VHA Seasonal Influenza Manual
VHA Seasonal

Influenza Manual

Infection: Don’t Pass It On
A Campaign for Public Health
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Overview

Plan Your Approaches

This manual is developed by the VA Infection: Don’t Pass It On (IDPIO) team – a dedicated group of staff from VA facilities, VISN offices, and several VA Central Office programs that represent many disciplines and professional perspectives (see the Acknowledgements section for details on the IDPIO team).

The flu manual provides information about flu vaccination, education and communication resources, and guidance on how to implement successful influenza prevention campaigns throughout VHA. It is intended for use by the teams and campaign coordinators within VHA facilities.

The VA Infection: Don’t Pass It On (IDPIO) team intends for this manual to be a rich resource of ideas, inspiration, facts, and information. It represents all aspects of flu prevention from the vaccine, to the disease, to prevention, to ways to run successful programs. IDPIO welcomes comments and suggestions for ways to improve and refresh this manual, not to mention better ways to run flu prevention programs. Please send your comments and suggestions to troy.knighton@va.gov or publichealth@va.gov. Here’s to a successful flu prevention campaign!

How to Use This Manual

Review the table of contents to find new information, and think through your program and plan your approaches to vaccination campaigns. Use this manual at flu meetings, as a resource to answer flu-related questions, and to find resources and references to policies, guidance, and best practices.

• Section 1 provides a clinical overview of influenza. It outlines, how flu is spread, influenza illness, diagnosis, and treatment.

• Section 2 provides a clinical overview of influenza vaccine. It outlines efficacy and effectiveness of the vaccine, vaccine composition, vaccine safety, production and types of inactivated and live flu vaccine, including newly FDA approved flu vaccines.

• Section 3 provides detailed information on the administration of live and inactivated influenza vaccine. It offers step by step guidance from deciding which vaccine to give to disposal of syringes, vaccine cold chains, and documentation. It outlines information from CDC and other key sources on this year’s influenza vaccine, including who should receive vaccine, clinical information about each form of flu vaccine, as well as the CDC’s Vaccine Information Statements (which vaccine administrators are required to give vaccine recipients).

• Section 4 provides in depth information planning, conducting, and evaluating influenza vaccination campaigns. It lists potential flu team members with description on roles within campaigns.

• Section 5 contains policy and guidance from VHA pertaining to delivery and administration of influenza vaccine. It contains the latest Directives for influenza and documentation of employee vaccination into the Occupational Health Record-keeping System (OHRS). It collates The Joint Commission guidance, CDC recommendations and VHA policy regarding flu vaccine and vaccination.
• **Section 6** discusses the concept and role of communications in successful vaccination campaigns. It outlines the importance of communication strategies in promoting influenza prevention and provides examples of messaging for Veteran patients and health care personnel (HCP). Also, provided is a script for use as a guide when answering difficult questions related to flu and flu vaccine.

• **Section 7** provides in-depth guidance and strategies for organizing comprehensive flu vaccination programs for health care personnel. This section reviews strategies for success, provides campaign messages, describes The Joint Commission standards and program evaluation, and has a question and answer section.

• **Section 8** describes strategies for successful patient flu vaccination programs.

• **Section 9** outlines two other mitigation strategies to prevent the spread of flu and support a culture of safety within VHA facilities: hand hygiene and respiratory hygiene/cough etiquette. IDPIO also developed a complementary resource, a hand hygiene toolkit.

• **Section 10** focuses on the importance of proper documentation of patient vaccination in the Computerized Patient Record System (CPRS) and documentation for employees and volunteers into the Occupational Health Record-Keeping System (OHRS). These contain instructions for documentation, CPT codes for flu vaccine and ICD-9 coding for documentation of influenza-like illness.

• **Section 11** outlines the abundance of resources available from the IDPIO library to support flu vaccination campaigns. You’ll find web and SharePoint information for locating posters, videos, fact sheets, and brochures for clinical and patient audiences. This section also contains instructions on how to order print materials through the Training Management System (TMS).

• **Section 12** provides guidance on the importance of pneumococcal vaccination and available pneumococcal vaccines, including 13-Valent Pneumococcal conjugate Vaccine (PCV13; Prevnar 13®), and 23-Valent Pneumococcal Polysaccharide Vaccine (PPSV23; Pneumovax 23®).

• **Appendices in Section 13** cover recommendations and other guidance from the Centers for Disease Control (CDC). You’ll find a plethora of resources, references, and Websites listed on various topics related to flu, flu vaccine, and prevention. Learn more about the *Infection: Don’t Pass It On* (IDPIO) campaign within the acknowledgements.

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**Flu Prevention In Action**

The manual features specific examples of interventions and activities that flu teams are employing to increase rates of influenza vaccination throughout the VA health care system. Our colleagues have spent countless hours developing these strategies, evaluating them and making improvements so they can maximize the results – ultimately to prevent the spread of influenza and other infectious agents by promoting vaccination and proper hand and respiratory hygiene/cough etiquette. “Flu Prevention in Action” vignettes will be featured throughout the flu manual. Thanks to all who submitted wonderful examples of campaign program activities, many of which could not be included. It is a testament to the innovation of staff who are committed to providing a culture of safety for staff and Veterans within our VHA facilities.
Define Campaign Goals

The foundation of an effective influenza vaccination campaign is rooted in goals. Each year in conjunction with your leadership, flu teams should develop goals as a foundation for planning, executing, and evaluating vaccination efforts. Sample goals are listed below. Each site should consider goals as a foundation of measureable elements that reflect the nature, extent, and cultural specificity of your target populations.

1. Gradually increase the seasonal influenza vaccination rate of health care personnel toward the 2020 Healthy People goal of 90%.++

2. Promote seasonal influenza vaccination to all Veteran patients. Note: This is based on the CDC recommendation of universal influenza vaccination of all people age 6 months and older.

3. Reduce disparity of influenza vaccination rates by increasing the rate of vaccine uptake among female patients and those patients under age 50.

4. Promote consistent and proper documentation and tracking for all influenza vaccinations.

5. Promote non-vaccine methods of preventing influenza, particularly hand hygiene and respiratory etiquette.

6. Encourage the entire VA health care community to promote and support influenza vaccination.

++ Beginning FY 13, VHA facilities were expected to align their influenza vaccination for HCP with the 2020 Healthy People goal which is to achieve a rate of 90% by 2020. Facilities will need to look at their vaccination rates for the previous year and set a goal to increase which will meet the Joint Commission standard. For example, a site may strive to raise HCP flu vaccination rates by 5% each year until 90% is attained by 2020. For most VHA health care facilities, this will translate into a gradual increase of the seasonal influenza vaccination rate of health care personnel to meet the 2020 Healthy People goal of 90%. To view these objectives for health care personnel, visit [http://www.healthypeople.gov/2020/topicsobjectives2020/objectiveslist.aspx?topicId=23](http://www.healthypeople.gov/2020/topicsobjectives2020/objectiveslist.aspx?topicId=23).

Resources from the *Infection: Don’t Pass It On* campaign

You will find all the resources in this manual, along with posters, flyers and other educational materials on these sites (see also Section 11 of this manual).

- VA Internet – find posters, factsheets, videos and general information on flu.
  - [www.publichealth.va.gov/flu](http://www.publichealth.va.gov/flu)
  - [www.publichealth.va.gov/InfectionDontPassItOn](http://www.publichealth.va.gov/InfectionDontPassItOn)

- National Teleconferences – IDPIO offers national phone conferences on a myriad of topics throughout the flu season. These are usually announced via emails a month or so in advance and feature subject matter experts discussing flu related issues and topics. Past teleconference topics included:
  - Pneumonia,
  - High-dose Flu Vaccine,
  - Influenza and Vaccine Updates,
  - Hand Hygiene, Disparities in Flu Vaccination,
  - Vaccine Efficacy and Effectiveness,
  - Adult Immunization Schedule,
  - Vaccinating Pregnancy Women,
  - Planning, Executing, and Evaluating Vaccination Campaigns.

- Email Communications – Emails are sent periodically to provide updates on flu related topics such as new resources, upcoming national teleconferences, policy and guidance updates, vaccination data, and other information related to influenza. If you are not already listed on the VHA Flu Coordinator outlook group – contact [Troy.Knighton@va.gov](mailto:Troy.Knighton@va.gov). Emails are also sent to other Outlook groups including: the National IC Group, Occupational Health, PAOs, and the MDRO/MRSA and VHA National Center for Health Promotion and Disease Prevention (NCP) email groups.
FAQs – Frequently Asked Questions

1. What resources are available to help me with my flu campaign?
   Most resources are located at www.publichealth.va.gov/flu. You find new posters, fact sheets, videos, policy, guidance, and other flu related information on this site. Another great source to visit is www.flu.gov.

2. How can I get copies of posters?
   All posters are available at www.publichealth.va.gov/flu for viewing, download, and printing. Some are pre-printed and available for order via TMS. See Section 11 of this manual for details.

3. Where can I get copies of VHA policy on influenza and related topics?
   Most policies related to influenza can be viewed throughout the sections of this manual.

4. Who is the contact for the Occupational Health Record-Keeping System (OHRS)?
   Pam Hirsch, Director of Clinical Occupational Health, VACO is the lead contact for OHRS at Pamela.Hirsch@va.gov. If you need additional staff trained on OHRS, contact Cathy Morgan at Cathy.Morgan@va.gov.

5. How can I get stickers and buttons?
   Two types of stickers and 4 buttons are available for order via TMS. See Section 11 of this manual for details.
Influenza

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What is influenza?

Influenza is a common, often miserable, and sometimes very serious and even deadly illness. The viruses that cause influenza occur in three major types: types A, B, and C. Types A & B commonly cause illness in humans whereas type C is rarely associated with significant clinical illness. Type A influenza also circulates in bird and mammal populations.

Influenza viruses are always changing, and this helps to account for the annual seasonal epidemics that we see in temperate climates. Antigenic mutations on the viral RNA segments are responsible for the so-called “drift” or minor variation from year-to-year that is responsible for epidemics.

Antigenic “shifts” represent a major change in influenza viruses and are the result of the exchanging of genetic segments between influenza A viruses. Such shifts can cause world-wide pandemics.

Influenza A Virus

How is influenza spread?

The primary mode of influenza transmission is thought to be the respiratory route through large, virus-laden particles called droplets. When an infected person coughs or sneezes they generate these particles that can travel up to 5 or 6 feet or more. These particles may then settle on the mucosal surfaces of another person’s upper respiratory tract, thereby infecting that other person.

In addition to droplet transmission, influenza may also be transmitted through small, aerosol particles as well as through contaminated surfaces. Flu may also be spread if someone touches a surface contaminated with flu virus and then touches his or her own mucous membranes of the eyes, nose, or mouth. Slightly dryer and cooler environments that are typically found in the fall and winter flu season promote influenza virus survival and may increase the risk for virus transmission.

Influenza may survive for up to 2 days on a dry surface and may be a continuous source of transmission. Viruses can survive on objects and other surfaces (e.g. counters where supplies or medications are prepared, elevator buttons, door knobs, side rails, faucet handles, etc.). In health care facilities, these surfaces...
with a high volume of hand contact may be quickly re-contaminated with pathogens. Routine preventive surface disinfection is essential as an infection control strategy for reducing sources of influenza.

The incubation period before the onset of symptoms is typically 2 days. Infected adults can begin shedding virus within 24 hours of becoming infected and up to 1 day before the onset of symptoms, and virus may be shed for about 5 days after the onset of symptoms. This means that adults could infect other people beginning 1 day before illness onset and for 5 days after illness onset.

### Cold vs. Flu

<table>
<thead>
<tr>
<th>Symptoms</th>
<th>Flu</th>
<th>Cold</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fever</td>
<td>100°F x 3-4 days</td>
<td>Rare and mild</td>
</tr>
<tr>
<td>Headache</td>
<td>Common: severe</td>
<td>Rare</td>
</tr>
<tr>
<td>Myalgia</td>
<td>Usual, often significant</td>
<td>None or Significant</td>
</tr>
<tr>
<td>Malaise</td>
<td>May last for 2-3 weeks</td>
<td>None or Very Mild</td>
</tr>
<tr>
<td>Fatigue</td>
<td>Sudden, can be significant</td>
<td>Rare</td>
</tr>
<tr>
<td>Rhinitis</td>
<td>Sometimes</td>
<td>Common</td>
</tr>
<tr>
<td>Sneezing</td>
<td>Sometimes</td>
<td>Common</td>
</tr>
<tr>
<td>Sore throat</td>
<td>Sometimes</td>
<td>Usual</td>
</tr>
<tr>
<td>Cough</td>
<td>Non-productive cough</td>
<td>Productive, hacking cough</td>
</tr>
</tbody>
</table>

### What is influenza illness?

Every year 5% to 20% of the U.S. population develops influenza illness. The symptoms of classic influenza include the abrupt onset of fever, sore throat, headache, cough, muscle aches, and fatigue. This acute respiratory illness generally lasts about 5 to 7 days, with sufferers often confined to bed for 1 or 2 of those days. About 10% to 20% of people may have some symptoms that linger beyond 10 days.

In healthy younger adult populations, influenza’s impact on daily life can be substantial. Not surprisingly, influenza is a common cause of work absenteeism. It is also a common cause of presenteeism (working while ill). In one study of working adults, people with influenza-like illness (fever/feverish plus cough or sore throat) were sick on average for 8 days. During their illness, they missed on average 1.5 days of work and then returned to work while still ill for an additional 4.4 days. In college and university students, influenza-like illness has also been reported to interfere with academic performance including taking exams and doing homework. Clinicians are encouraged to monitor influenza activity in their communities to consider what specific flu viruses are spreading and how well the flu vaccine is matched to flu viruses that are causing illness (Downloaded June 14, 2013 www.cdc.gov/flu/weekly).

### How is the flu diagnosed?

For timely clinical management of influenza-like disease, a rapid and accurate diagnosis is essential as other pathogens cause influenza-like disease complicating diagnoses based solely on clinical characteristics. Influenza surveillance information and diagnostic testing are valuable tools to enhance clinical judgment and treatment decisions.

The isolation of influenza virus requires collection of a clinical specimen, usually nasopharyngeal. There are 5 influenza testing methods: viral cell culture, rapid cell culture, antibody staining, molecular assays, and rapid influenza diagnostic tests. Serologic testing is not recommended for influenza. Check with your lab director or infectious diseases to know which of these tests may be available and appropriate for you to use.

### What are some of the complications of influenza?

Most people who develop influenza recover without any complications. However, the elderly, young children, and others with chronic medical conditions such as chronic heart or lung disease or diabetes are more susceptible to the serious complications of influenza. These complications can include primary influenza pneumonia, secondary bacterial pneumonia, and exacerbations of underlying medical conditions. The consequences of these complications include increases in outpatient and emergency department visits, hospitalization, and even death. For pregnant women, the risk of hospitalization is 4 times higher than for non-pregnant women. The risk of complications in pregnant women is comparable to non-pregnant women with high-risk medical conditions.
Influenza virus infections can also contribute to co-infections with other viral or bacterial pathogens. Influenza can exacerbate underlying medical conditions (e.g., asthma, COPD, or cardiac disease) or lead to secondary bacterial pneumonia, sinusitis, or otitis media. The consequences of complications include increases in outpatient and emergency department visits, hospitalization, and even death. It is prudent for clinicians to check the patient record to determine if the patient is eligible for the pneumococcal vaccination while also assessing the patient for their influenza vaccination status.

What are the best ways to prevent influenza?

Annual vaccination against influenza represents the mainstay of prevention efforts against this virus. In the United States, vaccination is recommended every year for all people 6 months of age and older who otherwise have no contraindication to receiving the vaccine.

In addition to annual vaccination, attention to good hand hygiene, respiratory/cough etiquette and judicious use of antiviral medications is also important. Avoiding contact with others who are ill and staying home when ill oneself are also important measures.

What is the recommended treatment for influenza?

Antiviral medications are important additions to influenza immunization for the control and prevention of influenza disease. Influenza vaccine should always be offered unless it is contraindicated. Antiviral medications should not be considered as a substitute for immunization. Early antiviral treatment can shorten the duration of fever and illness symptoms, and may reduce the risk of complications from influenza and death, and shorten the duration of hospitalization.

Optimal clinical benefit may occur when antiviral treatment is administered within 48 hours of suspected influenza illness onset to patients who are hospitalized, have a severe, complicated, or progressive illness, or are at higher risk for influenza complications. Antiviral drugs lower the risk of influenza while taking medication but susceptibility to influenza returns when the medication is discontinued. (CDC 2013).

Two FDA-approved influenza antiviral medications are recommended for use in the United States to combat influenza: oseltamivir (Tamiflu®) and zanamivir (Relenza®). Oseltamivir and zanamivir are chemically related antiviral medications known as neuraminidase inhibitors that have activity against both influenza A and B viruses.

Frequently Asked Questions (FAQs) about Influenza

1. What if a Veteran asks, “What everyday steps can I take to stop the spread of flu”?
Vaccination is the best way to protect yourself and your loved ones from the flu. Some additional steps you can take in your daily life include:
- Wash hands often with soap and water or an alcohol-based hand rub.
- Avoid touching your eyes, nose, or mouth. Germs spread this way.
- Try to avoid close contact with sick people.
- Practice good health habits like getting plenty of sleep and exercise, managing stress, drinking plenty of fluids, and eating a healthy diet.
- Cover your nose and mouth with a tissue when you cough or sneeze. Throw the tissue in the trash afterwards.
- If you are sick with flu-like illness, stay home for at least 48 hours after your last fever without the use of fever-reducing medicine.


2. Can I get the influenza from getting a flu shot?
No, the influenza viruses contained in a flu shot are inactivated (killed), which means they cannot cause infection. Flu vaccine manufacturers kill the viruses used in the vaccine during the process of making vaccine, and batches of flu vaccine are tested to make sure they are safe. In randomized, blinded studies, where some people received flu vaccinations and others saline injections, the only differences in
symptoms were increased soreness in the arm and redness at the injection site among some people who received the flu vaccination. There were no differences in terms of body aches, fever, cough, runny nose or sore throat. Some people may have coincidental respiratory illness around the time of receiving the influenza vaccine. This is not due to the influenza vaccine but due to concurrent exposure to other respiratory illness.


Selected References


Influenza Vaccine

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Influenza Vaccine

Seasonal influenza infection is preventable. Annual vaccination remains the single most effective preventive measure available against influenza. Fostering a culture of safety within VHA facilities begins with the individual and a personal commitment to vaccination as a responsibility to protect yourself, your coworkers, patients, and others in the VA community.

Influenza Vaccine Available in the U.S.

Each year a new vaccine is produced. Therefore, annual vaccination is recommended for optimal protection against getting the flu for all people 6 months of age and older who otherwise have no contraindication to receiving the vaccine including women who will be pregnant during the flu season, persons with chronic diseases, persons with immunosuppressive disorders, and residents of care facilities.

There are two basic types of influenza vaccines currently used in the United States: inactivated influenza vaccine (IIV) vaccines made from dead viruses and live attenuated influenza vaccines (LAIV4) made from living but weakened viruses.

At a Glance

1. **Quadrivalent** formulations of influenza vaccine
   - contain antigens to four types of influenza viruses
   - two type A and two type B viruses (trivalent vaccines contain antigens to three types of influenza viruses – two type A and one type B virus).

2. Live attenuated influenza vaccine (LAIV4) is only produced in the quadrivalent formulation.

3. Naming conventions
   - IIV = Inactivated Influenza vaccine
   - IIV3 = trivalent inactivated influenza vaccine
   - IIV4 = quadrivalent inactivated influenza vaccine
   - RIV = recombinant hemagglutinin influenza vaccine
   - ccIIV = cell culture based vaccine
   - LAIV4 = live-attenuated influenza vaccine
Types of inactivated influenza vaccine (IIV)

- standard dose
- high dose
- intradermal
- recombinant
- cell culture

Influenza Vaccine Available within VHA

Annual National Contracts may not include all flu vaccine formulations such as LAIV4, intradermal or quadrivalent. To order any other formulations talk to your Pharmacy Chief. Flu coordinators and other VA staff involved in implementing the influenza vaccination campaign at each facility should contact their Pharmacy Chief regarding vaccine availability, type of vaccine dosing ordered, and quantities.

Composition of Influenza Vaccine

Flu vaccines contain antigens to selected types of influenza A and B viruses. Prior to 2013, both the live vaccine (live attenuated influenza vaccine or LAIV4) and the inactivated vaccine (formerly known as trivalent inactivated vaccine or TIV) contained 3 antigens-two type A and one type B. Most influenza vaccine is prepared using chicken eggs. Ordinarily, persons who are able to eat eggs or egg products can safely receive vaccine containing egg protein. Vaccine product inserts will provide specific guidance for use on persons with egg allergies.

Additives used in the production of vaccines may include diluent fluid (e.g. sterile water, saline, or fluids containing protein) and/or preservatives and stabilizers to help the vaccine remain unchanged (e.g. albumin, phenols, and glycine). Antibiotics are added to many vaccines to prevent the growth of bacteria during production and storage of the vaccine. No vaccine produced in the United States contains penicillin or penicillin related antibiotics.

Note on Influenza Vaccine Abbreviations

Certain U.S. vaccine abbreviations have been revised by the Advisory Committee on Immunization Practices (ACIP) to refer to currently available influenza vaccines. The revisions are as follows:

The abbreviation TIV (trivalent influenza vaccine, previously used for inactivated influenza vaccines) has been replaced with the abbreviation IIV (inactivated influenza vaccine).

- IIVs as a class will include:
  - egg-based and cell culture-based trivalent inactivated influenza vaccine (IIV), and
  - egg-based quadrivalent inactivated influenza vaccine (IIV4).
- RIV refers to recombinant hemagglutinin influenza vaccine.
- LAIV4 refers to live, attenuated influenza vaccine, which is available as a quadrivalent formulation (LAIV4).
- LAIV4, IIV, and RIV denote vaccine categories; a numeric suffix specifies the number of influenza virus antigens contained in the vaccine.
- Where necessary to refer specifically to cell culture-based vaccine, the prefix “cc” is used (e.g., “ccIIV”).

Thimerosal is a mercury-containing preservative that is added to vials of vaccine that contain more than one dose to prevent contamination and growth of potentially harmful bacteria. **There is no scientifically accepted evidence of harm caused by the low doses of thimerosal in vaccines, except for minor reactions like redness and swelling at the injection site** ([http://www.cdc.gov/vaccinesafety/Concerns/thimerosal](http://www.cdc.gov/vaccinesafety/Concerns/thimerosal)).
Inactivated Influenza Vaccine

Inactivated influenza vaccine (IIV) should be received refrigerated, should be stored at 35°F – 46°F (2°C – 8°C) and should not be frozen. IIV that has been frozen or stored outside of the proper temperature range must be discarded.

a) Inactivated influenza vaccine (IIV) is made noninfectious (i.e., inactivated or killed) and thus cannot cause influenza.

b) IIV is licensed for use among persons aged ≥6 months and older including those who are healthy, those with chronic medical conditions, and those who are pregnant or post-partum. A different dosing schedule for children is required until 9 years of age.

c) IIV should be given to children (6 – 59 months) who have asthma or medical conditions that put them at higher risk for influenza complications instead of the live vaccine found in LAIV4 nasal spray.

d) IIV is administered by intramuscular injection or by a special formulation intra-dermal injection. For adults, the deltoid muscle of the arm is the preferred site for both routes.

e) The intra-dermal formulation of IIV is available for vaccination in the age group 18 to 64 years of age. This vaccine will be administered using the intra-dermal route into the subcutaneous tissue above the deltoid muscle. The vaccine is different in formulation and available as a single dose syringe with intra-dermal needle attached. Studies have indicated this formulation offers the same immunity levels as the intramuscular route of IIV.

f) High-dose IIV is approved for use in people age 65 years and older. High-dose flu vaccine may not have been purchased by your facility. Check with your Pharmacy Chief prior to receipt of shipment as to whether the high dose formulation was ordered for the current year influenza season when preparing for immunization clinics.

g) A trivalent cell culture-based inactivated vaccine prepared from virus propagated in Madin Darby Canine Kidney (MDCK) cells is an inactivated influenza vaccine which is indicated for persons aged 18 years and older. This vaccine provides an immunization option for persons with a history of severe allergic reaction to eggs.

h) A recombinant hemagglutinin protein vaccine which is indicated for persons 18 through 49 years of age contains purified proteins produced in a continuous insect cell line (armyworm). This vaccine provides an immunization option for persons with a history of severe allergic reaction to eggs.

i) IIV can be given to persons at risk for medical complications including:
   - All persons aged ≥50 years of age
   - Women who will be pregnant during the influenza season
   - Adults and children who have chronic pulmonary (including asthma), cardiovascular, renal, hepatic, cognitive, neurological/neuromuscular, hematologic or metabolic disorders (including diabetes mellitus). Adults and children who have immunosuppression (including caused by medications or HIV)
   - Residents of nursing homes and other long-term-care facilities

For specific guidance on administration of IIV, see Section 3.

Important Notice: LAIV4 should be stored in a refrigerator between 2-8 degrees Centigrade (35°F – 46°F) when received and used before the expiration date. DO NOT FREEZE.

Live, Attenuated Intranasal Influenza Vaccine (LAIV4)

A single LAIV4 is licensed in the United States: FluMist® (MedImmune, Inc.). LAIV4 is a live, quadrivalent, intranasally-administered vaccine that induces broad mucosal and systemic immune response. The vaccine is composed of a cold-adapted, temperature-sensitive virus that is only efficient at replicating in the temperature present in the nasal mucosa. LAIV4 should be stored in a refrigerator between 2-8 degrees Centigrade (35°F – 46°F) when received and used before the expiration date. LAIV4 is Thimerosal free. DO NOT FREEZE.
1. In general, LAIV4 is an option for vaccinating healthy VHA staff, volunteers, and Veterans under the age of 50. VA health care facilities may use it whether or not there is a shortage of inactivated (injectable) vaccine. But, especially in the event of a shortage of inactivated vaccine, use of LAIV4 conserves inactivated vaccine for those who are not eligible to receive LAIV4. For specific guidance on administration of LAIV4, see Section 3.

2. Side effects that may occur after administration of LAIV4 include runny nose, nasal congestion, headache, sore throat, and cough.

CAUTION

3. LAIV4 should NOT be given to:
   a) People who are 50 or over, or children under 2 years old
   b) Anyone with history of hypersensitivity, or anaphylactic reaction, to any component of FluMist® or any previous influenza vaccination
   c) Those allergic to eggs or egg products, gentamicin, gelatin, or arginine
   d) Persons who:
      ● Have had a severe allergic reaction to previous influenza vaccinations (e.g. rash, hives, itching, difficulty breathing, tightness in the chest, swelling of the mouth, face, lips, or tongue)
      ● Are children and adolescents (6 months-18 years of age) receiving aspirin or aspirin-containing therapy (or another salicylate)
      ● Have asthma, or active wheezing, or children younger than 5 yrs with recurrent wheezing
      ● Are pregnant
      ● Have nasal congestion that impedes delivery of the vaccine to the nasopharyngeal mucosa (delay LAIV4 administration until resolved or offer IIV)
      ● Have a moderate or severe illness with or without fever
      ● Are a close contact of immunosuppressed persons who require a protected environment
   e) Persons who have:
      ● Heart disease
      ● Lung disease
      ● Kidney disease
      ● Liver disease
      ● Immunosuppression/immunodeficiency disease
      ● Diabetes/metabolic disorders
      ● Anemia or other blood disorders
      ● Neurologic/neuromuscular disorders
      ● History of Guillain-Barré Syndrome

4. Health care personnel who work with severely immunosuppressed persons requiring care in a protected environment should not be vaccinated with LAIV4 (i.e., patients who are in hospital in a protective environment that is typically defined as a specialized patient-care area with a positive airflow relative to the corridor, high-efficiency particulate air filtration, and frequent air changes).

5. Severely immunosuppressed persons should not administer LAIV4 to others because of the small risk of acquiring vaccine virus from the environment during administration.

6. LAIV4 may be administered to others by person: considered at high risk of influenza complications or persons with underlying medical conditions placing them at high risk or who are likely to be at risk, (this includes persons 50 years old or older, pregnant women, those who have asthma, cystic fibrosis, or chronic obstructive pulmonary disease; those with chronic metabolic disease like diabetes, those with renal disease, etc.).

7. Consideration for restrictions of health-care personnel at work after receiving LAIV4: The precaution regarding use of LAIV4 in protected environments is based on a theoretic concern of transmission of the live attenuated virus to severely immunocompromised persons. However, no transmission of LAIV4 in health-care settings has ever been reported. These viruses are cold-adapted and cannot replicate at normal body temperature making the risk for transmitting a vaccine virus to a severely immunocompromised person extremely low. Health-care personnel working in environments such as neonatal intensive care, oncology, HIV, or labor and delivery units can receive LAIV4 without restriction.

8. VA does not have a specific contract for purchasing LAIV4 for our seasonal flu vaccine programs. Individual facilities may choose to order and administer LAIV4 flu vaccine for specific recommended groups. The use needs to be according to the current CDC ACIP guidelines. The ordering and administration of this formulation of flu vaccine would be coordinated through your pharmacy and flu vaccination planning committee.
References


Vaccination of Health-Care Personnel: Recommendations of the Health Care Practices Advisory Committee (HICPAC) and the Advisory Committee on Immunization Practices (ACIP), MMWR, Feb 24, 2006. Vol. 55/No RR-2. MMWR, July 17, 2008/57 (Early Release);1-60 http://www.cdc.gov/mmwr/preview/mmwrhtml/rr5502a1.htm

CDC: Prevention and Control of Seasonal Influenza with Vaccines, Recommendations of the Advisory Committee on Immunization Practices – United States. Available at: http://www.cdc.gov/mmwr/

Antiviral Agents for the Treatment and Chemoprophylaxis of Influenza; Recommendations of the Advisory Committee on Immunization Practices (ACIP); Recommendations and Reports; January 21, 2011 / 60(RR01); 1-24 http://www.cdc.gov/mmwr/preview/mmwrhtml/rr6001a1.htm

Within health care settings, no transmission of attenuated flu virus from LAIV has ever been reported.

Quadrivalent Influenza Vaccine

Do you know what the “H” and the “N” represent in H1N1 and other flu viruses? They are 2 surface glycoproteins hemagglutinin (HA) and neuraminidase (NA).

Quadrivalent vaccines contain antigens to two type A and two type B viruses which provides a broader spectrum of protection against the circulating influenza viruses.

Current trivalent vaccines contain antigens to three types of influenza viruses – two type A and one type B virus.

Healthcare providers should consult product inserts to confirm appropriate use of specific vaccines given the age and other characteristics of their patients.

Influenza Vaccines Efficacy

Modern influenza vaccines are clearly efficacious. However, reported vaccine efficacy will depend on the clinical endpoint used. Among the different kinds of endpoints used in studies are laboratory confirmed influenza illness, influenza-like illness (i.e. respiratory illness without laboratory confirmation), hospitalization for pneumonia and influenza, and death. For each of these outcomes, the reported vaccine efficacy will depend on the outcome’s sensitivity and specificity for being caused by influenza.

Time is needed for vaccinated persons to develop antibodies. Levels of protective antibodies peak 2 to 4 weeks post vaccination. Even when the vaccine strains are the same as the previous year, vaccination of those vaccinated during the previous flu season is recommended due to diminishing protection and changes in vaccine composition.

Todd A. Moore, RN, BSN, MSHA is the Assistant Director of the Overton Brooks VA Medical Center.
Drive-through Flu Shot Clinic

Beverly F. Van Metre, RN, BSN, MS, CHES, VHA-CM, Clinical Programs Coordinator, and IDPIO Team Member, Martinsburg, WV VAMC

The Martinsburg, WV, VA Medical Center has offered a drive-through flu shot clinic since 2007. The project has proven to be very popular among Veterans who express that they look forward to it every year.

The clinic is staged in a parking lot away from the main parking areas, but easily accessible from the main entrance to the campus. The clinic is set up using a mobile trailer parked beside a carport. Police Service places electronic signs that direct drivers to the clinic location and display the hours of operation. Veterans drive in under the carport, turn off the vehicle engine, and the nurses give flu, pneumococcal, and TDaP vaccine, as needed.

Ambulatory care intermittent nurses staff the clinic. For the past three years, one of the nurses has been the “lead” nurse and is responsible for arranging the schedules to cover the clinic hours. Having a “lead” nurse makes the scheduling process smoother and promotes team work. Wireless laptops are used for documentation and a check-in kiosk is located at car side.

The clinic opens as soon as possible after the flu vaccine shipment arrives, usually the day after Labor Day in September, and stays open (weather permitting), until the week before Thanksgiving.

Each Veteran has an opportunity to discuss the vaccines, any mild side effects, and ask questions. If it is the first time a Veteran is receiving the flu vaccine, staff ask him/her to park for at least 30 minutes to monitor for adverse reactions. During the vaccination process all Veterans receive a “goody” bag with Infection: Don’t Pass It On (IDPIO) campaign handouts on flu and hand and respiratory hygiene, the vaccine information statement (VIS) for the vaccine/s that s/he received, a 4-ounce bottle of alcohol hand gel, a pocket-size pack of tissues and an apple. Food service provides the apples and the Veterans love the “goody” bags, especially the apples.

When I organized the drive-through flu shot clinic, I did so to improve accessibility of influenza and other important vaccines. But my primary vision for the drive-through was to provide a special service for our Veterans. Our routine approach to every Veteran is first to thank them for their service to our country and tell them we are pleased to provide this service as a way of showing our appreciation. Many times we have received a heartfelt response to this greeting. All our nurses agree that this is an assignment they want to keep year after year.

Recently it has reported that, for studies reporting efficacy against laboratory confirmed influenza, real-time polymerase chain reaction (rtPCR) represents the best laboratory test for confirming influenza infection. Other laboratory tests that have been used in studies assessing influenza vaccine efficacy include culture (which suffers from a lower sensitivity than rtPCR), and serology (which may result in biased outcome ascertainment due to the fact that vaccinated persons may be less likely to show serologic evidence of infection than unvaccinated persons). Thus previously published studies assessing laboratory confirmed outcomes must be carefully scrutinized with regard to the exact method of laboratory confirmation used.

Other challenges in interpreting influenza vaccine efficacy or effectiveness studies relate to the type of study design used. Randomized clinical trials
Influenza Vaccine

Represent the gold standard for study design. But for assessing influenza vaccine effectiveness in the elderly, most published studies are not clinical trials but observational studies that are more susceptible to residual confounding and bias. For additional information on efficacy, refer to Prevention and Control of Seasonal Influenza with Vaccines, Recommendations of the Advisory Committee on Immunization Practices – available at: http://www.cdc.gov/mmwr/.

Despite these challenges, we know that, while they are not perfect, influenza vaccines do work. A recent meta-analysis of randomized placebo controlled trial and observational studies of influenza vaccine efficacy for reducing laboratory confirmed influenza illness (culture or rtPCR confirmed) found that the efficacy of trivalent inactivated vaccine in adults under age 65 was 59% (95% confidence interval of 51% to 67%).

In the same review several observational studies of influenza vaccination were reviewed. In one study of adults 50 years of age and older, vaccination was associated with reductions in hospitalization for laboratory confirmed influenza of 56% to 73% over 3 study years. While the results for individual years were not statistically significant, the pooled estimate of vaccine effectiveness reported in the original study was statistically significant at 61.2% (95% confidence interval 51% to 67%).

Influenza Vaccine Safety

Current influenza vaccines are very safe. Each year tens of millions of doses of vaccine are used in the United States, and cumulatively over the past decade almost 1 billion doses of influenza vaccine have been administered in this country. We have a substantial experience with these vaccines including a large amount of data demonstrating their safety.

With standard dose trivalent inactivated influenza vaccines, for example, randomized placebo controlled trials have demonstrated that healthy younger adults and the elderly do not experience significant increases in systemic symptoms following a flu shot than after a placebo injection. You don’t get the flu from a flu shot. However, following vaccination some people may experience local reactions such as arm soreness or tenderness that are usually mild to moderate and resolve in 1 to 2 days.

With the live attenuated influenza vaccine (the nasal spray vaccine), healthy adults experienced somewhat higher rates of runny nose and sore throat following receipt of the vaccine when compared to placebo. These symptoms were generally mild with resolution within a few days.

Let us not forget that measuring efficacy can be challenging based on multiple factors such as severity of flu in circulation and lab confirmation (number of people who actually get sick from flu each year) to support a formal diagnosis of flu-related illness. There are multiple pathogens that produce symptoms similar to influenza. And, flu vaccine only protects from influenza strains designated for inclusion in that year’s vaccine formulations.

Some clinical trials have also assessed influenza vaccine efficacy for reducing symptomatic respiratory illnesses (e.g. influenza-like illnesses) during the influenza season without relying on laboratory confirmation. These outcome case definitions include a lot of “noise” since many winter respiratory illnesses are caused by non-influenza viruses. In healthy younger adults, influenza vaccination reduces these clinical influenza-like illnesses on average by 30% (95% confidence interval 17% to 41%). For the elderly, only one clinical trial has reported a similar outcome, and vaccination in that study had an efficacy of 31% to 47% depending on the clinical case definition used.

The Centers for Disease Control and Prevention and the Food and Drug Administration closely monitor vaccines for safety in cooperation with state and local health departments, healthcare providers, and other partners including the Department of Veterans Affairs. In addition to published research studies, other sources of data on vaccine safety include the national Vaccine Adverse Events Reporting System (VAERS) and the national Vaccine Safety Datalink (VSD) project sponsored by the Centers for Disease Control and Prevention.
Guillain-Barré Syndrome (GBS)
Guillain-Barré syndrome (GBS) is a rare disorder in which a person’s immune system damages their nerve cells, causing muscle weakness and sometimes paralysis. In 1976 there was a small increased risk of GBS following vaccination with an influenza vaccine made to protect against a swine flu virus. The Institute of Medicine (IOM) conducted a thorough scientific review of this issue in 2003 and again in 2011 and concluded the evidence is inadequate to accept or reject a causal relationship between the influenza vaccine and GBS over the last 30 years but an association cannot be ruled out (Salmon 2013).

