sup>†</sup>	All Adults Aged 65+	56.0% (2004)	90%
	Hispanic Adults Aged 65+	34.8% (2004)	90%
	Non-Hispanic Black Adults Aged 65+	34.5% (2004)	90%
	High Risk Adults Aged 18-49	12.6% (2003)	60%
	High Risk Adults Aged 50-64	21.0% (2003)	60%
Hepatitis B Vaccine for High-Risk Adults <sup>†</sup>	Long-term Hemodialysis Patients	56% (2002)	90%
	Men Who Have Sex With Men	9% (1999)	60%
	Occupationally Exposed Workers	75% (2002-2003)	98%
	STD Patients	10% (1998-2001)	*
	Injection Drug Users	6% (1998-2001)	*

\* From Healthy People 2010: Objectives for Improving Health ([www.healthypeople.gov](http://www.healthypeople.gov)). Healthy People 2010 does not include goals for every subgroup recommended to receive vaccines.

\*\* Immunization of healthcare workers is important. For example, while influenza vaccine is beneficial to frail elderly in nursing homes, it is only about 30-40% effective in preventing illness. In contrast, the vaccine is 70-90% effective in preventing illness among healthy workers in those same homes. Thus, vaccinating healthcare workers could add substantial benefit to vaccination of nursing home residents by effectively reducing the chances that the healthcare workers get infected and spread the virus to residents.

† Data source: National Health Interview Survey (CDC, NCHS)

‡ Data sources: Annual Survey of Chronic Hemodialysis Centers (CDC, NCID; HCFA), Young Men's Survey (NCHSTP), and periodic vaccine coverage surveys (CDC, NCID)

NOTE: All adults represented in this table are non-institutionalized.

# Call To Action

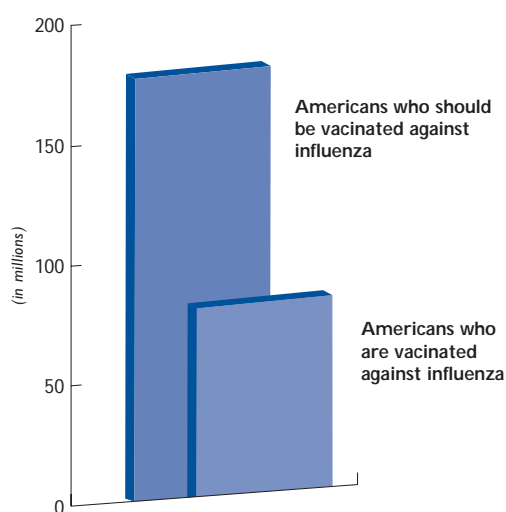
The U.S. experience with influenza vaccine during the 2004-05 season illustrated that a stable and reliable vaccine supply is essential to an effective immunization system.

When a single manufacturer, Chiron Corporation, announced it was unable to deliver 48 million expected doses of vaccine, it precipitated a temporary but acute vaccine shortage in the U.S., prompting considerable public anxiety and diverting health care and public health resources from other efforts.

Media and public attention centered on adults entering special lotteries and waiting hours, even overnight, in long lines outside clinics – sometimes in vain – for a chance to be vaccinated. It alerted the public to vulnerabilities of the U.S. adult immunization “system” that run deeper and wider than the influenza vaccine shortage alone. Improved policies are needed to prevent future vaccine shortages and to close the gaps between America’s immunization goals and its actual performance.

Greater and more stable demand would attract new entrants to the market to develop and produce vaccines. The CDC estimates that approximately 188 million Americans

should be vaccinated annually against influenza. However, even in years when supply is adequate to meet demand, only about 80-85 million people are vaccinated.<sup>9</sup>



## TRANSLATING PROVEN SOLUTIONS INTO POLICY AND PRACTICE

Extensive research has identified interventions and policies that are effective to increase immunization rates. These proven solutions are found in *The Guide to Community Preventive Services*,<sup>†</sup> scientific literature, and reports from sources such as the Institute of Medicine.<sup>10-11</sup>

Partnership performed a comprehensive literature review and conducted 24 structured interviews

<sup>†</sup> *The Guide to Community Preventive Services* provides decision-makers with recommendations on the most effective population-based strategies to promote and safeguard health. The federally sponsored, independent Task Force on Community Preventive Services makes these recommendations based on systematic reviews of the evidence of effectiveness ([www.thecommunityguide.org](http://www.thecommunityguide.org)).



with the nation's leading scholars and immunization experts. From these sources, Partnership developed a list of 25 policy options, the problems they address, and evidence of potential impact. Partnership then convened an Expert Panel, representing state and local public health agencies, medical professionals, manufacturers, employers, health insurers, immunization advocacy groups and academia to refine and narrow this list to those policies that:

- will effectively reduce a substantial burden of disease;
- are affordable;
- are politically feasible; and
- can be implemented immediately.

