Military Vaccine Agency Communications Plan 2012 - 2013 Seasonal Influenza

Issue

- The Department of Defense (DoD) has implemented the 2012–2013 Influenza Vaccination Program (IVP).
- Influenza immunizations are mandatory for all uniformed personnel.
- Influenza immunizations are mandatory for DoD civilian healthcare personnel who provide direct patient care.
- DoD's goal is to vaccinate 100% of all uniformed personnel and required civilians, with a milestone requirement of ≥ 90 percent by 17 December 2012.
- TRICARE Management Activity (TMA) authorizes TRICARE retail network pharmacies to administer the seasonal influenza vaccines at no cost to the eligible TRICARE beneficiaries. Commanders ensure personnel who receive influenza vaccinations from non-military facilities provide immunization data to their unit's immunization tracking system (ITS) point of contact by close of business of next duty day following vaccination.

Impact to Department of Defense

- Influenza (the flu) is a contagious respiratory illness caused by influenza viruses. Flu seasons are unpredictable and have the potential to impact DoD force readiness and mission. Immunizing with influenza vaccine has the potential to reduce the number of cases of influenza infection, hospitalization, and clinic visits related to influenza.
- Vaccine could become available as early as mid-August.
- Distribution will begin with DoD established high priority areas including CENTCOM, Korea, FLEET Forces, EUCOM/AFRICOM, and PACOM.
- DoD medical treatment facilities (MTFs) should expect multiple deliveries over several months. DoD will follow the Health Affairs (HA) policy for mandatory seasonal influenza vaccination for civilian healthcare personnel who provide direct patient care in MTFs.

Policy

 DoD policy requires immunization of all uniformed personnel against influenza according to Service-specific guidelines.

- HA Policy 08-005, dated 4 April 2008, mandates all civilian healthcare personnel who provide direct care to patients in MTFs must be immunized against seasonal influenza each year as a condition of employment.
- All Services will monitor compliance using Service-specific immunization tracking systems.
- DoD and the Services shall attempt to vaccinate all eligible beneficiaries requiring or requesting immunization in accordance with the Centers for Disease Control and Prevention (CDC) and Advisory Committee on Immunization Practices (ACIP) guidelines.

Key Messages

- Maintaining optimum health, safety, and well-being of Service members is our top priority.
- Vaccination remains the cornerstone of preventing influenza.
- The DoD IVP is part of our national defense strategy to safeguard DoD personnel against influenza disease.
- Influenza vaccinations should begin immediately upon receipt of vaccine and should continue until supply is exhausted or the vaccine expiration has been reached.
- Healthcare personnel should take time to screen for overdue routine adult vaccinations and provide instruction on how to obtain them if not administered at the time of screening.
- Infection from influenza viruses can result in illness ranging from mild to severe and may cause life-threatening complications.
- Take everyday precautions to stay healthy.

Talking Points

- Influenza is a contagious respiratory illness caused by influenza viruses, and the best way to protect against influenza is to get vaccinated every year.
- Two forms of influenza vaccine are distributed in the DoD:
 - An inactivated, protein-derived vaccine, given by intramuscular injection.
 - A live, attenuated (weakened) vaccine sprayed into the nose.
- Studies have shown that both the injectable vaccine and the intranasal vaccine are safe and effective in preventing influenza.
- The Vaccine Adverse Event Reporting System (VAERS) is in place for reporting possible vaccine-related adverse events (<u>www.vaers.hhs.gov</u>).



- The Epidemiology Branch of the Air Force School of Aerospace Medicine (USAFSAM) updates the influenza surveillance website weekly during the influenza season: http://afhsc.army.mil/fluReports.
- USAFSAM and the DoD Global Emerging Infections Surveillance and Response System coordinate weekly summary and final reports to the Assistant Secretary of Defense for Health Affairs.
- Commanders are charged with ensuring immunization data is entered into electronic immunization tracking systems at the point of service, or no later than close of business on the next duty day following vaccination.