How do I report an adverse reaction from flu vaccination?
Providers report the adverse event through the Adverse Event Tracking Package (ART) in CPRS and also through the VA Adverse Drug Event System (VA ADERS). Providers have direct access to CPRS. The Chief of Pharmacy (or designee) at every facility inputs adverse reactions into VA ADERS for drugs and vaccines. A Vaccine Adverse Event Reporting System (VAERS) form for all vaccines should be submitted anytime an adverse event occurs. The VAERS form is available at http://vaers.hhs.gov/pdf/vaers_form.pdf. On-line reporting is available at https://vaers.hhs.gov/esub/index. In addition, all adverse events must be documented in OHRS.

Influenza Vaccination Indications
The CDC Advisory Committee on Immunization Practices (ACIP) recommends that all people age 6 months or older who have no contraindications to the vaccine should get vaccinated each year.

If faced with a limited vaccine supply, focus vaccination on the following groups:
- Persons aged 6 months to 4 years or ≥50 years
- Have chronic pulmonary (including asthma), cardiovascular (except hypertension), renal, hepatic, neurologic, hematologic, or metabolic disorders (including diabetes mellitus)
- Immunosuppressed (including immunosuppression caused by medications or by human immunodeficiency virus)
- Pregnant during the influenza season
- Are aged 6 months–18 years and receiving long-term aspirin therapy
- Are residents of nursing homes and other chronic-care facilities
- Are American Indians/Alaska Natives
- Are morbidly obese (body-mass index ≥40)
- Are health-care personnel
- Are household contacts and caregivers of children aged <5 years, adults aged ≥50 years, or persons with medical conditions that put them at higher risk for severe complications from influenza.

REMINDER:
Give the CDC Vaccine Information Statement (VIS) prior to administration of vaccine and document that the patient received the VIS, including the date of the VIS. The VIS can be found on-line at http://www.cdc.gov/vaccines/hcp/vis/index.html.
Frequently Asked Questions (FAQs) about Influenza

1. What should everyone know about the seasonal influenza vaccine?
   - The most effective strategy for preventing influenza is annual seasonal influenza vaccination.
   - One needs an influenza vaccination annually to get the latest protection for seasonal flu.
   - Influenza vaccination can begin as early as August/September, per CDC guidelines, if vaccine is available.
   - Flu vaccine can be given well into winter and spring as long as flu is circulating in your local area, or until the flu vaccine expires.
   - The influenza vaccine is changed each year to match the current circulating type of influenza. The influenza vaccine (used each year is formulated to provide a close match to the known circulating strains of flu viruses and those anticipated to circulate that year.

2. When should flu vaccine be given?
   Flu vaccine should be made available to both enrolled Veterans and VA health care personnel as soon as flu vaccine is available at the facility. Do not “hold” doses. Vaccination efforts should be structured to ensure the vaccination of as many persons as possible over the course of several months, with emphasis on vaccinating before influenza activity in the community begins. In any given year, the optimal time to vaccinate cannot be determined precisely because influenza seasons vary in timing and duration, and more than one outbreak can occur in a single community in a single year. More information is available http://www.cdc.gov/mmwr/preview/mmwrhtml/mm6132a3.htm?s_cid=mm6132a3_x.

3. How long does a flu vaccine provide protection?
   The flu vaccine will protect you for one flu season. The flu vaccine is designed to protect you from the strains of flu that are expected to circulate that flu season. The components of the flu vaccine are updated every year in response to the most common circulating strains of flu virus. CDC recommends that seasonal influenza vaccine be administered to all age groups as soon as it becomes available.

4. Can the Inactivated Influenza Vaccine (IIV) be given with other vaccines?
   - Yes, the inactivated influenza vaccine does not interfere with the immune response to other inactivated vaccines or to live vaccines.
   - Inactivated or live vaccines can be administered simultaneously with live, attenuated influenza vaccine-LAIV4 (nasal spray).
   - However, after administration of a live vaccine, another live vaccine should not be administered for at least four weeks.

5. How effective is the influenza vaccine?
   Generally inactivated influenza vaccine will generate protective immunity in about two weeks. However, the effectiveness of inactivated influenza vaccine depends primarily on the age and immunocompetence of the vaccine recipient, and the degree of similarity between the viruses represented in the vaccine and those in circulation.

   In years when the vaccine strains are not well matched to circulating strains, vaccine effectiveness is generally lower. The vaccine’s effectiveness may also be lower among persons with chronic medical conditions and the elderly, as compared to healthy young adults and children. Overall, in years when the vaccine and circulating viruses are well-matched, influenza vaccines can be expected to reduce laboratory-confirmed influenza by approximately 70% to 90% in healthy adults <65 years of age. Several studies have also found reductions in febrile illness, influenza-related work absenteeism, antibiotic use, and doctor visits. For more information, visit http://www.cdc.gov/flu/professionals/vaccination/effectivenessqa.htm.

6. Are the eggs used for influenza vaccine production the same as eggs used for food consumption?
   The eggs used for influenza vaccine production are different from eggs that are used for food consumption in that the eggs for the vaccine are embryonated.
7. How do I report an adverse reaction from flu vaccination?

- Providers report the influenza vaccine adverse event through the Adverse Reaction Tracking System (ARTS) in CPRS. Providers have direct access to CPRS to input adverse reactions into the ART System.

- The Chief of Pharmacy (or designee) at every facility inputs adverse reactions for drugs or vaccines into VA Adverse Drug Event Reporting System (VA ADERS). A Vaccine Adverse Event Reporting System (VAERS) form for all vaccines should be submitted anytime an adverse event occurs. The VAERS form is directly accessible through a link in VA ADERS that allows online reporting. On-line reporting is also available at https://vaers.hhs.gov/esub/index.

- Occupational health should also report an adverse event through the Adverse Reaction Tracking System (ARTS) through the Occupational Health Record-Keeping System (OHRS).

8. Can we give flu vaccine to family members of enrolled Veterans?

No, at this time, flu vaccine purchased by the VA cannot be given to family members of enrolled Veterans (few exceptions exist such as those in CHAMPVA). Some VA facilities have partnered with local public health agencies in order to offer flu vaccine to family members and those not enrolled for VA care during flu vaccine campaigns. The local public agencies provide their own supply of flu vaccine, records, and billing or cost accounting (i.e., billing Medicare or insurance). The local public health agency (i.e., “Visiting Nurse Association” or local county health department) provides its own staff to administer flu vaccines as well. The local public health agency may be available at a separate station/location within the VA facility during walk-in flu vaccine campaigns, for example.

9. What is the difference between standard-dose IIV and high-dose IIV?

High-dose flu vaccine contains four times the antigens as standard–dose flu vaccine. The high-dose formulation is approved for persons aged ≥65 years and contains 60 mcg per vaccine strain. They both contain the same amount of preservatives.

More information about high-dose flu vaccine is available on the following websites:

- The Food and Drug Administration (FDA) web site on the Vaccines, Blood & Biologics page at: http://www.fda.gov/BiologicsBloodVaccines/Vaccines/ApprovedProducts/ucm112854.htm


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**Take three and prevent the flu- I got my flu shots, how about you?**

*Protect yourself and our vets. Take three!*

Flu Poster
Boise VA Medical Center, Boise, Idaho
<table>
<thead>
<tr>
<th>Vaccine Type</th>
<th>Route–Site</th>
<th>Appropriate Veteran Age</th>
<th>Adult Dosing Recommendations</th>
<th>Thimerosal Yes / No</th>
<th>Latex Yes / No</th>
<th>CPT Code</th>
</tr>
</thead>
<tbody>
<tr>
<td>Inactivated injectable*</td>
<td>Intramuscular (IM)</td>
<td>18 years and older</td>
<td>0.5 mL – prefilled syringe</td>
<td>No</td>
<td>Yes</td>
<td>90656</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Syringe Tip Cap</td>
<td></td>
<td>90471</td>
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<td></td>
<td></td>
<td></td>
<td></td>
<td>for these brands:</td>
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<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Fluarix®</td>
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<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Fluvirin®</td>
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<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>FlucelVax®</td>
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<td></td>
<td></td>
<td>Agriflu®</td>
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<tr>
<td>Inactivated injectable*</td>
<td>IM</td>
<td>18 years and older</td>
<td>Multi-dose vial 0.5 mL per dose</td>
<td>Yes</td>
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<td>90658</td>
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<tr>
<td>Inactivated injectable*</td>
<td>IM</td>
<td>65 years and older</td>
<td>0.5 mL – High-Dose prefilled syringe</td>
<td>No</td>
<td>No</td>
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<tr>
<td>Inactivated injectable*</td>
<td>Intradermal (ID) instructions with device</td>
<td>18 to 64 years</td>
<td>0.1 mL – prefilled microinjection systems</td>
<td>No</td>
<td>No</td>
<td>90654</td>
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<td></td>
<td></td>
<td>90471</td>
</tr>
<tr>
<td>Live attenuated**</td>
<td>Intranasal (IN)</td>
<td>2 through 49 years if healthy and non-pregnant</td>
<td>0.2 mL – Spray ½ of dose into each nostril as indicated on the syringe</td>
<td>No</td>
<td>No</td>
<td>90660</td>
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<tr>
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</tr>
</tbody>
</table>

± NOTE: These vaccination codes should be used in addition to the code for the actual administration of the vaccine, 90471.

* Trivalent inactivated influenza vaccine.

**Intranasal live attenuated vaccine only available as quadrivalent vaccine.
### Table of Approved Influenza Vaccines for the United States, as of July 2014

<table>
<thead>
<tr>
<th>Vaccine</th>
<th>Trade Name</th>
<th>Manufacturer</th>
<th>Presentation</th>
<th>Age Indications</th>
<th>Route</th>
<th>CPT Code</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Inactivated Influenza Vaccine, Trivalent [IIV3]</strong>, Standard Dose</td>
<td>Afluria®</td>
<td>CSL Limited</td>
<td>0.5 mL single-dose prefilled syringe</td>
<td>≥9 yrs.</td>
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<tr>
<td></td>
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<td>5.0 mL multi-dose vial**</td>
<td>≥9 yrs.</td>
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<td>90658</td>
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<tr>
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<td>Fluarix®</td>
<td>GlaxoSmithKline</td>
<td>0.5 mL single-dose prefilled syringe</td>
<td>≥3 yrs.</td>
<td>IM</td>
<td>90656</td>
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<tr>
<td></td>
<td>Flucelvax®**<em>(Cell culture-based Trivalent Inactivated Vaccine ccIIV3)</em></td>
<td>Novartis Vaccines</td>
<td>0.5 mL single-dose prefilled syringe</td>
<td>≥18 yrs.</td>
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<td>FluLaval®</td>
<td>ID Biomedical Corporation of Quebec (distributed by GlaxoSmithKline)</td>
<td>5.0 mL multi-dose vial**</td>
<td>≥3 yrs.</td>
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<tr>
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<td>Fluvirin®</td>
<td>Novartis Vaccines</td>
<td>0.5 mL single-dose prefilled syringe</td>
<td>≥4 yrs.</td>
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<tr>
<td></td>
<td></td>
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<td>5.0 mL multi-dose vial**</td>
<td>≥4 yrs.</td>
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<tr>
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<td>Fluzone®</td>
<td>Sanofi Pasteur</td>
<td>0.25 mL single-dose syringe</td>
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<td>0.5 mL single-dose syringe</td>
<td>≥36 mos.</td>
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<td>0.5 mL single-dose vial</td>
<td>≥36 mos.</td>
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<tr>
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<tr>
<td></td>
<td>Fluzone® Intradermal</td>
<td>Sanofi Pasteur</td>
<td>0.1 mL prefilled microinjection system</td>
<td>18-64 yrs.</td>
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<tr>
<td></td>
<td>Fluzone® High-Dose</td>
<td>Sanofi Pasteur</td>
<td>0.5 mL single-dose prefilled syringe</td>
<td>≥65 yrs.</td>
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<td>90662</td>
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<tr>
<td>Vaccine</td>
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<td>Manufacturer</td>
<td>Presentation</td>
<td>Age Indications</td>
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<td>CPT Code</td>
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<tr>
<td>Inactivated Influenza Vaccine, Quadrivalent (IIV4), Standard Dose</td>
<td>Fluzone® Quadrivalent</td>
<td>Sanofi Pasteur</td>
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<td>0.5 mL single-dose prefilled syringe</td>
<td>≥36 mos.</td>
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<td>Fluarix®</td>
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<td>0.5 mL single-dose prefilled syringe</td>
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<td>Recombinant Influenza Vaccine, Trivalent (RIV3)</td>
<td>FluBlok***</td>
<td>Protein Sciences</td>
<td>0.5 mL single-dose vial</td>
<td>18-49 yrs.</td>
<td>IM</td>
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<tr>
<td>Live-attenuated Influenza Vaccine, Quadrivalent (LAIV4)</td>
<td>FluMist® Quadrivalent</td>
<td>MedImmune</td>
<td>0.2 mL prefilled intranasal sprayer</td>
<td>2-49 yrs.</td>
<td>IN</td>
<td>90672</td>
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</table>

* Immunization providers should check Food and Drug Administration-approved prescribing information for vaccines for the most complete and updated information, including (but not limited to) indications, contraindications, and precautions. Package inserts for US-licensed vaccines are available at: [http://www.fda.gov/BiologicsBloodVaccines/Vaccines/ApprovedProducts/ucm093833.htm](http://www.fda.gov/BiologicsBloodVaccines/Vaccines/ApprovedProducts/ucm093833.htm).

**Multi-dose vials contain thimerosal as a preservative.

***Immunization option for persons with a history of severe allergic reaction to eggs.

How to Administer Influenza Vaccine

Contributors:

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Memphis VAMC

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Reno VAMCS
Inactivated Influenza Vaccine Administration

1. Concomitant vaccine administration. Usually, inactivated vaccines do not interfere with the immune response to other inactivated vaccines or to live vaccines.

2. Provide the vaccine recipient with the appropriate CDC Vaccine Information Statement (VIS). Document the date of the VIS and that it was given to the vaccine recipient. This must be a print copy that the patient may read and take home. Copies of the CDC influenza VIS’s are included in this section of the manual or on the Web at http://www.cdc.gov/vaccines/pubs/vis/default.htm. VA staff may also provide patients with other information or educational material in addition to the CDC VIS.

3. Ensure the patient has no known contraindications to receive the vaccine. In some rare instances people receiving vaccine have had severe allergic reactions. The following precautions should be carefully noted:

   a) People with known severe allergy to eggs, SHOULD NOT receive the vaccine unless evaluated by their physician to help determine if vaccine should be administered. People may say they are allergic to eggs, yet they actually eat products made with eggs (e.g. bread, cake). Be sure the allergy to eggs is accurate information and not just personal food dislike/preference.

   b) People who have had a previous influenza vaccination and had a serious reaction to components of the vaccine should not receive influenza vaccine.

   c) People with moderate or severe illness with a fever should delay getting vaccinated until after the acute phase of a febrile or respiratory illness (approximately 72 hours or until afebrile).

   d) People who developed Guillain-Barré syndrome (GBS) within six weeks of getting an influenza vaccine previously should consult a physician first. (Note: At one time, influenza shots were made with live virus. Influenza shots are now made with killed/inactivated virus, so GBS as an adverse event is extremely rare.)

   e) Influenza vaccine is not approved for children less than 6 months of age.

   People with hives only (majority of reactions) can safely receive the vaccine and should get it; very few adults are truly allergic to eggs (mostly occurs in childhood and is outgrown by adulthood). Skin testing prior to vaccine administration or dividing the dose is not necessary.
4. Injection Safety: hand hygiene, glove use, and skin preparation and disinfection. Injection safety is an important component of infection prevention. The concept of “standard precautions”, with mandatory safe practices, applies to all healthcare settings. Every person in all healthcare settings is considered a potential source of infection.

a) Hand Hygiene – Perform hand hygiene (use soap and water or alcohol hand rub), and wash/rub carefully, including wrists and spaces between the fingers according to your health care system hand hygiene policy.

- Perform hand hygiene BEFORE:
  - starting an injection session (i.e. preparing injection material and giving injections);
  - coming into direct contact with patients for health care related procedures;
  - putting on gloves (first make sure hands are dry).

- Perform hand hygiene AFTER:
  - an injection session;
  - any direct contact with patients;
  - removing gloves.

You may need to perform hand hygiene between injections in the same person, depending on the setting and whether there was contact with soil, blood or body fluids, ie, if receiving another vaccine at the same time as the flu vaccine.

Avoid giving injections if your skin integrity is compromised by local infection or other skin conditions (e.g. weeping dermatitis, skin lesions or cuts), and cover any small cuts.

b) Glove use

- Health care workers should wear non-sterile, well-fitting single-use gloves when coming into contact with blood. Latex-free gloves are preferred.
- Use one pair of non-sterile gloves per procedure or patient. Do not wear the same pair of gloves for more than one patient.
- Follow steps for hand disinfection before donning and after removal of gloves.
- You may choose to wear gloves as personal protection equipment (PPE), especially if you anticipate the vaccine recipient may bleed at the injection site.

- Ask the vaccine recipient if he/she bleeds easily or takes medications which thin the blood, such as warfarin (Coumadin®). If so, gloves should be worn.
- Indications for glove use in injection practice are:
  - when there is a likelihood of coming into direct contact with a patient’s blood or other potentially infectious materials (e.g. body fluids, moist body substances, nonintact skin that may be adjacent to or near the injection site).
  - if the health care worker’s skin is NOT intact (e.g. through eczema, or cracked or dry skin).
  - if the patient’s skin is NOT intact (e.g. through eczema, burns or skin infections).

- If wearing gloves, it may be helpful to open the individual bandage wrapper prior to applying gloves, to lessen the likelihood of the adhesive part of the bandage sticking to the gloves while applying the bandage to the vaccine recipient’s skin.

c) Skin preparation and disinfection

- Apply a 60–70% alcohol-based solution (isopropyl alcohol or ethanol) on a single-use swab or cotton-wool ball. DO NOT use methanol or methyl-alcohol as these are not safe for human use.
- Wipe the area from the center of the injection site working outwards, without going over the same area.
- Apply the solution for 30 seconds then allow it to dry completely.
- DO NOT pre-soak cotton wool in a container – these become highly contaminated with hand and environmental bacteria.
- Have latex-free bandages ready to apply to the injection site immediately after the injection is complete. Bandages to the injection site are not required, but most vaccine recipients prefer them. It is a good idea to apply to the injection site, in the event the site bleeds after injection and to cover/protect the skin where the injection occurred.

5. Administer the vaccine properly.

a) Clean or decontaminate your hands. See information above concerning glove use.
b) Examine and prepare the vaccine: Always double check the vial or syringe label to make sure that you have the vaccine you want to administer and it is not past the expiration date.

- For Multi-dose Vials: Shake the vial and visually inspect it for particulate matter. If you cannot shake the vaccine into a relatively even suspension, do not use it. After wiping the rubber stopper with an alcohol swab, load the syringe by injecting air into the vial, the same volume of air as the dose of vaccine to be drawn, pull plunger and draw vaccine into syringe. NOTE: Never reinsert a used needle into the vial.

- For Manufacturer Pre-filled (standard dose, high dose, or intradermal) syringes: Shake well before administration.

c) DO NOT prefill syringes. CDC does not recommend prefilled syringes because of the potential for administration errors. The same person who draws vaccine should ideally be the person who administers it. Once the needle is placed on the syringe it should be used immediately. Any syringes except those filled by the manufacturer should be discarded at the end of the clinic day.

d) Check vaccine expiration dates: Per The Joint Commission FAQ1, influenza vaccine is exempt from the new Joint Commission requirement on multi-dose vials being labeled with a revised expiration date once it has been opened or used. The manufacturer expiration date for influenza vaccines should be used for shelf life even after opening. The Joint Commission has clarified these multi-dose requirements. The requirements are addressed in their Medication Management standard MM.03.01.01 element of performance 7 which requires organizations to store all medications labeled with the expiration date.

e) Use the appropriate vaccine formulation:
Inactivated Influenza Vaccine (IIV) vaccine has more than one formulation. The standard dose formulation is acceptable for use in all age groups >6 months of age. The high dose formulation is approved only for use in age groups 65 years old and older. The purpose of the high dose formulation is to get a better immune response in the older adult population (more data is needed to substantiate this).

f) Use the appropriate site and needle for intramuscular (IM) injection. The intramuscular route is recommended for IIV. Adults and older children should be vaccinated in the deltoid muscle, below the shoulder on the upper arm. Use a 22–25 gauge needle. Choose the injection site and needle length appropriate to the person’s age and body mass. Needles of less than 1 inch might be of insufficient length to penetrate muscle tissue in certain adults and older children. A 1 inch (25mm) to 1.5-inch (38 mm) needle should be used to give inactivated influenza vaccine intramuscularly to adults. The needle length must be able to ensure sufficient intramuscular injection.

Concurrent Administration of Influenza Vaccine with Other Vaccines.

In the absence of specific data indicating interference, following ACIP’s general recommendations for vaccination is prudent. Inactivated vaccines do not interfere with the immune response to other inactivated vaccines or to live vaccines. LAIV4 can be administered simultaneously with inactivated or other live vaccines. However, after administration of a live vaccine, at least 4 weeks should pass before another live vaccine is administered. (CDC General Recommendations on immunization, recommendations of the Advisory Committee on immunization Practices (ACIP) and the American Academy of Family Physicians).
What length of needle should we use to give influenza vaccinations to adults?

<table>
<thead>
<tr>
<th>Adults 19 yrs or older</th>
<th>Needle Length</th>
<th>Injection Site</th>
</tr>
</thead>
<tbody>
<tr>
<td>Male or female less than 130 lbs</td>
<td>¾-1 inch *</td>
<td>Deltoid muscle of arm</td>
</tr>
<tr>
<td>Female 130-200 lbs Male 130-260 lbs</td>
<td>1-1½ inch</td>
<td>Deltoid muscle of arm</td>
</tr>
<tr>
<td>Female 200+ lbs Male 260+ lbs</td>
<td>1½ inch</td>
<td>Deltoid muscle of arm</td>
</tr>
</tbody>
</table>

*A 5/8” needle may be used for patients weighing less than 130 lbs (<60 kg) for IM injection in the deltoid muscle only if the skin is stretched tight, the subcutaneous tissue is not bunched, and the injection is made at a 90-degree angle.

7. Prepare and watch for an allergic reaction (anaphylaxis). Acute anaphylactic reactions are very rare, occurring after approximately one out of every 500,000 doses of vaccine. When they occur, however, you must take immediate action. During walk-in immunization clinics, no vaccine should ever be administered unless epinephrine, diphenhydramine, adult airways, and blood pressure cuffs are close at hand. All providers administering influenza vaccine should be familiar with an anaphylaxis protocol and with cardiopulmonary resuscitation (CPR).

After you have administered a vaccine to the vaccine recipient, instruct the recipient to report any itching, redness (with or without hives), difficulty breathing, or abdominal pain within several minutes of injection. Having the vaccine recipient wait 15 minutes in a post-injection area is suggested but is not officially required.

6. Dispose of the needle and syringe safely. Use a safety needle product and activate the safety mechanism before discarding syringe with needle into the sharps container. Activation of the safety needle should occur immediately after injection. If a non-safety needle must be used, do not recap the needle after use. Discard the uncapped used needle still attached to the syringe into a sharps container keeping your eyes on the needle continuously until it is inside the container. These disposal techniques apply to intramuscular and intradermal needles and syringes.

Drive through clinics should advise vaccine recipients in the vehicle to report any itching, redness (with or without hives), difficulty breathing, or abdominal pain within several minutes of injection to VA staff working in the drive through clinic. Follow the facility protocol for drive through immunization clinic recommendations when advising the vaccine recipients (or their driver) what to do if this occurs.

Vaccine Storage and Handling

Store Inactivated Influenza Vaccine (IIV) properly: Store between 2°C – 8°C (35°F – 46°F). Vaccine should never be frozen. Refrigerator temperature should be checked 2 times daily.

- The temperature in the refrigerator varies depending on if the item is stored in the vegetable bin, on the floor, next to the walls, in the door, etc., and may be a significant difference from the temperature in the body of the refrigerator away from these locations. Always store vaccines in their original packaging in the body of the refrigerator away from outlying locations. Place vaccine packages in such a way that air can circulate around the compartment. Never over pack the refrigerator compartment.
- Temperatures fluctuate throughout the day. Temperatures in the refrigerator should be checked at the beginning and end of the day to determine if the unit is getting too cold or too warm. Ideally, continuous monitoring thermometers that measure and record temperatures all day and all night are...
best. For vaccine storage only certified thermometers should be used. Recording the temperature of the room on the temperature log is a good idea in case there is a problem with the refrigerator/freezer temperatures. This information may be helpful to the vaccine company during a telephone consult to determine whether your vaccine can still be used if there has been a problem identified.

**Content for inactivated influenza adapted from:**


8. For a detailed explanation and demonstration of immunization techniques, the 35-minute video “Immunization Techniques DVD” can be ordered through the IAC at [http://www.immunize.org](http://www.immunize.org), using the “Shop IAC” link.

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**Large type version of the vaccine information statement for inactivated influenza vaccine**

CDC has a large type version of the VIS for the inactivated influenza vaccine. You can view and print this at [http://www.cdc.gov/vaccines/hcp/vis/vis-statements/flu.html](http://www.cdc.gov/vaccines/hcp/vis/vis-statements/flu.html).
Live Attenuated Influenza Vaccine Administration (LAIV4)

1. Understand concomitant vaccine administration.
   a) In the absence of specific data indicating interference, following ACIP’s general recommendations for vaccination is prudent. Inactivated vaccines do not interfere with the immune response to other inactivated vaccines or to live vaccines. LAIV4 can be administered simultaneously with inactivated or other live vaccines. However, after administration of a live vaccine, at least 4 weeks should pass before another live vaccine is administered (CDC General Recommendations on Immunization, recommendations of the Advisory Committee on Immunization Practices (ACIP) and the American Academy of Family Physicians).

   b) LAIV4 administration with measles, mumps, rubella and varicella vaccine among children (12-15 months) has been studied and indicates immunity was achieved with all vaccines administered.

2. Provide the vaccine recipient with the appropriate CDC Vaccine Information Statement (VIS) and document it was given to the vaccine recipient. This must be a print copy that the patient may read and take home. CDC influenza VIS can be found on the Web at http://www.cdc.gov/vaccines/pubs/vis/default.htm. VA staff may also provide patients with other information or educational material in addition to the CDC VIS.

3. Ensure vaccine recipient meets criteria to receive LAIV4. Healthy persons ages 2 years of age through 49 years of age and are not pregnant are eligible for this type of vaccination.

   LAIV4 should NOT be given to:

   a) Pregnant women

   b) People who are 50 or over

   c) Children under 2 years old because of an increased risk for hospitalization and wheezing observed in clinical trials

   d) Anyone with history of hypersensitivity, or anaphylactic reaction, to any component of LAIV4 or any previous influenza vaccination

   e) Those allergic to eggs or egg products, gentamicin, gelatin, or arginine

   Note: People with known severe allergy to eggs, SHOULD NOT receive the vaccine unless evaluated by their physician to help determine if vaccine should be administered. People may say they are allergic to eggs, yet they actually eat products made with eggs [e.g. bread, cake]. Be sure the allergy to eggs is accurate information and not just personal food dislike/ preference. People with hives only [majority of reactions] can safely receive the vaccine and should get it; very few adults are truly allergic to eggs [mostly occurs in childhood and is outgrown by adulthood]. Skin testing prior to vaccine administration or dividing the dose are not necessary.

   f) Persons who:
   - Have had a severe allergic reaction to previous influenza vaccinations [e.g. rash, hives, itching, difficulty breathing, tightness in the chest, swelling of the mouth, face, lips, or tongue].
   - Are children and adolescents (6 months to 18 years of age) receiving aspirin or aspirin-containing therapy (or another salicylate) (because of the association of Reye syndrome with wild-type influenza virus infection).
- Have asthma, or active wheezing, or children younger than 5 years with recurrent wheezing or a wheezing episode in the previous 12 months.
- Have nasal congestion that impedes delivery of the vaccine to the nasopharyngeal mucosa (delay LAIV4 administration until resolved or offer IIV).
- Have a moderate or severe illness with or without fever.
- Are in close contact with immunosuppressed persons who require a protected environment.

(Note: The precaution regarding use of LAIV4 in protected environments is based upon a theoretic concern that the live attenuated vaccine virus could be transmitted to severely immunocompromised persons. However, no transmission of LAIV4 in health-care settings ever has been reported, and because these viruses are also cold-adapted [and cannot effectively replicate at normal body temperature] the risk for transmitting a vaccine virus to a severely immunocompromised person and causing severe infection appears to be extremely low. HCP working in environments such as neonatal intensive care, oncology, or labor and delivery units can receive LAIV4 without any restrictions).

g) Persons who have:
- Heart disease, except isolated high blood pressure
- Lung disease
- Kidney disease
- Liver disease
- Immunosuppression/immunodeficiency disease
- Diabetes/metabolic disorders
- Anemia or other blood disorders
- Neurologic/neuromuscular disorders
- History of Guillain-Barré Syndrome

(Note: A moderate or severe illness with or without fever is a precaution for use of LAIV4. Development of GBS within 6 weeks following a previous dose of influenza vaccine is considered to be a precaution for use of influenza vaccines.)

1. Check expiration date. Product must be used before the date on sprayer label.
2. Remove rubber tip protector. Do not remove dose-divider clip at the other end of the sprayer.
3. With the patient in an upright position, place the tip just inside the nostril to ensure FluMist is delivered into the nose.
4. With a single motion, depress plunger as rapidly as possible until the dose-divider clip prevents you from going further.
5. Pinch and remove the dose-divider clip from plunger.
6. Place the tip just inside the other nostril and with a single motion, depress plunger as rapidly as possible to deliver remaining vaccine.

**DO NOT INJECT. DO NOT USE A NEEDLE.**

**Note:** Active inhalation (i.e., sniffing) is not required by the patient during FluMist administration.
3. Check manufacturer expiration date.

4. Check the syringe to make sure it is the correct vaccine. LAIV4 is intended for intranasal administration only and should not be administered by the intramuscular, intradermal, or intravenous route.

5. Administer vaccine intranasally; only one dose of 0.2 mL per season for adults. Remove the vaccine pre-filled single use sprayer from refrigerator. LAIV4 is supplied in a prefilled, single-use sprayer containing 0.2 mL of vaccine. While the recipient is in the upright position, insert tip of sprayer just inside the nose and rapidly depress the plunger until the dose-divider clip stops the plunger. Approximately 0.1 mL (i.e., half of the total sprayer contents) is sprayed into the first nostril while the recipient is in the upright position. Remove the dose-divider clip from the sprayer to administer the second half of the dose (approximately 0.1 mL) into the other nostril. If the vaccine recipient sneezes immediately after administration, the dose should not be repeated.

6. Postpone administration of LAIV4 if:
   - Vaccine recipient is in the acute phase of a febrile or respiratory illness (other than asthma) and administration should be delayed approximately 72 hours or until afebrile.
   - Nasal congestion is present that might impede delivery of the vaccine to the nasopharyngeal mucosa. Offer IIV or consider deferral of LAIV4 administration until resolution of the illness or condition causing the nasal congestion. No data exist about concomitant use of nasal corticosteroids or other intranasal medications.

7. Dispose of the sprayer properly. Once LAIV4 has been administered, the sprayer should be disposed of according to the standard procedures for medical waste.

8. Prepare and watch for an allergic reaction (anaphylaxis). Acute anaphylactic reactions are very rare, occurring after approximately one out of every 500,000 doses of vaccine. When they occur, however, you must take immediate action. During walk-in immunization clinics, no vaccine should ever be administered unless epinephrine, diphenhydramine, adult airways, and blood pressure cuffs are close at hand. Employees and volunteers should be familiar

Severely immunosuppressed persons: should not administer LAIV4 to patients. However, other persons at higher risk for influenza complications can administer LAIV4 to patients. These include persons with underlying medical conditions placing them at higher risk or who are likely to be at risk, including pregnant women, persons with asthma, and persons aged 50 years and older.

Vaccine prepared for a previous influenza season should not be administered to provide protection for any subsequent season.

Though rare, as with any vaccine, post vaccination reactions can occur.
with an anaphylaxis protocol and with cardiopulmonary resuscitation (CPR).

After you have administered a vaccine to the vaccine recipient, instruct the recipient to report any itching, redness (with or without hives), difficulty breathing, or abdominal pain within several minutes of administration. Having the vaccine recipient wait 15 minutes in a post-injection area is suggested but is not officially required.

**Vaccine Storage and Handling**

LAIV4 is shipped from the distributor to the receiving healthcare facility in a refrigerated state and should be refrigerated upon receipt and kept refrigerated until used. Refrigerated vaccine is good for use until expiration date. Do not freeze vaccine. Store vaccine between 2-8°C (35°F – 46°F). Check refrigerator temp where vaccine is stored 2 times daily.

- The temperature in the refrigerator varies depending on if the item is stored in the vegetable bin, on the floor, next to the walls, in the door, etc., and may be a significant difference from the temperature in the body of the refrigerator away from these locations. Always store vaccines in their original packaging in the body of the refrigerator away from outlying locations. Place vaccine packages in such a way that air can circulate around the compartment. Never over pack a refrigerator compartment.
- Temperatures fluctuate throughout the day. Temperatures in the refrigerator should be checked at the beginning and end of the day to determine if the unit is getting too cold or too warm. Ideally, continuous monitoring thermometers that measure and record temperatures all day and all night are best. For vaccine storage only certified thermometers should be used. Recording the temperature of the room on the temperature log is a good idea in case there is a problem with the refrigerator/freezer temperatures. This information may be helpful to the vaccine company during a telephone consult to determine whether your vaccine can still be used if there has been a problem identified.

**Important Notice:** LAIV4 should be stored in a refrigerator between 2-8 degrees Centigrade (35°F – 46°F degrees) when received and used before the expiration date. DO NOT FREEZE.

**Content for Live Attenuated Influenza Vaccine (LAIV4) adapted from:**


8. For a detailed explanation and demonstration of immunization techniques, the 35-minute video “Immunization Techniques DVD” can be ordered through the IAC at [http://www.immunize.org](http://www.immunize.org) using the “Shop IAC” link.
Related Resources

Instruction sheets on vaccine administration are also available from the Immunization Action Coalition (IAC):


Instructions for administration of LAIV4 http://www.fda.gov/downloads/BiologicsBloodVaccines/Vaccines/ApprovedProducts/UCM123743.pdf

For a detailed explanation and demonstration of immunization techniques, the 35-minute video “Immunization Techniques: Safe, Effective, Caring,” can be ordered through the IAC at http://www.immunize.org, click the link for Video: IZ Techniques
Flu Vaccination Campaign: Planning, Conducting, and Evaluating

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A successful influenza vaccination campaign is grounded in planning, execution, and evaluation. This section focuses on these elements by providing suggestions, ideas, and guidance for use as a foundation of your campaign, starting with assembling an effective flu campaign team. This section outlines potential roles of team members and also contains the Seasonal Influenza Campaign Calendar that describes month by month processes to monitor activities and initiatives and track progress towards vaccination goals.

Flu Campaign Team: A flu vaccine campaign will be as successful as the care with which the planning team was selected and the attention to detail of the plan, its execution, and evaluation. A flu team is the foundation of a successful campaign and at the epicenter is the Flu Coordinator(s). Sites with effective campaigns often have Flu Coordinators and team members that have established longevity and experience overseeing and developing the vaccination campaign. Each VA medical center or facility may enlist different types of professionals and disciplines as team members to provide comprehensive coverage of the campaign from promotion to data entry.

Flu Coordinators and team members are usually designated or appointed by facility leadership – and leadership’s support is essential to vaccination campaign goals and activities. Flu Coordinator(s) should work closely with facility leadership to select team members. Membership can be formalized through letters of appointment. Each team is usually a reflection of the unique characteristics of the facility, the staff, and Veteran patients it serves. Although not every team member will be involved throughout the entire campaign, the following list will help you build an effective and comprehensive team.

Flu Coordinator: The flu coordinator is the chair of the team. S/he provides leadership to plan meetings, delegate tasks to team members, and oversee the flu vaccine campaign. The person(s) designated as Flu Coordinator varies according the needs and practices of various VAMC sites and may be from a variety of disciplines such as nurses, pharmacists, and physicians, or staff in roles such as the health promotion and disease prevention coordinator or a public affairs officer. Often times it is a shared responsibility between infection control (patient vaccination) and occupational/employee health (staff vaccination) who work together to provide vaccine to all target populations. The Flu Coordinator should be a flu champion whose attitude, commitment, and enthusiasm toward preventing the spread of influenza through vaccination and other mitigation strategies is evident.

- Associate Chief Nurses and Nurse Managers: Since the flu vaccine campaign will involve both inpatient and outpatient populations, nursing leaders from both areas should be involved or at the very least, designate a representative to the team. The nurse leaders will be able to assist with staffing resources for team strategies such as a drive-through or walk-in clinic, special events, and promoting employee flu vaccination. If a site has a combined patient and staff campaign, nurse leaders can assist with staffing for roving flu vaccine carts or expanded hours for flu vaccinations in the occupational health clinic. Nurse leaders from inpatient acute and long term care areas will also help with plans for vaccinating these populations. Many sites employ standing orders for patient and/or staff vaccination. Usually facility leadership (e.g. Chief of Staff) or other clinical leadership will determine utility of standing orders and issue guidance within their facility and associated outpatients clinics, community living centers, and other sites of care delivery. Nursing leadership often
What can facility leadership do to support and promote influenza vaccination?

