

# Influenza Vaccine Availability in the Private Practice Setting in Maryland

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## Background

Influenza is a viral infection of the lungs and airways. Influenza is spread from person to person through the air by coughing and sneezing and by direct contact with infected people. Influenza can cause severe complications such as pneumonia, and can also worsen heart or chronic lung disease. Influenza is associated with thousands of deaths and hospitalizations annually.

The influenza vaccine is a safe, effective and low-cost measure that provides protection against the influenza virus about two weeks after vaccination. Despite assurances of adequate supply, physicians in Maryland continue to express concern and frustration in obtaining influenza vaccine.

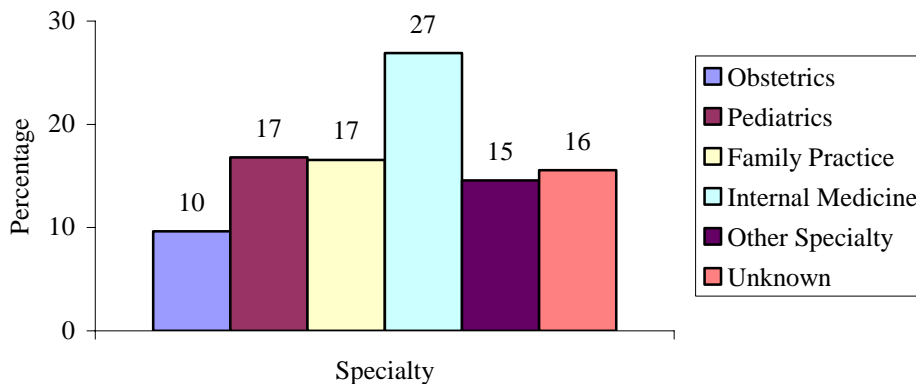
MedChi conducted a survey to:

- 1) Understand the experiences of physicians in offering influenza vaccine during the 2005-2006 season, and
- 2) Develop recommendations for improving vaccine distribution through physicians' offices for 2006-2007.

## Methods

A one-page survey was developed and distributed statewide to primary care practices by blast fax, as well as listserv and website postings. The survey was sent out on November 28, 2005 to 1,174 physicians, and on December 5 to 2,961. Over 400 surveys were returned by December 15, 2005. The results are based on 405 survey responses (one per practice). Figure 1 illustrates the specialties represented by the respondents.

**Figure 1. Practice Specialty  
2005 MedChi Influenza Survey**



## Summary of Key Issues

### Production and Distribution of Influenza Vaccine

Influenza vaccines must be updated annually to include the viruses that will most likely circulate in the upcoming season. There is a very tight timeline for selecting the influenza vaccine virus strains, preparing the vaccine (a very complex process), manufacturing, and distributing the vaccine. Due to the time constraints, any problems encountered during the process may cause shortages or delays.

Four manufacturers produced the 80 million doses of influenza vaccine for the U.S. during the 2005–06 influenza season: sanofi pasteur, Inc., MedImmune Vaccines, Inc., Chiron Corporation, and GlaxoSmithKline, Inc. They are expected to produce about 125 million doses for the 2006–2007 season.

The vaccine is only usable for a one-year time period, and any unsold vaccine in one year will result in reduced production the next year. The Centers for Disease Control establishes guidelines for the distribution of influenza vaccine. The vaccine supply is distributed in batches from August through January.

The distribution of vaccine is dependent on the source (manufacturer or vendor), which results in the disparate distribution of vaccine to physician practices. For example, sanofi pasteur provided its customers with partial orders in an effort to supply everyone with some vaccine.

### Priority and High Risk Populations (Inactivated Influenza Vaccine)

- 1) Health Care Workers
- 2) Individuals at highest risk for complications from influenza
  - pregnant women in the 2<sup>nd</sup> or 3<sup>rd</sup> trimester
  - children aged 6–23 months
  - persons aged 2–64 years with chronic health conditions
  - persons aged 65 years and older, with and without chronic health conditions
  - residents of long-term care facilities
- 3) Household Contacts and caregivers of high risk individuals (e.g., parents of young children)
- 4) Children 2 to 5 years
- 5) Adults 50 to 64 years

### Healthy Populations

Vaccination with the live, nasal-spray flu vaccine (FluMist®) is an option for healthy persons aged 5 to 49 years who are not pregnant. This vaccine is not subject to prioritization and can be given at any time.

## Summary of Survey Findings

### Role of the Private Practitioner

Physicians are the primary source for health care, and the primary delivery source for immunizations. The state and local health departments dispense less than 10 percent of all vaccinations. Physicians are best able to triage individuals to meet patients' needs (medically indicated) and serve priority and high-risk populations.