Background & Environment

- In the United States, analysis during the 1990s estimated an average of 36,000 annual deaths related to influenza, resulting in large part from an aging US population.
- In the United States, the average annual number of hospitalizations associated with influenza has been estimated at 226,000.
- DoD has contracted for a total of 3.9 million doses of influenza vaccine for the 2012-2013 influenza season. This includes 2.5 million doses of inactivated (injectable) vaccine and 1.4 million doses of live, attenuated (intranasal) vaccine.
- This amount will ensure that uniformed personnel and their beneficiaries are protected against influenza. MTFs should expect several deliveries to fill requirements as early as August.
- Influenza A and B are the two types of influenza viruses that cause epidemic human disease.
- The 2012-2013 trivalent inactivated vaccine (TIV) strains are A/California/07/2009 (H1N1)-like, A/Victoria/361/2011 (H3N2)-like, and B/Wisconsin/1/2010-like antigens.
- Influenza is spread through aerosolized respiratory droplets or through contact with a contaminated object.
- Administer first available vaccine doses to deployed or deploying personnel, critical support staff, and medically high risk groups as listed in the 2012-2013 recommendations of the ACIP. It is recommended that Live Attenuated Influenza Vaccine (LAIV) be administered to new accessions and beneficiaries 2 to 49 years of age without a medical contraindication.
- Injectable vaccines should be used for those in whom intranasal vaccine is medically contraindicated, or where intranasal vaccine is unavailable due to logistical constraints.
- The influenza vaccines are temperature-sensitive products and activities must comply with cold chain management guidelines when transporting and storing these vaccines.



- Healthcare providers take time to screen immunization records and tracking systems for additional vaccine requirements or necessary booster immunizations.
- Influenza vaccines should not be administered to people with allergies to egg proteins (eggs or egg products), chicken proteins, or any component of the vaccine.
- Influenza vaccine should not be administered to anyone with a history of Guillain-Barré Syndrome.
- DoD will use Fluzone®, Afluria®, and Flumist® seasonal influenza vaccines for the 2012-2013 influenza season.
- Fluzone®, manufactured by Sanofi-Pasteur, is an inactivated, trivalent influenza virus vaccine. DoD purchased three products for the 2012 -2013 influenza season:
 - Fluzone® pre-filled syringes are preservative (thimerosal) free and are used for immunizing persons 36 months and older. The unit of issue is ten 0.5 mL dose pre-filled syringes. Once a needle is attached to the pre-filled syringe it must be discarded if not used by the end of the duty day.
 - Fluzone® pediatric vaccine is preservative (thimerosal) free and is used for immunizing persons 6 to 35 months of age. The unit of issue is a package of ten 0.25 mL pre-filled syringes. Once a needle is attached to the pre-filled syringe it must be discarded if not used by the end of the duty day.
 - Fluzone® multi-dose vials contains a preservative (thimerosal), and is used for immunizing persons 6 to 35 months (0.25ml per dose), and for immunizing persons 36 months or older (0.5ml per dose). The unit of issue is a 5ml, multi-dose vial. The multi-dose vial may be used until the expiration date on the vial is reached.
- Afluria®_is manufactured by CSL Biotherapies and distributed by Merck, is an inactivated, trivalent influenza virus vaccine. DoD purchased two products for the 2012 – 2013 influenza season:
 - Afluria® pre-filled syringes are preservative (thimerosal) free and are used for immunizing persons 5 years of age and older. The unit of issue is a package of ten 0.5 mL dose pre-filled syringes. Once a needle is attached to the pre-filled syringe it must be discarded if not used by the end of the duty day.
 - Afluria® multi-dose vials contain a preservative (thimerosal) and are used for immunizing persons 5 years of age and older. The unit of issue is a 5 mL multi-dose vial (ten 0.5 mL doses). Once the stopper has been pierced, the vial must be discarded within 28 days.

Note: Age indication per package insert is ≥5 years. However, the Advisory Committee on Immunization Practices recommends Afluria®



not be used in children aged 5 to 8 years because of increased reports of febrile reactions in this age group. If no other age-appropriate, licensed inactivated seasonal influenza vaccine is available for a child aged 5 to 8 years who has a medical condition that increases the child's risk for influenza complications, Afluria® can be used; however, providers should discuss with parents or caregivers the benefits and risks of influenza vaccination with Afluria® before administering this vaccine. Afluria® may be used in persons aged ≥9 years.