1. Get vaccinated against flu.
2. Let others within your facility know you’ve been vaccinated and why you believe it is important.
3. Have your picture taken during vaccination and use it to promote vaccine uptake.
4. Promote vaccination to your leadership team.
5. Promote vaccination in person to colleagues.
6. Promote vaccination via an email to all staff.
7. Promote vaccination at meetings, grand rounds, and at other forums and gatherings.
8. Send out periodic emails regarding current rates of vaccination to encourage higher vaccine uptake to meet facility targets.
10. Appoint a flu champion/s (preferably NOT a new one/s each year).
11. Collaborate with the flu coordinator/champion to formally appoint staff to participate as flu team members. Team members should know facility leadership considers the flu vaccination campaign a priority.
12. Encourage the flu team to offer flu shots at staff meetings and other scheduled events.
13. Provide a budget for the flu team to promote, implement, and evaluate the vaccination campaign.
14. Attend some of the flu team meetings.
15. Reward flu team members in performance assessments, evaluations, and awards.
16. Include flu promotion in newsletters.
17. Support flu vaccination clinics by approving overtime or additional monies for extra human resources.
18. Work with human resources and occupational health to support and promote the notion of “staying home when sick”. Ensure all managers and staff support and encourage this practice and related policies are in place.
19. Conduct an annual staff picnic where flu shots are offered.
20. Support incentives for high performing clinics/teams/units such as pizza parties or items from the canteen.
21. Ask all staff, especially leadership teams, to support and promote flu vaccination efforts.
22. Volunteer at flu clinics and stand downs where flu shots are offered.
23. Personally thank people for getting a flu shot and promoting a culture of safety within your facility.

supports aspects of human resource management to deliver vaccine and manage vaccination clinics.

- **Clinical Applications Coordinator (CAC):** Documentation of flu vaccination in the medical record is essential to a successful campaign. Many sites use a clinical reminder for this documentation. The CAC will ensure CPRS templates and reminders are updated and contain vaccine names and lot numbers. The CAC can also insert links into note templates or reminders from which handouts such as Vaccine Information Statements (VIS) may be printed.

- **Facility Management Service (FMS):** Having a representative from FMS can be invaluable when planning a special event to promote the campaign to reserve and set up rooms. FMS is essential for securing space for events and providing clean up and trash disposal afterwards. FMS is typically a large service whose leadership can also be enlisted to promote employee flu vaccination.

- **Health Promotion/Disease Prevention (HPDP) Coordinator:** At many VA facilities the HPDP Coordinator may be the Flu Coordinator. In facilities where this is not the case, the HPDP will be a
Flu Prevention In Action

Mass prophylaxis and vaccination exercise with Emergency Management

Micki Gillis, Infection Control, Boise, ID, VAMC

“Infection Control and Emergency Management collaborated to coordinate an emergency vaccination/prophylaxis exercise – a real time activation of the emergency management cascade to provide flu shots to veterans, staff (including residents and students), and volunteers. During the exercise 767 shots were given in 3.5 days.”
valuable team member who could co-chair the team, and assist with a variety of tasks such as working with the public affairs staff to promote the campaign, and arranging special events such as a Kick-off, National Influenza Vaccination Week, and VA Staff Influenza Vaccination Week. The HPDP coordinator often helps the team focus on all aspects of influenza prevention from vaccination to hand hygiene and other mitigation strategies.

- **Infection Control Professional/Preventionist (ICP):** The ICP is responsible for ensuring that the facility has an influenza prevention program which meets VHA, CDC, and The Joint Commission (TJC) standards, and serves as the Flu Coordinator in many facilities. The ICP is a reliable source for information about influenza prevention and mitigation strategies, and an essential resource to the flu team.

- **Infectious Diseases (ID) physicians:** ID physicians may be directly involved in the flu vaccine campaign team or may take a role as a consultant to the team. In either case, they are a wealth of information and may be of assistance with enlisting medical center senior leadership involvement in the campaign and providing clinical consultation.

- **Occupational/Employee Health:** Many facilities combine resources for employee and patient flu vaccination into one campaign. This is especially true in locations that have smaller occupational health departments where additional staff is needed to expand opportunities and locations for health care personnel (HCP) flu vaccination. They usually are the lead for vaccination of HCP and ensure that vaccine is accessible to staff, especially during weekend and night shifts. The occupational/employee health department oversees documentation of employee influenza vaccination into the Occupational Health Record-Keeping System (OHRS).

- **Pharmacy staff:** A pharmacist is a team member who can provide assistance early in the campaign with determining the composition of the vaccine order. Later the pharmacist can provide information about vaccine delivery schedules, storage, and allocation of vaccine supplies to departments within the medical center and VA community based outpatient clinics (CBOC). The pharmacy contact will schedule deliveries of vaccine to clinics. At some sites, clinical pharmacists or pharmacy students may assist with administering influenza vaccine and promoting vaccine uptake during service encounters with Veteran patients. Ask the Chief of Pharmacy Service to designate staff to be team members.

- **Police Service:** VA Police Officers can assist with selection of sites for drive-through or walk-in (lobby) clinics, provide traffic control for drive-through clinics, and set up electronic or other signage that direct patients to a drive-through location or post hours of operation. If a promotional event is planned, police service can help with crowd management and provision of other safety measures.

- **Public Affairs:** The public affairs office is essential to a successful campaign as they will help with promotion using the facility website, social media, news media, and other means of public information sharing. At some facilities, public affairs staff arrange for the Flu Coordinator (or designee) to be a guest on a local radio or TV station talk show that promotes community events. Successful flu campaigns have engaged public affairs offices to utilize effective messaging strategies throughout the duration of the campaign for all patient and staff target populations.

- **Supply Service/Logistics:** A representative of supply service can provide a current inventory list and order needed supplies (needles, syringes, gloves, and alcohol pads) based on expected vaccine delivery to stock drive-through or walk-in clinics, and mobile carts used for flu vaccine administration. Logistics will
also provide a contact who will re-stock locations in use during the campaign.

- **Voluntary Service:** Volunteers can be utilized to assist with mailing campaigns, refreshments for Veterans at large events and walk-in and drive-through clinics, escort services for disabled Veterans, and transport vans to take veterans to drive-through clinics and other services related to influenza vaccination clinics.

**Additional Services and Resources**

The list below contains additional medical center services and resources that may be of help at various times during the campaign, but may not necessarily need to provide an official team member.

- **Medical media and print shop:** Medical media can assist with the design of print media for posters, reminder cards, and education materials in a form which is easily printable and meets VHA requirements for use within your facility. They can also take pictures of events. The print shop can reproduce forms, letters, and posters or banners.

- **Office of Information Technology (OI&T):** An OI&T staff representative should be enlisted for assistance with procuring laptop computers and cell phones that may be needed for drive-through or walk-in clinics or other special events where phones and computers are not typically located. Ask OI&T to provide a contact in the event that troubleshooting is needed with equipment.

- **Other Staff:** Each flu team is only effective as the membership. Welcome members who have a demonstrated investment in seasonal influenza prevention or commitment to promoting and maintaining a culture of health and safety within facilities. These other members are often well connected and visible to staff and patients and are considered stewards of health promotion.

**Flu Prevention In Action**

*Employee Flu Vaccination Planning Guide*

**Employee Health Services, Portland VA Medical Center**

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The Portland VA Medical Center Employee Flu Vaccination Planning Guide was created so to record the historical knowledge about how to plan and run the annual seasonal influenza vaccination campaign. It serves a guide for employee health staff and supporting flu team members to manage the flu vaccination campaign for over 6000 staff and Volunteers regardless of who was previously involved. The information within the guide varies from general vaccine facts to specific site information, such as clinical, administrative, and departmental contacts. There are timelines, responsibility check lists, a subject index, examples of past communications, and other topic areas. It is a living document and continues to receive updates and changes as we progress over the pre and post seasons and beyond. The document also contains opinions and common reoccurring themes. The guide offers perspective and rationale on activities, and, ultimately, lessons learned. Finally, we have confidence that this guide will allow anyone, even new flu team members, to have a reliable resource that outlines the flu campaign and how to manage challenging issues based on lessons learned from previous campaign experience. The campaign is no longer reliant on any one individual’s experience or position. For further information contact Employee Health Services by emailing VHAPOR – OccupationalHealth@va.gov or by calling 503-220-8262 ext. 55165 and asking to speak to a EH Flu Team Representative.
SEASONAL INFLUENZA Campaign Calendar

Use this as a planning guide for your seasonal influenza vaccination campaigns. It contains helpful activities within a timeline to assist you and your flu teams to plan, implement and evaluate your facility’s campaign for vaccinating all health care personnel (HCP) and enrolled Veterans.

- April: Evaluate & Review the Campaign (that just ended)
- May: Initiate the Planning Process
- June: Plan the Campaign
- July/Aug: Promote the Campaign
- September: Start the Campaign
- October/November: Conduct the Campaign
- December: Continue the Campaign
- January/February: Reinforce the Campaign
- March/April: Complete the Campaign

**APRIL** Evaluate & Review the Campaign (that just ended)

- Review current year vaccination rates among different services/departments and types of health care personnel and Veterans for opportunities to increase vaccination.
- Identify strengths and opportunities for improvement.
- Review various aspects of your flu vaccination program.
**MAY**

Initiate the Planning Process

- Obtain support from administration/leadership to identify/verify the health care system flu vaccine coordinator and flu partners/team.
- Assemble a seasonal flu vaccination campaign team – advertise via email announcements.
- Establish your team email group for efficient email communications.
- Schedule and hold a committee kick-off meeting for upcoming flu vaccine season. Some flu vaccine teams meet year-round.
- Identify and discuss your two basic flu vaccination target audiences:
  1. Enrolled VETERANS: Identify your target patient groups by gender, age, race, or by location such as inpatient areas, outpatient areas, Community-based Outpatient Clinics (CBOC), Community Living Centers (CLC).
  2. HCPs: employees, volunteers, and academic affiliates in all areas. NOTE: Some facilities have lead people for each target group (HCP vs Veterans) and areas (CLC, CBOCs, etc).
- Choose and order educational and promotional materials (posters, brochures, t-shirts, pens, coupons, etc).
- Talk to administration to organize incentives and awards (coupons, time off awards, etc).
- Talk to administration for approval and budgeting for any temporary or other staff needed to meet increased human resource needs for vaccinations in the fall.
- Begin monitoring influenza updates from the Centers for Disease Control and Prevention (CDC), The Joint Commission (TJC), and VHA.
- Talk to pharmacy about types and amounts of flu vaccine to be ordered.
- Order your vaccine. Consider multi-dose vials versus single use pre-filled syringes, discussing pros and cons of ordering each. Consider high dose, intradermal, and standard dose flu vaccine, considering pros and cons of providing each and target groups.
- Also order additional supplies needed for flu vaccination: gauze, band-aids, alcohol wipes, safety needles and syringes, if needed for type of flu vaccine formulation ordered.
- Order/acquire additional flu vaccine equipment, such as a flu vaccine cart, sharps containers, clipboards.
- Reserve space for walk-in flu vaccine clinic (usually held in October or November, depending on final delivery date for flu vaccine contract for the year).
- Schedule educational offerings for August, September, and the upcoming flu season.

Consider a Flu Vaccine Campaign Planning Team with representatives from:
- Pharmacy,
- Infectious Diseases physician,
- Occupational Health,
- Health Promotion/Disease Prevention (HPDP) Coordinator,
- Infection Prevention,
- Facility Management Service (for setting up tables and areas for walk-in clinics),
- Nurse Managers (to assist with support for nurses to help administer flu vaccine),
- Clinical Applications Coordinator (CAC) -to ensure computer templates and reminders updated and planned for the upcoming flu vaccination season,
- Business Office (spacing needs),
- Public Affairs Officer,
- Human Resources (staffing needs),
- Facility Leadership.
Plan the Campaign

- Review what was done the previous year—successes and failures.
- Review strategies and best practices utilized by successful health care facilities.
- Consider innovative approaches for the upcoming season, such as drive-through flu vaccine clinics, partnering with local public health agencies (look for ideas in the VA Influenza Manual).
- Define all resources and supplies needed to support your campaign (including budget and human resources).
- Refer to the latest version of the VA Influenza Manual to garner campaign ideas and checklist of activities and strategies to implement your campaign.
- Continue monitoring influenza updates from VHA, CDC and TJC.
- Discuss communications about how to meet goals and requirements.
- Email facility staff to solicit their input and to let staff know who is on the planning team.

Promote the Campaign

- Update your influenza vaccine protocols such as standing orders, etc.
- Gather promotional materials and resources.
- Obtain the current year’s CDC Vaccine Information Statements (VIS).
- Determine campaign dates, theme, and a preliminary promotion plan based on the date when flu vaccine is to arrive and quantities are available.
- Finalize logistics and staffing plans for the campaign week/kick-off event.
- Identify and train nurses and other staff who may be vaccinating.
- Train all providers who administer flu vaccine on proper documentation in health records – Computerized Patient Record System (CPRS) for patients and the Occupational Health Recording-keeping System (OHRS) for HCP.
- Communicate and distribute campaign plan and information.
- Educate HCP and Veterans about influenza and the influenza vaccine.
- Notify patients and staff about flu, flu vaccine and where to get vaccinated using a variety of media or mail (send facility-wide emails, postcards, and other reminders).
- Communicate clinic times and offerings via newsletter, daily facility email message system etc.
- Based on available supply, determine a plan as needed to identify which groups will receive the first doses of flu vaccine that arrive. This initial group may include HCP, high risk patients, such as those on dialysis, those in home-based primary care, or patients who arrive in outpatient clinics who are not anticipated to return for health care appointments for several months.
- Plan a kick-off event when sufficient vaccine is available to sustain the program.
- Monitor all communications from VHA and CDC regarding seasonal influenza.
**SEPTEMBER  Start the Campaign**

- Hold a kick-off event if sufficient vaccine is available.
- Operate occupational health clinic with extended hours for influenza vaccination.
- Administer vaccination at alternative sites, in lobbies, clinics and other areas.
- Monitor daily operations and identify ways to improve efficiency.
- Document vaccinations in CPRS (Veterans) and OHRS (health care personnel).
- Review and communicate all polices, recommendations and procedures for flu vaccinations BEFORE executing your campaign.
- Maintain campaign communication and emphasize the need to vaccinate throughout the entire influenza season.

**OCTOBER/NOVEMBER  Conduct the Campaign**

- Monitor vaccination rates, identify problems, and brainstorm ways to reach all who have not been vaccinated.
- Continue to document all vaccinations into health records.

**DECEMBER  Continue the Campaign**

- Maintain the campaign and communicate that it is not too late to be vaccinated.
- Hold an event during the National Influenza Vaccination Week (first week of December).
- Plan for VA Staff Vaccination Week (second week of Jan).
- Track and analyze vaccination rates and communicate findings.
- Monitor and communicate levels of seasonal influenza in your community.
Reinforce the Campaign

- Execute strategies for VA Staff Vaccination Week in January.
- Identify those who have not been vaccinated and may have received the influenza vaccine elsewhere. Document those vaccinated elsewhere in CPRS and OHRS.
- Continue to monitor and communicate levels of seasonal influenza in your community.
- Maintain the campaign and communicate that it is not too late to be vaccinated.

Complete the Campaign

- Continue to vaccinate as long as flu is circulating in your communities, or until your flu vaccine expires or until vaccine quantities are depleted.
- Continue to monitor and communicate levels of seasonal influenza in your community.
- Maintain the campaign and communicate to health care personnel that it is not too late to be vaccinated if the influenza virus is still prevalent in the community.
- Meet with the planning committee.
- Evaluate campaign, identify challenges, and celebrate successes.
- Communicate results of your seasonal influenza vaccination campaign.
RESOURCE LINKS

VA Influenza Home page:
www.publichealth.va.gov/flu

VHA Influenza Directive:

VA Influenza Manual:
www.publichealth.va.gov/flu

VHA Poster, brochures, and other education materials:
www.publichealth.va.gov/flu/materials

Centers for Disease Control and Prevention (CDC) Resources:
www.cdc.gov/flu/freeresources

The Joint Commission:
http://www.jcrinc.com/fluchallenge/

CDC:
http://www.cdc.gov/flu/

Infection: Don’t Pass It On Campaign

Veterans Health Administration
U.S. Department of Veterans Affairs
Clinical Public Health (10P3b)
810 Vermont Ave, NW
Washington, DC 20420
202-461-1040
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Vaccination Policy and Guidance

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This chapter contains influenza vaccination policy and guidance from VHA as well as other Federal agencies. Also included are requirements from The Joint Commission and frequently asked questions regarding vaccination of staff and licensed independent practitioners. Please be sure to check the appendices for other influenza materials.

**VHA Directive 2012-012: Occupational Health Record-Keeping System (OHRS)**

**Description:** This Veterans Health Administration (VHA) Directive provides policy for the implementation of the Occupational Health Record System (OHRS), a newly released electronic health record for employee occupational health records maintained in the Employee Medical File System Records and Employee Medical File System Records (Title 38).

**The Joint Commission Requirements**

Joint Commission: Infection Control Requirements for Offering Influenza Vaccination to Staff and Licensed Independent Practitioners

**Federal Government Law and Guidance**

Centers for Disease Control and Prevention (CDC) Website

Federal Law Requiring the Use of Vaccine Information Statements (VIS)

**Frequently Asked Questions and Answers**

**VHA Influenza Immunization Guidance Statement**

VHA, through the National Center for Health Promotion and Disease Prevention (NCP), has developed immunization guidance statements, including one for influenza. Please visit and review all VHA immunization guidance when offering vaccine to VHA health care personnel and patients.
OCCUPATIONAL HEALTH RECORD-KEEPING SYSTEM

1. PURPOSE: This Veterans Health Administration (VHA) Directive provides policy for the implementation of the Occupational Health Record System (OHRS), a newly released electronic health record for employee occupational health records maintained in the Employee Medical File System Records and Employee Medical File System Records (Title 38).

2. BACKGROUND

a. Essential elements for the effective delivery of occupational health care include: documentation of administrative examinations, injury, and illness care; medical surveillance; and infectious disease program management. Core actions in managing healthy workplaces include: tracking vaccinations; screening employees who report to duty despite illness; managing outbreaks with follow-up investigations; and identifying individuals who occupational health clinicians recommend be placed off duty.

b. Systematic and efficient processes to manage employee occupational health records and protect privacy are an essential element of occupational health practice.

c. The confidentiality of occupational health care records of employees of the Federal government are protected by the Privacy Act of 1974, Title 5 United States Code (U.S.C.) section 552a; the Federal Employees’ Compensation Act (FECA), 5 U.S.C. Chapter 81 and Title 20 Code of Federal Regulations (CFR) Part 10, Subpart A; Privacy Procedures for Personnel Records in 5 CFR Parts 293 and 297; and the Health Insurance Portability and Accountability Act (HIPAA) Privacy Rule, 45 CFR Parts 160 and 164. The records are maintained in Employee Medical File System Records (OPM/GOVT-10) and Employee Medical File System Records (Title 38) VA (08VA05) Privacy Act Systems of Records, which authorizes various routine use disclosures without the employee’s written release of information or authorization.

d. The Computerized Patient Record System (CPRS) does not provide adequate privacy protections for employee occupational health records. The development of the Text Integration Utility (TIU) and business rules provides the ability to restrict access to employee progress notes to only occupational health clinicians. No such protection exists for personal health information outside of progress notes.

e. FECA distinguishes between the use of health information for injury reporting and safety management, management of the clinical care of employees, and the administrative management of workers’ compensation claims. The use of the information used in the filing of workers’ compensation claims is restricted to the
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April 11, 2012

employees filing the claims, their supervisors, and workers’ compensation personnel. Although the health records of an employee who elects to obtain treatment in Occupational Health may be used by clinicians in the provision of medical care, this information may not be accessed by supervisors, human resources managers, or other individuals not designated as workers’ compensation staff, unless the individual provides a written authorization for such use of the information.

f. As with FECA, the HIPAA Privacy Rule authorizes clinicians to use employees’ occupational health records to provide medical treatment. The HIPAA Privacy Rule, however, prohibits the use of health records, including clinical information regarding an employee’s immunization status or exposures, by supervisors, human resources managers, or others. Further, the HIPAA Privacy Rule requires the use of access controls to safeguard such protected health information against any unauthorized use or disclosure.

g. OHRS employee health records are currently unscheduled and cannot be destroyed until disposition instructions are approved by the National Archives and Records Administration (NARA) and published in Record Control System (RCS) 10-1. The OHRS records appraisal was submitted to NARA on July 16, 2010. Additionally, OHRS is used to protect employee health records under applicable regulations and laws while promoting efficiency in recordkeeping and data access for workforce management and occupational safety.

h. **Definitions**

(1) **Federal Employee Compensation Act (FECA).** FECA provides workers’ compensation benefits to Federal employees for work-related injuries or illnesses, and to their eligible dependents if a work-related injury or illness results in the employee’s death. Occupational health, if selected as the provider of choice will provide treatment to employees with work-related injuries and illnesses.

(2) **Privacy Act.** The Privacy Act governs the collection, maintenance, use and dissemination of personally identifiable information about living individuals that is maintained in systems of records by federal agencies.

(3) **Health Insurance Portability and Accountability Act (HIPAA).** HIPAA provides standards and requirements for the electronic transmission, privacy, and security of certain health information.

(4) **Role-based Access.** Role-based access is an approach to restricting system access to authorized users. It determines what information a person may have the right to access.

(5) **Functionality.** Functionality refers to the set of functions or capabilities associated with computer software or hardware or an electronic device. OHRS functionality includes documentation of care and report generation.
3. POLICY: It is VHA policy that health records of staff members, whether paid, voluntary or workers without compensation (WOC) created or maintained by occupational health is recorded in OHRS.

4. ACTION

   a. Director, Occupational Health Program, Occupational Health Strategic Health Care Group, Office of Public Health. The Director, Occupational Health Program, is responsible for:

      (1) Ensuring that occupational health staff are made aware of new OHRS functionality as it becomes available;

      (2) Ensuring OHRS training is available and that new training modules are developed and deployed when new OHRS functionality is available;

      (3) Granting role-based access to potential OHRS users; and

      (4) Conducting audits of access to OHRS every 3 months to ensure users have appropriate role-based access.

   b. Veterans Integrated Service Network (VISN) Director. The VISN Director, or designee, is responsible for:

      (1) Designating a primary and alternate administrator in the VISN from the list of facility administrators in their VISN to manage role-based access to OHRS. These administrators must be either a registered nurse, physician assistant, nurse practitioner, or physician who is assigned to Occupational Health.

      (2) Notifying the Director, Occupational Health Program of any changes in VISN OHRS administrators on quarterly basis.

   c. Facility Director. Each facility Director, or designee, is responsible for:

      (1) Ensuring that staff responsible for data-entry into the OHRS are trained in the use of OHRS. **NOTE:** The extent of training depends on the individual’s role-based access.

      (2) Ensuring that health care provided to staff is recorded in OHRS where such functionality exists. **NOTE:** Additional functionality will be available every 3 to 6 months as it is developed, tested and deployed. All functionality is expected to be completed within the next 5 years.

      (3) Ensuring that new releases of OHRS are installed within 30 days after their release.
(4) Designating a primary and alternate administrator at the facility to manage role-based access to OHRS. These administrators must be a registered nurse, physician assistant, nurse practitioner, or physician who is assigned to Occupational Health.

(5) Ensuring that individuals assigned access to OHRS are given the correct role-based access.

(6) Notifying the Director, Occupational Health Program, of any changes in local OHRS administrators on a quarterly basis.

d. **OHRS Administrators.** The OHRS Administrator is responsible for:

1. Completing OHRS training specific to the OHRS Administrator;

2. Granting VHA staff appropriate role-based access to OHRS, reviewing this access every 3 months, and making necessary changes.

### 5. REFERENCES


b. FECA, 5 U.S.C. Chapter 81.


d. Personnel Records, 5 CFR Parts 293.


h. HIPAA Privacy and Security Rules, 45 CFR Parts 160 and 164.

i. Employee Medical File System Records, OPM/GOVT-10.

j. Employee Medical File System Records (Title 38)-VA,08VA05.


l. Electronic Records Management, 36 CFR 1236, Subpart C.

m. Recordkeeping and Reporting Requirements 29 CFR Part 1960, (Subpart I).
6. FOLLOW-UP RESPONSIBILITY: The Director, Occupational Health Program in the Occupational Health, Safety and Prevention Strategic Health Care Group (10P3D) in the Office of Public Health is responsible for the contents of this Directive. Questions may be addressed to Director, Occupational Health, at (202) 461-1042.


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Under Secretary for Health

DISTRIBUTION: E-mailed to the VHA Publications Distribution List 4/12/2012
The Joint Commission Requirements

Joint Commission: Infection Control Requirements for Offering Influenza Vaccination to Staff and Licensed Independent Practitioners

Description: The Joint Commission (TJC) has an infection control standard (IC.02.04.01) for critical access hospitals, hospitals, and long-term care organizations that requires them to offer influenza vaccination to staff and licensed independent practitioners (LIP). The standard also requires that staff and LIPs be educated about, at a minimum, the influenza vaccine; non-vaccine control and prevention measures; and the diagnosis, transmission, and impact of influenza. This standard aligns with recommendations made by the Centers for Disease Control and Prevention. For strategies to increase vaccination of health care personnel, go to Section 8: Health Care Personnel: How to Improve Vaccination Rates.

Federal Government Law and Guidance

Prevention and Control of Influenza with Vaccines: Recommendations of the Advisory Committee on Immunization Practices (ACIP)

Description: This document provides updated guidance for the use of influenza vaccines in the United States.

CDC: Prevention and Control of Seasonal Influenza with Vaccines, Recommendations of the Advisory Committee on Immunization Practices. Available at: http://www.cdc.gov/mmwr/.
Centers for Disease Control and Prevention (CDC) Website

**Description:** CDC information updated throughout the influenza season, so check for updates. Visit [http://www.cdc.gov/flu/about/season/?source=govdelivery](http://www.cdc.gov/flu/about/season/?source=govdelivery).

Federal Law Requiring the Use of Vaccine Information Statements (VIS)

**Description:** Health care providers are required by the national Childhood Vaccine Injury Act (NCVIA) to provide a copy of the most current VISN to either the adult recipient or to the child’s parent/legal representative *BEFORE* giving any adult or child certain specified vaccines.

CDC Guidelines on Large-Scale Vaccination Clinic Planning

**Description:** To facilitate the most efficient and safe delivery of available vaccine via large community clinics, these recommendations and guidelines have been developed to assist with planning large-scale influenza vaccination clinics by public and private vaccination groups. Visit [www.cdc.gov/flu/professionals/vaccination/vax_clinic.htm](http://www.cdc.gov/flu/professionals/vaccination/vax_clinic.htm).

**Frequently Asked Questions and Answers**

**Frequently Asked Questions on Influenza Vaccination for Occupational Health Staff**

**Should we vaccinate volunteers as part of our campaign?**
Yes. Volunteers provide a vital service to our Veterans including the provision of direct patient care. Facilities should offer the influenza vaccine to volunteers.

**Should we offer the influenza vaccine to medical residents, interns, nursing students and other academic affiliates who provide services at the VA during the influenza season through our Occupational Health Department?**
The decision with regard to resident, intern, nursing student and other academic affiliates is an individual VA facility decision; it should take into account the contractual agreement with academic affiliates, the availability of the vaccine, and the potential benefit to the VA. Facilities may want to make the same decisions about providing the influenza vaccine for academic affiliates as they do for volunteers.

**Should health care personnel who have contact with HIV/AIDS patients and other patients with compromised immune systems be vaccinated?**

All health care personnel in health care settings should receive annual influenza vaccination unless they have a contraindication to the vaccine.

**What are the recommendations for vaccination of health care personnel against influenza?**

All health care personnel in health care settings should receive annual influenza vaccination unless they have a medical contraindication to the vaccine.

**Why is vaccination recommended for health care personnel?**

- They can give influenza to patients, coworkers, family members, and others.
- They are at risk of getting influenza from patients with influenza.
- Preventing influenza through annual vaccination keeps health care personnel healthy and available to come to work or to take care of patients.

Inactivated influenza vaccine (the flu shot) is the preferred vaccine for people coming into close contact with anyone who has a severely weakened immune system.

**What are the recommendations for use of a declination form for health care personnel against influenza?**

VHA **does not** have a national mandate requiring or disallowing the use of declination forms. Analysis of VHA facilities that have used declination forms and those who did not, revealed no statistical difference in vaccination rates.

**How do I report an adverse reaction from flu vaccination?**

- For Veteran patients, providers report the influenza vaccine adverse event through the Adverse Reaction Tracking System (ARTS) in CPRS. Providers have direct access to CPRS to input adverse reactions into the ART System.
The Chief of Pharmacy (or designee) at every facility inputs adverse reactions for drugs or vaccines into VA Adverse Drug Event Reporting System (VA ADERS). A Vaccine Adverse Event Reporting System (VAERS) form for all vaccines should be submitted anytime an adverse event occurs. The VAERS form is directly accessible through a link in VA ADERS that allows online reporting. On-line reporting is also available at https://vaers.hhs.gov/esub/index.

Occupational health staff are to document an adverse event in an encounter entered the Occupational Health Record-Keeping System (OHRS). All employee, volunteer, trainee and contractor adverse reactions are also to be reported using the VA Adverse Drug Event System (VA ADERS) using the same process as outlined above for Veterans.
It’s Federal Law!
You must give your patients current Vaccine Information Statements (VISs)

As healthcare professionals understand, the risks of serious consequences following vaccination are many hundreds or thousands of times less likely than the risks associated with the diseases that the vaccines protect against. Most adverse reactions from vaccines are mild and self-limited. Serious complications are rare, but they can have a devastating effect on the recipient, family members, and the providers involved with the care of the patient. We must continue the efforts to make vaccines as safe as possible.

Equally important is the need to furnish vaccine recipients (or the parent/legal representatives of minors) with objective information on vaccine safety and the diseases that the vaccines protect against, so that they are actively involved in making decisions affecting their health or the health of their children. When people are not informed about vaccine adverse events, even common, mild events, they can lose their trust in healthcare providers and vaccines. Vaccine Information Statements (VISs) provide a standardized way to present objective information about vaccine benefits and adverse events.

What are VISs?

VISs are developed by the staff of the Centers for Disease Control and Prevention (CDC) and undergo intense scrutiny by panels of experts for accuracy. Each VIS provides information to properly inform the adult vaccine recipient or the minor child’s parent or legal representative about the risks and benefits of each vaccine. VISs are not meant to replace interactions with healthcare providers, who should answer questions and address concerns that the recipient or the parent/legal representative may have.

Use of the VIS is mandatory!

Before a healthcare provider vaccinates a child or an adult with a dose of any vaccine containing diphtheria, tetanus, pertussis, measles, mumps, rubella, polio, hepatitis A, hepatitis B, Haemophilus influenzae type b (Hib), influenza, pneumococcal conjugate, meningococcal, rotavirus, human papillomavirus (HPV), or varicella (chickenpox) vaccine, the provider is required by the National Childhood Vaccine Injury Act (NCVIA) to provide a copy of the VIS to either the adult recipient or to the child’s parent/legal representative.

How to get VISs

All available VISs can be downloaded from the website of the Immunization Action Coalition at www.immunize.org/vis or from CDC’s website at www.cdc.gov/vaccines/pubs/vis/default.htm. Ready-to-copy versions may also be available from your state or local health department.

You can find VISs in more than 30 languages on the Immunization Action Coalition website at www.immunize.org/vis. To find VISs in alternative formats (e.g., audio, web-video), go to: www.immunize.org/vis/vis_sources.asp

Most current versions of VISs

As of July 2, 2012, the most recent versions of the VISs are as follows:

- DTaP/DT .................. 5/17/07
- Hepatitis A ............ 10/25/11
- Hepatitis B ............. 2/2/12
- Hib .................. 12/16/98
- HPV (H. papillomavirus) ............ 5/3/11
- Gardasil ............... 2/22/12
- Influenza (inactive) ......... 7/2/12
- Influenza (live) ........... 7/2/12
- Japanese encephalitis  12/7/11
- Meningococcal .......... 10/14/11
- MMR .................. 4/20/12
- MMRV .................. 5/21/10
- PCV13 .................. 4/16/10
- PPSV .................. 10/6/09
- Polio ................... 11/8/11
- Rabies .................. 10/6/09
- Rotavirus ................ 12/6/10
- Shingles ................ 10/6/09
- Td/Tdap ............... 1/24/12
- Typhoid ................ 5/29/12
- Varicella (chickenpox) ... 3/13/08
- Yellow fever ........... 3/30/11

According to CDC, every time one of these vaccines is given — regardless of what combination vaccine it is given in — regardless of whether it is given by a public health clinic or a private provider — regardless of how the vaccine was purchased — and regardless of the age of the recipient — the appropriate VIS must be given out prior to the vaccination.

Source: www.cdc.gov/vaccines/pubs/vis/vis-facts.htm

To obtain current VISs in more than 30 languages, visit the Immunization Action Coalition’s website at www.immunize.org/vis
It's Federal Law . . . you must give your patients current VISs

**Top 10 Facts about VISs**

**Fact 1** It's federal law! Federal law requires that VISs must be used for the following vaccines when vaccinating patients of ALL ages:
- DTaP (includes DT)
- Td/Tdap
- Hib
- hepatitis A
- hepatitis B
- HPV
- influenza (inactivated and live vaccines)

According to CDC, every time one of these vaccines is given — regardless of what combination vaccine it is given in — regardless of whether it is given by a public health clinic or a private provider — regardless of how the vaccine was purchased — and regardless of the age of the recipient — the appropriate VIS must be given out prior to the vaccination. There are also VISs for vaccines not covered by NCVIA: anthrax, Japanese encephalitis, pneumococcal polysaccharide, rabies, shingles, smallpox, typhoid, and yellow fever. CDC recommends the use of VISs whenever these vaccines are given. The VIS must always be used if vaccine was purchased under CDC contract.

**Fact 2** VISs are required for both public and private sectors

Federal law requires use of VISs in both the public and private sector settings and regardless of the source of payment for the vaccine.

**Fact 3** VIS must be provided before vaccine is administered to the patient

The VIS provides information about the disease and the vaccine and should be given to the patient before vaccine is administered. It is also acceptable to hand out the VIS well before administering vaccines (e.g., at a prenatal visit or at birth for vaccines an infant will receive during infancy), as long as you still provide the VIS right before administering vaccines.

**Fact 4** You must provide a current VIS for each dose of vaccine

The most current VIS must be provided before each dose of vaccine is given, including vaccines given as a series of doses. If five doses of a single vaccine are required, the patient (parent/legal representative) must have the opportunity to read the information on the VIS before each dose is given.

**Fact 5** You must provide VISs for combination vaccines too

There is a VIS available for MMRV (ProQuad). An alternative VIS — the multi-vaccine VIS — is an option to providing single-vaccine VISs when administering one or more of these routine birth-through-6-month vaccines: DTaP, hepatitis B, Hib, pneumococcal (PCV), polio (IPV), or rotavirus (RV). The multi-vaccine VIS can also be used when giving combination vaccines (e.g., Pediarix, Pentacel, Comvax) or when giving two or more routine vaccines at other pediatric visits (e.g., 12–15 months, 4–6 years). However, when giving combination vaccines for which no VIS exist (e.g., Twinrix), give out all relevant single VISs. For example, before administering Twinrix give your patient the VISs for both hepatitis A and hepatitis B vaccines.

**Fact 6** VISs are available in other formats, including more than 30 languages

You may use laminated copies of VISs for patients and parents to read and return before leaving the clinic, but you must also offer the patient (parent/legal representative) a printed copy of the VIS to take home.

If they prefer to download the VIS onto a mobile device, direct them to CDC’s VIS Mobile Downloads web page: www.cdc.gov/vaccines/Pubs/vis/vis-downloads.htm

To download VISs in other languages, visit www.immunize.org/vis

**Fact 7** Federal law does not require signed consent in order for a person to be vaccinated

Signed consent is not required by federal law (although some states may require them).**Fact 8** To verify that a VIS was given, providers must record in the patient’s chart (or permanent office log or file) the following information:
- The published date of the VIS
- The date the VIS is given to the patient
- Name, address (office address), and title of the person who administers the vaccine
- The date the vaccine is administered
- The vaccine manufacturer and lot number of each dose administered

**Fact 9** VISs should not be altered before giving them to patients

Providers should not change a VIS or write their own VISs. It is permissible to add a practice’s name, address, or phone number to an existing VIS. Providers are encouraged to supplement the VIS with additional patient-education materials.

**Fact 10** Provide VISs to all patients

For patients who don’t read or speak English, the law requires that providers ensure all patients (parent/legal representatives) receive a VIS, regardless of their ability to read English. If available, provide a translation of the VIS in the patient’s language.

Translations of VISs in more than 30 languages are available from IAC. Go to www.immunize.org/vis for VISs in multiple languages as well as in other formats.
Communications: A Foundation of Influenza Prevention

Contributor:

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Effective communication strategies can provide the tools and knowledge for Veteran patients, VHA staff, and VA community to take steps to decrease chances of contracting or spreading flu viruses. VHA is committed to maintaining a culture of safety within its facilities by preventing infections. Each year seasonal influenza infection has a significant impact on the wellbeing and health of our patients, staff, and their families and caregivers. It is truly a public health and community issue that we cannot afford to ignore. Communication is key to helping people know that influenza infection is preventable and our best defense is vaccination!

Each year VHA facilities plan and coordinate seasonal influenza vaccination campaigns for patients and health care personnel (HCP). Many flu coordinators and planning teams have outlined communication strategies to educate target audiences on a multitude of topics related to their campaigns such as:

- influenza,
- influenza illness,
- vaccine information,
- reasons to get vaccinated,
- flu myths, and
- availability and access to vaccine.

A myriad of communications forums and social media are utilized to “get the word out” and educate individuals on the importance of vaccine and other strategies to prevent the spread of influenza. These include:

- emails,
- letters,
- posters and signage,
- educational fact sheets,
- newsletters,
- meeting announcements,
- Facebook,
- Twitter,
- websites, and
- electronic bulletins.

This section will outline the nine steps for a successful communications campaign, beginning with using goals to build your strategy. After understanding the campaign’s goals, the section will lead you through the steps to understand your audience and addressing any misconceptions they may have about flu. It will also describe key messages and using them to create effective content. After the content is created, the last steps will include utilizing social media and both applying and executing a communications plan. We hope your flu team will utilize these communications strategies, tools, and examples of effective messaging to mitigate the spread of influenza.

