

## INFLUENZA IMMUNIZATION

## WHAT IS THE PUBLIC HEALTH ISSUE?

About 36,000 deaths and 114,000 hospitalizations per year in the United States are the result of influenza infections. These infections occur in all age groups, but deaths occur most frequently among persons aged 65 years or older. In 2003, an unusually early onset of severe influenza outbreaks resulted in strong consumer demand for influenza vaccine. This demand exceeded that seen in previous flu seasons. In prior years, the supply of influenza vaccine was generally sufficient to meet demands. However, demand in 2003 remained high well into December, when flu vaccination clinics are typically winding down.

Production of influenza vaccines is a complex process that requires many steps, including selection of suitable vaccine viruses, reproduction of these viruses in eggs, and testing to ensure the safety and purity of the vaccine. Recommendations for strains to be included in U.S. vaccines are based on year-round surveillance. Typically, these recommendations are released in February for vaccines that will be used in the following season.

## WHAT HAS CDC ACCOMPLISHED?

During the 2003 influenza season, contracts were developed to deliver additional vaccine to state and local health departments to alleviate spot shortages reported. Work with the vaccine manufacturers, distributors, healthcare providers, and state and local public health departments was performed to redistribute vaccine wherever possible. Communication was extensively initiated throughout the year to advise partners and others about developments related to the production, distribution, and administration of influenza vaccine; provider and patient educational materials to encourage timely vaccination of high-risk groups were revised; and CDC participated in media events to highlight the benefits of influenza vaccination. These communications relied upon strengthened influenza disease surveillance, resulting in the systematic dissemination of information to characterize the degree and extent of influenza disease.

Ongoing influenza programs continued to work on making influenza vaccinations more broadly available. During 2003, CDC updated immunization recommendations and developed education materials for the new nasal-spray, FluMist<sup>TM</sup>, Live Attenuated Influenza Vaccine, licensed in 2003. Also, CDC and the Centers for Medicare and Medicaid Services completed a 3-year program to promote and evaluate the use of standing orders of vaccines in nursing homes. Initial data showed that standing orders are both more effective and more cost-effective than other available methods for immunizing nursing home residents against influenza and pneumococcal diseases.

## WHAT ARE THE NEXT STEPS?

CDC will continue to work with other federal agencies, state and local health departments, and private and community partners to facilitate communication and collaboration about influenza vaccine supply and distribution; develop strategies to improve annual immunization coverage among high-risk populations; and encourage providers to extend vaccination efforts into December and beyond where needed. Improving physician and institutional practices will lead to increased vaccination coverage among adolescents and adults. Efforts are also underway to address the unique supply issues associated with a seasonal vaccine that changes annually. CDC will continue to plan, prepare, and exercise responses to the eventual occurrence of an influenza pandemic.

For additional information on this or other CDC programs, visit www.cdc.gov/program

January 2004