The six policies selected by the Expert Panel represent the collective thinking and judgment of the nation's leading experts about the most effective and feasible actions that should be taken to protect adults from vaccine-preventable disease.

### KEYSTONES OF CHILDHOOD IMMUNIZATION POLICY VACCINES FOR CHILDREN AND SECTION 317

**The Vaccines for Children Program**— The Omnibus Budget Reconciliation Act (OBRA) created the Vaccines for Children (VFC) program as Section 1928 of the Social Security Act on August 10, 1993. The program was first implemented in 1994 and supplies free vaccines to participating providers for children aged 18 years or younger who are uninsured, on Medicaid, or who are American Indians/Alaska Natives. It also provides free vaccines at federally qualified health centers or rural health centers to children who have health insurance that does not cover immunizations. While the program does not cover the cost of vaccine administration, participating providers can charge no more than a set administration fee that varies from state-to-state. Approximately 50% of children in the U.S. receive VFC-purchased vaccines.<sup>10</sup>

**The Section 317 Grant Program** — Authorized under Section 317 of the Public Health Service Act, it provides annual grants to the states, territories and large urban areas. Separate grants are provided for vaccine purchase for children and adults and for operations and infrastructure. The operations/infrastructure grants support activities to implement evidence-based strategies to attain and maintain high immunization rates. Funding is authorized for activities related to adult immunization, but only about 5-8% of funding goes to adult activities due to the demands of the childhood immunization program. Unlike VFC, Section 317 is a discretionary program subject to the annual appropriations process and has experienced significant fluctuations in its funding levels.

# Call To Action

Although many actions can and should be taken by the private sector to improve immunization rates, this Call to Action focuses on six options that require federal action. The federal government can lead by example, demonstrating to the private sector the importance of adult immunization and its own commitment to improving immunization rates.

## **Covering the Costs of Adult Immunizations**

There is a compelling case for health insurance plans and purchasers of health insurance to play a leadership role in our national immunization system by supporting vaccines with strong evidence of societal benefit. Vaccines not only protect those immunized, but break chains of disease transmission, protecting others who cannot be immunized because of medical contraindications or age. For example, babies less than 6 months of age cannot receive the influenza vaccine but can be protected by immunizing those around them. And preventing cases of pneumococcal disease (a bacterial infection treated with antibiotics) would help slow the development and spread of antibiotic resistant bacteria—a serious and growing threat to all Americans, particularly our most vulnerable.

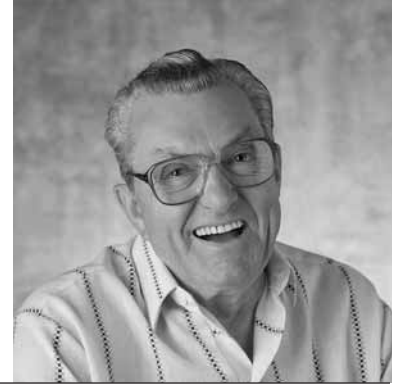
Partnership for Prevention recommends that Congress and the Administration take steps to ensure that recommended immunizations are available and accessible for all U.S. adults by adopting the following two policy recommendations. This is a sound investment that will reduce disease transmission and make the nation stronger.

### **1. Purchase and Distribute Influenza Vaccine for Uninsured Adults.**

Establish a multi-year pilot program in at least 4 states to purchase and distribute influenza vaccine for uninsured adults aged 19 to 64 who meet the criteria identified by the Advisory Committee on Immunization Practices.

CDC should fund state purchases of vaccines. Each state may determine the best approach for identifying and enrolling health care providers serving uninsured adults. The administrative fee for vaccinating eligible adults should be included in the pilot program.