STEP 1: Understanding Communications as a Framework for Influenza Vaccination
STEP 2: Using Goals to Build Strategies
STEP 3: Understanding Your Target Audience
STEP 4: Addressing Misconceptions
STEP 5: Developing Key Messages
STEP 6: Creating Effective Content
STEP 7: Utilizing Social Media and Other Communications Tools
STEP 8: Applying a Communications Plan
STEP 9: Executing the Communication Plan
STEP 1: Understanding Communications as a Framework for Influenza Vaccination

Effective communication between leadership and the flu team will cultivate a more successful and effective flu prevention campaign. Numerous messages and approaches are described in this section, and information and materials are also provided via the Infection: Don’t Pass It On (IDPIO) campaign emails (“flu tips”) over the course of each season.

As your facility integrates and/or coordinates your health care personnel (HCP) and patient vaccination campaigns, it is important to make sure your leadership, team, staff, and patients are well informed about flu prevention and vaccination programs over the course of the season. Inform people early and often; carry out a sustained communications effort. Your public affairs officer (PAO) is an essential part of this effort and knows best practices in internal staff communications, communications with Veterans, updating of intranet and Internet sites, and use of multiple means of traditional and social media to get the word out.

During flu season, note the key opportunities below that you and your PAO can use to frame campaign communications with leadership, health care personnel, and patients.

- **Campaign planning** – Enlist the support of your leadership by keeping them informed and seeking their support. Make sure that the team of people you recruit to help you are communicating early and often.
- **Campaign start up** – Use the days and weeks before you get your vaccine supply to inform patients and health care personnel about the importance and availability of vaccination.
- **Sustained reminders** – Seek opportunities for regular reminders about flu vaccination over the course of the season. Put out reminders to key audiences over time and in plenty of locations throughout your facility and by multiple means including: email, newsletters, handouts, and electronic bulletin boards and signage around your facility. Read further in this section for examples.
- **National efforts** – Participate in national campaigns that help you promote flu vaccine.
  - National Influenza Vaccination Week
  - VA Staff Vaccination Week
- **It’s not too late** – Flu has been known to peak as late as May (but usually around February) and it is useful to continue to let people know they can be vaccinated later in the season.
- **Wrap up and restart** – Collect and monitor flu vaccination rates and share your successes with leadership, patients and staff. Use data to drive areas for improvement as well.

The full range of steps for carrying out your campaign, from planning and ordering supplies to monitoring and reporting progress, are presented in a seasonal flu campaign calendar in the Section 4. The campaign calendar can be used to develop, carry out, and evaluate your campaign over the course of the whole year. The calendar can be viewed, downloaded, or printed from www.publichealth.va.gov/flu.
Flu Prevention In Action

Announcements to your flu champions

Gina Wieger, DNP, RN, Health Promotion Disease Prevention Program Manager, Miami VA Healthcare System

Flu Campaign Champions,


Upcoming overhead announcements next week:

1. You can get the flu without noticeable symptoms and can spread the flu to others. The most effective way to protect yourself, your patients, your coworkers, and the ones you love from the flu is by getting the flu shot today!

2. The flu shot has a proven track record of safety and efficacy. **It is impossible** to get the flu from the flu shot. Protect yourself, your patients, your coworkers, and the ones you love from the flu by getting the flu shot today!

3. The flu vaccine is effective in your body for about one flu season. Therefore, it is recommended EVERY year to get the latest protection. Protect yourself, your patients, your coworkers, and the ones you love from the flu by getting the flu shot today!

4. One to two days of mild arm discomfort from a flu shot is much better than getting the flu, which can last for many days or even weeks. Protect yourself, your patients, your coworkers, and the ones you love by getting the flu shot today!

5. The components of the flu vaccine are updated every year and even though the vaccine may not be an exact match, it can reduce the severity of illness and help prevent influenza-related complications. Protect yourself, your patients, your coworkers, and the ones you love by getting the flu shot today!

Thanks for helping spread the word by sharing the video with your Services!

Gina Wieger, DNP, RN
Health Promotion Disease Prevention Program Manager
Miami VA Healthcare System
STEP 2: Using Goals to Build Strategies

The foundation of an effective communication strategy is rooted in the campaign’s goals. Each year the Infection: Don’t Pass It On team, in conjunction with the leadership of our public health programs, develops goals for the campaign. This year’s goals are as follows:

1. Within each VA health care facility, gradually increase the seasonal influenza vaccination rate of health care personnel toward the 2020 Healthy People goal of 90%.

2. Promote seasonal influenza vaccination to all Veteran patients. Note: This is based on the Federal recommendation of universal influenza vaccination of all people age 6 months and older.

3. Reduce disparity of influenza vaccination rates by increasing the rate of vaccine uptake among female patients and those patients under age 50.

4. Promote consistent and proper documentation and tracking for all influenza vaccinations.

5. Promote non-vaccine methods of preventing influenza, particularly hand hygiene and respiratory etiquette.

6. Encourage the entire VA health care community to promote and support influenza vaccination.

++ Beginning FY 13, VHA facilities are expected to align their influenza vaccination for HCP with the 2020 Healthy People goal which is to achieve a rate of 90% by 2020. Facilities will need to look at their vaccination rates for the previous year and set a goal to increase which will meet the Joint Commission standard. For example, a site may strive to raise HCP flu vaccination rates by 5% each year until 90% is attained by 2020. For most VHA health care facilities, this will translate into a gradual increase of the seasonal influenza vaccination rate of health care personnel to meet the 2020 Healthy People goal of 90%. To view these objectives for health care personnel, visit http://www.healthypeople.gov/2020/topicsobjectives2020/objectiveslist.aspx?topicId=23.

STEP 3: Understanding Your Target Audience

As you craft your communications strategies, identify and discuss your two basic flu vaccination target audiences with your team. NOTE: Some facilities have lead people for each target group (health care personnel vs Veterans) and areas (Community Living Centers, Community Based Outpatient Clinics, etc).

1. Enrolled Veterans. Identify your target patient groups by the following subsets:
   - Gender
   - Age
   - By level of risk for complications from flu
   - By location such as inpatient areas, outpatient areas, Community-based Outpatient Clinics (CBOC), Community Living Centers (CLC)

2. Employees. Identify your target health care personnel (HCP) groups by the following subsets:
   - Clinical staff – physicians, physician assistants, nursing staff, pharmacists, trainees, service chiefs, chief residents and academic affiliates.
   - Nonclinical staff – public affairs employees, food workers, environmental management, police/security, volunteers, hospital leadership.

3. Veteran supporters. Work through those who may not be employees or enrolled Veterans, but may play an active role in Veteran’s health care decision making and getting the word out about vaccination and access to vaccine:
   - Representatives of Veteran Service Organizations
   - Caregivers, such as spouses, parents or children
   - State/county public health departments

STEP 4: Addressing Misconceptions

Every year, misinformation, myths, and personal experience can influence those who choose not to get the flu vaccine. Given the many reasons people offer about why they don’t get the flu vaccine, it can be a challenge to respond to these concerns. Make sure your audiences are informed and armed with the correct information. The messages below can assist...
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you as a guide to structure your conversation by responding with facts, respect, encouragement, and empathy.

The reasons and their accompanying messages fall into four common categories: 1) safety, effectiveness, and fear; 2) vaccination timing; 3) confusion about appropriate vaccine and “risk groups”; and 4) overconfidence in one’s own health.

1. Safety, Effectiveness, and Fear

What people say:
“"I don’t want to get the flu shot because...”
“I hear there are side effects.”
“The flu shot will give me the flu.”
“I don’t know what’s in the vaccine, so I won’t take it.”
“I don’t like putting things in my body, especially when no one knows if it is safe.”
“I got the flu last year even though I had been vaccinated. So, what’s the point?”
“How do I know the vaccine really works?”
“I’m very afraid of needles.”
“I can’t get the flu shot because I’m allergic to eggs.”
“I’m pregnant so getting the flu shot is scary to me.”

Points to share with Veterans and health care personnel with regard to safety, effectiveness, and fear:
• The most effective way to protect yourself from the flu is by getting an annual flu vaccination. Studies show that both the flu shot and the nasal spray vaccine are effective in preventing the flu.
• You cannot get the flu from the flu shot or the nasal spray flu vaccine. The vaccine used in your arm is not made from a live virus and cannot infect you with the flu. Although the nasal spray vaccine is made with live, weakened flu viruses, it also does not cause the flu.
• Some people who get the flu shot can still get the flu. However, it is not caused by the vaccine. Sometimes you can already be exposed to the flu a few days before you received the vaccine, but you just didn’t develop symptoms until around the same time you got vaccinated.
• The U.S. Food and Drug Administration (FDA) ensures that vaccines undergo a rigorous and extensive development program. After a vaccine is approved by the FDA, its safety is continuously monitored. Ingredients used during the manufacture of flu vaccines include substances to help prevent contamination, inactivate or “kill” the viruses, and stabilize the vaccine from changing. VA health care personnel and Veterans can learn more about the composition of the seasonal flu vaccine at http://www.cdc.gov/flu/professionals/vaccination/virusqa.htm.
• One mild side effect from the flu shot is tenderness at the site of the shot (injection) that can last for several days. There may be soreness, redness, or swelling that can be relieved by putting ice on the injection site. Moving the arm to keep the muscle loose may also help.
• Some people who get the injection may have a slight fever, chills, headache, tiredness, or muscle ache within the first 48 hours of getting the shot. These reactions may begin 6 to 12 hours after the shot, can last for one to two days, and are more likely to happen in people who have never received a flu vaccine. Two days of discomfort are better than getting the flu and its related complications, which can last for many days or even weeks.
• The flu vaccine is changed each year to match the type of flu currently circulating. Each year the vaccine is formulated to provide a close match to the known circulating strains of flu virus in the most recent flu season. In years when there is a good match between the circulating viruses and the corresponding vaccine strains, the vaccine’s effectiveness in reducing illness can be as high as 70–90 percent. In years where the match is not close, the chances of getting the flu without getting a flu shot is still going to be higher.
• Being afraid of needles means you are normal! If you are afraid of needles you may be a candidate for the nasal spray vaccine (FluMist®). The most common side effects from this delivery method are a runny nose and nasal congestion. If you are age 49 or under, healthy, and not pregnant, the nasal vaccine may be right for you. Discuss the nasal spray with your health care provider to see if it is an option for you.

2. Vaccination Timing

What people say:
“\textit{I don’t want to get the flu shot because...}”
“I got the seasonal flu shot last year. I’ve heard that once is enough.”
“It’s past October, I waited too late to get the flu shot. I’ll just get it next year.”
“The flu is not circulating in my community.”
“I don’t have time to get my flu shot. I’m just too busy!”

Points to share with Veterans and VA staff with regard to timing:
• The flu vaccine is effective in your body for about one flu season. Therefore, the flu vaccine is recommended EVERY year to get the latest protection.
• The circulating flu virus strains usually change from year to year. The components of the flu vaccine are updated every year in response to the most common circulating strains of flu virus, so you need an annual shot to get the latest protection for the current flu season. Even if the vaccine and the circulating strains are not an exact match, the vaccine can reduce the severity of the illness and help prevent influenza-related complications.
• Adults need only one seasonal flu vaccination each year.
• The flu vaccine stimulates production of antibodies by your body that provide protection against the flu viruses. The greater your antibody response the greater your protection against flu. Usually it takes about two weeks after your vaccination for your body to build enough antibodies to provide protection from flu.
• It is never too late to get the flu shot. Flu viruses begin circulating in the U.S. in the fall and continue into spring. VA encourages flu vaccination as soon as the vaccine is available, but you can get a flu vaccination at any time during flu season and be protected after that.
• Even if you think the flu is not circulating in your community, it can show up anytime. So it’s best to be ready and get vaccinated before flu shows up in your community.
• Because it’s sometimes hard to find the time to get the flu vaccine, the VA offers the flu vaccine at no charge to enrolled Veterans and employees at VA health facilities throughout the country. Getting vaccinated will protect you and help prevent the spread of flu to your family, fellow Veterans, VA health care personnel, and others.
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3. Confusion about Vaccination and “Risk Groups”

What people say:
“I’m not going to get the flu shot because…”
“The rules keep changing about who should get vaccinated. I keep hearing mixed messages.”
“I hear that older people are supposed to get the flu shot. I’m too young to need a flu shot.
“I’m not in a high-risk group.”
“ I don’t like shots and wanted to get the flu nose spray but I was told I couldn’t get it because I was too old. I am only 52 and the nurse said no one over 49 could get the nose spray for flu. Why is that?”
“I’m over 65 and I’m not sure whether I should get the regular flu shot or the high dose one.”
“I hear that now even young people are supposed to get the flu shot. The government can’t seem to make up their minds on this. I’m at no more risk for flu than I was last year.”

Points to share with Veterans and VA staff to clear up confusion and hesitation with regard to the flu vaccine:

- Yearly flu vaccination is now recommended for all persons age 6 months and older. The age range is expanded from previous recommendations, and is supported by evidence that annual flu vaccination is a safe and effective preventive health action with potential benefit for all people 6 months and older.
- People younger than age 65 should be administered standard dose flu vaccine.
- People age 65 years or older may receive either the standard dose or the high dose flu vaccine. Both vaccines are made up of the three flu strains most likely to cause illness this flu season. The high dose vaccine, made available since 2010, contains four times the amount of antigen (the part of the vaccine that prompts the body to make antibodies) than in the regular flu shot. Because human immune defenses become weaker with age the high dose vaccine is intended for people age 65 and older. The additional antigen in the high-dose vaccine leads to greater immune response (more antibodies) in the person getting the vaccine. Thus, people age 65 and older now have another option - the high-dose flu vaccine.
- Even if you are not at high risk, you should get a flu vaccination to protect yourself, and help reduce your chances of spreading the flu to your family, other Veterans, VA health care personnel, friends, and others.
- The nasal spray is not for everyone. It is approved for use only in people who are between the ages of 2 and 49. It should NOT be given to pregnant women or people who have severe allergy to eggs.

4. Overconfidence in One’s Own Health

What people say:
“I don’t want to get the flu shot because…”
“I’m healthy. I’ve always been healthy. I don’t need to get vaccinated for flu.”
“I have a strong immune system, so I am willing to risk getting the flu.”
“I don’t need the flu shot. If I get the flu, I’ll just take an antiviral medication.”
“If I get the flu, I’ll just take an antibiotic.”
“My immune system is working just fine, thank you. I never get sick!”
“I’ve been around a long time and probably been exposed to all kinds of flu. In fact, because I’m 70, I probably have some immunity to it.”

Points to share with Veterans and VA staff with regard to feeling overconfident about their own health:

- Influenza can cause serious illness and death even in the healthiest of people. The flu is not a disease that affects just the elderly. The flu can infect any person of any age. If you get the flu, you can spread it to your family, other Veterans, VA health care personnel and other staff, co-workers, and others. This puts everyone at risk for severe illness and complications from the influenza virus. Getting vaccinated protects you, your family, other Veterans, VA staff, and others.
- The flu virus changes almost every year, so even if you were immune one year, you may not be immune to the strains of flu virus spreading the next year. It’s better to be protected by getting vaccinated against flu each year.
- Antiviral medications do not eliminate flu symptoms. They do shorten the duration by about three days, but you’ll feel sick, miss out on your daily activities for several days, and/or need to be out of work. There is a cost associated with these antivirals and they must be taken very early during your illness to be effective in reducing the symptoms of flu.
- The flu is a virus. Antibiotics only work against bacteria and, therefore, cannot help treat the flu.
- Remember, you can spread flu to others before you have symptoms. To protect yourself, your family, other Veterans, VA health care personnel and
other staff, your coworkers, and others, you should get vaccinated.

- Most people who get the flu experience the full effect of its symptoms. There are some people who get flu without noticeable symptoms. These people can still spread the flu to others even before realizing they are ill.

### STEP 5: Developing Key Messages

After goals and target audiences are understood, and keeping in mind the myths and misconceptions of flu vaccination, the next step is to determine the key points your campaign will emphasize through a variety of outlets and messages. The Infection: Don’t Pass It On team, in conjunction with the leadership of our public health programs, has developed the following key communication points for the campaign:

**Key points emphasize to Veterans and Veteran supporters**

1. The flu vaccine is effective in preventing flu.
2. Benefits of the vaccine greatly outweigh the side effects.
3. You cannot get the flu from the flu shot.
4. Hand hygiene and respiratory etiquette, along with the flu shot, are a vital to preventing the spread of flu.
5. You need a flu shot every year because every year flu viruses may change.
6. Stay home or away from others when sick.
7. List when and where Veterans and staff may get vaccinated.

**Key Points Emphasize to Health Care Personnel (HCP)**

**Clinical and nonclinical:**

- VA’s culture of safety involves everyone.
- HCP are the leaders in preventing flu:
  - By getting vaccinated
  - By promoting vaccination to patients and other staff
  - By promoting and exercising proper hand hygiene and respiratory etiquette
  - By staying home or away from others when sick
  - By recording vaccination and infection data to appropriate sources (e.g. patient records)
- HCP may find more information on flu and the flu vaccine at [http://www.publichealth.va.gov/flu/index.asp](http://www.publichealth.va.gov/flu/index.asp) or at their local occupational health office.

**Clinical:**

- By not getting your flu shot, you may be endangering patients.
- Patients look to you to educate them on flu vaccination.
- Reporting flu activities in VISTA is very important. Make sure reporting is accurate and timely.

**Nonclinical:**

- Even if you don’t have direct contact with patients, you still share the same space and facilities and can still spread flu.
- Getting your flu shot will help protect you AND your coworkers who may have direct patient contact.
- Encouraging your coworkers to get their flu shots is crucial to fighting the spread of flu.
STEP 6: Creating Effective Content

Communication strategies work best when campaign messages are motivational, educational and actionable. While crafting messages, run through the check list below.

☑️ For what audience is this message intended? Does the message speak to that audience? Using your list of target audiences, consider how to reach them effectively by using plain language and population-specific information. For example, if you wish to target a Veteran audience, do not use the same language intended for a clinical audience.

☑️ What information should you provide to the target audience to increase comprehension and pinpoint facts most relevant to them? For example, provide fact sheets, brochures or links to websites containing specific information.

☑️ What do I want from the target audience after reading or seeing the message? State clearly what you want your target audiences to do. For example:
  - Get vaccinated (let them know when and where)
  - Keep hands and surfaces clean
  - Cover coughs and sneezes
  - Stay home or away from others when sick
  - Encourage others to get vaccinated

☑️ What are the key points to emphasize in facility-wide communications?
  - VHA promotes a culture of safety through influenza vaccination and prevention
  - The flu vaccine is free to paid employees, volunteers, trainees, and enrolled Veterans
  - This is how and when you can get vaccinated (provide time and place specific to your facility)
  - Flu vaccine, in combination with other mitigation strategies, prevents influenza within VHA facilities

Creating effective communications for Veterans

Vaccination and proper hand hygiene helps prevent the spread of illness to other Veterans they come in contact with. Let Veterans know they play an important role in flu prevention by helping to protect their fellow Veterans from the flu.

All enrolled Veterans:

Key Action Items for Veterans:
- Get vaccinated each year
- Keep hands and surfaces clean
- Cover coughs and sneezes
- Stay home or away from others when sick
- Encourage others to get vaccinated
- You play an important role in flu prevention. Help us keep our community healthy this flu season!

Female Veterans:
- Flu vaccination is crucial to every woman’s health.
- A flu shot can protect pregnant women, their unborn babies, and even the baby after birth.
- For mothers, getting vaccinated will help protect their children. It also sets a good example for their children to “be brave” when getting their own vaccination.
- Within VHA, rates of flu vaccination among females has been slightly lower than male vaccination rates. This year, let’s catch up to the guys!

Elderly Veterans:
- As we age, our immune system weakens. For seniors, the seasonal flu can be very serious, even deadly.
- Elderly Veterans have two options for vaccination – the regular dose flu shot and the high-dose flu shot designed specifically for people 65 and older. Both vaccines protect against the same flu viruses.

Younger Veterans:
- Flu affects all age groups, including younger ones.
- Flu keeps us from doing the things we enjoy like sports and having fun on the weekend. Flu can knock you out for days or even several weeks. It also impacts work and wages.

Veterans by location:
- Flu vaccination resources are available to all Veterans, no matter where and how you seek medical care. (Provide location-specific vaccination information to Veterans located in inpatient areas,
outpatient areas, Community-based Outpatient Clinics (CBOC), or Community Living Centers (CLC). Let them know how and when they can get vaccinated.)

Creating Effective Messaging for Health Care Personnel

Service chiefs, chief residents and other managers:
- Service chiefs and managers interact with a multitude of staff members on a daily basis. Your flu vaccination and healthy hand hygiene has a tremendous impact on the health of this facility.

Pharmacy personnel
- Each individual pharmacy professional comes in contact with a numerous medications distributed to Veterans on a daily basis. Your flu vaccination and hand hygiene protects the health of the Veterans you serve.

Nursing staff and physicians
- Nursing staff and physicians are the vanguard of a flu prevention campaign. Get vaccinated for flu to protect the Veterans you serve.
- Do not assume patients will get vaccinated on their own – instead, check in with patients and advise them to get vaccinated.
- Provider recommendation for a patient to get a flu shot is typically the strongest influence leading to vaccination. Make sure you recommend vaccination to each of your patients.
- The work is not done after a vaccination or an influenza diagnosis. By documenting vaccination and infection data, providers play a vital role in their facility’s ability to monitor influenza. (Provide education about flu surveillance through posters and emails) (see Section 11).

Leadership:
- VISN and facility leaders will lead the way to a healthy flu season by getting vaccinated. Employees look to you to set an example of a culture of safety at work!

Union leaders:
- Support from union leaders is critical to engaging union members. We need your support to help keep your members safe from flu. Please join us in our flu prevention efforts.

Food service personnel, volunteers and security staff
- Food service personnel, volunteers and security staff play a specific and important role during flu season. You have daily contact with patients and providers and share the same common areas and other spaces within facilities. Your flu vaccination has a huge impact in combating the spread of influenza at this facility!
- Healthy hand hygiene starts with you. Check out the best practices for hand hygiene (The Infection: Don’t Pass It On team has developed a variety of hand hygiene posters available at http://www.publichealth.va.gov/flu/materials/posters_influenza.asp.)

Key Action Items for health care personnel:
- Get vaccinated
- Encourage patients and coworkers to get vaccinated
- Stay home when sick
- Practice proper hand hygiene
- Cover coughs and sneezes

Creating Effective Content for Veteran Supporters

Veteran Service Organizations (VSO)
- Help promote vaccination and awareness to the Veterans they serve. Let your Veteran members know that flu vaccination is offered for free to all Veterans at this facility! Provide details about when and where your members can get vaccinated.

Caregivers
- Caregivers – such as spouses, parents or children – often play an active decision-making role in Veterans’ lives. Encourage the Veteran in your life to get their flu shot. Vaccination is offered to all Veterans for free at this facility.
- Don’t forget to get vaccinated through your physician or at your local pharmacy.

Key Action Items for Veteran Supporters:
- Set the example by getting vaccinated themselves
- Encourage Veterans they know to get vaccinated
STEP 7: Utilizing Social Media and Other Communications Tools

Many communication formats and channels can be used to “get the word out” and educate target groups on the importance of vaccine and other strategies to prevent the spread of influenza.

Work with your facility’s Public Affairs Officer (PAO) to help you utilize the following tools within your facility. For specific examples, please see the “Examples of Effective Messaging” Step 9 of this section.

**Tools for Patient Populations**

- **Facebook:** Facility Facebook pages are a fast and modern way to reach Veterans, especially those in a younger population. Messages posted on Facebook should follow the following guidelines:
  - Keep messages short – about 250 characters
  - Post a photo to grab reader’s attention
  - Submit posts through your PAO
- **Twitter:** Posts to twitter (tweets) are under 140 characters in length. Use hashtags that are relevant to the post, for instance #flu, #fluseason #fluvaccine. Submit tweets through your PAO.
- **Post card mailings:** Provide relevant information regarding where and when Veterans and staff can get vaccinated at your facility. Don’t forget to let them know that it’s free!
- **Phone recording scripts:** Record a 10-20 sec message that informs listeners when and where they can get their flu shot.
- **Local newsletter:** Using a short article, outline the basic key messages of your flu campaign and advise readers when and where they can get vaccinated.
- **Director blog entry:** If your facility director has a blog on your facility’s website, ask them to write a piece on the importance of getting vaccination. Consider including a photo of the director getting their own shot!
- **Text crawls for closed circuit TVs/eboards:** Keep crawls to 5-10 words and advertise when and where vaccination is available if possible.
- **Kick off events and special vaccination events:** Organize and promote vaccination events. Encourage staff units to get competitive and to bring a colleague with them when they get vaccinated. Make the event fun by handing out prizes. Don’t forget to pick a theme!
- **Educational posters, fact sheets, and brochures in common areas:** To view, download and print resources visit [www.publichealth.va.gov/flu](http://www.publichealth.va.gov/flu).
- **VSO Newsletters:** Using a short article, outline the basic key messages of your flu campaign and advise readers when and where they can get vaccinated.
- **Flu videos in waiting areas:** IDPIO provides videos for viewing and downloading at [www.publichealth.va.gov/flu](http://www.publichealth.va.gov/flu).
Email from flu team: Communicate electronically prior to and throughout the vaccine season. Remind health care personnel of the importance of vaccination, plus where and when they will be able to get the influenza vaccine. Keep communications short and succinct.

Email from hospital leadership: Ask your facility’s leadership to write an email that encourages a culture of safety by reminding that all HCP should get a flu shot.

Screen savers: Provide an attention-grabbing influenza fact, along with details on where HCP can get vaccinated.

E-bulletin board materials: See Step 9 for horizontal poster designs in JPEG format for display on CCTV, desktops, and at staff meetings.

Add flu vaccination section to new staff training session: Work with your human resources department to advocate to all new hires that they should get vaccinated. For more educational materials, materials, (see Section 11).

Employee newsletter: Using a short article, advise HCP that they are critical in preventing the spread of flu in several ways:

- Getting vaccinated
- Encouraging patients and coworkers to get vaccinated
- Staying home when sick
- Practicing proper hand hygiene
- Covering coughs and sneezes

Staff meetings or volunteer service meetings: Write a short script on the importance of vaccination and details of how to get vaccinated. Pass it along to staff chiefs or volunteer leaders to read to their team members during staff meetings.

Face to face recommendations: Encourage HCP and facility leaders to talk to their colleagues about getting vaccination. Word of mouth is a powerful communications tool.

Tools for VA Community

Facebook: Facility Facebook pages are a fast and modern way to reach anyone who lives with or cares for a Veteran. If a Veteran is too ill or unable to use social media, their family or friends may be able to do it for them. Messages posted on Facebook should follow the following guidelines:

- Keep messages short – about 250 characters.
- Speak to the audience: let caregivers know that this message is for them!
- Post a photo to grab reader’s attention.
- Provide links for additional resources, like the Office of Public Health’s flu page http://www.publichealth.va.gov/flu/.
- Submit posts through your PAO.

Twitter: Posts to twitter (tweets) are under 140 characters in length. Use hashtags that are relevant to the post for Veteran supports, for instance #Veteranssupporter #FriendofVeteran #flu, #fluseason #fluvaccine. Submit tweets through your PAO.

Post card mailings: Provide relevant information regarding where and when family members can take the Veterans in their lives to get vaccinated at your facility. Don’t forget to let them know that it’s free for the Veteran!

Educational posters, fact sheets, and brochures in common areas: To view, download and print resources visit www.publichealth.va.gov/flu.
STEP 8: Applying a Communications Plan

Sample communications plan

<table>
<thead>
<tr>
<th>Influenza Communications and Promotion Plan ________ Medical Center</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Message/Event</strong></td>
</tr>
<tr>
<td>-------------------</td>
</tr>
<tr>
<td><strong>Describe the message to be published or event organized</strong></td>
</tr>
<tr>
<td>Recruiting Flu Team members</td>
</tr>
<tr>
<td>Call for flu campaign theme contest</td>
</tr>
<tr>
<td>Newsletter article</td>
</tr>
<tr>
<td>Communicate to staff and patients when vaccine is available</td>
</tr>
<tr>
<td>Kick off event</td>
</tr>
<tr>
<td>National Vaccination Week</td>
</tr>
<tr>
<td>VA Staff Vaccination Week</td>
</tr>
<tr>
<td>Follow up communications to staff and patients</td>
</tr>
<tr>
<td>Communicate results of campaign to staff</td>
</tr>
</tbody>
</table>
STEP 9: Executing the Communication Plan

The following section includes examples of communications to health care personnel, Veterans, and the VA community. To view, download, and print resources such as posters and fact sheets on influenza, hand hygiene, and respiratory etiquette, visit: http://www.publichealth.va.gov/flu/materials/index.asp.

Email announcements
EXAMPLE 1 – From the flu team or flu coordinator to all employees:

Did you know that nationally only 55% of VHA employees were documented as receiving their shot last year?

Want to do better this year?

WE WANT YOU!
To help prevent the flu and get your flu shot!

We are looking for all health care personnel:
• Pharmacists  • Infectious Diseases physicians
• Occupational Health personnel
• Health Promotion/Disease Prevention Coordinators
• Infection Preventions personnel
• Facility Management Service  • Nurse Managers
• Clinical Applications Coordinators
• Business Office personnel  • Public Affairs
• Human Resources  • Facility Leaders
• Environmental staff  • Security Staff
• Food service personnel  • Volunteers
• Interns  • Residents

Flu Prevention In Action

Utilizing facility leadership to promote vaccination

Joan Heusser, RD, CD Health Promotion Disease Prevention Program Manager NFS PACT Dietitian Sub-Committee Chair VA Salt Lake City Health Care System

“At the Salt Lake City VA Medical Center, we improved our employee flu vaccination rate about 14% in FY13. Our marketing campaign included posters featuring facility leadership receiving the flu vaccine. We posted these around the medical center – in hallways, waiting rooms, and exam rooms. We included frequent posts in our Daily News emails and employee newsletters. We sent out written endorsements from the Medical Center Director, Chief of Staff, and other leadership promoting the vaccine. The occupational health nurses conducted an intensive campaign to deliver the vaccine to employees at staff meetings and other employee events.”

Our posters and pictures are at this link: Salt Lake City Flu Campaign Leadership posters, endorsements.
EXAMPLE 2 – From the public affairs officer or flu coordinator or occupational health to all staff:

The flu vaccine has arrived

No matter where you work, a flu shot protects you and the Veterans we serve.

Our culture of safety starts with you!

Free to all VA staff and enrolled Veterans.

Available at:
Room: __________
Date: __________
Time: __________

Contact ____________________________

to find out more information,
or visit
http://www.publichealth.va.gov/flu/index.asp
for more information on how to stay healthy this flu season.

EXAMPLE 3 – Reporting outside vaccinations, for all health care personnel (HCP):

Employees, Staff and Volunteers:

Did you already get your shot?
Was it outside of VA?
Please let us know!

Fill out this card and send it to the Occupational Health Office, located at ________________

Thank you for helping VA prevent the spread of flu!
Our culture of safety starts with YOU!

EXAMPLE 4 – Email to all HCP for VA Staff Vaccination Week

Did you know that nationally only 55% of VHA employees were documented as receiving their shot last year?

Get your flu shot during
VA Staff Vaccination Week

Room: __________
Date: __________
Time: __________

(substitute photo of your facility’s leadership here)

Name: ____________________________

Service: __________________________

Please check one:
[ ] I am an employee/veteran and have had the flu shot as a veteran at the VAMC on _____. (date)
[ ] I am a volunteer/veteran and have had the flu shot as a veteran at the VAMC on _____. (date)
[ ] I am a volunteer and have had the flu shot outside the VAMC on _____. (date)
[ ] I am an employee and have had the flu shot outside the VAMC on _____. (date)
[ ] I am an academic affiliate and have had the flu shot outside the VAMC on _____. (date)

Please place this postcard in the Occupational Health flu shot drop box located in the lobby or bring to Occupational Health (email – reply to sender, indicate the appropriate response, press send)
EXAMPLE 5 – Message from the facility director to all staff:

Dear ______ VA employees:

To help stay healthy during the holidays and into next year, give the gift of health by getting a flu shot to not only protect you, but others as well. National Influenza Vaccination Week (NIVW), December 8-14, 2013, is a national observance established to highlight the importance of flu vaccinations and encourage more people to be vaccinated after the holiday season, into January, and beyond.

The flu season typically runs from October to May, with the peak around January. So get vaccinated today before all the holiday parties and family gatherings.

One of the biggest myths about the flu is a person gets the flu from a flu shot. The influenza vaccine cannot give you the flu. Why? Because the flu shot contains killed viruses, and the nasal spray has weakened viruses that cannot cause illness. If you get flu-like symptoms soon after being vaccinated, it can mean you may have been exposed to the flu before getting vaccinated, or during the two-week period it takes the body to build up protection after vaccination. It might also mean you are sick with another illness that causes symptoms similar to the flu.

Flu-like symptoms include fever, cough, sore throat, runny or stuffy nose, body aches, headache, chills and fatigue. Some people may have vomiting and diarrhea, but it is not typically associated with respiratory flu. If you are sick with flu-like illness, stay home for at least 24 hours after your fever is gone (without the use of a fever-reducing medicine.) You can also go to a doctor for antiviral drugs, which can make illness milder, shorten the time you are sick and may prevent serious complications.

Vaccination is important for health care workers and others who live with or care for high-risk people to keep from spreading flu to high risk people. For example, children younger than six months are at high risk of serious flu illness, but are too young to be vaccinated.

Flu shots are available here at the VA and are free to staff and enrolled Veterans. Please stop by ______ and get yours—like I did!

EXAMPLE 6 – Messages for hand etiquette for health care personnel (HCP):

Wash your hands to help prevent the spread of flu!
If hands are visibly dirty or soiled, healthcare workers must wash their hands with soap and water.

In the remaining cases, alcohol-based hand rub may be used:
1. Before and after contact with a patient;
2. Before inserting an invasive device;
3. Before donning gloves and after removing gloves;
4. Moving from one contaminated body site to another on the same patient;
5. Before handling medication; and
6. After contact with inanimate surfaces and objects in the vicinity of the patient.

Text for newsletters or meeting announcements

EXAMPLE 1 – “It’s not too late” messaging for all audiences

GET A FLU SHOT
Flu is still spreading – and the season can last into spring time!

Flu Shots are available at _______________________

Protect yourself and your loved ones from flu and other germs by:
1. Getting the flu shot
2. Keeping your hands and surfaces clean
3. Covering your sneezes and coughs
4. Staying home or away from others when sick
EXAMPLE 2 – Newsletter article to all health care personnel and Veterans:

**A Flu Shot is Your Best Protection this Flu Season**

*Free vaccination to staff and enrolled Veterans*

No matter your age or state of health, getting a flu shot is the best thing you can do to protect yourself this flu season.

- Influenza can cause serious illness and death even in the healthiest of people.
- If you get the flu, you can spread it to your family, other Veterans, VA health care personnel and other staff, co-workers, and others. This puts everyone at risk for severe illness and complications from the virus.
- The flu vaccine is recommended EVERY year to get the latest protection.

Because it's sometimes hard to find the time to get vaccinated the VA offers the flu vaccine at no charge to enrolled Veterans at VA health facilities throughout the country, as well as staff.

Flu shots are offered at ______________ on ______________.

Talk to your VA health care provider about how to stay healthy this flu season. For more information, visit www.publichealth.va.gov/InfectionDontPassItOn.

EXAMPLE 3 – From flu team to clinical health care personnel:

**Health care providers:**

**Why should you get vaccinated against influenza?**

Health care providers have an ethical responsibility for promoting a culture of safety. Your flu vaccination protects you, those around you and the Veterans you serve.

Health care personnel should be vaccinated against influenza every year. Here's why:

- They can get the influenza virus from their patients, resulting in absence from their positions.
- They can acquire influenza infection and not have any symptoms, but still be able to transmit the disease.
- Health care personnel who are ill with influenza often continue to work and spread the virus to other employees, volunteers, patients, and family members.
- Unvaccinated health care personnel have caused influenza outbreaks in health care settings.

Check with Occupational Health for information on how to get your influenza vaccine.
EXAMPLE 4 – Thank you communications for staff and team members

Dear Employees:

Thank you....

For a helping reduce flu infections this year at our VA!

How did we do this year?
- Over ______ staff members were vaccinated
- Over ______ Veterans were vaccinated
- Compared to last year, that’s a ______ % increase in staff vaccinations and _____% increase in Veteran vaccinations!

But there’s always more we can do. Here are some ways we could improve:
- More vaccinations in _______ departments
- Higher vaccination rates in (insert demographic, gender, etc)

A special thank you to our dedicated flu team members:

EXAMPLE 5 – “Join the Kick-off Event”

Join us at this year’s

Flu Vaccination Kick Off Event

Room: _______
Date: _______
Time: _______

The Flu Team at the Lyons VA Medical Center in New Jersey.
EXAMPLE 6 – Postcard from your facility to all patients:

Post card front:

The flu vaccine has arrived at the _____________ Medical Center!

A flu shot protects you and those around you.
Help keep our community healthy this flu season!

Flu shots are free to all enrolled Veterans.

Available at:
Room: __________
Date: __________
Time: __________

Have you already received your flu shot?
Let us know!
Call ______________________

Post card back:

From__________________
______________________
______________________

TO: ____________________
______________________
______________________

[Logo of the Medical Center]
Educating clinical providers on flu vaccination

EXAMPLE 1 – Answering frequently asked questions

Attention Health Care Personnel:

Do you know patients who have concerns about the flu shot? Help address common concerns and encourage patients to get vaccinated.

“I’m healthy. I don’t need to get vaccinated for flu.”

Influenza can cause serious illness and death even in young, healthy people. It’s not just a disease that affects the elderly. If you get influenza, you can spread it to those around you, putting them at risk for severe illness and complications from the influenza virus. Protect yourself, your co-workers, and your family – get vaccinated for flu.

“I don’t want to get the vaccine because it has side effects.”

