University of Michigan
C.S. Mott Children's Hospital

C.S. Mott Children's Hospital
National Poll on Children's Health

A publication from C.S. Mott Children's Hospital, the University of Michigan Department of Pediatrics and Communicable Diseases and the University of Michigan Child Health Evaluation and Research (CHEAR) Unit

Vol. 2, Issue 1
Oct. 1, 2007

Flu Vaccination Among Children May Reach All-Time High This Year

The flu affects people of all ages, but is most likely to cause severe illness in young children, the elderly, and adults with chronic conditions (e.g., asthma, diabetes, heart disease). Children younger than 5 years old are twice as likely to be hospitalized for the flu as older children.

For many years the Centers for Disease Control and Prevention (CDC) have recommended that elderly persons and persons with chronic diseases receive annual flu vaccination. In 2004, the CDC formally recommended that all children 6-23 months old receive flu vaccine. For the 2007-08 flu season, the CDC extended the childhood recommendation up to age 5 years.

More parents plan to have children receive flu vaccine

In August 2007, the C.S. Mott Children's Hospital National Poll on Children's Health asked adults about their flu vaccination plans for themselves and their children. As part of the poll, parents were informed either that the CDC now recommends flu vaccine for all children from 6 months up to 5 years old, or that children younger than 5 years old are twice as likely to need to be hospitalized for the flu as older children.

Results indicate that 65% of parents plan to have their children up to 5 years old receive the flu vaccine in 2007-08. This level of planned vaccination represents a significant increase from the proportion of parents who reported that their young children received the flu vaccine in 2006-07 (Table 1). There were no differences in planned flu vaccination by whether parents received information about the CDC recommendation or the higher hospitalization risks for younger children.

Planned vaccination for 2007-08 was more common for children 0-5 years with chronic conditions versus children without (Table 1).

Table 1. Reported Flu Vaccination for 2006-07 and Planned Vaccination for 2007-08, for Children

	Received flu vaccine in 2006-07	Plan to receive flu vaccine in 2007-08
Children 0-5 years of age		
overall	**47%**	**65%**
without chronic conditions	**46%**	**64%**
with chronic conditions*	**57%**	**73%**

**Includes only flu-relevant chronic conditions*

Source: C.S. Mott Children's Hospital National Poll on Children's Health, August 2007

Report Highlights

- ***65% of parents plan to have their children up to 5 years old receive flu vaccine in 2007-08.***
- ***Of parents whose children did not receive the flu vaccine in 2006-07, 32% plan to vaccinate their children up to 5 years old in 2007-08.***
- ***The leading reason parents do not plan to vaccinate their children against flu is that they believe their children are healthy and don't need flu vaccine.***
- ***Based on intended flu vaccination, the expected supply of flu vaccine will likely meet anticipated demand during the 2007-08 flu season.***

Almost all parents (95%) who plan to get the flu vaccine themselves also plan to have their children vaccinated. Among parents who do not plan on receiving the flu vaccine themselves, only 45% plan to have their children vaccinated.

Why not receive the flu vaccine?

The most common reasons cited by parents who do not plan to vaccinate their children up to 5 years old against flu were:

- *My children are healthy and don't need the flu vaccine, 39%*
- *Flu vaccine does not protect my children against the flu, 28%*
- *If my children get the flu, I can get medicines to treat it, 27%*
- *I think my children can get the flu from the flu shot, 17%*

Adult flu vaccination rates likely to rise in 2007-08

Annual flu vaccination is recommended for all elderly persons aged 50 years and older, and for all adults with chronic conditions.

About one-half of all adults with chronic conditions plan to receive the flu vaccine in 2007-08 (Table 2). Planned vaccination levels among adults ≥ 65 years old are substantially higher. The largest jump from prior reported vaccination levels is among adults aged 18-49 years with chronic conditions. However, expected vaccination levels for 2007-08 remain below target levels set by the federal government.

Table 2. Reported Flu Vaccination for 2006-07 and Planned Vaccination for 2007-08, for Adults

	Received flu vaccine in 2006-07	Plan to receive flu vaccine in 2007-08
Adults		
≥ 65 years of age		
overall	**79%**	**85%**
50-64 years of age		
without chronic conditions	**37%**	**41%**
with chronic conditions	**45%**	**54%**
18-49 years of age		
with chronic conditions	**42%**	**52%**

Source: C.S. Mott Children's Hospital National Poll on Children's Health, August 2007

Projected supply and demand

In recent years, flu vaccine supply shortages and delays have been common. As of September 2007, the CDC does not expect any such problems for the 2007-08 season. Based on the vaccination plans of respondents to the C.S. Mott Children's Hospital National Poll on Children's Health, we estimate national demand for flu vaccination at about 116 million doses. At this level of demand, the supply of flu vaccine projected by the CDC for 2007-08 will be sufficient (Table 3).

Table 3. Estimated Demand for Flu Vaccine, 2007-08

	Estimated number of doses
Children	**16 million**
Adults	**100 million**
Estimated demand	**116 million***
Projected supply**	**127-132 million**

**Note:This estimate does not include demand for doses among children aged 6-17 years.*

** *CDC: 2007 National Influenza Vaccine Summit*

Source: C.S. Mott Children's Hospital National Poll on Children's Health, August 2007

Implications

Expected patterns of flu vaccination for 2007-08 indicate a rapid adoption of new recommendations for children up to 5 years of age. Of note, all parents in the poll received messages emphasizing the importance of flu vaccination for young children, and planned vaccination levels for 2007-08 reflect their responses to these prompts. Not all young children will have a health care visit during the flu season, during which health care providers can inform parents about the risks of flu and new flu vaccine recommendations. Therefore, to achieve vaccination levels during the 2007-08 season projected from this poll, other mechanisms will likely be needed to promote flu vaccination for children.

Projected flu vaccination levels for the elderly and for non-elderly adults with chronic conditions remain below national target levels. Because flu vaccination among adults appears strongly tied to planned vaccination for young children, it may be possible to boost adult vaccination levels by expanding childhood flu vaccination efforts.

Reported vaccination levels in the 2006-07 season are slightly higher than estimates from some other national sources for prior years. This suggests that respondents in this poll sample may have been better vaccinated, or more likely to report flu vaccination, than Americans overall, or that vaccination levels in 2006-07 were higher than in prior years.

Annually increasing supplies of flu vaccine will likely be enough to meet growing demand in the 2007-08 season. Assuring a steadily expanding supply of vaccine will need to be a major public health priority.

Data Source

This report presents findings from a nationally representative household survey conducted exclusively by Knowledge Networks, Inc, for C.S. Mott Children's Hospital. The survey was administered from July 20-August 9, 2007, to a randomly selected, stratified group of adults aged 18 and older (n=2,060) with and without children from the Knowledge Networks standing panel that closely resembles the U.S. population. The sample was subsequently weighted to reflect U.S. population figures from the Census Bureau. The response rate was 71% among Knowledge Networks panel members contacted to participate.

C.S. Mott Children's Hospital National Poll on Children's Health
Director: Matthew M. Davis, MD, MAPP
Associate Director: Sarah J. Clark, MPH
Manager & Editor: Dianne C. Singer, MPH
Contact us! Email: NPCH@med.umich.edu
For Reports: www.med.umich.edu/mott/research/chearnpch.html