CDC should assist states in identifying intervention and comparison sites and baseline estimates of influenza vaccination rates among the uninsured prior to implementation. CDC must submit reports to appropriate congressional committees on implementation and impact



of the pilot annually, including influenza vaccination rates by race/ethnicity, provider participation, and feasibility issues.

### Rationale

Rigorous studies have shown that removing financial barriers increases vaccination rates among adults.<sup>12</sup> Currently, there is no public safety net program to ensure that adults who lack insurance coverage can access vaccines.

A four-year Medicare demonstration (1988-1992), for example, showed that providing influenza vaccine to health care providers increased the number of adult patients who received an annual influenza vaccination. (At the time of the demonstration, the Medicare population was uninsured for the influenza vaccine. Thirty percent more adults received an influenza vaccination in the intervention sites than in the study's comparison sites).<sup>13</sup>

We propose a pilot program limited to influenza vaccine to 1) demonstrate that this approach will increase the number of adults vaccinated, reduce disease transmission, and reduce costs associated with influenza illnesses; and 2) identify important implementation issues prior to a nationwide rollout.

This policy will also foster valuable partnerships between private health care providers who care for adults and state/local public health agencies which will pay for the vaccines and monitor their use. Public health agencies will gain entrée to additional medical practices to provide technical assistance on methods to improve adult immunization rates and to build a stronger adult vaccine delivery system.<sup>14-17</sup>

Finally, increased purchase of influenza vaccine will help increase and stabilize demand, thereby providing an incentive for influenza vaccine manufacturers to enter and remain in the U.S. market, a vital safeguard against shortages.

*COST:* Partnership for Prevention estimates that a 4-state pilot program would cost approximately \$6.7 million in the first year, \$8.7 million in the second year, and \$10.6 million in the third year. See the appendix for details of this cost analysis.

## 2. Ensure First-Dollar Coverage for the Influenza and Pneumococcal Vaccines in the Federal Employee Health Benefit Program.

Require the Federal Employee Health Benefit Program (FEHBP) to stipulate that participating health insurance plans provide first dollar coverage of influenza and pneumo-

# Call To Action

coccal vaccines for adults who meet the criteria identified by the Advisory Committee on Immunization Practices.

## Rationale

U.S. government policies on vaccines should be consistent. The federal government promotes adherence to the adult immunization schedule yet does not ensure complete insurance coverage for its own employees and program beneficiaries. A Partnership for Prevention

analysis of coverage for the influenza and pneumococcal vaccines among plans participating in the 2005 FEHBP shows that while coverage is generally very good, it is not complete and there is substantial variation across plans. (For more detailed findings, see the textbox.)

A policy for first dollar coverage of influenza and pneumococcal vaccines for FEHBP enrollees will close gaps in coverage and, perhaps more importantly, send a strong signal to the private sector that

## OVERVIEW OF COVERAGE FOR THE INFLUENZA AND PNEUMOCOCCAL VACCINES IN THE FEDERAL EMPLOYEE HEALTH BENEFIT PROGRAM (FEHBP)

Both influenza and pneumococcal vaccinations are offered as covered benefits by each of the more than 40 insurers that participate in the 2005 FEHBP in the ten jurisdictions with the highest numbers of federal civilian employees—CA, DC, TX, VA, NY, MD, FL, PA, IL, and GA (in descending order). However, this coverage is sometimes subject to co-pays and deductibles, depending on the insurance product (i.e., HMO, point-of-service plan, or high-deductible) and option (i.e., standard versus high). For example, while the vast majority of plans offer an annual influenza vaccination, most charge a co-pay. And while all products offer pneumococcal vaccination to enrollees aged 65+, few plans include coverage for high-risk individuals under age 65. (About 23 million persons in the U.S. are under age 65 and at high-risk for pneumococcal disease.)

Three high-deductible health plans that we examined in greater depth (provided by Aetna, Coventry, and HealthAmerica) provide first dollar coverage or simply co-pays for preventive services even if the high deductible has not been met. (Under IRS rules, high-deductible health plans are allowed, but not required, to offer coverage for certain preventive services, including immunizations, before the high deductible is met.)

The ten insurance markets included in this review include approximately 1.3 million of the 2.7 million federal civilians employed nationwide. State-based tables detailing influenza and pneumococcal vaccine coverage, as cited in each insurer's benefit overview catalogue, are posted at [www.prevent.org](http://www.prevent.org).