Studies have shown that the influenza vaccine is not associated with higher rates of systemic symptoms than are seen with injections of placebos among healthy working adults. The most common side effects of influenza vaccination include: soreness, redness, or swelling at the injection site, mild or low-grade fever, and aches. The symptoms should only last a day or two. The most common side effects from the nasal influenza vaccine are a runny nose and nasal congestion. Allergic reactions (anaphylaxis) rarely occur (less than 1 in 1 million). Neurological reactions (Guillian Barré Syndrome) are also rare (1 in 1 million).

“I got the influenza vaccine before and I still got influenza, so why should I get it now?”

In years when there is a good match between the circulating viruses and the corresponding vaccine strains, vaccine efficacy for reducing illness has generally been between 70–90 percent. However, even when the viruses are not well matched, the vaccine can protect many people and prevent flu-related complications.

“I’m pregnant. I shouldn’t get the vaccine.”

All pregnant women are at risk from influenza and its complications. It is important that pregnant women get the influenza vaccine to protect themselves and their babies. The influenza vaccine can be given any time during the pregnancy. However, pregnant women should NOT receive the nasal influenza vaccine.

“I don’t like needles, so I don’t want to get vaccinated.”

Some patients may be a candidate for the nasal spray that delivers live attenuated influenza vaccine (LAIV4). This is an option for healthy adults up through age 49, especially when there is a shortage of inactivated influenza vaccine. There is also an intradermal vaccine available.

“I don’t need the vaccine. If I get the flu, I’ll just take an antiviral medication.”

Antiviral medications do not eliminate flu symptoms. They do shorten the duration by about 3 days, so you will need to be off work. Like all medication, antivirals may have side effects. It’s better to get the flu vaccine.

“I always get ‘the flu’ when I take the vaccine.”

When you are vaccinated, you may develop temporary mild body aches, soreness at the injection site, and/or low grade fever. Any of these indicate a healthy normal response that may result in some mild discomfort, but this is different from actually getting influenza.

“My immune system is working just fine, thank you” or “I never get the flu.”

Remember, you can transmit influenza to others before you become symptomatic. You may transmit the flu virus to others before you develop any symptoms of the flu. To protect your patients and family, you should get vaccinated.

For more information about vaccination events or other influenza questions, please visit [www.publichealth.va.gov/InfectionDontPassItOn](http://www.publichealth.va.gov/InfectionDontPassItOn) or contact the Flu Coordinator at _______________.
EXAMPLE 2 – Communications to clinical health care personnel about documenting flu activity:

Attention Health Care Personnel:

Documenting flu vaccination is a critical part of VA’s Flu Campaign

VA documents influenza activity because it helps protect the health of not only Veterans within VA but contributes to nation-wide influenza planning. Accurate and timely documentation by health care personnel is essential to the surveillance process.

Documenting influenza vaccinations in CPRS:

1. **Vaccinations can be entered via a reminder dialog progress note template or a clinical reminder dialog.**
   This is the preferred method of documentation since manufacturer name, lot numbers and expiration dates can be included in the dialog and the entry will populate the patient’s immunization list in CPRS.

2. **Direct entry of the vaccination into the Patient Care Encounter (PCE)** can be made after administration of the vaccine.

3. **Recording the administration of a vaccine dose in the Bar Code Medication Administration (BCMA) system** on inpatients does not result in the entry of the vaccination on the patient’s immunization list unless local programming has been accomplished to include this function. If no local programming exists to perform this function, then the site needs to implement one of the processes above to ensure that ALL vaccinations administered to patients are appropriately recorded on the immunization list.

4. **Entry of the Current Procedural Terminology (CPT) code for a vaccination will result in the automatic update of the patient’s immunization list ONLY IF THE PCE CODE MAPPING file contains a link from that CPT code to the correct immunization.** Utilizing these processes will assure entry of the correct CPT Codes for vaccine administration and the specific vaccine directly into the PCE VISIT files as well as the Immunization section of the encounter form. Completed documentation of the influenza vaccination can be viewed in the progress notes in CPRS with the actual immunizations and related CPT codes displayed in a window below the progress note.

**CPT Codes for Influenza Vaccine**

- 90656 – preservative free standard dose vaccine – pre-filled syringes
- 90658 – standard dose vaccine – multi-dose vials
- 90660 – live attenuated (nasal) vaccine
- 90662 – high dose vaccine – pre-filled syringes
- 90654 – preservative free intradermal vaccine – pre-filled syringes

For more information about vaccination events or other influenza questions, please visit [www.publichealth.va.gov/InfectionDontPassItOn](http://www.publichealth.va.gov/InfectionDontPassItOn) or contact the Flu Coordinator at ____________.
EXAMPLE 3 – Documenting flu vaccination into the medical record

Attention Health Care Personnel (HCP):

Documenting flu vaccination is a critical part of VA’s Flu Campaign

Accurate and timely documentation by health care personnel is essential to the surveillance process and meeting The Joint Commission requirements.

How can HCP’s contribute to accurate surveillance?

- Utilize one of five CPT codes for each influenza vaccination administered. Using these processes will assure entry of correct CPT Codes for vaccine administration.
- Accurately code: Data is only as good as the recording.
- Code early in a timely manner: the faster the progress note is finished, the faster codes are assigned, and the faster VA can determine the true state of flu infections.

CPT Codes for Influenza Vaccine

- 90656 – preservative free standard dose vaccine – pre-filled syringes
- 90658 – standard dose vaccine – multi-dose vials
- 90660 – live attenuated (nasal) vaccine
- 90662 – high dose vaccine – pre-filled syringes
- 90654 – preservative free intradermal vaccine – pre-filled syringes

For more information about vaccination events or other influenza questions, please visit www.publichealth.va.gov/InfectionDontPassItOn or contact the Flu Coordinator at ____________.

Social media posts

Facebook:
- Do I have a cold or the flu? Should I stay home or go to work? Learn important facts about the flu, flu vaccination and taking care of yourself while sick this flu season at: www.publichealth.va.gov/flu.
- It’s an urban legend that you can get the flu from a flu shot. The vaccine contains non-living flu viruses. The truth is you can protect yourself and your family by getting a flu shot each year. www.publichealth.va.gov/flu.
- Washing hands is a great way to prevent the spread of the flu, but you also need a flu shot. If you are a Veteran enrolled with the VA you can get one for free at your VA medical center. www.publichealth.va.gov/flu.
- December 8-14th has been designated as National Influenza Vaccination Week! If you’re a staff member or enrolled Veteran, the flu shot is free. (Provide details on when and where)

Twitter:
- Any Vet who filled a sandbag in the military knows it was done for protection just like getting a flu shot. www.publichealth.va.gov/flu.
- Fall kicks off the football and flu seasons. Get your flu shot at your local VA and stay protected. www.publichealth.va.gov/flu.
Health Care Personnel:
How to Improve Vaccination Rates

Contributor:
Pamela Hirsch, NP-C, BS, MEd, MS
Director of Clinical Occupational Health
VA Central Office
VHA health care personnel (employees, trainees, and volunteers) are at an increased risk of acquiring influenza because they are exposed to hospitalized and clinic patients who have influenza as well as to infected individuals in the community.

Increasing influenza vaccination rates and reducing the spread of influenza and other infectious diseases is one component of a culture of safety. When HCP make the decision to work for VHA, it should be with the understanding that they are making a commitment to work for the nation’s premier health care system. VHA expects all HCP to get vaccinated for influenza each year. VHA HCP have a responsibility to protect our patients and others in the VA community.

VHA HCP who are infected with influenza can transmit the virus to others. The Centers for Disease Control and Prevention (CDC) recommends that all HCP receive an annual influenza vaccination to prevent transmission. The goals of this strategy are to reduce the risk of transmission of influenza and to ensure that provision of health services to our Veterans is not disrupted.

The term health care personnel (HCP) within this manual is defined as all paid and unpaid persons (e.g. employees, volunteers, and trainees working in health care settings who have the potential for exposure to infectious materials.)

**VHA’s Performance in Vaccinating Health Care Personnel (HCP)**

Beginning FY 13, VHA facilities were expected to align their influenza vaccination for HCP with the 2020 Healthy People goal which is to achieve a rate of 90% by 2020. Facilities will need to look at their vaccination rates and set a goal to increase the vaccination rate which will meet the Joint Commission standard. Remember, HCP includes employees, volunteers and trainees. Facilities must document and determine vaccination rates for each of these groups of HCP. For example, a site may strive to raise HCP flu vaccination rates by 5% each year until 90% is attained by 2020. For most VHA health care facilities, this will translate into a gradual increase of the seasonal influenza vaccination rate of health care personnel to meet the 2020 Healthy People goal of 90%. To view these objectives for health care personnel, visit [http://www.healthypeople.gov/2020/topicsobjectives2020/objectiveslist.aspx?topicId=23](http://www.healthypeople.gov/2020/topicsobjectives2020/objectiveslist.aspx?topicId=23).

To capture accurate HCP vaccination data, the Occupational Health Record-keeping System (OHRS) must be used to document vaccination of VA health care personnel. This policy is contained in VHA Directive 2012-012, Occupational Health Record-Keeping System, April 11, 2012.
Leveraging partnerships with VISN and facility leadership is essential to advance a culture of demonstrated commitment to clinical care excellence and patient safety. VHA leadership, labor leadership, VSOs, and OPH’s seasonal influenza program will work in tandem to promote vaccine uptake and provide strong messages to support VHA’s goals for influenza vaccination at national and local levels. Leveraging these partnerships effectively includes approaches from “top down and bottom up.” Facility leadership is essential to the formation and success of “The Flu Team.”

**Why VHA Health Care Personnel (HCP) Should Be Vaccinated Against Seasonal Influenza**

1. **Transmission of influenza in health care settings is a major concern.** HCP who acquire influenza can spread the infection to patients, co-workers and their families and friends. Vaccination against influenza is an effective way to prevent influenza and its potential complications. In educating HCP on why they should be vaccinated, Occupational Health staff should stress:
   - The vaccine is effective in preventing seasonal influenza.

---

**VHA Employees Vaccinated Against Seasonal Influenza**

**FY 2006-2014**

**Graph 1**

![Graph showing vaccination rates from FY06 to FY14](image)

**FY06-FY09 vaccination data submitted by facilities**

**FY10 vaccination data from Voice of VA survey**

**FY11-FY13 vaccination data from OHRS** *(Note: Not all facilities documented vaccination in OHRS.)*
Transmission to patients, co-workers, family members, and friends is minimized when health care personnel are vaccinated.

Individuals infected with the influenza virus may infect others without knowing it as they shed the influenza virus at least one day before any symptoms occur and continue until 4 to 5 days after symptoms begin.

Absenteeism due to influenza decreases the number of staff available to take care of patients, which many see as a patient safety issue as it affects the delivery of care.

2. HCP should understand that personal responsibility includes protecting themselves against infectious disease such as influenza and thus protecting their patients. When promoting vaccination among HCP, Occupational Health staff should emphasize the following reasons to get the influenza vaccine:

- protects you and your coworkers;
- protects patients;
- protects family and friends;
- decreases need to use sick leave;
- prevents severe illness;
- prevents death due to influenza.

3. HCP may also have health problems and conditions that put them at increased risk of complications from influenza. These include:

- Chronic cardiac or pulmonary disorders severe enough to require regular medical follow-up care.
- Chronic health conditions such as diabetes mellitus and other metabolic diseases, cancer, immunodeficiency, liver disease, renal disease, anemia, and hemoglobinopathy.
- Any conditions that can compromise respiratory function or the handling of respiratory secretions or that can increase the risk of aspiration.
- Being pregnant.

Finally, Occupational Health Staff should answer questions that HCP have regarding the influenza vaccine.

Influenza vaccine may be administered to all categories of HCP unless there is a contraindication for the vaccine. In some cases, live attenuated influenza vaccine (LAIV or FluMist®), may be administered to HCP. LAIV or FluMist® is a good option for those HCP who are in good health, are not pregnant, have a dislike of needles, and meet the criteria for LAIV (see LAIV in Section 2). Another option is to be vaccinated using the intradermal formulation.

**Vaccination is the primary method to prevent influenza, limit transmission, and prevent complications from influenza.**
## Challenges and Related Strategies to Improve Vaccination Rates Among Health Care Personnel (HCP)

<table>
<thead>
<tr>
<th>Challenge Category</th>
<th>Specific Challenge</th>
<th>Strategies to Improve</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Resources</td>
<td>Lack of vaccine available</td>
<td>Make vaccine available for staff vaccination earlier in vaccination season.</td>
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<tr>
<td></td>
<td></td>
<td>Plan a kickoff event for after first vaccine delivery so will not run out of vaccine and have to stop the campaign.</td>
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<td></td>
<td>Lack of staff for documenting</td>
<td>Utilize nurses on transitional duty to vaccinate and document vaccination in OHRS. Make sure they are trained in how to document in OHRS before the beginning of the flu season.</td>
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<td></td>
<td>Lack of staff to vaccinate employees during kickoff event</td>
<td>Use nursing students to supplement staffing at kickoff events.</td>
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<td></td>
<td></td>
<td>Assign additional RNs to mobile cart during first month of vaccination season.</td>
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<tr>
<td>2. Access</td>
<td>Limited hours offering vaccination</td>
<td>Make vaccine available to staff 24/7.</td>
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<td></td>
<td>Open occupational health early, stay open throughout the day and close later. Offer vaccine during weekends and night shifts.</td>
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<td></td>
<td>Vaccine not available at convenient location</td>
<td>Utilize mobile carts to bring vaccine to all areas of the facility several times during vaccination season.</td>
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<td></td>
<td>Hold a special event such as a facility picnic or employee appreciation day and have the flu vaccine available.</td>
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<td></td>
<td></td>
<td>Test your facility mass vaccination program by offering the flu vaccine as a real practice for a potential disaster.</td>
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<tr>
<td>3. Documentation and tracking</td>
<td>Improper data entry</td>
<td>Offer training about the proper way to record vaccination of employees in OHRS prior to the influenza season.</td>
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<tr>
<td></td>
<td>Inability to identify who received vaccine outside of Occupational Health</td>
<td>Utilize pop-up computer screens to remind HCP about vaccination.</td>
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<td></td>
<td></td>
<td>Utilize postcards to capture data on HCP vaccinated elsewhere. Distribute postcards to supervisors to give to employees and have them instruct staff where to drop off postcards (at secure locations).</td>
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<tr>
<td></td>
<td></td>
<td>Make sure all collected vaccination information is documented in OHRS.</td>
</tr>
<tr>
<td>4. Marketing</td>
<td>Lack of advertising about vaccine availability and where can get vaccinated</td>
<td>E-mail advertising of kickoff event.</td>
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<td></td>
<td></td>
<td>Display posters in lobby and cafeteria advertising kickoff and other vaccination events.</td>
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<td></td>
<td></td>
<td>Craft messages targeted to groups of HCP with lower vaccination rates.</td>
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<tr>
<td></td>
<td></td>
<td>Make sure messages and any accompanying images send consistent messages.</td>
</tr>
<tr>
<td>5. Education</td>
<td>Employees are overheard repeating myths</td>
<td>Send regular messages with accurate information. Make informational posters and brochures available. Explain the risk of any side effect is much less risky than not receiving the flu vaccine. Provide up-to-date information. Explain any confusion and misconceptions. Be sure to tell the truth: vaccination is not 100% effective nor 100% safe. Try utilizing motivational interviewing as another method to change beliefs and attitudes about vaccination.</td>
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</tbody>
</table>

Throughout the flu season, keep track of who is and who is not vaccinated. Modify your vaccination program to address those areas.

**Flu Prevention In Action**

*Utilizing vaccination carts and extended hours*

**Paula Abraham, Dr.PH, RN, CIC, Infection Control Coordinator, Houston VA Medical Center**

“To increase vaccine accessibility, Infection Control Staff conducted mobile clinics by delivering the vaccine to the nursing units and administrative offices. Flu clinic hours were extended to the evening, night and weekend shifts. This, plus other best practices, led to an 11% increase in the rate of employee vaccination from FY 12 to FY13.”
Section 7

Checklist of a Successful Influenza Vaccination Campaign

1. Identify a facility champion whose main responsibility is getting employees vaccinated against influenza.
2. Encourage top management to be active members of the influenza vaccination program.
3. Enlist peer vaccination champions to encourage influenza vaccination. Make sure they are trained and have access to the Occupational Health Record-keeping System (OHRS) to document vaccination.
5. Set vaccination rate goals for your facility and departments/service lines and set up friendly competition among departments/services.
6. Make the vaccine accessible by increasing Occupational Health clinic hours, increasing the locations where vaccination is available, and taking the vaccine to HCP via mobile carts.
7. Advertise the dates, times, and locations of influenza vaccination in multiple message formats and multiple locations.
8. Provide training or educational materials on why it is important for HCP to get vaccinated.
9. Keep track of who is vaccinated so that targeted reminders can be sent to those who do not get vaccinated.
10. Identify why individuals do not wish to get the influenza vaccine and develop targeted messages to address those concerns.
11. Send postcards or e-mails to asking staff to inform Occupational Health staff if they were vaccinated somewhere else.
12. Track and report, on a daily basis, the number of HCP who are vaccinated. This can be easily accomplished in OHRS.

Strategies for Increasing Health Care Personnel Influenza Vaccination Rates

The following strategies have been shown to be effective for increasing influenza vaccination rates.

1. Use a team approach
2. Use organizational approaches
3. Make use of educational opportunities
4. Understand obstacles and individual beliefs
5. Consider timing of vaccination
6. Employ systems strategies
7. Make vaccination convenient
8. Communicate, remind, and reinforce

1. Use a team approach

“The Flu Team” is the collective driver to plan, implement, and evaluation flu vaccination campaigns. At the core of any successful flu team is the “Flu Coordinator.” This position should have recognized authority and be the champion of increasing access to and uptake of flu vaccine. The most successful flu teams are comprised of key partners from various disciplines and services. Some VISNs have coordinated meetings to support local facilities and share resources.

Organizing an employee vaccination campaign does not need to be complicated. The educational component of the program may take more planning than other aspects of the campaign. Forming an interdisciplinary team to plan and oversee the campaign to immunize health care personnel against sea-sonal influenza is an approach that other hospitals have found useful. Members of the team might include: management, a facility champion, occupational health, infection control, infectious disease, hospital epidemiologist, pharmacy, public relations employees and union representatives. Make sure key partners (Occupational Health) are included on
the team. Select a leader. The “Flu Coordinator” should have the authority to make decisions on strategies to increase vaccination and be the lead champion of increasing access to and update of the flu vaccine.

The team should meet year round. It is essential that the team meets before the start of the influenza season to plan strategies, meets periodically during the season to make revisions to their plan and at the end of the season to identify any lessons learned. The team may also identify a “theme” which may change from year to year or sponsor a campaign slogan contest to raise awareness and increase interest. Health care organizations have found that having someone in charge of the staff influenza vaccination program is essential to be successful over time. Make sure the members of the team are enthusiastic champions for vaccination.

Consider having a VISN team. Coordination across a VISN aides in development of new ideas and strategies and provides peer support for those who are members of facility teams.

2. Use organizational approaches

Vaccination is one part of a comprehensive, measurable program to improve safety by reducing the risk for an individual to develop influenza disease and the risk for influenza transmission. Some facilities benefit from bundling vaccination efforts with other important methods used to mitigate influenza, including respiratory etiquette, hand hygiene, and asking HCP to stay home when sick.

Also, linking Veteran and HCP vaccination programs may strengthen VA’s commitment to patient-centered care by building upon the energy, effort, and successes of Veteran and HCP vaccination programs. Vaccination policy, resources, and operational strategy can be leveraged to integrate and effectively target both Veterans and HCPs with designated leads for sub-populations (e.g. Veteran, employee, volunteer, trainees, contract staff, etc.). Our culture of safety involves everyone.

Make influenza vaccination of HCP an organizational priority.

- Encourage the Network director, facility director, service chiefs, chief residents, other managers, voluntary service and union partners to lead the way by getting their vaccine and encouraging their HCP to get vaccinated.
- Provide written guidance stressing importance of vaccination for HCP with clear direction from leadership (i.e., Directive, letter from Facility Director to all employees, academic affiliates, and volunteers, or Flu Advisory).

Some VISNs have created an Interdisciplinary Flu Teams with representatives from VISN medical centers/clinics and national leadership. These groups unify and support facility flu campaign efforts at VISN level and create a forum for sharing strategies and program efforts. Conference calls are used to discuss and identify current issues, strategies and best practices.

Flu Prevention In Action

Offering flu shots at Employee Appreciation Picnics

Margaret Lenz RN, Employee Health Nurse, Wm. S. Middleton Memorial VA Hospital 111-ID, Madison, WI.

Each year the Madison VAMC flu team kicks off vaccination campaigns by offering flu shots to all staff during the Employee Appreciation Picnics, held at the medical center and all affiliated CBOCs. These events have become affectionately known as “Brat and a Shot.” Two tables are set up along both lunch lines to offer flu vaccine. This year there were 2-3 vaccinators at each table and another person preparing the vaccine and supplies. This helps to eliminate wait times for employees getting vaccinated. Flu shots are offered to employees, residents, students, volunteers, and even veterans if they walk by. This year a record number of people were vaccinated with about 400 doses administered.
• Customize information for local distribution with local leadership buy-in and involvement. Use photos of hospital directors or other opinion leaders getting their influenza vaccine (newsletters, posters, TV/monitor displays).
• Enlist peer vaccination champions to encourage vaccination.

Sponsor a kickoff event at the start of influenza season. Think about a theme for the event. For maximum exposure, hold the event in a high-traffic area. Arrange for the hospital Director and a union representative to provide opening remarks and get their vaccine. Incorporate flu vaccination as an activity during a facility employee picnic.

Hold an event during National Influenza Vaccination Week (NIVW) and VA Staff Influenza Vaccination Week.
• Publicize the campaign activities often.
• NIVW usually held in December.
• VA Staff Influenza Vaccination Week usually held in January.

Take time in January to identify HCP who were vaccinated elsewhere.
• Provide performance feedback:
  ◦ Set goals/benchmarks, encourage friendly competition among HCP in different clinical settings, provide incentives to HCP who receive vaccine through worksite or private source.
  ◦ Thank everyone who contributed to the flu campaign efforts, and especially to employees who committed to keeping themselves, their patients, and families healthy by getting vaccinated.
  ◦ Send out congratulations to departments/services that achieved the highest vaccination numbers/rates.

National Influenza Vaccination Week (NIVW) is a national observance that was established to highlight the importance of continuing influenza vaccination, as well as fostering greater use of flu vaccine after the holiday season into January and beyond. [http://www.cdc.gov/flu/nivw/]

“VA Staff Influenza Vaccination Week,” is held to encourage health care personnel (HCP) to receive flu vaccine. Within the U.S. public health community and the Veterans Health Administration (VHA), influenza (flu) vaccination is viewed as an important means available to prevent and control seasonal flu. Flu vaccination keeps staff healthy, reduces absenteeism, and enables us to keep taking care of Veterans.

3. Make use of educational opportunities

Provide training on importance and effectiveness of influenza vaccination. Below are examples of opportunities to educate HCP about influenza and the importance of vaccination. These include:
• new employee orientation,
• staff meetings,
• grand rounds,
• town hall meetings,
• leadership/supervisor meetings,
• special events such as patient safety/quality fairs,
• lunch and learns,
• health fairs,
• volunteer service meetings,
• special infectious disease fair where staff learn about importance of HCP vaccination and disease prevention. Make vaccinations are available,
• special influenza fair where people learn about the flu and flu vaccination. Make flu vaccine available to patients and staff.

Other educational approaches include:
• Provide VHA Influenza Vaccine videos for display on CCTV, desktops, and at staff meetings.
• Add to standard curricula of annual staff training session.
Health Care Personnel: How to Improve Vaccination Rates

- Emphasize the high risk to patients when HCP decline vaccination.
- Try motivational interviewing as a technique to increase acceptance of vaccination.
- Emphasize the low risk of side effects from the vaccine.
- Send a letter, postcard, or e-mail to HCP prior to the start of the vaccine season reminding them of the importance of vaccination, where and when they will be able to get the influenza vaccine.
- Put an article in the employee newsletter or post information on staff bulletin boards. Include training regarding the importance of getting a flu shot during new employee orientation.

4. Understand obstacles and individual beliefs

Vaccine acceptance may vary by communities, occupational groups, and demographics. Understanding immunization patterns and demographics of HCP who work in VHA can guide the development of strategies to improve vaccine acceptance.

Reasons staff may accept seasonal influenza vaccination include:
- Wanting to stay healthy
- Desire to protect patients
- Desire to protect family and friends
- Desire to avoid missing work
- Wanting to serve as a role model for Veteran patients
- Previous seasonal influenza vaccination
- Perceived effectiveness of the vaccine
- Previous illness due to influenza
- Strong recommendation from leadership and peers
- Personal physician or health care provider recommendation

Reasons staff may decide not to get vaccinated against seasonal influenza include:
- Fear of vaccine side effects
- Fear of getting seasonal influenza from the vaccine
- Belief that the vaccine is not effective in preventing influenza
- Belief if they had a weakened immune system they should not get the vaccine
- Belief that it is not safe during pregnancy
- Fear of needles
- Perception that they are at low risk of getting seasonal influenza
- Belief that seasonal influenza is not a serious disease
- Inconvenience in obtaining the vaccine
- Lack of knowledge of CDC and other expert recommendations for vaccination

Some staff may consider getting the vaccine if they were convinced that:
- the vaccine was effective in preventing influenza,
- the vaccine protected them against all strains of the virus,
- they were in a high risk group or had a serious health condition,
- they had a vulnerable household member,
- their supervisor recommended the vaccine,
- influenza is prevalent in the community,
- the vaccine was safe.

Therefore, there should be continuous and ongoing vaccine education updates emphasizing the seriousness of influenza and addressing misconceptions about influenza and the vaccine. Occupational Health staff should determine why HCP at their facility elect not to get vaccinated and develop specific strategies which address those concerns. Targeted messages which address common misconceptions must be addressed such as:
- “The flu vaccine does NOT give you influenza.” You can get the flu right after you are vaccinated because:
  - You were already sick when you got the vaccine, but did not yet have any symptoms. It takes the flu vaccine two weeks to fully protect you.
  - You may be infected with the flu after vaccination, but before the vaccine has had time to fully protect you.
  - Other germs besides the flu are around and can cause you to feel sick like the flu, but it’s not the flu.
“Influenza is a leading cause of death in adults in the United States.”

- When some people get the flu it is mild, but for many others it can lead to hospitalization.
- If you get the flu you will need to take time off from work. HCP who are vaccinated take about 50% fewer sick days.
- You won’t need to pay for doctor’s visits and medications to treat the flu. Immunized HCP have about 44% fewer doctor’s visits.
- You won’t need to cancel activities with family and friends because you are sick with the flu. Immunized HCP have about 59% reduction in illness during vacation time.

- “There is evidence that vaccinating HCP reduces mortality among patients in long term care facilities.”
- Vaccination is most effective in younger, healthier individuals.
  - It is 60%-90% effective among healthy persons less than 65 years old.
  - Individuals, especially those who are elderly and the immunocompromised, are least likely to develop an adequate response to the vaccine. Vaccination is approximately 30%-40% effective among frail elderly patients, such as those in VHA’s Community Living Centers. They need your help. Get vaccinated!

Occupational health should consider how staff at their facility prefer to receive information about influenza and the influenza vaccine. More than one strategy will be needed to meet preferences of different staff groups. Feedback from focus groups held at 20 facilities in 2009 indicated that although most staff referred to the internet for health information, there was some variation between direct and non-direct patient care staff. Direct care staff was more likely to utilize Web sites, academic journals, and the CDC. Non-direct care staff was more likely to utilize media channels, signs, clinics, personal physicians, books and the radio for information.

In addition, the focus groups revealed that direct care staff wanted more information on the following:
- influenza vaccine strain coverage
- relationship between vaccination and reduced number of sick days
- when they should get vaccinated and how long they would be protected from influenza

- information to give patients with allergies
- FluMist® and
- vaccine ingredients including preservatives

Non-direct care staff wanted more information on the following:
- influenza, its transmission and symptoms
- self care
- when to get vaccinated and
- vaccine ingredients

Both groups wanted information on the pros and cons of vaccination and the impact of illness on the workforce. They both wanted information tailored to their audience by their local community in bulleted format, easy to read and less than two pages.

5. Consider timing of vaccination

Even though influenza vaccination is not mandatory, each year VHA expects all HCP to get vaccinated for influenza. Occupational Health staff should offer the vaccine as soon as the vaccine becomes available. The seasonal influenza vaccine should be offered throughout the influenza season which often extends through spring.

Maintaining the vaccination effort is critical. Occupational Health staff have found it useful to have a kickoff event, remind staff to get vaccinated during the “National Influenza Vaccination Week” (usually the second week in January) and to have a third effort, “VA Staff Influenza Vaccination Week,” which includes capturing those who may have been vaccinated elsewhere. During these periods, staff may find it useful to sponsor podcasts, e-cards, and other electronic means to remind staff that the vaccine is available and encourage staff who were vaccinated elsewhere to report this to Occupational Health staff. In addition, facilities may consider providing vaccination at the same time as another required activity such as mandatory training and tuberculosis screening activities. It is important to ask new employees if they have been vaccinated for seasonal influenza throughout the influenza season. Documentation of previous vaccination, offering the vaccine, any contraindication and declinations including the reason for declining vaccination is essential. All documentation is to be done in Occupational Health Record-Keeping System (OHRS).
6. Employ systems strategies

- Ensure standing orders/protocols for influenza vaccine are in place.
- Work closely with Pharmacy to get your supply of vaccine for HCP.
- Work closely with pharmacy staff to ensure that kick off events are planned after vaccine receipt.
- Monitor vaccination rates and provide feedback to specific clinics or settings on a weekly basis.
- Secure support for any additional human resources.
- Consider utilizing FluMist as an alternative to influenza shots, for HCP under age 50 who do not routinely come in close contact with severely immunocompromised patients and have no contraindication. An intradermal influenza vaccine may also be ordered and supplied through your pharmacy.
- Document receipt of vaccination, contraindications or declinations in the employee’s medical record, OHRS. See Section 10. Make sure all staff vaccinating staff are trained to document in OHRS before the start of the seasonal influenza vaccination season.

7. Make vaccination convenient

- Extend Occupational Health hours when vaccine is available to include all shifts and days of the week.
- Increase staffing in Occupational Health during peak hours.
  - Consider using volunteers to sign employees in and nurses with work related injuries to administer the vaccine if it is within their functional abilities. (Check with the workers’ compensation specialist and nursing service for who might be able to assist.)
  - Consider utilizing nursing students to augment staff vaccinating employees.
  - Consider using pharmacists, who are authorized to vaccinate, to augment staff vaccinating employees.
- Increase the number of locations where the vaccine is given.
  - Hold drop-in vaccination days, or “drive-through” vaccination clinics for HCP.
- Use rolling carts to bring the influenza vaccine directly to the work setting, grand rounds, canteen entrance, and other locations where HCP congregate. Sending rolling carts to wards and clinics during each shift and on weekends should also be considered. Carts should be stocked with vaccine, safety syringes, vaccine information statements, sharps disposal containers, alcohol hand rub, alcohol wipes, adhesive bandages, documentation forms, and injectable epinephrine with orders for administration in the event of an acute hypersensitivity reaction.
- Send e-mail messages and post schedules of when the influenza vaccine will be available.
- Authorize nurses on units to give the influenza vaccine to coworkers. Make sure they are trained and document vaccination in OHRS.
- Allow employees to take the vaccine during veteran flu vaccine drives.
- Announce the availability of the vaccine via audible paging systems as available.
- Offer the vaccine to new HCP during orientation.
Flu Prevention In Action

Utilizing nurse volunteers within each clinic

Lanette Hughes RN, BSN, MRSA/MDRO Prevention Coordinator
Salisbury VAMC

“In addition to the Occupational Health Nurse taking her mobile vaccine cart to administrative offices to vaccinate those employees, we have ‘super givers’. Within each clinic, a nurse volunteers to be the ‘super giver’ for that clinic and gives all the employees their flu vaccines. Areas with 100% vaccinated get a prize. “

1. How have you gathered these super givers? Super givers are nurses who volunteer to give flu shots to other employees in their clinics.

2. How do they manage to get so many people vaccinated? By having the super givers in each clinic, it’s easy and convenient to get vaccinated. Super givers promote the vaccine in their area. Staff are more likely to receive the vaccine if they are reminded every day by someone they know. We also have posters everywhere to promote the vaccine, articles are put in the weekly bulletin and emails are sent out. One year they camped out at the entrance to the facility and asked staff about having the vaccine as they came to work. If they wanted the vaccine, they pulled over to the side and nurses were there ready to administer the vaccine. It was very quick.

3. Are they on each clinic or service area? Each clinic has a super giver. If it’s a service that doesn’t have nurses (dietary for example) the service line chief has the occupational health nurse come to their monthly meeting and offer the vaccines then.

4. Are they usually the same from year to year? They can volunteer every year or they can opt out and another volunteer will be sought.

5. What are the prizes? Prizes are something small like a pizza party.

6. Are the prizes for the unit or the super giver? The pizza party would be for the staff in the winning area.

7. Where do you get the prizes? I’m pretty sure VCS provides the pizza – paid for by facility leadership.

8. Is facility leadership involved or supportive of this? Facility leadership is very supportive and sends out emails encouraging staff to be vaccinated. They also furnish the prizes.

9. Is the occupational health nurse cart separate or part of the super givers? Occupational health has a rolling cart with separate supplies to go place to place. Super givers keep their supplies together in one place so they are ready when someone wants the vaccine.
8. Communicate, remind, and reinforce

All Public Affairs Offices have the potential to be an active resource. In addition, all communication needs to be clear and goal driven. The use of catchy phrases, social media, screensavers/pop-ups and the word of mouth will aid your flu team in having a successful vaccination season. Additionally, there is a multitude of infection: Don’t Pass It On (IDPIO). resources available to your facility that will greatly add to efforts in planning a campaign at www.publichealth.va.gov/flu. Include your Public Affairs Officer in the coordination and implementation of vaccination campaigns.

- Contact your facility Public Affairs Office to plan and execute marketing strategies and approaches that support your influenza vaccination campaign.
- Use multiple message formats, repeat announcements regarding dates, times, and locations of vaccination:
  - Provider e-mail, newsletters, posters, and cafeteria table tents
  - Paycheck stubs, Web site messages
- Post schedules ahead of time for mobile carts and influenza clinics.
- Work with your unions’ leadership; have them promote vaccination of their members and recruit union members who are licensed to vaccinate to immunize their membership.
- Work with your Volunteer Service: Ask if you can attend one of their meetings, collect information on previous vaccination and offer the vaccine to those who have not received it.
- Make appointments with departments and services to attend service meetings to educate HCP about the need to protect HCP and our Veteran patients from influenza.
- Add information to the Occupational Health Web site regarding influenza vaccination locations and times for HCP.
- Send letters, postcards, or e-mail messages to HCP prior to the start of the vaccine season reminding them of the importance of vaccination and where and when they will be able to get the influenza vaccine.
- Write short items for the employee newsletter or post information on staff bulletin boards.
- Provide factsheets with pay stubs to dispel misconceptions and increase acceptance of influenza vaccination.

- Add an influenza reminder to Occupational Health’s telephone recording. When HCP call, they can automatically be reminded about the availability of the vaccine. If the recording capacity exists, add specific information regarding dates, times, and locations for influenza vaccination as well as any other pertinent information. These reminders can begin in September and conclude after the influenza season has peaked, which usually occurs in February or March.
- Create a computer “pop-up” message asking HCP if they have received the vaccine, wish to receive the vaccine or received the vaccine elsewhere. This data can be collected, collated and HCP contacted to verify and document they were vaccinated elsewhere or contact them to find a time which is convenient for them to be vaccinated. This “pop-up” message could be sent out near the beginning of the influenza season to all HCP, and during the mid and late influenza vaccination season to those who have not indicated they were vaccinated.

How many people die from seasonal flu each year in the United States?

The number of seasonal influenza-associated (i.e., seasonal flu-related) deaths varies from year to year because flu seasons are unpredictable and often fluctuate in length and severity. Therefore, a single estimate cannot be used to summarize influenza-associated deaths. Instead, a range of estimated deaths is a better way to represent the variability and unpredictability of flu. An August 27, 2010 MMWR report entitled “Thompson MG et al. Updated Estimates of Mortality Associated with Seasonal Influenza through the 2006-2007 Influenza Season. MMWR 2010; 59(33): 1057-1062.” provides updated estimates of the range of flu-associated deaths that occurred in the United States during the three decades prior to 2007. CDC estimates that from the 1976-1977 season to the 2006-2007 flu season, flu-associated deaths ranged from a low of about 3,000 to a high of about 49,000 people. Death certificate data and weekly influenza virus surveillance information was used to estimate how many flu-related deaths occurred among people whose underlying cause of death was listed as respiratory or circulatory disease on their death certificate. Source: CDC http://www.cdc.gov/flu/about/disease/us_flu-related_deaths.htm.
In late November/December or later in the season, identify HCP not yet vaccinated and remind them by e-mail or a phone call that the influenza vaccine is available.

Target groups with low vaccination rates.

Keep facility leadership (Directors, Service Chiefs) informed on vaccination rates of their HCP on a monthly basis. Provide information of rates by wards, units, services etc. As a general rule, individual vaccination information cannot be released without consent of the employee.

Create competition among services/product lines/units. Design a poster of a large syringe that can be used as an indicator of the number of individuals who have been vaccinated.

Send out notices on which departments/services are leading the way in the percent of HCP vaccinated.

Send out daily or weekly bulletins to highlight the importance of getting vaccinated. Some examples include:

- How is the flu spread? By coughing and sneezing – avoid the flu – get vaccinated.
- Always, practice good hand washing and respiratory etiquette.
- Did you know that in the United States, about 5% to 20% of the population becomes infected with the influenza virus annually?
- No one likes getting the flu – fever, body aches, cough, sore throat – get vaccinated.
- Be a flu buster, get vaccinated, and stop the spread of influenza.
- If you have chronic pulmonary (including asthma), cardiovascular, renal, hepatic, hematological or metabolic disorder (including diabetes) it is recommended that you get vaccinated.
- If you care for someone at home like small children or family members with a medical condition that puts them at higher risk for severe complications from influenza, protect them, get vaccinated.
- CDC now recommends that everyone over the age of 6 months is vaccinated against seasonal influenza.
- Ask Occupational Health for information on where and when to receive your influenza vaccine.