- Flumist® seasonal influenza vaccine:
 - Flumist® is a live, attenuated trivalent influenza virus vaccine manufactured by MedImmune for the 2012-2013 influenza season. The vaccine is preservative (thimerosal) free and is used for immunizing healthy persons 2 to 49 years of age. The unit of issue is a package of ten 0.2 mL pre-filled single use sprayers. Flumist® has a shelf life of 18 weeks.
- Cold Chain Management:
 - Cold Chain Management must be maintained with all formulations of the inactivated influenza vaccine regardless of manufacturer, when transporting and storing prior to use. The vaccine requires refrigeration storage at 2 to 8 degrees Celsius or 36 to 46 degrees Fahrenheit and should not be frozen.
 - For Flumist®, cold chain management must be maintained when transporting and storing Flumist® prior to use. The vaccine is shipped frozen from the manufacturer, and should not be refrozen. Flumist requires refrigeration storage at 2 to 8 degrees Celsius or 36 to 46 degrees Fahrenheit and may be used until expiration date as noted on the sprayer.

Questions and Answers

1) What is the current DoD Seasonal Influenza policy and who should be vaccinated?

DoD policy states influenza immunizations are mandatory for all Active Duty, National Guard, and Reserve personnel. Influenza immunizations are mandatory for DoD civilian and healthcare personnel who provide direct patient care at medical treatment facilities (MTFs).

Note: more information on DoD influenza policies can be found at www.vaccines.mil/Policies/Influenza - Seasonal.



OSD (Health Affairs) Policy 08-005, dated 4 April 2008, mandates all civilian healthcare personnel who provide direct care to patients in medical treatment facilities must be immunized against seasonal influenza each year as a condition of employment. Note: more information on OSD (Health Affairs) Policy 08-005 can be found at

www.vaccines.mil/documents/1169HCPFluHAPolicy_08_005.pdf.

2) What is the primary goal of DoD's Seasonal Influenza Vaccine Program (IVP)?

The primary goal is to vaccinate 100 percent of all Active Duty, National Guard, Reserve, and healthcare providers whom provide direct patient care with a milestone goal of ≥ 90 percent by 17 December each year.

3) Who does the Advisory Committee on Immunization Practices (ACIP), recommend receive annual influenza vaccination?

ACIP recommends the use of the seasonal influenza vaccinations for all people 6 months and older. Additionally, emphasis on providing routine annual vaccinations to certain groups at higher risk for influenza infection or complications should be a priority:

- Anyone who is at risk of complications from influenza, or more likely to require medical care.
- Women who will be pregnant during influenza season.
- Anyone with long-term health problems including heart disease, kidney disease, liver disease, lung disease, metabolic disease (diabetes), asthma, anemia and other blood disorders.
- Anyone with a weakened immune system, long-term treatment with drugs such as steroids, and cancer treatment with x-rays or drugs.
- Anyone with certain muscle or nerve disorders (such as spinal cord injuries, seizure disorders or cerebral palsy) that can lead to breathing or swallowing problems.
- Anyone 6 months through 18 years of age on long-term aspirin treatment.
- Residents of nursing homes and other chronic-care facilities.
- Anyone who lives with or cares for people at high risk for influenza-related complications.
- Health care providers.
- Household contacts and caregivers of children from 0-5 years of age and people 50 years and older.



4) When will the 2012-2013 Influenza Vaccination Program (IVP) begin?

Vaccine shipments can occur as early as mid-August. Your installation seasonal influenza vaccine program should begin immediately upon receipt of influenza vaccine to protect individuals at risk from developing influenza or its complications. All Services will follow Service—specific implementation guidelines. Influenza vaccinations should continue until supply is exhausted or the vaccine expiration is reached.

5) What documentation is required with influenza immunization?

It is important to document immunizations properly into electronic immunization and paper-based systems. Vaccine, date of administration, lot number, manufacturer, Vaccine Information Statement version date, name of vaccine administrator, and medical exemptions for military personnel must be documented in Service-specific immunization tracking systems. All Services will monitor compliance using Service-specific electronic immunization tracking systems (Medical Protection System (MEDPROS), Aeromedical Services Information Management System (ASIMS), Medical Readiness Reporting System (MRRS) and the Defense Eligibility Enrollment Reporting System (DEERS). All MHS beneficiary immunizations should be documented into the electronic health record.