Even those who have insurance coverage for immunizations do not always get vaccinated. Only 48% of adults aged 50-64 in health insurance plans with coverage for the influenza shot received vaccinations in 2003.<sup>21</sup>

these two vaccines offer significant societal benefits and should be promoted via various mechanisms, beginning with the elimination of out-of-pocket costs. Federal leadership will likely produce spillover effects to employer-sponsored health insurance plans in the private sector and at the state and local levels. Because the two vaccines are highly cost-effective, even cost-saving, they will provide greater gains in health for every dollar invested than do the vast majority of diagnostic and treatment services that FEHBP plans already cover.

Other federally-funded health insurance programs do not provide complete coverage for cost-effective adult immunizations. An important next step is to remedy these gaps. *Medicare* has the right policy for the influenza and pneumococcal vaccines: it offers complete coverage with no copays or deductibles.<sup>†</sup> *Medicaid* contains no mandatory policies for vaccine coverage with respect to adults. A recent state-by-state analysis<sup>18</sup> revealed significant variation in coverage for influenza, pneumococcal, and other adult immunizations (2 states provide no coverage at

all), including variation in the extent to which states pay the administration fee for vaccines (with many only reimbursing providers for the cost of the vaccine).<sup>‡</sup> The *Veterans Administration* does not charge copays to enrollees for influenza and pneumococcal immunizations.<sup>19</sup> The *Tricare Military Health System* managed care option covers influenza vaccines at no cost for those at high risk.<sup>20</sup> Partnership has limited access to Tricare coverage policies for other vaccines.

### Strengthening our Public-Private Immunization System

A public-private sector partnership is needed to replicate among adults the improvements that have been made in childhood immunization rates. This partnership can 1) help providers institutionalize the delivery of adult immunizations; 2) raise awareness among the public that adult immunizations are an important part of staying healthy; and 3) document adult vaccination rates to assess need and effectively target resources.

<sup>†</sup> Medicare also covers the hepatitis B vaccine, but it is subject to the Part B deductible and 20% co-pay. Congressional action would be needed to expand Medicare coverage to any additional vaccines as the program does not have statutory authority to add or change immunization coverage.

<sup>‡</sup> Recognizing the importance of the administration fee to provider participation in adult immunization efforts, Medicare recently raised its reimbursement for administration of influenza and pneumococcal vaccines to \$18 per vaccine.

# Call To Action

## 3. Expand Section 317 of the Public Health Service Act to Address Adult Immunization Needs.

Earmark additional funding in the Section 317 program specifically for adult immunization activities. See textbox on page 11 for a description of the Section 317 program.

### Rationale

State and local public health agencies have significant responsibilities within our national immunization system to ensure access to immunization services, educate the public about immunizations, and monitor disease outbreaks and vaccination levels. Currently, only about 5% of Section 317 funding is dedicated to adult immunization activities which translated to approximately \$10 million for the states and territories in FY04.<sup>†</sup>

Increased funding to Section 317 for adults would support:

**Assistance for providers to implement practice improvements that work.**<sup>12</sup> Healthcare providers, including physicians in private practice, hospitals, etc., must be prepared to deliver vaccines at every opportunity, and they must convince patients to get immunized. As has been done successfully with child-

hood immunizations, public health agencies can work with providers to enhance performance by assisting them in implementing evidence-based methods, such as:

- Systems that inform providers when individual clients are due or overdue for vaccines (flagging charts, reminders by computer);
- Patient reminder systems (telephone calls, letters, or post-cards);
- Performance evaluation (giving information to providers about their own “track record” in delivering immunizations);
- Implementing standing orders, which allow non-physician medical personnel to deliver vaccines without direct physician involvement.

**Consumer education** to increase knowledge about recommended adult immunizations and to correct misperceptions about the efficacy and safety of vaccines.

**Improved surveillance** to document the burden of vaccine-preventable diseases and immunization rates, including disparities by race/ethnicity and geographic location.