Addressing Concerns of Health Care Personnel (HCP)

“You know that the influenza vaccine works, so why don’t more people get vaccinated?”

Some people are concerned about side effects. They think that the influenza vaccine will make them sick. However, mild soreness of the arm at the injection site is the most common side effect. The vaccine itself will NOT give you influenza. Influenza vaccination is the best protection against influenza. Protect VA patients, yourself, your co-workers and your family. Get vaccinated. Check with Occupational Health for information on how to get your influenza vaccine.

“Why should health care personnel be vaccinated against influenza?”

There are several reasons why health care personnel should be vaccinated against influenza every year:

- They can get the influenza virus from their patients resulting in absence from their positions.
- They can acquire influenza infection and not have any symptoms, but still be able to transmit the disease.
- Health care personnel who are ill with influenza often continue to work and spread the virus to other employees, volunteers, patients, and family members.
- Unvaccinated health care personnel have caused influenza outbreaks in health care settings.

“Did you get your influenza vaccine last year?”

If you didn’t, you may have harmed the health of some of our patients, your co-workers, and family members. You can spread influenza to patients, putting them at risk for influenza and its complications. Studies show
that vaccination of health care personnel is associated
with decreased mortality among Community Living
Center residents. Protect yourself and our Veterans;
Get Vaccinated. Ask Occupational Health about when
and where to receive your vaccination.

“I’m healthy. I don’t need to get vaccinated for flu.”
Is this you?
Influenza can cause serious illness and death even
in young, healthy people. It’s not just a disease that
affects the elderly. If you get influenza, you can spread
it to your patients, putting them at risk for severe illness
and complications from the influenza virus. Protect
yourself, your co-workers, and your patients – forget
Vaccinated. Ask Occupational Health about when and
where to receive your vaccination.

“The residents in long-term care need the influenza
vaccine more than I do.”
Wrong. Studies, especially in long-term care, have
shown that it is as important for health care personnel
to receive the vaccine as it is for residents.

“I don’t want to get the vaccine because it has
side effects.”
Studies have shown that the influenza vaccine is not
associated with higher rates of systemic symptoms
than are seen with injections of placebos among
healthy working adults. The most common side effects
of influenza vaccination include: soreness, redness,
or swelling at the injection site, mild or low-grade
fever, and aches. The symptoms should only last a
day or two. The most common side effects from the
nasal influenza vaccine are a runny nose and nasal
congestion. Allergic reactions (anaphylaxis) rarely occur
(less than 1 in 1 million). Neurological reactions (Guillian
Barré Syndrome) are also rare (1 in 1 million).

“I got the influenza vaccine before and I still got
influenza, so why should I get it now?”
In years when there is a good match between the
circulating viruses and the corresponding vaccine
strains, vaccine efficacy for reducing illness has
generally been between 70–90 percent. However,
even when the viruses are not well matched, the
vaccine can protect many people and prevent flu-
related complications.

“I’m pregnant. Should I get the influenza
vaccination?”
Yes. All pregnant women are at risk from influenza and
its complications. It is important that pregnant health

...
“There are so many strains of flu that the vaccine can’t cover them all.”

The World Health Organization (WHO) and Centers for Disease Control and Prevention (CDC) carefully select the H1N1, H2N3 and B component strains of the vaccine at the outset of each seasonal influenza season. Your immunogenic response for those identified strains helps provide more general protection during the winter months when influenza is more common. Although the vaccine may not exactly match the circulating influenza viral strains, if exposed to influenza, your symptoms will be milder than if you had not been vaccinated.

Additional Measures to Prevent the Spread of Influenza

Remind all health care personnel (HCP) that although the influenza vaccination may be the best way to protect against influenza, there are other measures they should also take to protect themselves, their families, and patients. Here are some messages to use:

- **Stay at home when you are sick**, especially if running a fever. Not only can HCP with influenza transmit it to others, but studies have shown that people with influenza who return to work before fully recovered have less than optimal work performance.

- **Clean hands frequently with water and soap or alcohol-based rubs**, especially after using copy machines, fax machines, someone else’s computer or phone; after sneezing, or making contact with your own secretions.

- **Exercise proper respiratory etiquette**. Cover coughs and sneezes and keep tissues at your desks. Dispose of used tissues properly.

- **Frequently wipe down surfaces with antimicrobial wipes** that include: keyboards, mouse devices, and phones.

- **Avoid and minimize contact with sick persons**, except of course the patients you are here to help.

- **Use proper personal protective equipment (PPE)** and work practices when caring for ill patients. Remind others to follow these simple measures to prevent the spread of influenza.

Sample Postcard/Email Text for Tracking Health Care Personnel’s Receipt of Vaccine

Name: _________________________________________________________________

Service: ______________________________________________________________

Please check one:

- □ I am an employee/veteran and have had the flu shot as a Veteran at the VAMC on ___________. *(date)*
- □ I am a volunteer/veteran and have had the flu shot as a Veteran at the VAMC on ___________. *(date)*
- □ I am a volunteer and have had the flu shot outside the VAMC on ___________. *(date)*
- □ I am an employee and have had the flu shot outside the VAMC on ___________. *(date)*
- □ I am a trainee and have had the flu shot outside the VAMC on ___________. *(date)*

Please place this postcard in the Occupational Health flu shot drop box located in the lobby or bring to Occupational Health (email – reply to sender, indicate the appropriate response, press send)
Tracking Health Care Personnel Receipt of Vaccine

A key part of the VA seasonal influenza vaccination campaign is for Occupational Health staff to track vaccination rates among HCP and provide feedback during the influenza vaccination campaign. This assists Occupational Health staff increase vaccination rates and improve patient safety. Occupational Health must track who has received the vaccine so they can send messages to those who have not been vaccinated reminding of the vaccine’s availability. This includes employees, volunteers and trainees.

It is beneficial for facility Occupational Health staff to identify why HCP in general, elect not to receive the influenza vaccine. This can be accomplished through focus groups, anonymous surveys, or a review of the literature. This will enable Occupational Health staff in collaboration with other subject matter experts at the facility to develop focused educational programs and vaccination strategies to increase vaccination rates.

Document seasonal influenza vaccination of employees, volunteers and trainees in the Occupational Health Record-keeping System (OHRS). For additional information refer to Section 10.

2. The organization provides access to influenza vaccination on site.
3. The organization educates staff and licensed independent practitioners about, influenza vaccination, non-vaccine control measures (such as hand hygiene, sneeze and cough etiquette); and the diagnosis, transmission, and potential impact of influenza.
4. The organization annually monitors vaccination rates and reasons for nonparticipation in the organization’s immunization program.
5. The organization implements enhancements to the program to increase participation.

Staff Influenza Vaccination Program Review

Continuous quality improvement is an essential component of any program to ensure that the program meets requirements and expectations. The Joint Commission, Association for Professionals in Infection Control and Epidemiology (APIC), Health Care Infection Control Practices Advisory Committee (HICPAC), Centers for Disease Control and Prevention (CDC), and Society for Health Care Epidemiology of America (SHEA) note that measuring influenza vaccination rates is an important component of an organization’s influenza vaccination program. A recent publication of

Joint Commission: Infection Control Requirements for Offering Influenza Vaccination to Staff and Licensed Independent Practitioners

The Joint Commission approved an infection control standard that requires organizations to offer influenza vaccination to staff and licensed independent practitioners, applicable to critical access hospitals, hospitals, and long-term care. This standard conforms to recommendations made by the Centers for Disease Control and Prevention. The Standard states:

The organization offers vaccination against influenza to licensed independent practitioners and staff.

Elements of Performance for IC.02.04.01 include:
1. The organization establishes an annual influenza vaccination program that includes, at a minimum, staff and licensed independent practitioners.
The Joint Commission “Providing a Safer Environment for Health Care Personnel and Patients Through Influenza Vaccination: Strategies from Research and Practice,” addresses practices that have been implemented in varied health care settings to improve seasonal flu vaccination rates among employees, [http://www.jointcommission.org/assets/1/18/Flu_Monograph.pdf](http://www.jointcommission.org/assets/1/18/Flu_Monograph.pdf).

Quality improvement activities should be oriented toward the actual delivery of services and meeting the goals of VHA’s program. Periodic reviews can identify strengths and areas for improvement. Occupational Health staff in collaboration with other subject matter experts then can develop plans to adjust and carry out needed changes and re-evaluate the changes made to the program. In addition, it is beneficial to evaluate the vaccination program at the end of the vaccination period and identify overall program strengths and areas for improvement for the next year. Areas that should be evaluated include:

- Resources
- Access
- Documentation and Tracking
- Marketing
- Education

As part of an evaluation program, occupational health staff should identify reasons why HCP at their facility choose not to be vaccinated. Focus groups are one way to identify reasons for not opting to be vaccinated. A second method is an anonymous survey.

One type of survey questions include why the individual chose not to be vaccinated. Survey statements might include:

- Fear of needles
- Fear of side effects
- Not being in a high risk group
- Concern about additives in the vaccine (thimerosal)

A second type of survey is one where HCP are asked what might increase their interest in receiving the seasonal influenza vaccine. Survey statements might include:

- If I felt there was an increased likelihood of me getting the flu
- If I had frequent contact with vulnerable populations
- If I did not fear the potential side effects of the vaccine
- If I was able to receive the nasal spray
- If I was able to receive the intradermal injection
- If the vaccine covered all strains of the flu instead of just 3

**Influenza Vaccination Evaluation – post-campaign assessment questions**

1. Number of health care personnel vaccinated ______
2. Number of employees vaccinated ______
3. Number of volunteers vaccinated ______
4. Number of academic affiliates vaccinated ______
5. Number of other staff vaccinated ______
6. Did you have a multidisciplinary strategic planning team? Were the right disciplines represented? Did we have enough vaccine for health care personnel? Were the team members champions?
7. Which departments/services/product lines has the lowest vaccination rate among their health care personnel?
8. Which occupational groups (physicians, nurses, laboratory workers, maintenance workers, etc) had the lowest vaccination rates?
9. What were some of the reasons/barriers cited by this department/occupational group for not receiving the vaccine?
10. Brainstorm strategies to address the identified barriers.
11. What were the strengths and weaknesses of the vaccination campaign?
Key Elements of a Successful Health Care Personnel Influenza Vaccination Campaign

1. Informing HCP about the free availability of the vaccine and the goals of the campaign (awareness).
2. Educating HCP about its importance (marketing).
3. Making the vaccine convenient (access).
4. Notifying HCP regarding the scheduling of administration (awareness).
5. Keeping track of who has been vaccinated (feedback/evaluation).

Frequently Asked Questions on Influenza Vaccination for Occupational Health Staff

Should we vaccinate volunteers as part of our campaign?
Yes. Volunteers provide a vital service to our Veterans including the provision of direct patient care. Facilities should offer the influenza vaccine to volunteers.

Should we offer the influenza vaccine to medical residents, interns, nursing students and other trainees who provide services at the VA during the influenza season through our Occupational Health Department?
Trainees should be vaccinated. The decision with regard to trainees is an individual VA facility decision; it should take into account the contractual agreement with academic affiliates, the availability of the vaccine, and the potential benefit to the VA. Facilities may want to make the same decisions about providing the influenza vaccine for trainees as they do for volunteers.

Should health care personnel who have contact with HIV/AIDS patients and other patients with compromised immune systems be vaccinated?
All health care personnel in health care settings should receive annual influenza vaccination unless they have a contraindication to the vaccine.

What are the recommendations for vaccination of health care personnel against influenza?
All health care personnel in health care settings should receive annual influenza vaccination unless they have a medical contraindication to the vaccine.

Why is vaccination recommended for health care personnel?
- They can give influenza to patients, coworkers, family members, and others.
- They are at risk of getting influenza from patients with influenza.
- Preventing influenza through annual vaccination keeps health care personnel healthy and available to come to work or to take care of patients.

Inactivated influenza vaccine (the flu shot) is the preferred vaccine for people coming into close contact with anyone who has a severely weakened immune system.

What are the recommendations for use of a declination form for health care personnel against influenza?
VHA does not require the use of declination forms. Analysis of VHA facilities that have used declination forms and those who did not, revealed no statistical difference in vaccination rates.

How do I report an adverse reaction from flu vaccination?
- For Veteran patients, providers report the influenza vaccine adverse event through the Adverse Reaction Tracking System (ARTS) in CPRS. Providers have direct access to CPRS to input adverse reactions into ARTS.
- The Chief of Pharmacy (or designee) at every facility inputs adverse reactions for drugs or vaccines into VA Adverse Drug Event Reporting System (VA ADERS). A Vaccine Adverse Event Reporting System (VAERS) form for all vaccines should be submitted anytime an adverse event occurs. The VAERS form is directly accessible through a link in VA ADERS that allows online reporting. Online reporting is also available at https://vaers.hhs.gov/esub/index.
- Occupational health staff are to document an adverse event in an encounter entered the Occupational Health Record-Keeping System (OHRS). All employee, volunteer, trainee and contractor adverse reactions are also to be reported using the VA Adverse Drug Event System (VA ADERS) using the same process as outlined above for Veterans.
Is LAIV an option for health care personnel?
Yes, LAIV is an option for healthy health care personnel up through age 49, especially when there is a shortage of inactivated influenza vaccine. Choosing LAIV, currently available as FluMist®, means you are helping to conserve when there is limited inactivated influenza vaccine for high-risk persons who do not have the option of live attenuated influenza vaccine. It is also a good option for health care personnel who may not get the vaccine because they are afraid of needles.

Is shedding the virus a problem for health care personnel?
The FluMist® package insert states that a person can shed the virus for up to three weeks because that is what the studies in humans showed, but shedding alone should not be equated with person-to-person transmission. In fact, studies have found that person-to-person transmission caused by shedding is very rare. In a study conducted in a Finnish day care center that was designed to maximize the chance of detecting vaccine virus transmission, one child shed the virus for 21 days. Other children in this study shed the virus a mean of 7.6 days. Estimated transmission rates were extremely low (0.6–2.4 percent). There was actually only one documented case of LAIV transmission. An additional small study of 40 adults conducted since licensure found that only 50 percent of the adults were shedding the vaccine influenza virus on day three after vaccination; one adult shed the virus on day seven. That means that half the adults had stopped shedding the virus by day three. These post licensure studies prompted the Advisory Committee on Immunization Practices (ACIP), an independent committee that advises the CDC, to reduce the recommended number of days health care personnel should avoid contact with patients requiring protective isolation from three weeks to seven days.

Should health care personnel who have a contraindication to LAIV administer it?
They can. Environmental contamination with LAIV during administration is probably unavoidable. However, because it is an attenuated virus (weakened) that is designed not to replicate at the warm temperatures of the lower respiratory tract, the ACIP does not believe that administration of LAIV by a person with one of the contraindications to it (such as asthma, chronic obstructive pulmonary disease, etc.) puts that person at risk from infection or illness from the vaccine virus.
Veteran Patients:
How to Improve Vaccination Rates

Contributors:
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Veteran Patients: How to Improve Vaccination Rates

The following strategies have been shown to be effective for increasing influenza vaccination rates, especially when used in conjunction with each other.

1. Use a team approach
2. Use organizational approaches
3. Make use of educational opportunities
4. Understand obstacles and individual beliefs
5. Employ systems strategies
6. Make vaccination convenient
7. Communicate, remind, and reinforce

1. Use a team approach

“The Flu Team” is the collective driver to plan, implement, and evaluate flu vaccination campaigns. At the core of any successful flu team is the “Flu Coordinator.” This position should have recognized authority and be the champion of increasing access to and uptake of flu vaccine. The most successful flu teams are comprised of key partners from various disciplines and services. Some VISNs have coordinated meetings to support local facilities and share resources. Organizing a vaccination campaign does not need to be complicated. The educational component of the program may take more planning than other aspects of the campaign. Forming an interdisciplinary team to plan and oversee the campaign to vaccinate Veteran patients against seasonal influenza is an approach that other hospitals have found useful. Members of the team might include: management, a facility champion, occupational health, infection control, infectious disease, hospital epidemiologist, pharmacy, public relations employees and union representatives. Make sure key partners are included on the team. Select a leader. The “Flu Coordinator” should have the authority to make decisions on strategies to increase vaccination and be the lead champion of increasing access to and update of the flu vaccine. See Section 4 for additional information on flu teams and their roles in planning, executing, and evaluating seasonal influenza vaccination campaigns.

The team meets before the start of the influenza season to plan strategies; meets periodically during the season to make revisions to their plan; and at the end of the season to identify any lessons learned. The team may also identify a “theme” which may change from year to year or sponsor a campaign slogan contest to raise awareness and increase interest. Health care organizations have found that having someone in charge of the influenza vaccination program is essential to be successful over time. Make sure the members of the team are enthusiastic champions for vaccination.

Consider having a VISN team. Coordination across a VISN aids in development of new ideas and strategies and provides peer support for those who are members of facility teams.
2. Use organizational approaches:

**BEFORE your vaccination campaign begins**
- Make influenza vaccination an organizational priority.
- Develop and provide written policy or guidance stressing importance and effectiveness of patient influenza vaccination with clear direction from VHA leadership.
  - Establish an influenza vaccination campaign committee, with diverse clinical and support membership.
  - Schedule meetings prior to and during the vaccination season.
- Discuss successful strategies and what needs improvement.
- Set goals/benchmarks, based on previous years’ performance and current year’s targets.
- Coordinate planned activities to coincide with the influenza vaccine delivery schedule.
- Develop a month-by-month calendar of activities to prepare for a vaccination campaign (see Section 4).
- Solicit local leadership buy-in and involvement.
  - Use photos of hospital director or other opinion leaders getting their influenza vaccine in newsletters, VA TV/monitor displays and on the Medical Center’s internet home page.
- For each ward, clinic, domiciliary, Community Living Center and CBOC recruit a Flu Vaccination Champion who will help keep the momentum flowing in their area.
- Customize information for local distribution (e.g., bulletins, announcements, e-mail messages).
- Solicit information from Veterans for planning.
  - Consider a short questionnaire on the Medical Center’s internet web page about what they liked, didn’t like about last year’s campaign and what was most helpful. Also ask for suggestions to improve this year’s campaign.
- Consider creative approaches such as drive through clinics or enhanced transportation services to the drive through or clinic location.
- Flu vaccine should be made available to both enrolled Veterans and VA health care personnel as soon as flu vaccine is available at the facility. Do not “hold” doses. Vaccination efforts should be structured to ensure the vaccination of as many persons as possible over the course of several months, with emphasis on vaccinating before influenza activity in the community begins. In any given year, the optimal time to vaccinate cannot be determined precisely because influenza seasons vary in timing and duration, and more than one outbreak can occur in a single community in a single year. More information is available at [http://www.cdc.gov/flu/professionals/acip/index.htm](http://www.cdc.gov/flu/professionals/acip/index.htm).

**DURING your vaccination campaign**
- Use performance feedback:
  - Monitor/assess the number and percent of high-risk patients vaccinated, and the number of women vaccinated.
  - Inform providers and teams regarding the number and percent of high-risk patients vaccinated, and the number of women vaccinated.
- Encourage friendly competition among providers or clinics.
- Provide incentives to providers, clinics, and wards with high patient vaccination rates.
- Use *Infection: Don’t Pass It On* (IDPIO) campaign and annual flu resource materials such as buttons, stickers, posters, and flu manual. Distribute flu buttons to staff, hang posters throughout the facility. Offer stickers to all who receive the vaccination. See Section 11 for ordering information or the IDPIO web site to download and print materials at [www.publichealth.va.gov/flu](http://www.publichealth.va.gov/flu).
- Critically review what is and isn’t working well. Make mid course corrections as needed.

**AFTER your campaign**
- Inform providers and teams re: the number and percent of high-risk patients and women vaccinated.
- Critically review and evaluate your campaign after flu season.
- Identify and document strategies that worked well as those that did not work well.
- Thank your flu champions.
- Celebrate your successes.
3. Make use of educational opportunities

- Provide fact sheets, brochures, and other flu information to Veterans and family sitting in clinic waiting areas. Written information should be direct and straightforward, using appropriate language and terminology, and at appropriate reading levels (see Section 11).
- Provide information on important everyday preventive actions: respiratory hygiene/cough etiquette (cough in tissue or cough into sleeve) and hand hygiene (Clean hands often after coughing, sneezing or after touching items in a public place. Keep hands away from eyes nose and mouth).
- Broadcast information e.g., influenza vaccine administration sites/dates/times, facts vs. myths and use VA and CDC podcasts on vaccination, respiratory hygiene/cough etiquette presented on VA TV/monitors throughout the medical center to inpatients, employees, trainees, and volunteers.
- Enlist providers and clinical staff from multiple disciplines, as well as pharmacists, students, interns, and residents to assist with inpatient and outpatient education efforts.
- Have patient educational materials on flu immunization available; don’t forget to include information on important everyday preventive actions: respiratory hygiene/cough.
- Work with nurse managers, health educators, prevention coordinator, and flu champion on using consistent educational materials.

Inform patients about:

- Vaccination as the best way to prevent getting the flu.
- Who should get vaccinated each year?
  - All people over the age of 6 months should receive a flu shot each year.
  - The following people are at high risk for complications from the flu and are a primary focus of flu campaigns to receive vaccination. When vaccine supply is limited, vaccination efforts should focus on delivering vaccination to the following persons (no hierarchy is implied by order of listing):
    - all children aged 6 through 59 months;
    - all persons aged ≥50 years;
    - adults and children who have chronic pulmonary (including asthma) or cardiovascular (except isolated hypertension), renal, hepatic, neurologic, hematologic, or metabolic disorders (including diabetes mellitus);
    - persons who have immunosuppression (including immunosuppression caused by medications or by HIV infection);
    - women who are or will be pregnant during the influenza season;
    - children and adolescents (aged 6 months through 18 years) who are receiving long-term aspirin therapy and who might be at risk for experiencing Reye’s syndrome after influenza virus infection;
    - residents of nursing homes and other long-term care facilities;
    - American Indians/Alaska Natives; and
    - persons who are morbidly obese (BMI ≥40).
- Potential side effects.
  - The viruses in the flu shot are killed (inactivated) and cannot cause anyone to get the flu. Most people who receive the flu shot have no problems from it. Some people may get a low grade fever, and aches lasting one-two days after getting the shot – mild in comparison to the getting the flu. The injection may cause some discomfort, soreness, redness, or swelling where the shot was given, which resolves in a day or two. Re-emphasize that one cannot get the flu from the flu shot.
- Where to get flu shots – from their provider, at a walk-in flu clinic, or a drive-through clinic. Let them know about the convenience.

Inform providers about:

- How to respond effectively to patient questions and concerns regarding the vaccine, flu or other issues such as side-effects (see Section 6). Have a RN, LPN, or health tech screen, offer vaccination, and make referrals as appropriate regarding patient concerns.
- How to access and review the Veteran’s vaccination history.
- High risk patients – use of clinical reminders and health factors to identify these Veterans.
- Annual seasonal influenza vaccination campaign goals and status reaching them.
- Proper procedures for administration of flu vaccine.
- How to document flu vaccination.
4. Understand obstacles and individual beliefs

Vaccine acceptance may vary by individual, family, communities, or other demographic. Understanding attitudes on vaccination and demographics of patients can guide the development of strategies to improve vaccine acceptance.

Some individuals may consider getting the vaccine if they were aware that:
- The vaccine was effective in preventing influenza.
- The vaccine protected them against multiple strains of the virus.
- They were in a high risk group or had a serious health condition.
- Seasonal influenza causes illness, hospitalization, and deaths each year in the U.S.
- They lived with a vulnerable household/family member.
- A loved one or family member recommended the vaccine.
- Influenza was prevalent in the community.
- The vaccine was safe.
- Yearly influenza vaccination was necessary.

In 2009, 20 focus groups were conducted with Veterans in VA facilities across the United States. Participants described what they do to keep healthy, including how important it was for them to get vaccinated against the flu during the past flu season. Infection control behaviors and attitudes were then discussed, including why participants did or did not decide to get vaccinated, and barriers to getting vaccinated. These findings are outlined here.

Most vaccinated Veterans indicated that they made it a point to get the flu shot annually. The most common reasons for getting the flu shot were:
- Bad experiences getting the flu in the past.
- Weakened immune systems or aging.
- Habit (often began in the military when flu shots were required).
- Don’t want to spread the flu to others; and,
- Doctor recommendation.

Most non-vaccinated Veterans said they routinely did not get the flu shot. The most common reasons for not getting vaccinated included:
- Fear of getting sick from the vaccine.
- Vaccine not perceived as effective (doesn’t protect against all types of flu).
- Never got the flu.
- Bad experiences with vaccines.
- Don’t want to have the influenza virus put in their bodies.
- Belief that the immune system is strong enough to fight off the flu (don’t feel at risk for flu).

Therefore, there should be continuous and ongoing vaccine education updates emphasizing the seriousness of influenza and addressing misconceptions about influenza and the vaccine. Flu Coordinators, Infection Control Professionals/Preventionists, and other health care personnel should determine why patients elect not to get vaccinated and develop strategies which address those concerns. Targeted messaging is needed to provide information and eliminate fears surrounding vaccination and influenza. See Section 6 for how to address these issues.
5. Employ systems strategies

- Use computerized clinical record reminders.
- Use standing orders or protocols for inpatients (acute, community living center, and mental health settings), outpatients, and home care patients.
- Use patient reminders (postcards/letters) and recall systems to inform veterans of dates/locations/times of flu clinics.
- Print messages on the back of appointment reminder letters.
- Provide updates and information on the facility and VISN internet websites.
- Use social media such as Facebook and twitter.
- Utilize My HealtheVet secure messaging for individual and group reminders.
- Remove actual and perceived barriers (e.g., provide easier parking for flu shot clinics).
- Clear signage with dates, times, location of and directions to flu clinics.
- Have CCHT (Care Coordination Home Telehealth) coordinators encourage vaccination when interacting with patients.

6. Make vaccination convenient

- Expand access/outreach.
  - Extend clinic hours/days / possibly try weekend clinics
  - Schedule drop-in/walk-in vaccination days, ‘drive-through’ vaccination
  - Good signage to direct veterans to the times and location of vaccinations/flu clinic
  - Vaccinate in settings not routinely used for this purpose (hospital lobbies, Vet Centers, domiciliaries)
  - Bring the vaccine to residents (if possible) in VA residential facilities
  - Include influenza vaccination with home visits

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Flu Prevention In Action

Capturing clinical reminders for flu vaccination and wellness programs

Shirleen E. Bennett RN MS, Health Promotion & Disease Prevention Program Manager, Veteran Health Education, VAMC Canandaigua & Rochester Outpatient Clinic

At our large community-based outpatient clinic (CBOC), patients were encouraged to complete their passport by visiting tables for vaccination, education, enrollment for MyHealtheVet (MHV), Tobacco Cessation, Advance Directives, and our MOVE Program. During the four-week program, over 400 participating Veterans were vaccinated, and over 900 clinical reminders for the wellness programs were completed. The “Passport for Health” initiative will be expanded to from Monday through Friday for eight weeks. The goal is to offer influenza vaccine and to encourage additional enrollment for MOVE, MHV, and the Health Buddy (CCHT) Program.
• Target all patients including special populations in clinics where they are likely to be seen (spinal cord injury, womens health clinics, mental health and substance abuse, HIV/ID clinics, hepatitis C clinics, homeless and stand-down programs).
  • Include locations such as: all specialty clinics, dental clinic, triage and emergency rooms/departments
  • Offer vaccination at convenient times and places, before and/or after a scheduled patient event, educational event or mental health group
  • Offer vaccinations to inpatients prior to discharge, or as soon as medically feasible during hospital stay
  • Identify outside organizations to partner with – such as local state and county health departments, visiting nurses associations, or even medical/nursing school students that you can work with to increase the impact of your vaccination campaign. The partner may be able to give vaccinations to family members and friends of Veterans that are not eligible for VA care.

7. Communicate, remind, and reinforce

Use multiple message formats and tools. Regularly provide reminders and updates. Educational materials such as a seasonal flu brochures or posters should be widely distributed and available for clinicians, Veterans, visitors and staff.

Marketing Tools for Clinicians
• Provider email, email blast to all staff to communicate awareness of influenza campaign and to encourage Veterans to get vaccinated.
• Screensavers with messages to providers and staff regarding the phases of the influenza campaign – “get ready,” “vaccinations being given date/time,” “it’s not too late for your patient to get vaccinated.”
• Provide “I got my flu shot” stickers to all clinicians who vaccinate patients. Also ask them to wear IDPIO “flu buttons” during flu season.

Marketing Tools for Veterans
• “On hold” telephone recorded messages for callers
• Newsletters
• Posters
• Buttons
• Stickers
• Pens
• Cafeteria tray liners
• Table tents
• Phone calls, and/or mailed reminders to outpatients. Provide return envelope, card or tear off section of the letter, for Veterans to provide information if vaccinated at another location.
• Place reminder to let VA know if vaccinated at another location on the back of appointment letters or other informational letters sent.
• Include reminders with pharmacy refills.

Other Communication Tools
• Ask reason for patient’s refusal of flu shot; discuss and dispel “flu shot myths” (see Section 6).
• Use facility and VISN websites to provide updates for number of Veterans, employees, and volunteers vaccinated.
• Use facility Facebook page, Twitter, or other social media resources.
• Put flu clinic notices in local newspaper and on local radio stations.
• Display posters in elevators and restrooms. Change the posters at regular intervals.
Veteran Patients: How to Improve Vaccination Rates

Flu Prevention In Action

Utilizing motivational interviewing techniques

Gina Wieger, DNP, RN, Health Promotion Disease Prevention Program Manager, Miami VA Healthcare System

“Physicians from Immunology & Infectious Diseases held an in-service training for PACT (primary care) staff in motivational interviewing. Staff learned how to use the Decisional Balance Worksheet and have been encouraged to utilize it when discussing flu vaccination options with patients”.

Messages for Veteran Patients

- **Stay home when you are sick.** Don’t go to work, visit friends, family or others to avoid spreading flu and other germs.
- **Keep your children or others within your household at home when they are sick and away from others.**
- **Clean hands frequently with water and soap or with alcohol-based hand gels.** Encourage those around you (friends, children, work colleagues) to practice hand hygiene especially after touching items such as doorknobs, computer keyboards, countertops and other surfaces. Clean hands after sneezing and coughing, or making contact with your own secretions. Place alcohol hand gel in convenient places at work and at home.
- **Exercise proper respiratory hygiene/cough etiquette.** Cover coughs and sneezes and keep tissues in convenient places. Dispose of used tissues properly. Sneeze into your sleeves if you don’t have tissues.
- **Keep surfaces clean within your home and your work place.**
- **Avoid/minimize contact with sick persons.**

Addressing Concerns of Veteran Patients (or residents in long-term care facilities)

”Why should I get my flu shot?”

There are several reasons to be vaccinated against influenza every year:

- Influenza vaccine is the still the best way to avoid getting sick from flu.
- They can acquire influenza infection and not have any symptoms, but still be able to transmit the disease to friends, family and work colleagues.
- The virus changes from year to year, requiring vaccination each fall.
“I’m healthy. I don’t need to get vaccinated for flu.”
Influenza can cause serious illness and death even in young, healthy people. It’s not just a disease that affects the elderly. If you get influenza, you can spread it to other patients, putting them at risk for severe illness and complications from the influenza virus. Protect yourself, your co-workers, your family, your friends, and other patients – get vaccinated for flu. The newest recommendation from the Center for Disease Control is to receive your flu vaccination early in the flu season (September or October). Ask your health care provider about when and where to receive your vaccination. Or, watch for the reminder you will get in the mail with the vaccination dates and times (no appointment needed). If you already have an appointment, ask to receive it then. Also stay tuned to the VA Webpage for information.

“I don’t want to get the vaccine because it has side effects.”
Studies have shown that the influenza vaccine is not associated with higher rates of systemic symptoms than are seen with injections of placebos among healthy working adults. The most common side effects of influenza vaccination include: soreness, redness, or swelling at the injection site, mild or low-grade fever, and aches. The symptoms should only last a day or two. The most common side effects from the nasal influenza vaccine are a runny nose and nasal congestion. Allergic reactions (anaphylaxis) rarely occur (less than 1 in 1 million). Neurological reactions (Guillian Barré Syndrome) are also rare (1 in 1 million).

“I got the influenza vaccine before and I still got influenza, so why should I get it now?”
Consider that influenza has similar symptoms to other conditions, such as the common cold. Sometimes it may be difficult to know if you have flu or some other condition. We do know that the flu vaccine offers protection from flu in years when there is a good match between the circulating viruses and the corresponding vaccine strains. Vaccine efficacy for reducing illness has generally been between 70–90 percent. However, even when the viruses are not well matched, the vaccine can protect many people and prevent flu-related complications.

“I’m pregnant. Should I get the influenza vaccination?”
Yes. All pregnant women are at risk from influenza and its complications. It is important that women who are pregnant get the influenza vaccine to protect themselves and their babies. The influenza vaccine can be given any time during the pregnancy. However, pregnant women should NOT receive the nasal influenza vaccine (known as FluMist® or LAIV4).

“I don’t like needles, so I don’t want to get vaccinated.”
Discuss with your provider. You may be a candidate for the nasal spray that delivers live attenuated influenza vaccine (LAIV4). This is an option for healthy people up through age 49, especially when there is a shortage of inactivated influenza vaccine. There is also an intradermal vaccine available.

“I don’t need the vaccine. If I get the flu, I’ll just take an antiviral medication.”
Antiviral medications do not eliminate flu symptoms. They do shorten the duration, so you will need to be off work. Like all medication, antivirals may have side effects. It’s better to get the flu vaccine.

“I’m not in a high risk group.”
CDC recommends influenza vaccination for all people age 6 months or older. You may be at a high risk if you have a chronic health problem such as diabetes. Vaccination helps to protect your friends, your co-workers, your family and all those you come in contact with.

“I always get ‘the flu’ when I take the vaccine.”
When you are vaccinated, you may develop temporary mild body aches, soreness at the injection site, and/or low grade fever. Any of these indicate a healthy normal response that may result in some mild discomfort, but this is different from actually getting influenza.

“My immune system is working just fine, thank you” or “I never get the flu.”
Remember, you can transmit influenza to others before you become symptomatic. You may transmit the flu virus to others before you develop any symptoms of the flu. To protect yourself, your friends, and family, you should get vaccinated.
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<thead>
<tr>
<th>Checklist of a Successful Influenza Vaccination Campaign</th>
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<tbody>
<tr>
<td>☑ Identify a facility champion as the flu coordinator. This person may want to work with the occupational health staff to combine resources and efforts to establish a facility-wide flu vaccination campaign for Veterans and staff.</td>
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<tr>
<td>☑ Encourage facility leadership to be active members of the influenza vaccination program.</td>
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<td>☑ Enlist peer vaccination champions to encourage influenza vaccination. Make sure they are trained and know how to properly document vaccination.</td>
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<td>☑ Sponsor a kickoff event. Make it fun.</td>
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<tr>
<td>☑ Make the vaccine accessible by encouraging all staff to promote and vaccinate Veteran patients. Increase vaccination events and locations where vaccination is available, and taking the vaccine to clinics via mobile carts.</td>
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<tr>
<td>☑ Advertise the dates, times, and locations of influenza vaccination in multiple message formats and multiple locations.</td>
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<tr>
<td>☑ Provide training or educational materials on why it is important to get vaccinated.</td>
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<tr>
<td>☑ Identify why individuals do not wish to get the influenza vaccine and develop targeted messages to address those concerns.</td>
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Mitigation Strategies:

A. Hand Hygiene
B. Respiratory Etiquette

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Special thanks to Megan Gosch and Craig Brown, VHA Center for Occupational Health and Infection Control (COHIC)
Mitigation Strategies
Hand Hygiene

VHA is committed to reducing the spread of infections within its facilities and recognizes effective hand hygiene practices as an important component to infection prevention. Hand hygiene is a necessary complement to vaccinations and respiratory hygiene in stopping the spread of flu, healthcare associated infection (HAI), and other infection. While flu prevention primarily focuses on vaccination and respiratory hygiene, hand hygiene is essential in any comprehensive flu campaign, particularly in:

- Reducing the spread of flu from contaminated surface where the influenza virus can live for 2 to 8 hours.
- Protecting patients, families, and healthcare workers who are unable to receive a flu vaccine.

Healthcare associated infection (HAI) also called "nosocomial" or "hospital" infection, is an infection occurring in a patient during the process of care in a hospital or other health care setting which was not present at the time of admission. HAI can affect patients in any type of setting where they receive care and can also appear after discharge. Infections from HAI result in long-term disability, increased resistance of microorganisms to antimicrobials, massive additional costs for health systems, high costs for patients and their family, and unnecessary deaths. Infections from influenza can result in prolonged illness, extended hospital stays, and even death. Effective hand hygiene practices can reduce the spread of these infections, reduce the need for additional care and services, and help minimize the monetary and physical burden to VA patients, staff, and the VA health care system.

Hand hygiene doesn’t apply solely to health care personnel (HCP). Patients and visitors to VHA facilities have a recognized role in the transmission of infections, including influenza and HAI. Everyone has a personal responsibility to promote and practice effective hand hygiene. VHA has a commitment to advancing the culture of safety, with minimized risk of spreading or acquiring infection, throughout its health care system.

HCP are expected to model effective hand hygiene behaviors and encourage the same among other HCP, patients, and visitors. HCPs can do so by educating and demonstrating hand hygiene at various interactions as outlined in policies and guidelines. Fostering participation from patients and visitors will increase the success of reducing the spread of influenza, HAIs, and other infections.