6) Where did the DoD get this year's influenza vaccine?

DoD has contracted with the Defense Logistics Agency – Troop Support (DLATS) to obtain influenza vaccine from three different manufacturers. Two manufacturers, Sanofi-Pasteur (Fluzone) and CSL Biotherapies (Afluria), produce the injectable trivalent inactivated vaccine (TIV). MedImmune (FluMist) produces the live, attenuated influenza vaccine (LAIV) intranasal. Note: More information regarding this year's influenza vaccines and the presentations available can be found: http://www.cdc.gov/flu/about/ga/vaccine-selection.htm

7) Which personnel are required to receive the influenza vaccine?

DoD policy requires annual influenza immunizations for all Active Duty, National Guard and Reserve personnel, and healthcare personnel who provide direct patient care according to Service-specific guidelines.

8) Will my immunization be monitored by my Service?

Yes. All Services will monitor compliance using Service-specific immunization tracking systems (MEDPROS, ASIMS, and MRRS).



9) Who should receive the influenza vaccine and in what order if there is a shortage?

Should an unanticipated shortage of vaccine occur, OSD (Heath Affairs) will provide further direction regarding priority tiers, consistent with recommendations published in the CDC's Morbidity and Mortality Weekly Report.

10) Is injectable vaccine reserved for any specific population?

Yes. The Services will reserve injectable vaccine for people in whom the intranasal vaccine is medically contraindicated or where the intranasal vaccine is unavailable due to logistical constraints.

11) Who can I contact if I have a problem after receiving my vaccine?

If you are having a medical emergency call 911. Contact your healthcare provider or the clinic at which you received your vaccination for appropriate follow-up. You may also contact the DoD Vaccine Clinical Call Center 24/7 at (866) 210-6469 or email via at https://askvhc.wramc.amedd.army.mil. Any clinically significant medical event that occurs after vaccination should be submitted to the Vaccine Adverse Event Reporting System (VAERS) at http://www.vaers.hhs.gov.

The Disease General Information

1) What is seasonal influenza disease?

Influenza is a contagious respiratory illness caused by influenza types A or B viruses. Influenza viruses are easily spread by airborne respiratory droplets from person to person (often by sneezing or coughing). Symptoms of infection include fever, muscle aches, headache, malaise (a general feeling of sickness), nonproductive cough, sore throat, and runny nose. Most people who get the flu will have mild illness, will not need medical care or antiviral drugs, and will recover in less than two weeks. Some people, however, are more likely to get flu complications that result in being hospitalized and occasionally result in death. Pneumonia, bronchitis, sinus infections, and ear infections are examples of flurelated complications. The flu also can make chronic health problems worse. For example, people with asthma may experience asthma attacks while they have the flu, and people with chronic congestive heart failure may have worsening of this condition that is triggered by the flu.



2) Who is at high risk for developing flu related complications?

Children younger than 5 but especially children younger than 2 years of age, adult 65 years and older, pregnant women and individuals with various chronic medical conditions are at greatest for hospitalization and possibly death related to infection. For a full list of conditions http://www.cdc.gov/flu/about/disease/high_risk.htm

2) How does influenza spread?

Influenza spreads from person-to-person through aerosolized respiratory droplets released when a person coughs, sneezes, or breathes on someone. People may also become infected with influenza by touching something contaminated with the virus and then touching their mouth, nose, or eyes.

3) How soon will I get sick after exposure to the influenza virus?

Most healthy adults may be able to infect others beginning 1 day before symptoms develop and up to 5 to 7 days after becoming sick. Children may pass the virus for longer than 7 days. Symptoms start 1 to 4 days after the virus enters the body. That means that you may be able to pass on the flu to someone else before you know you are sick, as well as while you are sick. Some persons can be infected with the flu virus but have no symptoms. During this time, those persons may still spread the virus to others.

4) What should I do if I am infected with the influenza virus?