**Misinformation:**  
In a February 2004 survey, 33% of adults said they believed the influenza vaccine caused influenza.<sup>22</sup>

<sup>†</sup> CDC, unpublished data. The \$10 million includes approximately \$1 million for the READII initiative, which will be discontinued after FY05. See [www.cdc.gov/nip/specint/readii](http://www.cdc.gov/nip/specint/readii)



**Vaccine Purchase** for the vaccination needs of uninsured at-risk populations (an option under Section 317).

*COST:* The Association of State and Territorial Health Officials has recommended that \$83 million be added to the Section 317 budget in FY 2005 to support adult immunization operations/infrastructure and vaccine purchase at the state level.

Leadership from the national level is also needed to reinforce education and surveillance efforts at the state and local levels. A national effort, led by federal public health agencies, should also include the following policy:

#### **4. A National Campaign to Educate Americans about the Value of Adult Immunizations.**

Earmark additional funding for DHHS to conduct an educational campaign on the importance of adult immunizations. Educational efforts should target the general public and specific target populations with particularly low immunization rates, as well as providers, insurers, and employers.

The aim is to increase demand, address misconceptions and unjustified concerns about vaccine safety, promote insurance coverage for adult immunizations, and promote use of evidence-based approaches

that improve vaccination rates. Media outreach should be one component of an array of innovative educational methods. Assessments of program impact should include surveys of changes in the knowledge, attitudes, and practices of consumers and healthcare providers.

*COST:* Partnership for Prevention estimates that an effective campaign would require approximately \$2-3 million per year over a 5-year period. CDC's campaign to prevent antimicrobial resistance in health-care settings has involved similar costs and has been successful.

#### **Measuring Performance and Rewarding Quality**

High coverage rates for preventive services such as adult immunizations are the hallmark of quality healthcare. The good news is that we have more opportunities than ever before to create a high-quality healthcare system.

#### **5. Expand and Assess CMS Quality Initiatives.**

Direct the Centers for Medicare & Medicaid Services (CMS) to expand its quality initiatives and consistently measure adult vaccination rates among patients and health care workers. Earmark additional funding for the Agency for

*Partnership for Prevention envisions a new culture in adult medicine in which it is unacceptable not to check the immunization status of adults.*

# Call To Action

Healthcare Research and Quality (AHRQ) to assess CMS efforts and those of private health care organizations (e.g., health plans, hospitals, and nursing homes) to identify the most effective approaches to reward quality.

## Rationale

Measuring how well providers deliver immunizations increases vaccination rates.<sup>12</sup> Measurement and feedback help doctors (or organizations such as hospitals or health plans) improve performance and distinguish themselves in certain areas. Providing this information to the public helps consumers make better choices about which doctors, hospitals, or other type of facility they want to use.

Rewarding quality (in other words, paying those who do a good job more than those who do not) takes measuring performance a step further. It results in financial incentives, rather than disincentives, to keep people healthy.

CMS has taken a leadership role in measuring performance and exploring quality initiatives, and we applaud its efforts. (See the textbox for a description of current CMS activities.) The Agency for Healthcare Research and Quality has the mandate and expertise to help CMS and the private sector expand these exciting programs, which will result in a healthcare system that pays for better care, not just more care.

*COST:* Partnership recommends earmarking \$1 million for AHRQ to assess 'rewarding quality' approaches and to identify best practices.

## 6. Make Vaccination of Healthcare Workers a Quality Indicator.

Direct CMS, as part of its Quality Initiative, to reach agreement with the Joint Commission on Accreditation of Healthcare Organizations (JCAHO) to include immunization of healthcare workers as one of the standards that must be met for accreditation of hospitals, nursing homes, home health agencies, and other regulated facilities.

Facilities should be required to document that the vaccines were offered and either administered or not administered with informed patient refusal.

## Rationale

Existing performance measurement systems (such as the accreditation system operated by JCAHO) are excellent mechanisms to ensure that healthcare workers are immunized against infectious diseases that can spread to vulnerable patients. Only 40% of healthcare workers were immunized against influenza in 2003 (see Table 2), leaving non-immunized patients at risk for infection, particularly the elderly and newborns.



## POSITIVE STEPS AT CMS MEASURING PERFORMANCE AND REWARDING QUALITY

The Centers for Medicare & Medicaid Services has launched a **Hospital Quality Initiative** to collect data on services provided by individual hospitals. Data for individual hospitals are reported on the Internet ([www.cms.gov/quality/hospital](http://www.cms.gov/quality/hospital)). Among the performance measures is delivery of **pneumococcal immunization** for patients hospitalized with pneumonia (who need the vaccine to protect them against future bouts of illness). Hospitals must report their rates to receive cost-of-living increases in Medicare payments (98% of hospitals complied in 2004).