History

The importance of hand hygiene was first introduced by Dr. Ignaz Semmelweis in 1847 before scientists had discovered bacteria and the role of germs in the spread of infection. He observed post-partum mortality rates were very different on two wards in Vienna General Hospital. Although both performed approximately 3,500 deliveries per year, 600-800 mothers died each year on wards overseen by physicians and medical students and 60 mothers died per year on wards overseen by midwives. This led to Dr. Semmelweis’ groundbreaking experiment in which he required all physicians and medical student to rub their hands in chlorinated lime solution before every vaginal exam. The impact was dramatic. Before implementing his intervention, 13-18% of the mothers...
on the physician ward died, while 2% of mothers died on the midwife wards. After physicians began using the chlorinated lime solution, mortality rates dropped to 1.2% in physician wards.

*Figure 1. Dr. Ignaz Semmelweis’ 1847 Chlorinated Lime Solution Experiment*

**Role of Hands in Transmission of Influenza Virus**

Evidence for the importance of hand hygiene has continued since Dr. Semmelweis’ experiment. Multiple studies have shown decreases in overall hospital infection rates with hand hygiene compliance improvement.

Research studies also demonstrate hand hygiene can reduce the rate of transmission of flu and respiratory infections. A systematic review found that hand cleansing cut the risk of respiratory infection by 16%. Specifically, hands play a role in the transmission of the influenza virus when droplets carrying influenza virus contaminate animate and inanimate objects. It has been shown that a cough or sneeze from an infected person can spread the virus to surfaces 5-6 feet away. A noninfected person touching a contaminated surface can spread the virus to him or herself by then touching his or her eyes, nose, or mouth. The same transmission route may occur during patient care. Therefore, it is essential to follow hand hygiene guidelines regarding in order to prevent the transmission of the influenza virus.

**Health Care Personnel (HCP): When to Disinfect Your Hands**

VHA’s Directive 2011-007, “Required Hand Hygiene Practices” provides guidance to facilities on structure and process of acceptable hand hygiene practices. This Directive incorporates The Joint Commission’s National Patient Safety Goal 07.01.01 as well as the World Health Organization’s (WHO) guidelines and CDC recommendations on hand hygiene practices within medical facilities. The directive requires VHA healthcare workers to disinfect their hands at specific points during patients care. Those are listed below.

1. If hands are visibly dirty or soiled or exposure to *Clostridium difficile*, healthcare workers must wash their hands with soap and water.

In the remaining cases, alcohol-based hand rub may be used:

2. Before and after contact with a patient;
3. Before inserting an invasive device;
4. Before donning gloves and after removing gloves;
5. Moving from one contaminated body site to another on the same patient;
6. Before handling medication; and
7. After contact with inanimate surfaces and objects in the vicinity of the patient.

**Three Key Strategies to Increase Hand Hygiene Practice within VHA Facilities**

1. **Leverage Partnerships**

   The existing partnerships between VHA and labor leadership, Veterans Service Organizations (VSOs), and health care personnel (HCP) can provide an opportunity for improving our culture of safety. Coordinated communications from VHA, VSOs, and labor leadership set an expectation for hand hygiene for patients, visitors, and HCP in the spirit of a culture of safety. Whether seeking care or working within the VHA health care system, it understood that VHA, one of the
nation's premier health care systems, expects a culture of safety. Framing hand hygiene as both an individual and community responsibility is essential to protect HCP's, patients, and others in VHA facilities.

2. Integrate Programs for a Comprehensive Approach

Hand hygiene is one part of a comprehensive, measurable program to improve safety by reducing the risk of influenza and other infectious agents to others. Bundling hand hygiene with vaccination efforts and other important methods used to mitigate transmission (including respiratory etiquette and reducing the number of HCP who come to work while ill) is a proven disease prevention strategy. Linking hand hygiene, respiratory etiquette, and vaccination programs will strengthen VA's commitment to patient-centered care by building upon the energy, effort, and successes of our current infection control programs. Policy and operational strategy should be fully integrated to effectively target Veterans, visitors, and HCPs. Fully integrated programs include designate leads to address specific methodologies that advance a culture of safety.

3. Engage Resources

Seek ways to efficiently and effectively use facility HCP, information technology, and VACO program office resources to build a robust and successful hand hygiene campaign for HCP and the Veterans they serve. The *Infection: Don’t Pass It On* (IDPIO) campaign continues to develop tools and resources to assist facilities in planning, implementing, and evaluating their influenza vaccination campaigns and hand hygiene compliance programs.

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Measuring Hand Hygiene

The Joint Commission and other organizations agree that each health care setting is challenged to establish and select the measurement approaches that will best fit their needs. Following effective hand hygiene practices has long been recognized as the most important way to reduce the transmission of pathogens in health care settings. Many studies, however, have shown that adherence to hand hygiene recommendations remains low and that improvement efforts frequently lack sustainability. In 2004, The Joint Commission added a National Patient Safety Goal requiring that accredited health care organizations comply with hand hygiene guidelines. While most would agree that hand hygiene is of critical importance, many have found that measuring adherence to hand hygiene guidelines is not a simple task. Methods for measuring hand hygiene performance may include use of automated systems, direct observation, product use measurement, and surveys. Each has its own challenges and levels of validity. One method may prove effective in one environment but ineffective in another type of setting or clinic. For additional information about measurements and standards, visit the VHA Hand Hygiene Toolkit or The Joint Commission monograph: MEASURING HAND HYGIENE ADHERENCE: OVERCOMING THE CHALLENGES at [www.jointcommission.org/Measuring_Hand_Hygiene_Adherence_Overcoming_the_Challenges/](www.jointcommission.org/Measuring_Hand_Hygiene_Adherence_Overcoming_the_Challenges/).

VHA Hand Hygiene Toolkit

VHA’s *Infection: Don’t Pass It On* (IDPIO) campaign, led by the Office of Clinical Public Health, has developed an online toolkit on hand hygiene to provide relevant resources and tools for VHA facilities to use in promoting effective hand hygiene practices among all health care personnel, patients, and visitors.

Within the toolkit you’ll find a myriad of resources. There are folders containing materials from different entities including the Centers for Disease Control and Prevention (CDC), the Joint Commission, the World Health Organization (WHO), and of course,

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Encourage Patients & Visitors to Clean Hands

- Before eating
- Before touching a patient or someone sick
- Before entering the building/clinic or a patient room
- After using the restroom
- After sneezing or coughing
- After leaving the clinic or patient room.
the Veterans Health Administration (VHA). You’ll find educational materials such as posters, brochures, and links to videos. Visit the reference folder to read the latest in research and literature on hand hygiene and related topics. A host of monitoring and evaluation systems are outlined, as well as guidance on promotion of effective hand hygiene policy and practice.

**Hand Hygiene in VHA**

The Veterans Health Administration (VHA) conducted a national survey of its 141 VHA medical centers and healthcare system. The survey covered three content areas of hand hygiene: 1) methods of measuring healthcare worker hand hygiene compliance, 2) interventions to improve hand hygiene compliance, and 3) site-specific targets for hand hygiene compliance. A majority (98.6%) of the medical centers conduct direct observations to measure hand hygiene compliance rates with 22.7% tracking product usage and 2.8% using automated systems. Room entry (69.1%) and exit (71.9%) were the most commonly monitored hand hygiene opportunities. The most common interventions to improve hand hygiene compliance included posters (97.2%), feedback to leadership (98.6%) and units (92.9%), and improved access to hand hygiene products (e.g., 90.6% provide individual hand sanitizers to staff). Mandatory education programs for clinical staff are conducted in 88.5% of the medical centers. Findings from the national survey will assist decision making regarding standardizing surveillance, recommendations of interventions, and next steps in hand hygiene policy in VHA. For more details on the survey, please read:


### Top 5 Hand Hygiene Improvement Interventions

<table>
<thead>
<tr>
<th>Interventions</th>
<th>Percentage</th>
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<tbody>
<tr>
<td>Feedback to leadership (97.2%)</td>
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<tr>
<td>Posters (96.5%)</td>
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<tr>
<td>Feedback to units (92.9%)</td>
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<tr>
<td>Availability of individual alcohol-based hand rub (89.4%)</td>
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<td>Patient engagement (87.2%)</td>
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**Hand Hygiene Resources**


Mitigation Strategies – Hand Hygiene

Selected References


Mitigation Strategies: 
Respiratory Etiquette

The primary mode of influenza transmission is thought to be the respiratory route through large, virus-laden particles called droplets. When an infected person coughs or sneezes they generate these particles that can travel up to 6 feet or more. These particles may then settle on the mucosal surfaces of another person’s upper respiratory tract, thereby infecting that other person.

In addition to droplet transmission, influenza may also be transmitted through small, small particle aerosols and perhaps from contaminated surfaces.

Influenza can spread within health care settings among patients, health care workers and visitors. Annual seasonal influenza vaccination is the most effective method of preventing influenza and everyone 6 months of age or older should receive an annual influenza vaccination. Even so, there will be people who decline the vaccine or cannot take the vaccine, requiring a multi-faceted approach to prevent the transmission of the influenza virus. The Centers for Disease Control and Prevention (CDC) have developed strategies for the prevention of seasonal influenza in all health care settings.

Respiratory Hygiene/Cough Etiquette

Respiratory hygiene/cough etiquette involves measures to contain respiratory secretions and are recommended for all individuals with signs and symptoms of a respiratory infection (e.g. cough, sneeze, runny nose, fever). These practices are used to minimize influenza exposure, before arrival, upon arrival and throughout the visit to a health care setting.

- **Before Arrival** – During the influenza season, telephone discussions with patients should include instructions to tell a health care worker if they have any symptoms of a respiratory illness to ensure they are provided a mask to wear during their visit. Patients can also be offered a telephone consultation visit for mild respiratory illness to determine if they actually need to visit the facility or if their needs can be met without a face to face visit.

- **Upon Entry and During the Visit** – Processes should be in place to provide patients, visitors, and health care personnel (HCP) with the information and supplies to prevent transmission of influenza virus upon arrival to a health care facility.
  - Hang signs and posters at all facility entrances with instructions about respiratory hygiene and cough etiquette. Include all languages appropriate to the population served with instructions on:
    - How to use masks or tissues to cover nose and mouth when coughing or sneezing;
    - Disposal of contaminated items in a waste receptacle;
    - How and when to perform hand hygiene (soap and water, alcohol hand gel).
  - Provide masks to patients/visitors with signs and symptoms of respiratory infection.
  - Insure easy access to supplies to perform hand hygiene at entrances, waiting rooms and at patient check-in stations.

Establish a culture of safety within your VHA facility. Encourage patients, visitors, and other staff to wear a mask if displaying symptoms of respiratory illness.
• Provide dedicated space and encourage persons with symptoms of respiratory infection to sit at least 3-6 feet from others.

• Establish dedicated triage stations, especially during periods of increase community influenza, to facilitate rapid screening of patients for symptoms of influenza and to separate from other patients.

Health Care Personnel

• Facilities should establish and communicate sick leave guidance and practices that are non-punitive and encourage health care personnel to not report to work if they have a fever and symptoms of a respiratory infection.

• Facilities should advise health care personnel to follow respiratory hygiene and cough etiquette after returning to work, especially if coughing or sneezing persist, including wearing a facemask when performing patient-care activities.

• All HCP should perform frequent hand hygiene, especially before and after every patient contact and any contact with any respiratory secretions.

• All HCP, regardless of direct patient contact, should exclude from work until at least 24 hours after fever resolves, without the use of a fever-reducing medication.

• Sites should consider strategies to separate HCP from working with high risk patients (e.g. hematopoietic stem cell transplant patients) and from other colleagues.

• Detailed guidance on respiratory protection for HCPs is provided in the December 2012 Industrial Hygiene Guidebook (Chapter 9).

Adherence to Standard Precautions

• All health care personnel, patients and visitors should follow standard precautions which assumes that every patient is potentially infected or colonized with a pathogen that can be transmitted. The elements of standard precautions that apply to patients with respiratory infections include:

  • Hand Hygiene – perform hand hygiene frequently, including before and after all patient contact, contact with potentially infectious material, before putting on and upon removal of personal protective equipment. Options for performing hand hygiene include alcohol-based hand rubs or soap and water (when hands are visibly soiled). Supplies should be readily available to HCP, patients, and visitors.

  • Gloves – should be worn for any contact with potentially infectious material, followed by hand hygiene. Gloves are for single patient use and should not be washed for the purpose of reuse.

  • Gowns – Gowns are worn when there is a potential for contact with blood, body fluids, secretions or excretions. Remove gown after use and perform hand hygiene. Gowns are for single patient use and should be changed between patients.

Adherence to Droplet Precautions

• Patients with suspected or confirmed influenza should be placed under droplet precautions for seven days after illness onset or until 24 hours after resolution of fever and respiratory symptoms, whichever is longer.
Mitigation Strategies – Respiratory Etiquette

- Health care personnel should wear facemasks when entering the room of a patient under droplet precautions. The facemask is removed before leaving the room, disposed of in a waste container and hand hygiene performed.
- Patients under droplet precautions are provided a facemask if transport is necessary outside of room.
- Provide information to other departments providing care to patients with suspected or confirmed influenza infection to ensure they take measures to protect themselves and other patients.

Use Caution when Performing Certain Procedures

- Procedures such as bronchoscopy, sputum induction, elective intubation, extubation and autopsies may generate higher concentrations of infectious respiratory aerosols than coughing, sneezing, talking or breathing. The following precautions are recommended for patients with suspected or confirmed influenza:
  - Only perform these procedures if medically necessary;
  - Limit the number of health care personnel present;
  - Conduct the procedure in a negative pressure room with at least 12 air changes per hour;
  - Consider the use of a portable HEPA filtration unit;
  - Adhere to standard precautions, replacing a facemask with a fitted N95 mask;
  - Conduct a thorough environmental surface cleaning following the procedure.

Visitors of Patients with Influenza or Suspected Influenza

- Limit visitors to patients under droplet precautions for influenza to only persons necessary for emotional support. Visitors who have been in contact with the patient before and during hospitalization for influenza are a potential source of infection for other patients, visitors and staff.
- All visitors should follow respiratory hygiene and cough etiquette precautions when visiting patients with influenza/suspected influenza.

- Screen visitors for symptoms of acute respiratory illness before entering the hospital.
- Before visitors enter the patient's room, provide instruction on hand hygiene, limiting surfaces touched, and the use of gowns, gloves and masks per station policy.
- Caution visitors to limit their movement within the facility.
- Provide information on influenza vaccination.

Monitor Influenza and Other Respiratory Activity – to ensure prompt notification of increased activity in the community or outbreaks within the facility.

Environmental Controls – Standard cleaning and disinfection procedures are adequate for influenza virus control, including applying disinfectants to frequently touch surfaces/objects for the indicated contact times. Management of laundry, food service utensils and medical waste should follow standard procedures.

Engineering Controls – Use of physical barriers including partitions or the use of curtains to separate patients may help to reduce or eliminate exposures.

Training/Education for Health care Personnel – Information about influenza and other respiratory illnesses and their prevention should be provided to health care personnel. These include:

- Signs, symptoms, complications of influenza and other respiratory illnesses;
- Importance of the role of vaccination, respiratory hygiene and cough etiquette, sick leave policies and precautions during high risk procedures;
- Appropriate use of personal protective equipment, including respirator fit testing.
- Use of infection control practices and engineering controls to reduce exposure.

Use of Antiviral Treatment and Chemoprophylaxis of Patients and Health Care Personnel when Appropriate

- The most recent recommendations for the use of antiviral agents can be found in this manual and on the CDC website at http://www.cdc.gov/flu/antivirals/index.htm. Patients and staff are reminded that persons continue to shed influenza virus while being treated with antiviral medications. Hand hygiene, respiratory hygiene, and cough etiquette should continue while undergoing treatment.
Health Care Personnel at Higher Risk for Complications of Influenza – pregnant women and women up to 2 weeks postpartum, persons aged 65 years and older, persons with chronic diseases including asthma, heart disease, diseases that suppress the immune system, other chronic medical conditions and morbid obesity are considered at high risk for complications of influenza. They should understand the importance of vaccination, early treatment with antiviral medication and avoidance of high-risk exposure scenarios to decrease the risk of hospitalization and death.

SEVEN ways to promote a culture of safety within VHA health care settings

1. Get vaccinated against influenza.

2. Stay home when sick. Establish and discuss expectations with your supervisor based on VHA policy.

3. Cover your coughs and sneezes. Use a tissue or some other barrier (arm or sleeve) to cover your nose and mouth. Always clean your hands after.

4. Exercise and promote effective hand hygiene practice at work and at home. Encourage patients, visitors, and other HCP to do the same. Make friendly reminders a norm within your facility.

5. Make masks and tissues readily accessible to all.

6. Encourage patients and visitors to
   a) wear masks if you hear them coughing frequently.
   b) cover their coughs and sneezes.
   c) comply with standard, droplet, or other posted respiratory precautions.
   d) clean their hands frequently.

Use these occasions as teachable moments that define VHA commitment to maintaining a healthy and safe environment.

7. Encourage your colleagues and other HCP to wear masks or properly cover their mouths and noses if you hear them coughing or sneezing frequently or observe respiratory or flu-like symptoms. Make this behavior standard within your facility to demonstrate.

References

VHA Industrial Hygiene Guidebook (see Chapter 9: Respiratory Protection)

Some of the Flu Team having fun during their flu campaign at the Iowa City VA Medical Center.
Prevention Strategies for Seasonal Influenza in Health care Settings

Centers for Disease Control and Prevention “Seasonal Influenza – Cover Your Cough”

Virginia Department of Health “Frequency asked questions about respiratory Hygiene / Cough Etiquette”

Centers for Disease Control and Prevention “Everyday Preventive Actions that Can Help Fight Germs Like the Flu.”

Other sources of information

VA Public Health website which offers a selection of posters for covering coughs/sneezes, etc.

VA Public Health website has a video about respiratory etiquette for patients

Centers for Disease Control and Prevention (CDC)

CDC for outpatient setting

World Health Organization (2006)

Occupational Safety and Health Administration

Institute for Health care Improvement

U.S. Department of Health and Human Services (HHS)

Infection Control Today

Review of the Literature


Surveillance and Documentation

A. Surveillance
B. Documenting into OHRS
C. Documenting into CPRS

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Surveillance and Documentation

Surveillance enables facilities and leadership to prepare for influenza and stay informed throughout flu season. It also helps VA prepare for future flu seasons and plays a crucial role in understanding influenza outbreaks.

Since surveillance efforts are dependent upon proper documentation of influenza cases and vaccinations, surveillance is only as strong as the documentation performed by health care personnel. Documenting influenza vaccinations and illnesses accurately and in a timely manner is critical to combat influenza, both inside and outside of VA. Data created by the documentation efforts by VHA health care personnel contributes to the Centers for Disease Control’s (CDC) monitoring efforts as well, and is compiled with the surveillance efforts of health departments nation-wide.

HAIISS: VA’s Surveillance System

The Healthcare Associated Infections and Influenza Surveillance System (HAIISS) is VA’s surveillance system. HAIISS leverages VHA’s advanced electronic medical record and integrated health care system to monitor influenza. The system draws upon data from two sources:

1. QC PathFinder™ (QCP) electronic healthcare associated infections (HAI) detection application.

2. Electronic Surveillance System for the Early Notification of Community-Based Epidemics biosurveillance application (ESSENCE).

Both of these web applications use data accessed from the Veterans Health Information Systems and Technology Architecture and stored within the HAIISS Data Warehouse.

The data from HAIISS is de-identified, aggregated, and then sent to the CDC’s BioSense program, which helps monitor influenza’s impact on the health of all Americans.
Influenza Surveillance Flow Chart

HCP documents the following in VistA:
1) Lab results
2) Pharmacy utilization
3) Outpatient data
4) Inpatient data
5) Triage data

**QC PathFinder™ Electronic HAI Detection Application (QCP)**

QC PathFinder™ is an electronic infection surveillance software that generates queries to inform the office of Public Health (OPH) of outbreaks. It collects data from:

1) Lab results
2) Pharmacy utilization

**Electronic Surveillance System for the Early Notification of Community-Based Epidemics (ESSENCE)**

Essence is a biosurveillance system that is driven by diagnosis codes and procedures codes, serving as an early warning system to prevent and control the spread of infection. It is Internet-based and used by both civilian and military health departments nationwide. VA runs a customized version, which collects:

1) Outpatient data
2) Inpatient data
3) Triage data

**Healthcare-Associated Infection and Influenza Surveillance System (HAISS)**

Compiling influenza data from QC Pathfinder™ and ESSENCE, HAISS provides situational awareness of emerging health threats, such as influenza. It helps VA gauge resource allotment and allows OPH to monitor the onset and trends of flu season.

**BioSense**

BioSense, the CDC’s surveillance system, tracks health problems like influenza in the United States as they evolve. It provides public health officials with the data, information, and tools needed to better coordinate responses to influenza. It also provides a snapshot of influenza’s impact on the health of the nation.

BioSense pulls together information on emergency department visits and hospitalizations from multiple sources, including VA. These data guide the decisions and actions by public health agencies at local, regional, and national levels.
Health Care Personnel (HCP) – Role in Surveillance

VA documents influenza activity because it helps protect the health of not only Veterans within VA but contributes to nation-wide influenza planning. Accurate and timely documentation by health care personnel is essential to the surveillance process.

How can HCPs contribute to accurate surveillance?

- Utilize one CPT code for each influenza vaccination administered. Using these processes will assure entry of correct CPT Codes for vaccine administration.
- Accurately code: Data is only as good as the recording.
- Code early in a timely manner: the faster the progress note is finished, the faster codes are assigned, and the faster VA can determine the true state of flu infections. Since data is loaded into the surveillance system twice a day, it’s important to keep up with the program that is designed to keep up with you.

HAIISS in Action

Using HAIISS, OPH measures and analyzes influenza disease and patient vaccination activity throughout the VA system and uses this to generate weekly reports that are widely distributed to VA frontline staff and leadership. Through this system, VHA and individual facilities will be better able to understand vaccination activities and refine strategies for improving staff and patient vaccination.
Appropriate documentation of influenza vaccine administration is necessary to provide an accurate record of VHA's staff (employees, volunteers, trainees, and other personnel) vaccination history. Documentation during mass influenza vaccination clinics can be a challenge, but a process should be in place to ensure it is complete and accurate. Be sure to utilize the CPT codes for each influenza vaccination administered. (See the documentation instructions and the CPT codes within the patient vaccination section as they are the same.)

Staff must document vaccination of health care personnel in the Occupational Health Record-Keeping System (OHRS) an electronic health record. The Occupational Health Record-keeping System is a Web based application. Only VHA staff who have been granted access to OHRS are able to document influenza vaccination administration. Staff who will be assisting Occupational Health in vaccinating staff must complete the OHRS training prior to being granted access to OHRS. Access to OHRS is role based and staff who assist Occupational Health in vaccinating employees, volunteers and trainees have limited access to health information. The person administering the vaccine must be the person who documents the administration of the influenza vaccination in OHRS. Remember to follow your facility's policy on timeliness of documenting vaccinations. This includes documenting in a timely manner. Delaying documentation is a patient safety issue. Also, delay will result in vaccination data not being captured and reported by DSS which will directly impact workload capture.

The following process is to be used to document influenza vaccinations in OHRS:

1. Individual vaccination
   a. Search and select the individual who is to receive the vaccine. Note: You must search for volunteers using their last name. Search for employees using their last name, their full social security number or the first letter of their last name and the last four numbers of their social security number.
   b. With the individual selected, click Create Encounter.
   c. From the Category drop-down list, select General Health.
   d. From the Type drop-down list, select Vaccination.
   e. Enter the Purpose for the vaccination encounter (free text) Note: You may leave this field blank or type in influenza vaccination.
   f. Click Submit.
   g. A list of vaccines displays. Highlight seasonal influenza vaccine. Click Add. Note: If you are administering another vaccine at the same time highlight both vaccines and click Add.
   h. Click Submit.
   i. A template appears.
   j. The template will display whether or not the individual has already received the vaccine if it was documented in OHRS. Note: If the individual has already received the vaccine this season, click on cancel.

VHA policy for using OHRS is outlined in VHA Directive 2012-012, Occupational Health Record-Keeping System, April 11, 2012 found in section 5 of the flu manual on page 52.
The template is divided into several sections: subjective, objective, assessment, plan and encounter codes. Only those sections with a “*” are required (plan and encounter codes).

Click the plan tab and enter the required information. The template is dynamic and the required fields will change depending on what information is added.

- The first question is was the vaccine received previously. If yes, document date received.
- If no, additional information is required to document vaccination.

**What's New:**

- Identification of regular or high dose vaccine.
- Drop down list of drug companies.
- Preselected dose: 1.0 ml.
- Preselected route: Intramuscular.
- Vaccination Site: Most frequent injection sites are at the top of the list.

You must still compete the lot number and expiration date.

Under the encounter codes tab, staff must select diagnostic and procedure codes. Default codes have been identified, but staff have the ability of searching and selecting another code, if applicable. The diagnosis code is the same as when documenting influenza vaccination in CPRS for Veterans.

### 2. Quickload

Quickload allows occupational health staff to pre-load information about the vaccine being administered to a group of individuals (VIS, dose, route, manufacturer, lot number, and expiration date). Once the vaccine information is completed, staff search and select the individuals who received the vaccine.

**What's New:**

- Identification of regular or high dose vaccine.
- Drop down list of drug companies.
- Preselected dose: 1.0 ml.
- Preselected route: Intramuscular.
- Vaccination Site: Most frequent injection sites are at the top of the list.

You must still compete the lot number and expiration date.

Staff may modify the injection site and time administered for each individual vaccinated, so that accurate information is collected. Once all the vaccination information is entered, the information is submitted. Documentation is now complete in all the selected records.

Occupational Health staff may generate summary and detailed reports on employee vaccination. Reports include: vaccination status, vaccination rate, vaccine administration, and immunity status.

### Helpful Hints:

- Before loading several patients’ vaccination information sign an encounter to make sure your electronic signature works.
- If the HCP’s duty station is different from the person administering the vaccine, use Quickload to find him or her.
- Vaccination Status and Vaccination Rate Reports: There is a difference in who is included in the denominator in vaccination status and vaccination rate reports. Reports where the date includes “as of” will exclude all inactive patients. Reports where the date range is “from” and “to” include patients who were active any time during that date range.
- The vaccination administration report gives the number of doses of vaccine administered.

### Frequently Asked Questions:

- **I logged in but I do not see the blue OHRS button.**
  If you do not see the blue OHRS button in the upper right corner of your screen, you have not been granted access to OHRS. Call your local administrator who is an occupational health physician, nurse practitioner, physician assistant or registered nurse.

- **I entered all of the encounter information, but I get an error message when I enter my VistA account information.** A VistA electronic signature (Esig) account is required for OHRS users to use their electronic signature when signing an encounter. Contact your local IMR staff who will verify that your VistA Esig user account is set up with at least one of the following:
• The user must have the [XOBE ESIG USER] Broker option added to his or her secondary menu.
• The [XOBE ESIG USER] Broker option must be added to the Common Menu [XUCOMMAND] in Kernel. (For IRM: this is the recommended option which enables all users on the system to have access to the ESig options so that the Broker option need not be assigned specifically to individual users)

• My signature code is not working. Check to make sure you are using the correct duty station (facility where you work). Make sure you are using the correct signature code (the same code you use to sign a clinical note in CPRS). If you continue to have problems contact your local Administrator: physician, nurse practitioner, physician assistant or registered nurse working in occupational health).

• I need additional VHA staff trained and granted access to OHRS to document influenza vaccination administration. Contact Cathy Morgan, Education Project Manager, Cleveland, OH at Cathy.Morgan@va.gov. She can provide the appropriate link and instructions to meet training requirements. Once completed and confirmed by Cathy, your occupational health staff can grant you access to OHRS.

3. Generating Reports in OHRS

Types of Reports
Occupational Health staff can generate three main types of reports on influenza vaccination. These reports include:
1. Vaccination Administration. This is a summary report on the actual number of vaccinations given. It does not include information on vaccination received elsewhere.
2. Vaccination Status. This report includes both vaccinations administered and vaccinations received elsewhere.
3. Vaccination Rate. This report provides a percent of patients who are vaccinated.

Date Selection:
There are two date selection choices. Information included in the report will vary depending on the selection.
1. As Of Date X: This report includes all patients that are active as of the date selected. If does not include patients who may have worked earlier in the seasonal influenza season and have left employment.
2. From X Date To X Date. This report includes all patients that worked even one day between the date selected. Therefore, if an individual worked up to December 1, 2014 and the report is generated for September 1, 2014 through March 1, 2015, the person is included in the denominator. The denominator in this report will be larger than that in the As Of report, especially if a facility is hiring large number of new employees.

Report Format:
In general, all reports can be either detailed or summary.
1. Detailed reports include patient names.
2. Summary reports do not include patient names.
The Vaccination Administration report can be generated as a summary report.

Vaccination Status:
There are three options for who is to be included in the report.
1. Individuals who are vaccinated
2. Individuals who are not vaccinated
3. Both individuals who are vaccinated and those who are not vaccinated

Patient Type:
There are several patient types which can be selected to be included in reports. Reports can include one, several or all categories of patients. When generating vaccination rate reports only employees and volunteers should be selected. Categories of patients include:

1. Employee
2. Volunteer
3. Resident
4. Medical Student
5. Nursing Student
6. Other Student
7. Contractor
8. Applicant
9. Visitor
10. Non-paid employee
11. Other

File Type:
Reports can be either in pdf or excel format.

Note: Although OHRs captures information on medical contraindications and and declinations including reasons for declining vaccination, it does not have the capability to report on these as this point in time.

Mrs. Shirley M. Bealer, VHA-CM, who is the Overton Brooks Medical Center Director.
April 5, 2013

Dear CLC Employee;

You are receiving this letter from the CLC Influenza Outbreak Prevention Workgroup because Employee Health records reflect you have not reported receiving an influenza vaccination this year. Our goal is to promote influenza awareness out of concern for our CLC veterans, staff, and their families.

If you have received an influenza vaccination at PVAMC, or from your own provider, or somewhere in the community, please email VHAPOR-STAFF FLU and report the approximate date you received the vaccine. Contact Employee Health at ext. 57669 if you have any questions.

Influenza outbreaks in long term care settings often spread quickly, infecting patients and staff and causing personnel shortages. The CLC patient population and setting is the PVAMC’s highest risk setting for an influenza outbreak.

In order to ensure PVAMC has taken all possible steps to protect our veterans and staff, please review the following important patient and staff safety information:

- Outbreak prevention measures should be practiced routinely and carefully by all CLC employees and patients. This includes immediately receiving an influenza vaccination as soon as possible if not yet obtained. It takes 2 weeks to develop protection following the vaccination.

- Staff and patients should cover coughs and sneezes and wash or sanitize hands before and after patient contact, and after touching their face.

- Staff with acute respiratory illness should remain outside the workplace for at least 24 hours after the resolution of fever.

- Report suspected resident influenza cases to Infection Prevention and Control x 58307.

- Infection Prevention and Control will advise on the appropriate diagnostic testing and therapy, and whether more expansive infection prevention measures are needed.

Also keep in mind the following information about influenza:

- Influenza is an acute respiratory illness that can typically include two or more of the following symptoms: fever, cough, severe body aches, sore throat, or headache. Many people compare it to the “worst illness” they have ever had.
Most CLC patients are at high risk for complications due to influenza. Fifty percent of influenza patients who require hospitalization are 65 or older. Children are the second largest group hospitalized due to influenza; many of our staff and patients have contact with children.

Contact numbers for the Emergency Management Advisory Council Influenza Outbreak Prevention Workgroup are included below in case you have questions. Thank you for promoting CLC patient safety!

Sincerely,

Sherri Atherton
Director, Infection Prevention and Control
Co-chair, Influenza Outbreak Prevention Workgroup

Michael Patterson
Emergency Programs Manager
Co-chair, Influenza Outbreak Prevention Workgroup

Emergency Management Advisory Council Influenza Outbreak Prevention Workgroup

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<thead>
<tr>
<th>Name</th>
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<tr>
<td>Denise Lieb</td>
<td>Vice President AGFE 2583</td>
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<tr>
<td>Karee Kenney</td>
<td>Administrative Director, RLTC</td>
<td>X31341</td>
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<tr>
<td>Ken Warrington</td>
<td>Administrative Director, CLC</td>
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<tr>
<td>Waynette Ralls, RN</td>
<td>Nurse Manager, CLC</td>
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<tr>
<td>Stephanie Sorenson RN</td>
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<td>Michael Patterson</td>
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<td>Anna Torres, RN</td>
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<tr>
<td>Molly Osborne, MD</td>
<td>Integrated Ethics Program Officer</td>
<td>X55549</td>
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Appropriate documentation of influenza vaccine administration is necessary to provide an accurate record of the patient’s immunization history. Be sure to utilize the CPT codes for each influenza vaccination administered. (See the documentation instructions and the CPT codes within this section.)

All influenza vaccinations should be documented in a way that results in the vaccination being entered on the patient’s immunization list (i.e., entered in the V IMMUNIZATION file). This can be done in a number of different ways depending on your site and the location of the patient, but the maintenance of an accurate and up to date immunization list is critical.

1. Vaccinations can be entered via a reminder dialog progress note template or a clinical reminder dialog. This is the preferred method of documentation since manufacturer name, lot numbers and expiration dates can be included in the dialog and the entry will populate the patient’s immunization list in CPRS.

2. Direct entry of the vaccination into the Patient Care Encounter (PCE) can be made after administration of the vaccine.

3. IMPORTANT: Recording the administration of a vaccine dose in the Bar Code Medication Administration (BCMA) system on inpatients does not result in the entry of the vaccination on the patient's immunization list unless local programming has been accomplished to include this function. If no local programming exists to perform this function, then the site needs to implement one of the processes above to ensure that ALL vaccinations administered to patients are appropriately recorded on the immunization list.

4. PLEASE NOTE: Entry of the Current Procedural Terminology (CPT) code for a vaccination will result in the automatic update of the patient’s immunization list ONLY IF THE PCE CODE MAPPING file contains a link from that CPT code to the correct immunization.

The following list contains instructions about options for documenting influenza vaccinations in CPRS:

Never only document flu vaccine administration directly in the progress notes. Flu vaccinations must be recorded using a method that enters appropriate CPT codes.
Utilizing these processes will assure entry of the correct CPT Codes for vaccine administration and the specific vaccine directly into the Patient Care Encounter (PCE) VISIT files as well as the Immunization section of the encounter form. Completed documentation of the influenza vaccination can be viewed in the progress notes in CPRS with the actual immunizations and related CPT codes displayed in a window below the progress note.

Make the CPT code information below available to all who give flu vaccine at your site. Some sites communicate these codes during trainings, meetings, and/or emails. Accurate documentation of the influenza vaccination is essential for data tracking and measurement.

CPT Codes for Influenza Vaccines

- 90656 – IIV3 – Inactivated Influenza Vaccine, Trivalent, preservative-free, intramuscular – single-dose syringe
- 90658 – IIV3 – Inactivated Influenza Vaccine, Trivalent, intramuscular – multi-dose vial
- 90662 – IIV3 Inactivated Influenza Vaccine, Trivalent, enhanced immunogenicity via increased antigen content, preservative-free, intramuscular – single-dose syringe
- 90673 – RIV3 – Recombinant Influenza Vaccine, Trivalent, preservative-free, intramuscular – single-dose vial
- 90654 – IIV3 Inactivated Influenza Vaccine, Trivalent, preservative-free, intradermal – single-dose syringe
- 90661 – cciIIV3 – Cell Culture-based Inactivated Influenza Vaccine, Trivalent, preservative-free, intramuscular – single-dose syringe
- 90686 – IIV4 – Inactivated Influenza Vaccine, Quadrivalent, preservative-free, intramuscular – single-dose microinjection system
- 90672 – LAIV4 – Live-attenuated Influenza Vaccine, Quadrivalent, intranasal – single-use nasal spray
- G8482 – influenza immunization administered or previously received (this code is appropriate to use when documenting influenza vaccination that a Veteran received at a non-VA location. This code can be linked to any existing influenza vaccination clinical reminder. It is NOT a billing code, but will enable capture of these vaccinations for purposes of tracking influenza vaccination rates.)

NOTE: The above vaccination codes should be entered into the medical record in addition to the code for the actual administration of the vaccine, 90471.

In April 2006, the National Clinical Reminders Group recommended each VA build a uniform health summary that included any local reminders for influenza vaccination. This health summary allows the user to view a record of all immunizations given at any VA site and can be accessed from the Reports Tab of CPRS under Health Summaries or in VistA Web.
Utilizing data from clinical reminders

Gwen Vilo, RN, HPDP Program Coordinator, Southeast Louisiana Veterans Health Care System, New Orleans.

“I use a report in VISTA that identifies patients who had a visit the prior day but do not have the clinical reminder resolved. I then send the list of missed opportunities to the RN managers for follow up. I send the PACT teams a monthly graph of the number of vaccines administered. After implementing these steps, the number of flu vaccines administered increased in FY13”

For assistance creating reminder dialogs and/or a health summary, contact your local facility’s Office of Information Technology (OIT) staff. Members of the OIT staff are an important part of the team working on documentation of vaccine administration. Ideally, each facility/VISN would have a designated staff person to work on projects such as this.

Clinical Reminder for Seasonal Flu Vaccination

There is NOT a national clinical reminder for staff to use in CPRS to document influenza vaccination. Individual facilities are encouraged to implement a locally developed influenza clinical reminder to help increase and track the rate of influenza vaccinations. There is a patient wellness reminder in My HealtheVet for use by in-person authenticated patients.
VHA Flu and Educational Resources

Contributors:

Lorraine Bem, EdD, MSHA, MSN, FACHE
National Project Manager/ANCC Nurse Planner
Birmingham Employee Education Resource Center

Troy Knighton, EdS, LPC
National Seasonal Influenza & IDPIO Program Manager
Clinical Public Health VA Central Office
IDPIO Catalog

The Infection: Don’t Pass It On (IDPIO) campaign has developed resources to facilitate the implementation of seasonal flu vaccination initiatives. Selected resources have been produced and printed that are available via the EES Talent Management System (TMS). Follow the instructions in this section to order and have resources mailed directly to you. All IDPIO resources are available from the following websites. These materials can be viewed, downloaded, and printed from these websites:

1. VA Internet
   www.publichealth.va.gov/flu.
Influenza Video Series

The IDPIO campaign has developed a total of seven videos, six of which are video clips approximately 2-3 minutes long.

