

PRACTICE

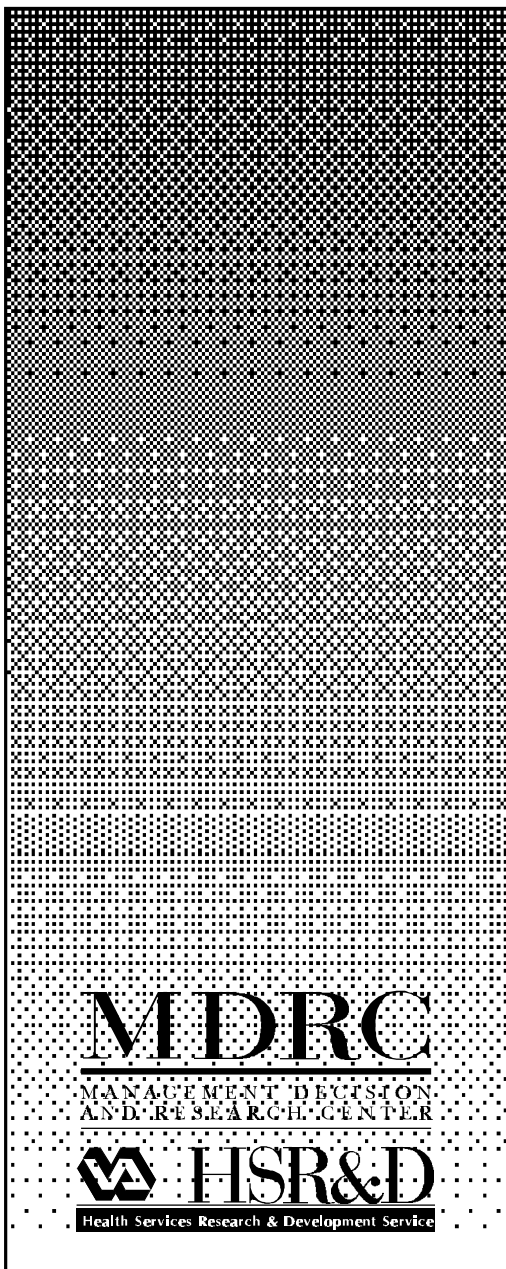
Matters

SEPTEMBER, 1996

VOL. 1

ISSUE 1

INFLUENZA IMMUNIZATION



Research evidence finds:

- *Influenza is caused by viruses.*
- *Complications of influenza include pneumonia and exacerbations of underlying chronic heart and lung conditions often resulting in hospitalization or death.*
- *An effective vaccination exists.*
- *Flu vaccination is an indispensable part of the care of persons 65 years of age and older.*
- *All people, not just elderly or at risk groups, should consider annual vaccination if they wish to avoid illness due to flu.*
- *Vaccination is cost effective.*
- *All VA patients and employees should be considered for vaccination.*
- *Vaccination of healthy working adults decreases absenteeism from work due to flu.*
- *Influenza vaccination is not associated with adverse systemic side effects.*
- *Concern about side effects is a barrier to vaccination in healthy adults, but studies show that mild soreness of the arm at injection site is the most common side effect.*

BACKGROUND

Influenza together with pneumonia remains the sixth leading cause of death in the United States despite the availability of a highly effective vaccine. ¹

The Advisory Committee on Immunization Practices recommends annual vaccination for persons over 65 years of age and all at-risk groups. Although most deaths from influenza occur among the elderly, VA researchers have recently found that younger healthy working adults would also benefit from annual vaccination. ² VA studies have found that influenza vaccination protects VA patients from influenza related complications, protects workers and reduces their number of sick days due to flu resulting in substantial economic and productivity benefit.

VA POPULATION

Over 2.8 million veterans were treated in VA hospitals and outpatient clinics in FY 1995 and almost 38% of them were over 65.

VA employs 258,275 people of which 240,588 work in the Veterans Health Administration. VHA employees care for the large VA at-risk patient population and can transmit the influenza virus to them. Care givers can substantially reduce the risk of patient exposure by being vaccinated. VHA care givers include:

- Physicians, nurses, and other personnel in both hospital and outpatient-care settings;
- Employees of nursing homes and chronic-care facilities who have contact with patients or residents;
- Providers of home care to persons at high risk (e.g., visiting nurses and volunteer workers); and
- Household members (including children) of persons in high-risk groups should also consider vaccination.

Practice Matters is a new series which covers topics in a short and focused style summarizing the results of important research within VA and promoting the application of research for improved health care delivery and decision making. For more information or to provide us with your suggestions, please contact:

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SYMPTOMS

Typical influenza symptoms include the abrupt onset of fever, myalgia, sore throat, non productive cough, headache and debilitating weakness. Influenza can cause debility lasting for several days or even weeks and in some severe cases may lead to pneumonia or exacerbations of other underlying heart and lung conditions. Influenza accounts for millions of days lost from work each year. ³ During influenza epidemics, there is a rapid increase in the number of visits to physicians' offices, walk in clinics and emergency rooms as well as increased hospitalizations for management of lower respiratory tract complications.