CMS also works with the **Joint Commission on Accreditation of Healthcare Organizations (JCAHO)**, the predominant accrediting body for hospitals, nursing homes and other facilities, to develop definitions of health care quality that hospitals can use for both the aforementioned initiative and JCAHO accreditation.

CMS's **Doctors' Office Quality Project**, designed to measure the quality of care delivered in doctors' offices, includes proposed measures for influenza and pneumococcal immunization. This project is currently a demonstration in 3 states.

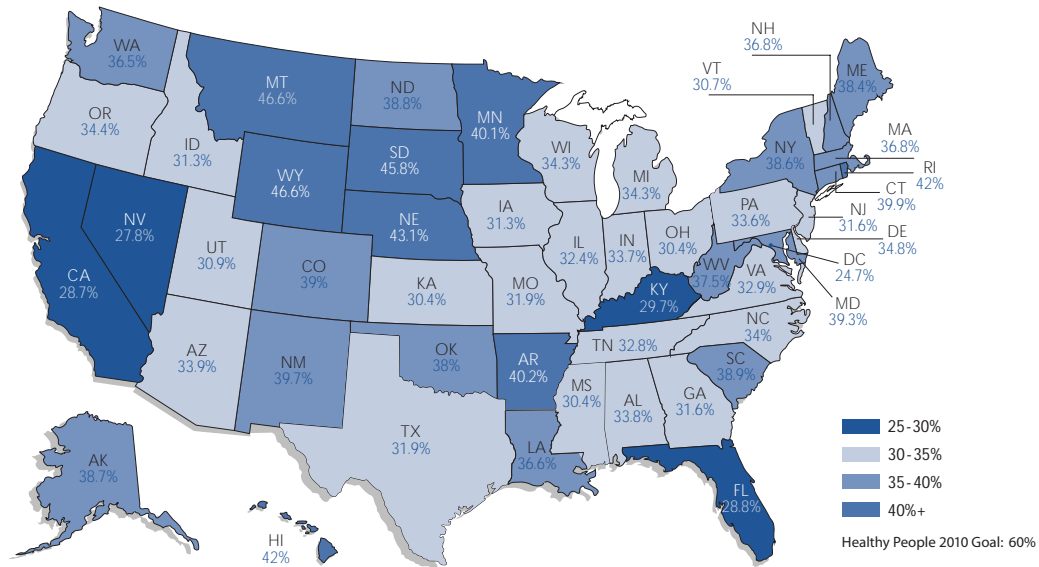
CMS also collaborates with the **National Committee for Quality Assurance (NCQA)** to measure the performance of its Medicare Advantage health plans using the NCQA performance measurement set (HEDIS®). Among the measures is delivery of influenza vaccine to Medicare beneficiaries aged 65+.

CMS is currently considering new ways to reward quality, based on data from these initiatives. At least one demonstration is underway and others are expected.