Getting plenty of rest, drinking fluids, and avoiding alcohol and tobacco will allow your body to fight off the illness more quickly. If you use over-the-counter medications to relieve symptoms, it is important to follow the manufacturer's instructions. Protect others by covering your mouth when coughing and sneezing, wash your hands frequently, and stay at home if you are feeling ill.

5) Will new strains of influenza virus circulate this season?

Influenza viruses are constantly changing, so it is not unusual for new strains of influenza virus to emerge at any time of the year. This year's influenza vaccines were made using the following strains:

- A/California/7/2009 (H1N1) pdm09-like virus
- A/Victoria/361/2011 (H3N2)-like virus
- B/Wisconsin/1/2010-like virus

The A/Victoria and B/Wisconsin are a change from last year's formulation.



The Disease Prevention

1) Why do I need to be immunized against influenza every year?

Circulating wild influenza viruses change from year to year. Protection that develops after a person is infected or immunized against the circulating viruses of one season does not provide adequate cross-protection when a new influenza strain develops. Immunity once vaccinated may wane after 6-8 months requiring an annual vaccination for full protection.

2) What is the best way to protect myself and my family from getting influenza if we are not vaccinated?

Vaccination is your best protection against influenza infection. If you are unable to receive the vaccine, avoid close contact with people sick with the flu. Wash your hands often with soap and water or if that is unavailable use alcohol-based hand rub. To prevent the spread of germs, avoid touching your eyes, nose, or mouth and cover your mouth and nose with a tissue when coughing or sneezing.

3) When should I get vaccinated?

It is recommended that people get vaccinated against influenza as soon as vaccine becomes available in your community. Vaccinations should occur through the entire influenza season which ends when product expires in early summer or supply is exhausted.

4) Where can I receive my vaccine?

The influenza vaccine can be received from many MTF's and clinics within DOD. To find a clinic near you can utilize the MILVAX clinic finder found at http://www.vaccines.mil/ClinicFinder. Additionally the TRICARE Management Activity issued the final rule authorizing TRICARE retail network pharmacies to administer seasonal influenza at no cost to the for the 2012-2013 influenza season. Soldiers who receive the influenza vaccination from non-military facilities must provide appropriate immunization data to their unit's Service-specific Immunization Tracking System point of contact no later than close of business of the next duty day following vaccination in order to properly document the annual requirement.

The Vaccines General Questions

1) How effective is influenza immunization in protecting me from illness caused by the different strains of influenza?

Vaccines are developed each year in an attempt to match the predicted virus strains. When they are well-matched, immunization of healthy adults is 70-90% effective in preventing influenza illness. When the majority of circulating influenza strains is not well matched by the vaccine, effectiveness has been as low as 47-77%. Vaccines may be somewhat less effective in elderly persons and very young children, but immunization can still help prevent serious complications from influenza illness.

2) What if I'm pregnant or breastfeeding? Can I still receive the seasonal influenza vaccine?

Yes. The Advisory Committee on Immunization Practices (ACIP), the American College of Obstetricians and Gynecologists, and the American Academy of Family Physicians have all recommended the routine vaccination of women who are pregnant, or who become pregnant during the influenza season. Pregnant women, as well as lactating/postpartum women and their newborn babies, are at high risk for influenza complications. Pregnant women may receive the inactivated injectable influenza vaccine, during any point of gestation and postpartum and breastfeeding women may receive the inactivated or live vaccine.

3) Are influenza vaccines harmful during my pregnancy?

Pregnant women are at high risk for influenza related complications and are a priority group for vaccination. The FDA has classified Fluzone and Afluria as "Pregnancy Category B", indicating that animal reproduction studies have not demonstrated a fetal risk, but there are no controlled studies in pregnant women. The Advisory Committee on Immunization Practices (ACIP), the American College of Obstetricians and Gynecologists (ACOG), and the American Academy of Family Physicians recommends the use of injectable influenza vaccine for immunization of pregnant women because the benefit of protection outweighs the potential risk of any adverse event. In a study of approximately 2,000 pregnant women who received inactivated influenza vaccine during pregnancy, no adverse effects were demonstrated in the fetus, infant or during early childhood. Ref: http://www.cdc.gov/vaccines/pubs/preg-guide.htm

4) If a child is receiving an influenza vaccination for the first time, what is the appropriate administration schedule?

