

# Flu Vaccination Rates Were Stagnant for Infants

BY LORINDA BULLOCK

FROM MORBIDITY AND MORTALITY  
WEEKLY REPORT

Older children are getting seasonal influenza vaccinations in greater numbers compared with the previous flu season – mostly due to H1N1 concerns – but vaccination coverage rates for the youngest, most vulnerable age group – infants – have remained the same, according to a report by the Centers for Disease Control and Prevention.

According to the CDC's Morbidity and Mortality Weekly Report, seasonal flu vaccination rates among children across all age groups (6 months to 18 years) improved overall in 2009-2010.

The average vaccination coverage with one or more seasonal influenza doses increased to 26.3%, compared with 20.8% of all children for the 2008-2009 season. The researchers also determined that full vaccination coverage was low during the 2009-2010 season, ranging from 34.7% among children aged 6-23 months to 15.3% among children aged 13-18 years (MMWR 2010;59:1266-9).

These data are also helping the agency find out if efforts by the CDC Advisory Committee on Immunization Practices (ACIP) to expand its seasonal influenza vaccination recommendations to include all children aged 5-18 years no later than the 2009-2010 season were fruitful.

The researchers used state data from the National

H1N1 Flu Survey and the Behavioral Risk Factor Surveillance System (BRFSS) and from eight sentinel geographic regions (subsets of Arizona, Colorado, Michigan, Minnesota, Oregon, and Wisconsin; the entire state of North Dakota; and all of New York City). Vaccination with the influenza A(H1N1) 2009 monovalent vaccine was not included in this report, the researchers wrote.

Children aged 5-12 years showed the largest increase in vaccination coverage – from 19.0% to 27.1% over the last two flu seasons – while coverage among children 6-23 months only increased from 55.2% in the 2008-2009 season to 55.7% in 2009-2010.

Seasonal flu vaccination coverage among children aged 2-4 years and 13-18 years increased at similar rates: 38.4% (from 33.0% in 2008-2009) and 15.3% (from 10.9%), respectively.

“The increase in coverage from the 2008-09 season to

the 2009-10 season among older children and adolescents could reflect the usually observed increase in vaccination coverage with newly recommended vaccines, increased awareness of influenza vaccination because of the 2009 H1N1 pandemic, or other reasons,” the report said.

“These findings highlight the need to identify varied strategies and venues for delivering influenza vaccine to different age groups of children to increase vaccination coverage,” the researchers added.

The CDC recommended new strategies and contin-



Seasonal influenza vaccination rates among children aged 6 months to 18 years improved overall in 2009-2010.

## VITALS

**Major Finding:** Children aged 5-12 years showed the largest increase in vaccination coverage – from 19.0% to 27.1% over the last two flu seasons – while coverage among children aged 6-23 months hardly changed, from 55.2% in the 2008-2009 season to 55.7% in the 2009-2010 season.

**Data Source:** State data from the National H1N1 Flu Survey and the Behavioral Risk Factor Surveillance System (BRFSS) and from eight sentinel geographic regions.

**Disclosures:** None was reported.

## CDC: With Pertussis Spike, Adult Tdap Vaccination Rates Must Rise

BY JANUARY W. PAYNE

FROM MORBIDITY AND MORTALITY  
WEEKLY REPORT

Despite 2005 recommendations that people aged 10-64 years receive the tetanus, diphtheria, and acellular pertussis (Tdap) vaccine every 10 years, vaccination rates remain suboptimal, according to a report from the Centers for Disease Control and Prevention.

In 2008, just 5.9% of adults aged 18-64 years were estimated to have received the Tdap vaccine. Tdap vaccination rates were higher for health care personnel – 15.9% – than for adults who have contact with infants – 5.0%.

And for adults in this age range for whom Tdap vaccination history could be determined, 36.5% were overdue for a tetanus booster shot, which the Tdap vaccine would now replace.

The findings are especially alarming given the recent spike in the number of pertussis cases across the United States, and they underscore the need for more aggressive vaccination efforts, according to researchers from the CDC.

The analysis of data from the National Health Interview Survey showed that about 62% of adults aged 18-64 years reported having been vaccinated against tetanus in the previous 10 years in 2008, and 60% reported having updated vaccinations in 1999 (MMWR 2010;59:1302-6).

The Advisory Committee on Immunization Practices that made the 2005 Tdap recommendations suggested that the vaccine may be used to provide protection against infection with pertussis.

It is particularly important for health care personnel and adults who have contact with infants to be vaccinated against pertussis, because they are at higher risk for transmitting the illness to susceptible groups.

While tetanus infections are rare in the United States, pertussis is considered a common illness, according to the CDC. In 2008, 13,278 cases of pertussis were reported in the United States, although that is likely to be an underestimate given that the illness typically has nonspecific symptoms and often isn't properly diagnosed. Infants less than age 6 months who are too young to have completed pertussis vaccinations themselves are at risk of contracting the infection from their adult caretakers.

To improve Tdap vaccination rates, the CDC advises health care providers to recommend the Tdap vaccination to adults aged 18-64 years whose last tetanus shot was more than 10 years ago. However, for health care providers and for adults who have contact with infants younger than age 1 year, the interval between the last tetanus shot and a new Tdap vaccine can be as little as 2 years. ■

## FDA Approves Chemical-Poisoning Antidote for Kids

BY ELIZABETH  
MEHCATIE

A drug that has been used to treat nerve gas and other types of pesticide and chemical poisoning in children off label for years is now approved for pediatric use, the Food and Drug Administration announced.

The drug, pralidoxime chloride, available as Protopam Chloride in the United States, was approved in 1964, as a treatment for poisoning caused by organophosphate pesticides and chemicals, such as nerve agents, in adults.

It is now available in an intramuscular formulation in addition to the previously available intravenous formulation. Protopam Chloride, manufactured by Baxter Healthcare Corp., works by acting as an antidote “by slowing the attachment of the chemical to nerve endings,” according to the FDA statement announcing the approval.

Because the drug is now approved for pediatric use, the label will include dosing information in children, which will provide health care professionals with information

on “how to use this drug safely and effectively,” Dr. Russell Katz, director of the division of neurology products in the FDA's Center for Drug Evaluation and Research, said.

Using intravenous drugs in children, especially in emergency situations, can be difficult, so “having the new option of intramuscular injection might help health care professionals use this medicine quickly and accurately,” Dr. Dianne Murphy, director of the FDA's Office of Pediatric Therapeutics, pointed out in the statement.

Blurred vision, double vision, dizziness, headache, drowsiness, nausea, difficulty breathing, increased heart rate, and increased blood pressure are among the adverse reactions associated with the drug in adults and children, according to the FDA.

Symptoms associated with poisoning with organophosphate pesticides or chemicals can range from mild symptoms, such as a runny nose or vomiting, to serious symptoms that include difficulty breathing, weakness, and convulsions, according to the FDA statement. ■