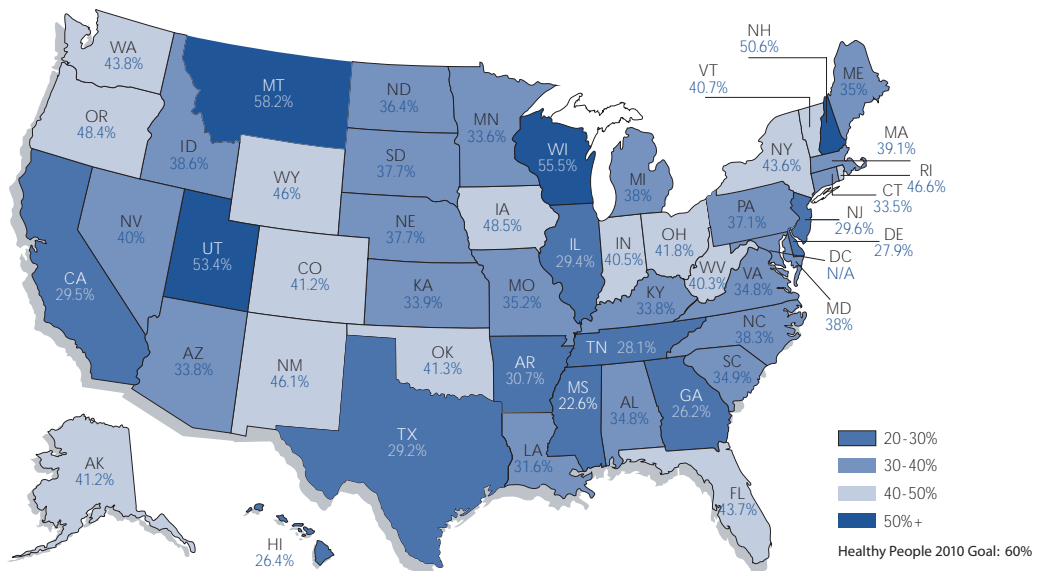
# Call To Action

## APPENDIX A

### Influenza Vaccination Among Adults Aged 18-64 with Asthma



### Pneumococcal Vaccination Among Adults Aged 18-64 with Diabetes



SOURCE: Behavioral Risk Factor Surveillance System, United States, 2003



## APPENDIX B

### Estimating the Cost of a 4-State Pilot Program to Purchase and Distribute Influenza Vaccine for Uninsured Adults

We picked four potential states for the pilot based on geographic location and diversity of population by race and urban/rural residency. See Table 1 for estimates of the number of uninsured in each state who should receive the influenza vaccine based on ACIP recommendations. The total number of people ages 19-64 in each state and the number of uninsured in each state (Columns A and C) are based on March 2003 and 2004 Current Population Surveys as reported by the Kaiser Family Foundation, State Health Facts ([www.state-healthfacts.kff.org](http://www.state-healthfacts.kff.org)).

The estimate of people requiring the flu vaccine (Column B) is based on state-by-state and county-level analyses of vaccine needs conducted by the CDC based on 2002 resident population data. These data include household contacts of infants < 6 months of age, healthcare workers < 65 years, people ages 2-64 years with illnesses that put them at risk for influenza, and pregnant women. This estimate includes children ages 2-18 years with illnesses that put them at risk for influenza; this group would not be included under the pilot because they are covered under the VFC program.

We assumed that 15% of this population would be vaccinated under the pilot in the first year, 20% in the second year, and 25% in the third year. A portion of the uninsured population in each state would not be eligible for the vaccine because they would reside in comparison sites. The most recent experience with such a program was in a four-year Medicare demonstration (1988-1992) where 30% more adults 65+ uninsured for the influenza vaccine received the vaccine in the study's intervention sites compared to the study's control sites.<sup>11</sup>

Finally, we assumed the private sector cost-per-dose price of \$8.50 as of February 2005. We also assumed a vaccine administration fee of \$18 for a total price per person vaccinated of \$26.50.

We also assumed that administrative costs would be necessary in each state to set-up and monitor the pilot, recruit and educate providers, and educate the uninsured about the availability of the vaccine.

# Call To Action

## APPENDIX B (CONTINUED)

Table 1

	A	B	C	D	E
States	All people ages 19-64 (2003)	CDC estimate of people ages 19-64 needing flu vaccine	People uninsured ages 19-64 (2003)	% of people ages 19-64 needing flu vaccine (B/A)	Estimate of uninsured ages 19-64 needing flu vaccine (CxD)
Arizona	3,201,270	1,074,001	690,770	34%	234,862
Michigan	6,101,210	1,959,842	930,660	32%	297,811
New York	11,768,090	3,741,219	2,429,450	32%	777,424
Tennessee	3,664,740	1,147,055	556,040	31%	172,372
Total					1,482,469

Table 2

	Estimate of uninsured needing flu vaccine	Portion receiving flu vaccine under pilot program	Cost of flu vaccine+ administration	Total cost of vaccine	Admin cost of program*	Total cost of program
Yr 1	1,482,469	15%	\$26.50	\$5,892,814	\$800,000	\$6,692,814
Yr 2	1,482,469	20%	\$26.50	\$7,857,086	\$800,000	\$8,657,086
Yr 3	1,482,469	25%	\$26.50	\$9,821,357	\$800,000	\$10,621,357

\* **Administration Costs** = \$200,000 per state per year = \$800,000 additional costs per year