According to the ACIP and the American Academy of Pediatrics (AAP):

Children aged 6 months to 8 years who are receiving the influenza vaccine for the first time or whose previous vaccination status is unknown should receive two (2) doses of vaccine separated by at least four weeks.

Children aged 6 months through 8 years who have NOT received two (2) or more total doses of seasonal influenza vaccine since July 2010 should receive two (2) doses of vaccine separated by at least four weeks.

Children aged 6 months through 8 years who received two (2) or more total doses of seasonal influenza vaccine since July 2010 and all children 9 and older should receive one dose of seasonal influenza vaccine.

To view the pediatric administration algorithm Ref: http://www.cdc.gov/flu/professionals/vaccination/

5) If a child 6 months - 8 years of age is receiving an influenza vaccination for the first time, must the same type of vaccine be administered for both doses?

No. The first and second doses can be from different manufactures or formulas. TIV can be used when vaccinating children aged 6 months to 8 years and LAIV (FluMist®) for children aged 2 years and older, who have not been previously vaccinated.

6) How are injectable and intranasal influenza vaccines shipped and stored?

All injectable and intranasal vaccines are shipped and should be stored at 2 to 8 degrees Celsius. When the vaccine arrives at your facility, it must immediately be placed in a refrigerator. In addition, protect Afluria from light until use. Do not use vaccines past the expiration date printed on the vaccine vial or syringe. Once the Afluria multi-dose vial has been punctured the vaccine must be used within 28 days. Fluzone multi-dose vials may be used after puncture until the expiration date on the vial. Any prefilled syringes, sprayers or single dose vials must be discarded if the tip cap is removed, a needle is placed on the syringe or the cap of the vial has been removed.

7) If I need to place a tuberculin skin test (TST), should I be concerned about administering the influenza vaccine at the same time?

Yes. The live vaccine (FluMist®) may suppress a positive response to a tuberculin skin testing (TST or PPD) in a person who is infected with tuberculosis (TB), resulting in a false negative skin test. If a person needs TB skin testing and LAIV, you can correctly administer both in one of three ways

- Give the TST (PPD) and the vaccine simultaneously.
- Give the TST (PPD) first and when the person returns to have the skin test results interpreted, administer the live vaccine.
- Give the live vaccine and then delay administration of the TST (PPD) for 28 days.

Injectable influenza vaccines and tuberculin skin test can be administered concurrently or at any interval.

8) Can live vaccines and the influenza vaccine be administered on the same day?

The inactivated injectable influenza vaccine may be administered on the same day as live vaccines or at any interval, but the live intranasal influenza vaccine it must be administered on the same day as the other live vaccines or separated by 28 days.

The Vaccines

Trivalent Inactivated Vaccine (TIV), Injectable Fluzone® and Afluria®

1) What is Fluzone®?

Fluzone®, Fluzone® Pediatric, Fluzone® High-Dose (HD), and Fluzone® Intradermal are inactivated injectable influenza virus vaccines manufactured by Sanofi-Pasteur. Presentations include a multi-dose vial, a thimerosal-free single-dose syringe and single-dose vial. Fluzone and Fluzone Pediatric are licensed for persons aged 6 months and older, Fluzone HD is licensed for persons aged 65 years and older and Fluzone Intradermal is licensed for persons aged 18 through 64 years. DoD only contracted for Fluzone and Fluzone Pediatric this season.

2) What is Afluria®?

Afluria® is an inactivated injectable influenza virus vaccine manufactured by CSL Biotherapies. Presentations include a multi-dose vial and a thimerosal-free single-dose syringe. Afluria is licensed for persons aged 5 years and older; however, ACIP recommends Afluria be administered to children aged 9 years and older due to increased reports of febrile reactions in children younger than 9



years. Other age-appropriate, licensed seasonal influenza vaccine formulations can be used. If no other age-appropriate, licensed seasonal influenza vaccine is available for children aged 5 years through 8 years who are at high risk for influenza complications, Afluria may be given. Healthcare providers should discuss the benefits and risks of influenza vaccination with the parents or caregivers prior to administering Afluria.