- Four short clips are targeted toward a general audience (veteran patients, family, visitors and even VA staff) and focus on vaccination for seasonal flu, hand hygiene, respiratory etiquette, and how flu is spread. These four clips are not for clinical instruction or formal training.
- Two short clips are intended for health care providers and others within the medical care setting. These focus on donning and doffing personal protective equipment (PPE) for combined airborne infection isolation and contact precautions.
- A 14-minute video on seasonal flu for a general audience is also included. It’s “game show” format is both fun and informational for staff, patients and visitors.
- All of the videos are posted for viewing at www.publichealth.va.gov/flu/materials/videos.asp.

Flu and Educational Resource Materials

1. Flu Manual
Each year the VHA Seasonal Influenza Manual is available in electronic format only at www.publichealth.va.gov/flu.

2. Posters/flyers
These cover a myriad of topics that include flu, vaccination, hand cleaning, respiratory etiquette, and use of personal protective equipment. Some posters have been designed for clinical audiences and other for general audiences. Hang them around clinics and facilities in appropriate areas.

3. Buttons & Stickers
Over the years, many buttons have been designed and distributed to facilities. Some templates are on the VA’s Websites and can be used if sites want to make their own buttons. Visit www.publichealth.va.gov/flu/materials/buttons.asp. Some buttons are available from our stock of IDPIO materials at the depot. Go to www.tms.va.gov and use keyword IDPIO.

4. Brochures and Fact Sheets
These cover topics ranging from seasonal flu and hand cleaning, to pandemic flu. Visit www.publichealth.va.gov/flu/materials/brochures.asp.

5. Cafeteria tray liners
Several designs are available if you want to work with your Canteen Service to have them printed and used during flu season. Visit www.publichealth.va.gov/flu/materials/trayliners.asp.
Hand Hygiene Resource Materials

1. Hand Hygiene Toolkit
This online resource will continue to evolve with the emergence of new guidance, research, and science. Sources are the Centers for Disease Control and Prevention (CDC), the Joint Commission, the World Health Organization (WHO), and Veterans Health Administration (VHA). There are folders on:

- posters, brochures, and links to resources;
- the latest research and literature;
- monitoring and evaluation systems;
- guidance on promotion of effective hand hygiene policy and practice.

How can I get IDPIO and flu resources?

Utilize the websites noted in this section previously to view, download, and print materials directly from your desktop or work with your local medical media department. A limited number of resources are available for order (posters, brochures, buttons, stickers, etc) through the Talent Management System (TMS). See the following steps to order.

Ordering Instructions

Infection: Don’t Pass It On (IDPIO) Resources

1. Go to the VA Talent Management System (TMS) at www.tms.va.gov.
2. Log into TMS
3. Search CATALOG by typing in “IDPIO” in the search catalog field at the top of page.
4. Select IDPIO: Infection Don’t Pass It On from the search results.
5. Scroll down to RELATED DOCUMENTS and click (on the tiny blue arrow) to expand.
6. If you know the Order # (F #) of the products you want, then proceed to step 10. If you don’t know the order number (F#), then continue to step 7.
7. Select “Link to Document Holder”.
8. Select Handout: IDPIO Catalog. This document displays all printed posters, brochures and other IDPIO educational resources available for order. Note the product titles and EES order numbers for each. You may wish to print this document as you’ll need all this information to complete your order.
9. Return to RELATED DOCUMENTS by minimizing the resources list and the locator screen.
10. Select the ORDER THIS PRODUCT button to place an order. This link is located directly under the link for Handout: IDPIO Catalog.
11. Fill in all of the required IDPIO Order Form information. This information will be transmitted directly to the EES Distribution team via Outlook email for processing. List all product titles, order numbers and quantities separately for each product you order.
12. After the form has been completely filled, complete your product order by clicking on the SUBMIT FORM button.

NOTE: The EES Distribution team will not deliver to home addresses. The request must come from a VA e-mail address to be received and processed. Orders are shipped within 3-5 business days unless otherwise specified in the special instructions. For assistance, email Lorraine.Bem@va.gov or call 205-731-1812, ext. 313.
Pneumococcal Disease and Vaccine Information

Contributor:
Beverly VanMetre, RN, BSN, MS, CHES
Clinical Programs Coordinator
 Martinsburg VAMC
Pneumococcal Disease

Pneumococcal disease is caused by Streptococcus pneumoniae, a bacterium that has more than 90 serotypes. Most serotypes cause disease, but only a few produce the majority of invasive pneumococcal disease (IPD). The 10 most common types cause 62% of invasive disease worldwide. The disease is spread from person to person by droplets in the air. The pneumococci bacteria are common inhabitants of the human respiratory tract. They may be isolated from the nasopharynx of 5%–70% of normal, healthy adults (Immunization Action Coalition [IAC], 2013).

According to the Centers for Disease Control and Prevention (CDC) – Manual for the Surveillance of Vaccine-Preventable Diseases (2012), each year in the United States, a substantial burden of disease and death results from both invasive and non-invasive pneumococcal disease, including meningitis, bacteremia, pneumonia, and acute otitis media. A 2011 study estimated that pneumococcal disease accounted for 445,000 hospitalizations and 22,000 deaths annually.

Pneumococcal pneumonia is the most common disease caused by pneumococcal infection. Pneumococcal pneumonia can occur in combination with bacteremia and/or meningitis, or it can occur alone. Isolated pneumococcal pneumonia is not considered invasive disease but it can be severe. CDC estimates that 175,000 cases occur each year in the United States. The incubation period is short (1-3 days).

Symptoms include abrupt onset of fever, shaking chills or rigors, chest pain, cough, shortness of breath, rapid breathing and heart rate, and weakness. The fatality rate is 5%–7% and may be much higher in the elderly.

There are two major clinical syndromes of IPD: bacteremia, and meningitis. They are both caused by infection with the same bacteria, but have different manifestations.

Pneumococcal bacteremia occurs in about 25%–30% of patients with pneumococcal pneumonia. More than 50,000 cases of pneumococcal bacteremia occur each year in the United States. Bacteremia is the most common clinical presentation among children less than two years, accounting for 70% of invasive disease in this group.

Pneumococci cause 13%–19% of all cases of bacterial meningitis in the United States, with 3,000-6,000 cases of pneumococcal meningitis each year. Symptoms and signs may include headache, tiredness, vomiting, irritability, fever, seizures, and coma. Children less than one year have the highest rate of pneumococcal meningitis, approximately 10 cases per 100,000 population. The mortality rate is high (30% overall, up to 80% in the elderly).

Pneumococcal disease is a serious disease that causes sickness and death. In fact, pneumococcal disease kills more people in the United States each year than all other vaccine-preventable diseases combined.
Case-fatality rates are highest for meningitis and bacteremia, and the highest mortality occurs among the elderly and patients who have underlying medical conditions. Despite appropriate antimicrobial therapy and intensive medical care, the overall case-fatality rate for pneumococcal bacteremia is about 20% among adults. Among elderly patients, this rate may be as high as 60% (IAC, 2013).

**Pneumococcal Vaccine**

At this time, two vaccines for prevention of pneumococcal disease are licensed for use in adults. The Advisory Committee on Immunization Practices (ACIP) currently recommends a single dose of PPSV23 for all persons aged 65 years and older.

1. **13-Valent Pneumococcal conjugate Vaccine (PCV13; Prevnar 13®)**

PCV13 was first licensed by the Food and Drug Administration (FDA) for prevention of IPD and otitis media in infants and young children in February 2010, supplanting PCV7. PCV13 is identical in formulation for the seven common serotypes in PCV7, but it includes six additional antigens. Subsequently in December, 2011, FDA licensed PCV 13 for prevention of pneumonia and IPD in adults aged >50 years.

On June 20, 2012, the ACIP recommended routine use of PCV13 for adults aged ≥19 years with immunocompromising conditions, functional or anatomic asplenia, cerebrospinal fluid (CSF) leaks, or cochlear implants (See Table1). PCV13 should be administered to eligible adults in addition to the 23-valent pneumococcal polysaccharide vaccine (PPSV23; Pneumovax 23®), the vaccine currently recommended for these groups of adults.

Current recommendations for vaccination with PCV13:

- Adults with specified immunocompromising conditions who are eligible for pneumococcal vaccine should be vaccinated with PCV13 during their next pneumococcal vaccination opportunity.
- In pneumococcal vaccine-naive persons, ACIP recommends a single dose of PCV13 for adults age 19 or older with:
  - Immunocompromising conditions
  - Functional or anatomic asplenia
  - CSF leaks
  - Cochlear implants
- This should be followed by a dose of PPSV23 no sooner than 8 weeks after initial vaccination with PCV13. The current PPSV23 recommendations should then be followed for subsequent doses of PPSV23 vaccine.
- In adults age 19 or older (who have the conditions listed above), and have previously received ≥1 dose(s) of PPSV23, should be given a PCV13 dose ≥1 year after the last dose of PPSV23.
• For those who require additional doses of PPSV23, the first such dose should be given no sooner than 8 weeks after PCV13 and at least 5 years after the most recent dose of PPSV23.

2. 23-Valent Pneumococcal Polysaccharide Vaccine (PPSV23; Pneumovax 23®)
PPSV23 contains 12 of the serotypes included in PCV13, plus 11 additional serotypes. PPSV23 is recommended for prevention of IPD among all adults aged ≥65 years, and for adults at high risk aged 19–64 years (See Table 1).

Although conflicting evidence regarding PPSV23 efficacy in HIV-infected adults has been published, the GRADE evaluation reviewed by ACIP concluded that potential benefits from PPSV23 use in this population outweigh any potential harms. Given the high burden of IPD caused by serotypes in PPSV23 but not in PCV13, broader protection might be provided through use of both pneumococcal vaccines.

The current ACIP PPSV23 recommendations call for vaccination of adults at high risk aged 19–64 years at the time of diagnosis of the high-risk condition. A one-time revaccination dose of PPSV23 is recommended 5 years after the first dose for persons with functional or anatomic asplenia and for immunocompromised persons (See Table 1).

All adults are eligible for a dose of PPSV23 at age 65 years, regardless of previous PPSV23 vaccination; however, a minimum interval of 5 years between PPSV23 doses should be maintained.

Current recommendations for vaccination with PPSV23:
• Depending on age and medical conditions, some people may need 2 or 3 vaccinations in their lifetime.
• May be given any time during the year.
• Recommended for all adults age 65 years or older.
• Also recommended for adults age 19 through 64 years who have:
  • Chronic heart, kidney, liver disease, or who abuse alcohol.
  • Chronic lung disease, asthma, or who smoke cigarettes.
  • Diabetes.
  • Cerebro-spinal fluid leaks.
  • Cochlear implants.
  • Sickle cell disease or other red blood cell disorders.
• Functional or anatomic asplenia.
• Medical conditions that weaken the immune system such as HIV infection, leukemia, lymphoma, Hodgkin’s disease, multiple myeloma, or cancer.
• Had an organ transplant or are taking chemotherapy, long-term steroids, or radiation therapy.
• If elective splenectomy or cochlear implant is being considered, the vaccine should be given at least 2 weeks prior to the procedure. If that is not feasible, vaccinate as soon as possible after surgery.
• For persons starting chemotherapy or other immunosuppressive therapy, vaccine should be administered at least 2 weeks prior to therapy, if possible.

Frequently Asked Questions

PCV13

How often should PCV 13 be given?
• PCV13 is currently given in a single, one-time dose.
• If the patient’s vaccination status is unknown, those in the recommended group should be administered pneumococcal vaccine.
• Consider supplying patients who have trouble remembering their vaccination history with a personal immunization card. Examples of cards are available at https://www.immunize.org/adultizcards/index.htm.

How is PCV 13 administered?
• PCV 13 may be given IM (intramuscularly) with a 22-25 g 1-1 ½-inch needle in the deltoid.
• PCV 13 may be given at the same time as influenza vaccine, using a different site.

What are the risks from PCV13?
With any medicine, including vaccines, there is a chance of side effects. These are usually mild and resolve with home treatment measures, but serious reactions are also possible. Reported problems associated with PCV13 vary by dose and age, but generally:
• About half of children became drowsy after the shot, had a temporary loss of appetite, or had redness or tenderness where the shot was given.
• About 1 out of 3 had swelling where the shot was given.
• About 1 out of 3 had a mild fever, and about 1 in 20 had a higher fever (over 102.2°F).
• Up to about 8 out of 10 became fussy or irritable.
• Adults receiving the vaccine have reported redness, pain, and swelling where the shot was given. Mild fever, fatigue, headache, chills, or muscle pain have also been reported.
• Life-threatening allergic reactions from any vaccine are very rare.

What are the contraindications and precautions for PCV13?
• PCV13 is contraindicated for people who have had an anaphylactic reaction to a diphtheria-toxoid containing vaccine (e.g. DtaP, DT, Td, or Tdap), because the antigens in PCV13 are conjugated to diphtheria CRM197 protein.
• PCV13 is contraindicated for anyone with a history of anaphylactic hypersensitivity to any vaccine component. For a list of PCV13 vaccine contents, see the package insert.
• Although there is no evidence that PPSV is harmful to either a pregnant woman or to her fetus, as a precaution, women with conditions that put them at risk for pneumococcal disease should be vaccinated before becoming pregnant, if possible.
• PCV13 packaging does not contain latex.
• The presence of a moderate or severe acute illness with or without a fever is a precaution to administration of all vaccines. (The definition of "moderate or severe acute illness" is based on the clinical judgment of the provider.)

PPSV23

How often should PPSV23 vaccine be given?
Most adults 65 and older need only one dose. Those who need a second dose include:
• Adults age 65 years and older previously vaccinated should receive a second dose if five or more years have passed since the first dose and they were less than age 65 years at the time of the first dose.
• Adults at the highest risk of pneumococcal infections should receive a second dose five or more years after the first dose, regardless of the age at which the first dose was given. Adults at the highest risk include those with:
  • Chronic heart, kidney, lung or liver disease, or who abuse alcohol.
  • Asthma or who smoke cigarettes.
  • Diabetes.

Flu Prevention In Action

Drive-through flu shot clinics
Beverly F. Van Metre, RN, BSN, MS, CHES, VHA-CM, Clinical Programs Coordinator, and IDPIO Team Member, Martinsburg, WV VAMC

The Martinsburg, WV, VA Medical Center has offered a drive-through flu shot clinic since 2007. The project has proven to be very popular among Veterans who express that they look forward to it every year.

The clinic is staged in a parking lot away from the main parking areas, but easily accessible from the main entrance to the campus. The clinic is set up using a mobile trailer parked beside a carport. Police Service places electronic signs that direct drivers to the clinic location and display the hours of operation. Veterans drive in under the carport, turn off the vehicle engine, and the nurses give flu, pneumococcal, and TDaP vaccine, as needed. For more information see Section 3.
Cerebro-spinal fluid leaks.
Cochlear implants.
Sickle cell disease or other red blood cell disorders.
Functional or anatomic asplenia.
Medical conditions that weaken the immune system such as HIV infection, leukemia, lymphoma, Hodgkin’s disease, multiple myeloma, or cancer.
Had an organ transplant or are taking chemotherapy, long-term steroids, or radiation therapy.
Taking medication that lowers immunity, such as chemotherapy or long-term steroids.

Should a dose be repeated if a patient is uncertain of having received it before?
- ACIP does not recommend routine revaccination for most persons for whom PPSV23 is indicated.
- A second dose of PPSV23 is recommended 5 years after the first dose for persons aged 19–64 years with functional or anatomic asplenia and for persons with immunocompromising conditions.
- ACIP does not recommend multiple revaccinations because of uncertainty regarding clinical benefit and safety.
- If the patient’s vaccination status is unknown, those in the recommended group should be administered pneumococcal vaccine.
- Consider supplying patients who have trouble remembering their vaccination history with a personal immunization card. Examples of cards are available at http://www.immunize.org/shop/record-cards.asp.

How is PPSV23 administered?
- Pneumococcal polysaccharide vaccine may be given IM (intramuscularly) with a 22-25 g 1-1/2-inch needle in the deltoid or SC (subcutaneously) in the fatty tissue over the triceps with a 23-25 g 5/8 inch needle.
- Pneumococcal polysaccharide vaccine can be administered at the same time as Influenza vaccine, using a different site.

Who should NOT get PPSV23?
- Anyone who has had a life-threatening allergic reaction to PPSV should not get another dose.
- Anyone who has a severe allergy to any component of a vaccine should not get that vaccine. Tell your provider if you have any severe allergies.
Anyone who is moderately or severely ill when the shot is scheduled may be asked to wait until they recover before getting the vaccine. Someone with a mild illness can usually be vaccinated.

Although there is no evidence that PPSV is harmful to either a pregnant woman or to her fetus, as a precaution, women with conditions that put them at risk for pneumococcal disease should be vaccinated before becoming pregnant, if possible.

What are the most common adverse reactions to PPSV 23?
The most common adverse reactions, reported in >10% of subjects vaccinated with PPSV 23 in clinical trials, were:

- Injection-site pain, soreness, or tenderness 60.0%.
- Injection-site swelling or induration 20.3%.
- Headache 17.6%.
- Injection-site erythema 16.4%.
- Asthenia and fatigue 13.2%.
- Myalgia 11.9%.

Simultaneous Administration with Other Vaccines for Adults Aged 60 years and older
The FDA-approved product information for zoster vaccine states that zoster vaccine and pneumococcal polysaccharide polyvalent vaccine should not be given concurrently because concomitant use reduces the immunogenicity of zoster vaccine; co-administration did not affect the immunogenicity of the pneumococcal vaccine. However, since the clinical relevance of this observation is not known, the CDC states that zoster vaccine and pneumococcal polysaccharide polyvalent vaccine can be co-administered to prevent missed opportunities for zoster vaccination. The VHA Office of Public Health, Pharmacy Benefits Management, and the National Center for Health Promotion and Disease Prevention recommend that the zoster vaccine and pneumococcal polysaccharide polyvalent vaccine should be administered 4 weeks apart if feasible but may be concomitantly administered to avoid a missed opportunity to provide both vaccines.
TABLE 1. Medical conditions or other indications for administration of 13-valent pneumococcal conjugate vaccine (PCV13), and indications for 23-valent pneumococcal polysaccharide vaccine (PPSV23) administration and revaccination for adults aged ≥19 years,* by risk group – Advisory Committee on Immunization Practices, United States, 2012.

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<th>Risk group</th>
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<td>Chronic liver disease, cirrhosis</td>
<td></td>
<td>✓</td>
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<td></td>
<td>Cigarette smoking</td>
<td></td>
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<tr>
<td>Persons with functional or anatomic asplenia</td>
<td>Sickle cell disease/other hemoglobinopathy</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td></td>
<td>Congenital or acquired asplenia</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>Immunocompromised persons</td>
<td>Congenital or acquired immunodeficiency¶</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
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<tr>
<td></td>
<td>Human immunodeficiency virus infection</td>
<td>✓</td>
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<tr>
<td></td>
<td>Chronic renal failure</td>
<td>✓</td>
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<td>Nephrotic syndrome</td>
<td>✓</td>
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<td></td>
<td>Leukemia</td>
<td>✓</td>
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<td>Lymphoma</td>
<td>✓</td>
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<td>Hodgkin disease</td>
<td>✓</td>
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<tr>
<td></td>
<td>Generalized malignancy</td>
<td>✓</td>
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<td>Iatrogenic immunosuppression**</td>
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<td>✓</td>
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<tr>
<td></td>
<td>Solid organ transplant</td>
<td>✓</td>
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<tr>
<td></td>
<td>Multiple myeloma</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
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</table>

* All adults aged ≥65 years should receive a dose of PPSV23, regardless of previous history of vaccination with pneumococcal vaccine.
† Including congestive heart failure and cardiomyopathies, excluding hypertension.
§ Including chronic obstructive pulmonary disease, emphysema, and asthma.
¶ Includes B- (humoral) or T-lymphocyte deficiency, complement deficiencies (particularly C1, C2, C3, and C4 deficiencies), and phagocytic disorders (excluding chronic granulomatous disease).
** Diseases requiring treatment with immunosuppressive drugs, including long-term systemic corticosteroids and radiation therapy.
Resources


®Use of trade names and commercial sources is for identification only and does not imply endorsement by the U.S. Department of Veterans Affairs.
Appendices

A. Resources, References and Websites

B. Acknowledgements

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Resources

- This VA Seasonal Influenza Manual is available on the VA Internet sites www.publichealth.va.gov/flu and www.publichealth.va.gov/InfectionDontPassItOn

References

Guidance on Influenza Immunization
Prevention and Control of Seasonal Influenza with Vaccines, Recommendations of the Advisory Committee on Immunization Practices. Available at: http://www.cdc.gov/mmwr/

Guidance on Immunization/Vaccination in General
CDC: Recommended Adult Immunization Schedule – United States. Available at http://www.cdc.gov/vaccines/schedules/downloads/adult/

Vaccine Information Statements (VISs)
U.S. Department of Health and Human Services, CDC. Available at: http://www.cdc.gov/vaccines/pubs/vis/default.htm

www.vaccines.gov
Vaccines.gov is a Federal government website that brings together the best in federal resources on vaccine and immunizations. It provides easy-to-understand health information specifically designed for consumers. The site includes content about vaccine recommendations, the diseases that vaccines prevent, important information for getting vaccinated, and tips on travel health. It also links consumers with resources in their states to learn about vaccine requirements for school or child care entry and local community information.
Guidance on Flu Vaccination in People with Egg Allergies


Videos
Veterans Health Administration (VHA) – Infection: Don’t Pass It On
Target Audience: General (patients, Veterans and their families, colleagues, all VA staff, friends, family and community partners and organizations)

Coming soon to a nose near you... The FLU!

Influenza Myth Buster
Detroit VAMC
http://www.youtube.com/watch?v=g7AODuGvFDQ


Richard Kent Zimmerman, MD; Mary Patricia Nowalk, PhD, Chyongchiou J Lin, PhD; Mahlon Raymund, PhD; Dwight E Fox, DMD; Jay D Harper, MD; Mark D Tanis, RN; Bayo C Willis, MPH. “Factorial Design for Improving Influenza Vaccination Among Employees of a Large Health System.” Infection Control and Hospital Epidemiology July 2009 Volume 30 Number 7 pages 691-697. Available at http://www.jstor.org/stable/10.1086/598343


Vaccination of Veterans, Patients, and the Public


Gamble GR, Goldstein AO, Bearman RS. J Am Board Fam Med. 2008 Jan-Feb; 21(1):38-44. “Implementing a standing order immunization policy: a minimalist intervention”. Available at: http://www.jabfm.org/cgi/content/abstract/21/1/38


Nichol KL. “Benefits of Influenza Vaccination for Low-, Intermediate-, and High-Risk Senior Citizens.” Archives of Internal Medicine, 1998;158: 1769. Available at: http://archinte.ama-assn.org/cgi/content/full/158/16/1769


Cost Effectiveness of Influenza Vaccination


Use of Anti-viral Medication


Pneumococcal Vaccination

CDC. Use of 13-Valent Pneumococcal Conjugate Vaccine and 23-Valent Pneumococcal Polysaccharide Vaccine for Adults with Immunocompromising Conditions: Recommendations of the Advisory Committee on Immunization Practices (ACIP); MMWR October 12, 2012 / 61(40);816-819 http://www.cdc.gov/mmwr/preview/mmwrhtml/mm6140a4.htm

CDC. “Updated Recommendations for Prevention of Invasive Pneumococcal Disease Among Adults Using the 23-Valent Pneumococcal Polysaccharide Vaccine (PPSV23),” MMWR, September 3, 2010 / 59(34);1102-1106. Available at: http://www.cdc.gov/mmwr/preview/mmwrhtml/mm5934a3.htm

Recommendations of the Task Force on Community Preventive Services for Targeted Vaccinations. Available at: http://www.thecommunityguide.org/vaccines/index_inactive.html

CDC. Website – Pneumonia Can Be Prevented: Vaccines Can Help. Available at: http://www.cdc.gov/Features/Pneumonia/
Hand Hygiene and Respiratory/Cough Etiquette

Videos

Veterans Health Administration (VHA) – *Infection: Don’t Pass It On*
Target Audience: General (patients, Veterans and their families, colleagues, all VA staff, friends, family and community partners and organizations) [http://www.publichealth.va.gov/flu/materials/videos.asp](http://www.publichealth.va.gov/flu/materials/videos.asp)

Detroit VAMC Hand Hygiene Video
“Germ-X” (spoof of 1950’s science fiction B-movies) tells the story of how one employee learns the importance of hand hygiene. This production was done by the Medical Media Production Services @ John D. Dingell VA Medical Center.

CDC Patient Admission Video
This video, available in English and Spanish, teaches two key points to hospital patients and visitors to help prevent infections: the importance of practicing hand hygiene while in the hospital, and that it is appropriate to ask or remind their healthcare providers to practice hand hygiene as well. [http://www.cdc.gov/handhygiene/Patient_materials.html](http://www.cdc.gov/handhygiene/Patient_materials.html)

The Joint Commission Center for Transforming Healthcare

World Health Organization (WHO)
These videos focus on a myriad of topics related to hand hygiene. [http://www.who.int/gpsc/5may/video/en/index.html](http://www.who.int/gpsc/5may/video/en/index.html)

The New England Journal of Medicine

Posters and Flyers

Veteran Health Administration (VHA)
These posters provide information on hand hygiene for target audiences throughout the VA health care system. See Section 11 for ordering information. [http://www.publichealth.va.gov/flu/materials/posters.asp](http://www.publichealth.va.gov/flu/materials/posters.asp)

Salt Lake City VA Medical Center, “Blue Hands Group”
The Salt Lake City VA Medical Center recruited their leadership team to support their hand hygiene campaign. Life size posters of their leaders wearing blue gloves with messages that encourage hand hygiene are strategically place throughout their medical center. [http://www.saltlakecity.va.gov/SALTLAKECITY/pressreleases/bluehandgroup2010.asp](http://www.saltlakecity.va.gov/SALTLAKECITY/pressreleases/bluehandgroup2010.asp)

Centers for Disease Prevention and Control (CDC)
These posters will further emphasize the concepts and techniques to increase hand hygiene at your facility. [http://www.cdc.gov/handhygiene/training/interactiveEducation/index2.htm](http://www.cdc.gov/handhygiene/training/interactiveEducation/index2.htm)

- These posters demonstrate hand hygiene techniques using traditional soap and water and alcohol-based hand sanitizer. [http://www.cdc.gov/handhygiene/Basics.html](http://www.cdc.gov/handhygiene/Basics.html)

- This CDC poster focuses on hand hygiene for patients and visitors. [http://www.cdc.gov/handhygiene/PDF/CDC_HandHygienePoster.pdf](http://www.cdc.gov/handhygiene/PDF/CDC_HandHygienePoster.pdf)

- Provides posters and flyers in multiple languages on “stop the spread of germs” for health care settings as well as community and public settings like schools and child care facilities. [http://www.cdc.gov/flu/protect/covercough.htm/](http://www.cdc.gov/flu/protect/covercough.htm/)
The Association for Professionals in Infection Control and Epidemiology (APIC)


Hand Hygiene Resource Center (HHRC)

The HHRC has tools that can help you promote good hand hygiene in your organization or institution. Educational presentations and other materials to help educate your physicians, clinicians, nurses and other staff about hand hygiene are provided. [http://www.handhygiene.org/educational_tools.asp](http://www.handhygiene.org/educational_tools.asp)

The Ambulatory Surgical Center (ASC) Quality Collaborative

The ASC Quality Collaboration has assembled a variety of resources and information that may be used to supplement your current processes to improve hand hygiene practices. The BASIC Hand Hygiene Toolkit includes four essential resources: Hand Hygiene: What CMS Surveyors Are Looking For; How to Handwash Poster; Hand Hygiene Policy and Procedure Template. The EXPANDED Hand Hygiene Toolkit contains both essential resources and a broader array of materials including: Assessment Tools, Implementation Aids, Training Materials, Monitoring Tools, Workplace Reminders, and Guidelines from Leading Authorities. [http://www.ascquality.org/handhygienetoolkit.cfm](http://www.ascquality.org/handhygienetoolkit.cfm)

World Health Organization (WHO)

This site contains useful resources to promote and improve hand hygiene practices within health care facilities. [http://www.who.int/gpsc/5may/tools/workplace_reminders/en/index.html](http://www.who.int/gpsc/5may/tools/workplace_reminders/en/index.html)

- Your 5 Moments for Hand Hygiene Poster
  A poster explaining the My 5 Moments for Hand Hygiene approach to display at your health-care facility. [http://www.who.int/gpsc/5may/tools/workplace_reminders/Your_5_Moments_For_Hand_Hygiene_Poster_Chair.pdf](http://www.who.int/gpsc/5may/tools/workplace_reminders/Your_5_Moments_For_Hand_Hygiene_Poster_Chair.pdf)

- How to use Hand Rub
  A poster with step-by-step instructions on how to properly use hand rubs to clean and decontaminate hand. [http://www.who.int/gpsc/5may/How_To_HandRub_Poster.pdf](http://www.who.int/gpsc/5may/How_To_HandRub_Poster.pdf)

- How to Wash Hands
  A poster with step-by-step instructions on how to properly wash hands using soap and water. [http://www.who.int/gpsc/5may/How_To_HandWash_Poster.pdf](http://www.who.int/gpsc/5may/How_To_HandWash_Poster.pdf)

Brochures & Pamphlets

Veterans Health Administration (VHA)

This brochure targeting a general audience (patients, veterans, and visitors) addresses hand washing and using alcohol hand rubs. See Section 11 for ordering information. [http://www1.va.gov/vhapublications/ViewPublication.asp?pub_ID=1927](http://www1.va.gov/vhapublications/ViewPublication.asp?pub_ID=1927)

Association for Professionals in Infection Control and Epidemiology (APIC)

Hand Hygiene for Consumers explains when and how to wash your hands and when and how to use alcohol handrubs. The brochure also offers information about the skin, an important barrier against harmful irritants and germs, and how to protect it from dryness. [http://www.apic.org/Resource_/EducationalBrochureForm/fa13a1c7-1fda-4987-a0be-118bbe09cd/File/Hand-Hygiene-Consumers-Brochure.pdf](http://www.apic.org/Resource_/EducationalBrochureForm/fa13a1c7-1fda-4987-a0be-118bbe09cd/File/Hand-Hygiene-Consumers-Brochure.pdf)

Association for Professionals in Infection Control and Epidemiology (APIC)

Improved adherence to hand hygiene practices and skin wellness may significantly impact patient outcomes and occupational health. [http://www.apic.org/Resource_/EducationalBrochureForm/067506c0-c605-48de-9d6c-e236f0ed5c54/File/APIC-Healthy-Skin.pdf](http://www.apic.org/Resource_/EducationalBrochureForm/067506c0-c605-48de-9d6c-e236f0ed5c54/File/APIC-Healthy-Skin.pdf)

World Health Organization (WHO)

WHO’s summary of the why, how and when of hand hygiene for health care personnel. [http://www.who.int/gpsc/5may/Hand_Hygiene_Why_How_and_When_Brochure.pdf](http://www.who.int/gpsc/5may/Hand_Hygiene_Why_How_and_When_Brochure.pdf)
Web sites

Influenza and Immunization Web Sites

Department of Veterans Affairs
http://www.publichealth.va.gov/flu/
– Influenza Web sites for the Department of Veterans Affairs. These include links on the influenza virus and influenza vaccine, VA policy and guidance on influenza, and VA resources for implementation of seasonal influenza vaccination campaigns.

http://www.publichealth.va.gov/InfectionDontPassItOn
– Web sites for the VA public health campaign “Infection: Don’t Pass It On,” which focuses on prevention of infection within the VA medical system through hand and respiratory hygiene, resources for infection emergencies and vaccination against influenza and pneumonia.

Federal Government
http://flu.gov – this site is the new official Federal website that provides information on seasonal and pandemic influenza information.

http://www.vaccines.gov – Vaccines.gov is a Federal government website that brings together the best in federal resources on vaccine and immunizations. It provides easy-to-understand health information specifically designed for consumers.

http://www.cdc.gov/vaccines – This is the Web site for the National Immunization Program of the Centers for Disease Control and Prevention (CDC) and has a great deal of information for the public and health care providers on all immunization topics.

http://www.cdc.gov/vaccines/acip/index.html – This page on the NIP site lists all recommendations of the ACIP (Advisory Committee for Immunization Practices).

http://www.cdc.gov/vaccines/schedules/ – This page includes easy-to-read, printable schedules of adult immunization recommendations, an interactive tool to download, and an adult vaccination screening form.

http://www.cdc.gov/flu/weekly/fluactivitysurv.htm This page provides weekly updated reports about national and international influenza activity and has fundamental information concerning influenza surveillance methods.

http://www.cdc.gov/vaccines/recs/rate-strategies/adultstrat.htm – This page includes Strategies for Increasing Adult Vaccination Rates (NIP), Updated June 2010.

http://www.cdc.gov/flu/ – This is the main influenza Web page of the CDC. It includes extensive information about influenza and its prevention and control for patients and health care professionals.

http://healthfinder.gov/NHO/AugustToolkit.aspx – A toolkit to use for National Immunization Awareness Month (August), including sample tweets and e-cards.

http://www.fda.gov/cder/drug/antivirals/influenza/ – This web page from the Food and Drug Administration has links for influenza vaccine information and antiviral drug information.


http://www.nlm.nih.gov/medlineplus/influenza.html – This is the influenza Web page of Medline Plus, a service of the National Library of Medicine, National Institutes of Health (NIH). It includes sections on news, diagnosis, treatment, prevention, disease management, clinical trials and other research, and information focused on audiences ranging from children to the elderly.

Non Federal Government
http://www.immunize.org – This is the Web site for the Immunization Action Coalition (IAC) with a wide variety of information about immunizations, including Vaccine Information Statements in many languages. The Directory of Immunization Resources is full of useful information on organizations, Web sites, hotlines, and agencies that are immunization resources.
http://www.vaccineinformation.org/ – This page from the IAC is comprehensive, organized, and easy to access. For each vaccine-preventable disease, there are answers to many questions about the disease and the vaccine, as well as sections containing photos, case histories, recommendations, references, and links to useful resources. Also included is material about vaccine safety, travel, bioterrorism, state laws – and much more. Has information in Spanish.

http://www.acponline.org/aii – This site from the American College of Physicians provides resources and tools to support physicians in their immunization efforts, with the goal of improving adult immunization rates. It includes physician education, patient education, and practice management tools for immunization and reimbursement.

http://www.nfidi.org/ – This is the Web site for the National Foundation for Infectious Diseases and contains a call to action and strategies for increasing influenza immunization among employees, trainees, and volunteers.

http://www.vaccines.org – This Web site provides access to up-to-the-minute news about vaccines and an annotated database of vaccine resources on the Internet.

http://www.ImmunizationEd.org – This is a Web page from the Group on Immunization Education of the Society of Teachers of Family Medicine. On this site you will find news and reports to keep family physicians up-to-date on vaccines for children and adults, links to the most current immunization schedules and vaccine information, downloadable slide presentations and photographs of diseases.

http://www.atpm.org/ – This Web site of the Association of Teachers of Preventive Medicine has several educational resources available for download or purchase for training health care professionals and students about immunization issues.

http://www.naccho.org/ – This is the Web site of the National Association of County and City Health Officials and has links to toolboxes for influenza and immunizations as well as links to training and resources pages.

http://www.mayoclinic.com/invoke.cfm?objectid=5CB89570-BB46-4961-8BFE66D06D5BDD1B – This is the Mayo Clinic patient information page on influenza.

http://www.health.state.mn.us/divs/idepc/diseases/flu/index.html – This is the influenza section of the Minnesota Department of Health.

http://www.medscape.com/resource/influenza – On this site you will find comprehensive clinical information and educational tools for clinicians and other healthcare professionals.

Pandemic Influenza Web Sites

Department of Veterans Affairs
VA Pandemic Influenza Information
http://www.publichealth.va.gov/flu/pandemic
This site contains VA Pandemic Influenza Plan and links to other documents, including information on use of the antiviral drug oseltamivir, respiratory infectious disease emergency plan for facilities, hand and respiratory hygiene, personal protective equipment.

Federal Government
Federal Government Information
http://www.flu.gov/professional/federal/index.html – this site contains links to national strategy, federal agency activities, and information for federal employees.

World Health Organization
International Pandemic Influenza Information
This site contains links to advice for travelers, world regional 2009 H1N1 influenza information, country activities, outbreak news and timeline planning; business, school, health care, and community planning; influenza watch and meeting update.
Hand Hygiene and Respiratory/Cough Etiquette

Web Sites
Department of Veterans Affairs
www.publichealth.va.gov/InfectionDontPassItOn. Infection: Don’t Pass It On (IDPIO) campaign. IDPIO is an ongoing public health campaign to involve VA staff, Veterans, their families, and visitors in preventing the transmission of infection.

Federal Government
http://www.cdc.gov/flu/professionals/infectioncontrol/resphygiene.htm Provides guidance on infection control measures that can be implemented at the first point of contact with a potentially infected person.

Non Federal Government


State Governments

http://www.health.state.mn.us/divs/idepc/diseases/flu/avian/hcp/standard.pdf provides key elements of the Minnesota Department of Health’s guidance on concepts of respiratory hygiene and cough etiquette using source control measures to prevent patients with respiratory infections from transmitting infection.

This manual is developed by the *Infection: Don’t Pass It On (IDPIO)* campaign. IDPIO is an ongoing public health campaign to involve VA staff, Veterans, their families and visitors in preventing the transmission of infection. The campaign develops and distributes education and communication resources for the VA community to promote:

- hand hygiene and respiratory etiquette,
- annual seasonal influenza vaccination,
- pandemic flu preparedness and response,
- correct and appropriate use of personal protective equipment, and
- basic public health measures to prevent transmission of infection.

For their leadership, expertise, and dedication to influenza prevention efforts within the VHA medical system and the IDPIO campaign, the IDPIO coordinating team would like to acknowledge:

**Victoria Davey**, PhD, MPH, RN, Chief Officer, Office of Public Health, VA Central Office,

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VA National Acquisition Center
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