## ENDNOTES

1. Thompson WW, Shay DK, Weintraub E, Brammer L, Bridges CB, Cox NJ, Fukuda K. Influenza-associated hospitalizations in the United States. *JAMA* 2004; 292:1333-1340.
2. Meltzer MI, Cox NJ, Fukuda K: The economic impact of pandemic influenza in the United States: priorities for intervention. *Emerg Infect Dis* 1999;5:659-71.
3. Centers for Disease Control and Prevention. Active Bacterial Core Surveillance (ABCs) Report. *Streptococcus pneumoniae*, 2003-preliminary.
4. Centers for Disease Control and Prevention. Achievements in public health: hepatitis B vaccination- United States, 1982-2002. *MMWR* 2002; 51(25): 549-552.
5. Sisk JE, Moskowitz AJ, Whang W, Lin JD, Fedson DS, McBean AM, Plouffe JF, Cetron MS, Butler JC. Cost-effectiveness of vaccination against pneumococcal bacteremia among elderly people. *JAMA* 1997; 29;278(16):1333-9.
6. Nichol KL, Margolis KL, Wuorenma J, Von Sternberg T: The efficacy and cost effectiveness of vaccination against influenza among elderly persons living in the community. *N Engl J Med* 1994;331:778-84.
7. Nichol KL. Cost-benefit analysis of a strategy to vaccinate healthy working adults against influenza. *Arch Intern Med*. 2001 Mar 12;161(5):749-59.
8. Centers for Disease Control and Prevention. Unpublished data.
9. Orenstein, WA. Averting Future Influenza Vaccine Shortages. Hearing on US Influenza Vaccine Supply – February 10, 2005, U.S. House of Representatives, Committee on Government Reform.
10. IOM Committee on the Evaluation of Vaccine Purchase Financing in the United States. *Financing Vaccines in the 21st Century. Assuring Access and Availability*. Washington, D.C.: The National Academies Press, 2004.
11. IOM Committee on Immunization Finance Policies and Practices. *Calling the Shots: Immunization Finance Policies and Practices*. Washington, D.C.: The National Academies Press, 2000.
12. Task Force on Community Preventive Services. Recommendations regarding interventions to improve vaccine coverage in children, adolescents and adults. *Am J Prev Med* 2000;18(1S):92-6.
13. Centers for Disease Control and Prevention. Perspectives in Disease Prevention and Health Promotion Final Results: Medicare Influenza Vaccine Demonstration—Selected Sites, 1988-1992. *MMWR* 1993;42(31):601-04.
14. Fairbrother G, Friedman S, Hanson KL, Butts GC. Effect of the Vaccine for Children program on inner-city neighborhood physicians. *Arch Pediatr Adolesc Med* 1997;151:1229-35.
15. Szilagyi PG, Humiston SG, Pollard Shone L, Kolasa MS, Rodewald LE. Decline in physician referrals to health department clinics for immunizations: the role of vaccine financing. *Am J Prev Med* 2000;18:318-24.
16. Zimmerman RK, Mieczkowski TA, Mainzer HM, et al. Effect of the Vaccines for Children program on physician referral of children to public vaccine clinics: a pre-post comparison. *Pediatrics* 2001;108:297-304.
17. Zimmerman RK, Nowalk MP, Mieczkowski TA, Mainzer HM, Jewell IK, Raymond M. The Vaccines for Children program: policies, satisfaction, and vaccine delivery. *Am J Prev Med* 2001;21:243-9.
18. Rosenbaum S, et al. The Epidemiology of U.S. Immunization Law: Medicaid Coverage of Immunizations for Non-Institutionalized Adults. Washington, D.C.: The George Washington University Center for Health Services Research and Policy, November 2003.
19. Personal communication with Dr. Jonathan Perlin, Deputy Under Secretary for Health, Department of Veterans Affairs.
20. [www.tricare.osd.mil](http://www.tricare.osd.mil)
21. National Committee for Quality Assurance. State of Healthcare Quality 2004. Washington D.C. Available at [www.ncqa.org](http://www.ncqa.org).
22. Centers for Disease Control and Prevention. Experiences with influenza-like illness and attitudes regarding influenza prevention—United States, 2003-04 influenza season. *MMWR* 2004; 53(49):1156-1158.



© Partnership for Prevention  
1015 18th Street, NW, Suite 200  
Washington, DC 20036  
(202) 833-0009

[www.prevent.org](http://www.prevent.org)

©2005