3) Why does ACIP guidance state that Afluria should not be given to children 8 years of age or younger, except in special circumstances, even though it is FDA approved for ages 5 years and above?

During the 2010 flu season in Australia, this influenza vaccine was associated with an increased frequency of fever and febrile seizures in children aged 6 months through 4 year. In Australia, fever in children aged 5 through 8 years was also reported following vaccination. In several studies conducted prior to the 2010-11 flu season in the United States, no association between flu vaccine administration and febrile seizures has been detected. However, ACIP changed the recommended age from 5 years and above to 9 years and above.

4) Who should receive the injectable vaccines?

ACIP recommends the use of injectable vaccines for immunization of persons described as eligible in manufacturer package inserts and for whom the live virus vaccine (FluMist®) is contraindicated.

- Anyone who is at risk of complications from influenza, or more likely to require medical care.
- Women who are or will be pregnant during influenza season.
- Anyone with long-term health problems.
- Anyone with a weakened immune system.
- Anyone 6 months through 18 years of age on long-term aspirin treatment.
- Residents of nursing homes and other chronic-care facilities.
- Anyone who lives with or cares for people at high risk for influenza-related complications.
- Household contacts and caregivers of children from birth up to 5 years of age and people 50 years and older.

5) Who should not receive the injectable influenza vaccines?

 People who have a severe allergy to chicken proteins, eggs, egg products, or any components of the influenza vaccine.



- People who have had a severe reaction to an influenza vaccination in the past.
- People who have a history of Guillain-Barré Syndrome.
- People who are sick with a fever. These individuals may be immunized once their symptoms resolve.
- Children younger than 6 months of age.

6) What side effects can I expect when I receive the injectable influenza vaccine?

The viruses in inactivated influenza vaccine have been killed so you cannot become infected with influenza. Side effects which may occur are: soreness, redness, or swelling where the vaccination was administered, fever, weakness, headache, and muscle aches. If these problems occur, they usually begin soon after immunization and typically last for one or two days. Most people who receive influenza vaccine experience no serious problems. In rare instances, serious problems such as a severe allergic reaction can occur.

The Vaccines Live Attenuated Intranasal Vaccine (LAIV), Intranasal FluMist®

1) What is FluMist®?

FluMist® is a live, attenuated influenza virus vaccine manufactured by MedImmune. The only presentation is a thimerosal-free single dose sprayer.

2) Who should receive intranasal vaccine (FluMist®)?

FluMist® is approved for all healthy people aged 2-49 years who are not pregnant. For more information, see http://www.vaccines.mil/flu.

3) Who should not receive FluMist® (LAIV)?

The following populations should not be immunized with the Live Attenuated Intranasal Vaccine:

- People less than 2 years old or those 50 years old or older
- People with asthma, reactive airways disease, or other chronic disorders of the pulmonary or cardiovascular systems
- People with other underlying medical conditions, including such metabolic diseases as diabetes, cardiac/kidney/liver diseases, and blood disorders



- People with known or suspected immunodeficiency diseases or who are receiving immunosuppressive therapies
- Children or adolescents receiving aspirin therapy or other
- People with a history of Guillain-Barré Syndrome
- Pregnant women
- People with a history of hypersensitivity, including anaphylaxis, to any of the components of LAIV or to eggs

4) What side effects can I expect when I receive FluMist®?

The viruses in the intranasal vaccine are weakened and do not cause severe symptoms associated with influenza. Common side effects may include runny nose, headache, fever, cough, and sore throat. Other possible side effects are chills, cough, decreased activity, decreased appetite, headache, irritability, muscle aches, and tiredness/weakness. For more information, see http://www.flumist.com.

Myths and Facts

1) Myth #1: Having influenza is similar to getting a cold; therefore, an immunization is not really necessary.

Fact: On average, more than 226,000 people are hospitalized from flu complications, including 20,000 children; about 36,000 people die from influenza each year. Vaccination provides the best protection available from the influenza virus— even when the vaccine does not closely match the circulating flu strains. A vaccination may lessen influenza illness severity and is important for persons at high-risk for serious flu-related complications and for close contacts of high-risk individuals. Ref: http://www.cdc.gov/flu/about/qa/flushot.htm and http://www.cdc.gov/flu/about/qa/disease.htm.