*“For some patients this may be the only time you see them for the year. It gives you a chance to check on their other health problems and their general health.”*

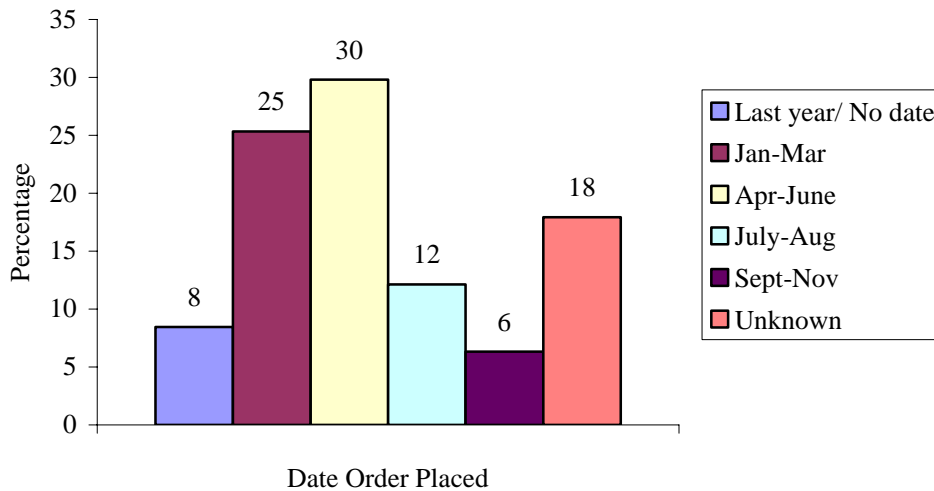
Practice procedures for influenza immunization are summarized in Table 1. Some practices purchased a small quantity of vaccine limited to immunizing the practice staff and a few patients as needed.

**Table 1. Practice Procedures Regarding Influenza Immunization**

<u>Procedure</u>	<u>#</u>	<u>%</u>
Counsel		
Yes	390	96.3
No	7	1.7
Unknown	8	2.0
Offer		
Yes	316	78.0
No	74	18.3
Unknown	15	3.7
Purchase		
Yes	379	93.6
No	26	6.4

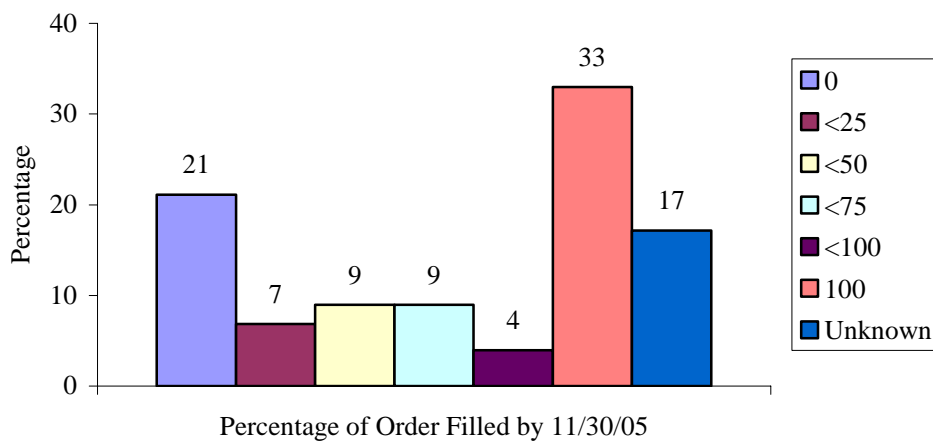
The quantities of influenza vaccine ordered ranged from as little as 10 doses to as many as several thousand per practice. Orders were placed directly from the manufacturer(s), distributor(s), or some combination of the two. More than 60 percent of practices had placed their 2005-2006 order for influenza vaccine by June 2005; among these, approximately one-third had placed their order by March 2005 (Figure 2.).

**Figure 2. Timing of Order Placement  
2005 MedChi Influenza Survey**



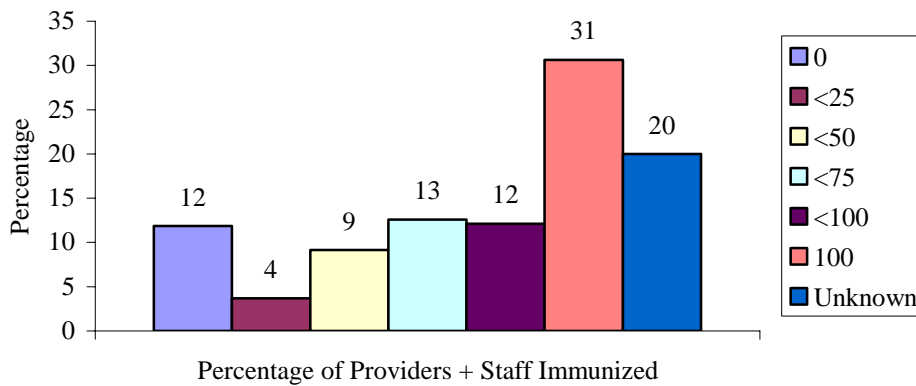
Approximately one-third of the practices had received all of their vaccine order by November 30, 2005, while 21 percent had received none, and another 25 percent had received less than 75 percent of their total order (Figure 3).