CONTROL THROUGH VACCINATION

Vaccination each year, before the influenza season, is currently the most effective means of reducing the impact of influenza. Studies show that vaccination of the elderly results in a 50% reduction of the incidence of serological and clinical influenza, and is even more effective in preventing the complications of influenza (60% to 70%). ^{4,5} In healthy younger persons receiving the vaccination, cases of flu can be prevented by over 80%, resulting in significant economic benefits due to fewer sick days from work and visits to physicians for flu. ²

The 1996-97 influenza vaccine contains antigens of three virus strains (two type A's and one type B) representing influenza viruses presently circulating in the world and believed likely to occur in the United States next winter. The vaccine contains 15 mg each of A/Texas/36/91-like (H1N1), A/Wuhan/359/95-like (H3N2), and B/Beijing/184/93-like hemagglutinin antigens in each 0.5 ml. For both A/Wuhan/355/5-like and Beijing/184/93-like antigens, U.S. manufacturers will use antigenically equivalent strains A/Nanchang/933/95 (H3N2) and B/Harbin/07/94 because of their growth properties. The vaccine is made from highly purified, egg-grown viruses that have been made noninfectious (inactivated). It should not be administered to persons known to have anaphylactic hypersensitivity to eggs or to other components of the influenza vaccine without consulting a physician. ^{6,7}

EXPERT OPINION

Too few people receive influenza vaccine each year. Among the barriers to vaccination are uncertainty about the benefits and risks of vaccination and failure to implement organized programs for vaccine delivery.

Influenza vaccination is among the most cost effective interventions available for our patients and their care providers. Among seniors in an HMO, ⁸vaccination was associated with a reduction in hospitalizations for pneumonia and influenza of 48% to 57% and for all respiratory conditions by 27% to 39%. Vaccination was also associated with 39% to 54% fewer deaths. Direct cost savings averaged over \$100 per person vaccinated. Among healthy working adults, vaccination is also associated with substantial benefits. ² In a placebo controlled trial, vaccination reduced upper respiratory illness episodes by 25%, sick leave by 43%, and physician's office visits by 44%. Cost savings averaged over \$45 per person vaccinated.

Influenza vaccination is *not* associated with higher rates of systemic symptoms than is placebo as shown in recent studies in elderly ^{9,10} and healthy, younger adults. ¹¹ Local side effects may occur more frequently, but are usually mild. The safety of influenza vaccine should be stressed to providers and patients alike.

Knowing "the facts" about a bad disease and good vaccine is not enough. To achieve higher immunization rates, providers must also implement organized programs which automate offering and administering vaccine. Components of one such program include standing orders, walk-in clinics, pre-printed information/ documentation forms, and an annual educational/ publicity mailing to patients. ¹²

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RECOMMENDATIONS

Based on research evidence:

- A formal influenza vaccination program should be developed at the local level that strives toward 100% compliance as the goal.
- A successful influenza vaccination program requires efficiency and multi-disciplinary collaboration and should address methods for identifying and informing target patients and providing chart reminders to practitioners.
- The vaccination program should be made as convenient as possible allowing for ease of access to both patients and staff and include activities such as: patient reminder letters, walk-in clinics, standardized documentation and information forms, including overprinted progress notes. ¹³
- All providers should administer the vaccine to their patients during the course of regularly scheduled visits and a standing order should be established for clinic nurses to give the vaccine to eligible patients without individually signed physician's orders, provided patients report no contraindications to the vaccine.
- Large announcements should be posted in clinic lobbies and waiting areas designating locations and dates of immunization to capture patients who may not use the system during the immunization period.
- Instructions for administration and documentation of the vaccine should be posted in exam rooms.
- Clinic clerks should ask patients on check-out if they received their vaccination.
- Education should be provided to patients, providers and staff that emphasizes the seriousness of influenza, the effectiveness of the vaccine and the safety of the vaccine.
- Place patient education handouts with post-flu shot information in all exam rooms as cue for patient and provider.
- Measure and evaluate the program's success.

This Influenza Immunization issue of *Practice Matters* was prepared by the Information Dissemination Program at the Management Decision and Research Center with information and assistance from the following: John R. Feussner, Chief Research and Development Officer; Ronald J. Gebhart, MD, Chief Consultant, Primary and Ambulatory Care; Kristin L. Nichol, MD, MPH, Acting Chief of Medicine Service, VAMC Minneapolis; Gary A. Roselle, MD, Program Director, Infectious Diseases Program; Office of Policy, Planning and Performance; National Center for Health Promotion; and Office of Patient Care Services.

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Your comments and suggestions are welcomed!

Feedback on this issue as well as suggestions for future topics would be greatly appreciated. Feel free to contact us using the address, phone and email given on page 2 or simply write your suggestions here and fax it to us today, attention Information Dissemination Program at (617)278-4438.

What do you think about the amount of information on the topic of influenza immunization provided in *Practice Matters*? Please check one.

- Not enough information
- Just enough
- Too much

Will it make a difference in what you do about influenza immunization in your facility?

- Yes
- No

Please explain.

Do you have suggestions for future topics for *Practice Matters*?

General Comments?

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