2) Myth #2: Side effects from the influenza vaccine are worse than influenza itself.

Fact: The most common side effect you are likely to experience with the injectable influenza vaccine is a sore arm. The risk of a rare allergic reaction is far less than the risk of severe complications from influenza. Live, intranasal influenza vaccine can cause mild symptoms in the recipient. Common side effects can include runny nose, headache, fever, cough, and sore throat. Ref: http://www.cdc.gov/flu/about/ga/flushot.htm



3) Myth #3: Even if I get the influenza vaccine, can I still be infected with influenza?

Fact: Yes. Influenza viruses are always changing. They can change from the time the vaccine is recommended and the beginning of influenza season, or they can even change during a season. Each year, experts study thousands of influenza virus samples from around the world to figure out which viruses are making people sick and how these viruses are changing. With this information, they forecast which three virus strains are most likely to make the most people sick during the next influenza season. Each year, the seasonal influenza vaccine contains three influenza virus strains – one influenza A (H3N2) virus, one influenza A (H1N1) virus, and one influenza B virus. The selection of which viruses to include in the vaccine must be made in February of the prior year in order for vaccine to be produced in time for distribution the following season. When influenza viruses change, they may no longer closely match viruses used to make that season's influenza vaccine.

This can make the vaccine less effective. But, even when this happens, the vaccine can still offer some cross-protection: The vaccine contains three viruses, so it can protect you against the other two viruses that may be making people sick. The immune protection you get from the vaccine can provide partial protection against influenza viruses that are related to those used to make the vaccine (this is called cross-protection). So while a less-than-ideal match can reduce vaccine benefit, the vaccine can still provide enough protection to make illness less severe and prevent influenza-related complications. A less-than-perfect vaccine is still the best protection we have against influenza. That is why CDC continues to recommend getting the vaccine even when there is a less-than-perfect match.

Ref: http://www.cdc.gov/flu/about/qa/season.htm and http://www.cdc.gov/flu/about/qa/vaccineeffect.htm

4) Myth #4: Only elderly people really need the influenza vaccine.

Fact: Among elderly persons not living in chronic-care facilities (such as nursing homes) and those persons with long-term (chronic) medical conditions (such as asthma, diabetes, or heart disease), influenza vaccinations are 30-70% effective in preventing hospitalization for pneumonia (a lung infection) and influenza. Among elderly nursing home residents, influenza vaccinations are the most effective in preventing severe illness, complications that may follow influenza (like pneumonia), and deaths related to influenza. Because persons aged 65 years and older are at highest risk for serious complications from influenza, it is also important that people who live with or care for those at high risk for serious complications get an influenza vaccination. Children younger than 6 months of age are at the most risk for having complications from influenza. However, they



are too young to get the influenza vaccination. To protect these infants, it is very important that their household members and out-of-home caregivers be vaccinated against influenza. Influenza vaccine can prevent 66% or more influenza infections in young children, with even higher estimates for older children, when the vaccine strains are well matched to the flu viruses causing illness. Vaccinating close contacts of children can also help decrease children's risk of getting influenza. Everyone who is healthy and eligible to receive the vaccine should take advantage of the opportunity to boost their immunity to seasonal influenza.

Ref: http://www.cdc.gov/flu/about/qa/vaccineeffect.htm

5) Myth #5: You must get the influenza vaccine before the influenza season, or it is not worth getting.

Fact: Influenza vaccine can be given before or during the influenza season. Influenza vaccinations provide protection against the influenza strains contained in the vaccine through one influenza season. Vaccinations should begin as soon as vaccine is available and continue throughout the influenza season. Ref: http://www.cdc.gov/flu/about/ga/misconceptions.htm.

6) Myth #6: I can take medications prescribed by my doctor instead of getting the influenza vaccine.

Fact: Antiviral medications given within the first few days of symptom onset can reduce the duration and severity of the disease, but cannot cure it. These drugs are not a substitute for the influenza vaccine. Remember, influenza vaccine is the best defense against seasonal influenza, but antiviral drugs can be an important second line of defense to treat influenza or prevent influenza infection. Ref: http://www.cdc.gov/flu/protect/antiviral/keyfacts.htm.