**Figure 3. Percentage of Order Received by November 30  
2005 MedChi Influenza Survey**



Among the practices responding to the survey, immunization levels ranged from 0 to 100 percent. Thirty-one percent of practices reported that all of the providers and staff were immunized by November 30, 2005, while 12 percent reported that no one was immunized.

**Figure 4. Percentage of Providers & Staff Immunized  
2005 MedChi Influenza Survey**



### Three Areas of Difficulty Faced by Private Practitioners in Providing Influenza Vaccine

#### 1) Availability—barriers to purchasing a desired quantity of vaccine

- Pre-booking procedures
- Timing for placing orders
- Limitations on quantity allowed for purchase
- Inability/limitation on ordering additional supply

*“We were prepared in April to ‘pre-book’...for our entire flu needs...They would only allow us to pre-book the number of doses used the previous year (during shortage!)”*

#### 2) Distribution—issues in receiving the vaccine order

- National level – CDC regulation of vaccine supply
- Delays in delivery
- Partial orders delivered
- Unpredictability of timing of delivery
- Poor communication from distributors regarding reasons for delay
- Commercial/retail providers have supply when physicians do not

*“I find it unbelievable that large corporations...can get the vaccine supply, and primary care physicians such as our practice cannot even get our orders for our patients in most need.”*

#### 3) Practice management—barriers to delivering vaccine to patients

- Vaccine not available for routine scheduled patient visits
- Inability to plan mass immunization effort or “flu clinics”
- Reimbursement rates do not adequately cover administration and overhead costs
- Costs incurred for unsold vaccine

*“A delay in shipment to physicians, while chains such as Giant have a supply available early,*

*can mean that patients who we thought were going to be vaccinated here actually got their shots elsewhere.”*

*“Reimbursements do not cover costs of vaccine, administration, etc.”*

Many of the comments shared by physicians reflected their frustration with the same issues occurring this year as last year, the prospect that delays and shortages may occur again next year, and that commercial service providers/retailers had a supply when physicians did not. It is difficult to match the patient need and demand for the vaccine with the supply of vaccine from the manufacturer. Commercial sources are designed to meet consumer demand but not necessarily patient need, while physicians may not have the supply to meet patient need.

Delays in distribution may result in patients being vaccinated in mid-December or later or not being vaccinated at all. Practices with late shipments of vaccine may not be able to use all of their vaccine because patients will have received their immunizations elsewhere. Delays in distribution also result in fewer health care workers being immunized, creating additional risk for priority populations.

*“A disaster. I’ve always offered it - no more. We are thinking of not offering any immunizations!”*

*“I feel it is ridiculous we cannot vaccinate against something that happens every year.”*

### Recommendations for the Prevention of Influenza Cases in Maryland

Findings from the survey were discussed by the MedChi Public Health Committee, presented to the Board of Trustees, and shared with local and state partners. Recommendations for efforts to prevent influenza cases in Maryland have been grouped into two broad areas:

1) Assist private practitioners in providing influenza vaccines to their patients in a timely manner to ensure appropriate distribution of vaccine supply to priority populations.

- Work with American Medical Association to ensure that providers in a medical setting (private practitioner, health care institution, health department) are the first priority for receiving vaccine supply.
- Provide information and reminders regarding pre-booking to physicians.
- Provide information regarding flu clinics offered through health departments through listserv link to Maryland Department of Health and Mental Hygiene site, other.
- Coordinate with Maryland Department of Health and Mental Hygiene for appropriate distribution of vaccine supply.
- Promote message “It’s not too late to get your flu shot!” to encourage vaccinations through at least January instead of dropping off demand in mid-December.

2) Increase immunization levels among health care workers to reduce the transmission of influenza to high-risk populations, and reduce costs to the health care system.

- Review cost-benefit of immunizing health care workers.
- Communicate the benefits of immunizing health care personnel to physician practices.

- Provide vaccine at no cost to health care workers.
- Ensure adequate supply to practices and medical settings to immunize staff.
- Support the Maryland Health Care Workers Influenza initiative—a partnership between Maryland Hospital Association, Maryland Department of Health and Mental Hygiene, and Maryland Partnership for Prevention.
- Support legislation requiring health care workers to be immunized with opt out conditions.

MedChi will continue to assess issues concerning ordering and receipt of vaccine supplies, and work to ensure that physicians are able to immunize their high-risk patients in a timely manner.

### **Acknowledgements**

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### **References**

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