2013 – 2014
Influenza Vaccine Strains

Trivalent Vaccine:
- A/California/7/2009pdm09-like (H1N1)
- A/Texas/50/2012 (H3N2)
- B/Massachusetts/2/2012-like

Quadrivalent Vaccine:
- A/California/7/2009pdm09-like (H1N1)
- A/Texas/50/2012/(H3N2)
- B/Massachusetts/2/2012-like
- B/Brisbane/60/2008-like
Stop the spread of germs that can make you and others sick!

Cover your mouth and nose with a tissue when you cough or sneeze. Put your used tissue in the waste basket.

If you don't have a tissue, cough or sneeze into your upper sleeve or elbow, not your hands.

You may be asked to put on a facemask to protect others.

Wash hands often with soap and warm water for 20 seconds. If soap and water are not available, use an alcohol-based hand rub.
Advice for Parents on Talking to Children About the Flu

Focus on what your child can do to fight the flu and to not spread flu to others:

- Have your child get a flu vaccine. The flu shot may pinch, but it will help protect them from getting sick later. A flu vaccine given as a nasal spray may also be available.

- Encourage them to try to stay away from people who are sick.

- Encourage them to cough and sneeze into a tissue when they are sick. Throw the tissue in the trash right away. If they do not have a tissue, they should cover their mouth and nose with their arm.

- Encourage them to wash hands often with soap and warm water for 15-20 seconds. Set a good example by doing this yourself.

- Encourage them to stay home from work and school if they are sick, and stay away from people until they are better.
Encourage healthy habits: eating healthy foods, getting enough sleep, and getting exercise.

Use their questions as a chance to tell them how to avoid the flu and how to not spread flu and other germs.

For more information call CDC info at 1-800-CDC-INFO (232-4636) or go to www.cdc.gov/flu.
CDC Study Shows Flu Vaccination Prevents Significant Flu Illness, Doctor’s Visits and Hospitalizations

June 24, 2013 – Flu vaccination prevented an estimated 13.6 million flu cases, 5.8 million medical visits and nearly 113,000 flu-related hospitalizations in the United States over a 6-year period (2005-2011), according to a study by CDC experts. Since 2010, all people 6 months of age and older in the United States have been recommended to receive annual flu vaccination.

The study, published in PLOS ONE on June 19, 2013, presents a new model to estimate the direct annual impact of flu vaccination in the United States. CDC researchers used flu surveillance data collected during the flu season to project the burden of flu in the absence of vaccination compared to the burden of flu with vaccination. By looking at the difference between the two, the researchers estimated the burden of flu averted by vaccination.

This new model will help CDC experts to quantify the public health benefit of the flu vaccination program in the United States. In the past, CDC has relied on surveys of vaccine coverage and observational studies of vaccine effectiveness that focused on specific populations at specific times to assess and communicate the benefits of vaccination. The new CDC model provides a more standardized and repeatable way to measure and communicate some of the direct public health benefits of flu vaccination.

According to the study, the flu season where the greatest benefit of flu vaccination was measured occurred during the 2010-11 season, when flu vaccination averted more than 18.5% of potential flu cases. This translates into flu vaccines having averted approximately 5 million flu cases, 2.1 million flu-related medical visits and 40,400 flu-related hospitalizations across all age groups in the United States during that season.

The study authors attributed the significant vaccine benefits observed that season to the increase in vaccination coverage among all age groups that occurred following the 2009 pandemic. They believed the increase in vaccination coverage likely resulted from higher public awareness about the flu due to the 2009 H1N1 pandemic.

The season with the lowest number of averted outcomes was 2006-2007, when approximately 1.1 million flu cases were averted. The researchers pointed to milder flu activity as the possible reason for the lower number of averted flu outcomes observed that season, because fewer flu cases can be prevented when the burden of disease is low.

Overall, the researchers concluded that the U.S. flu vaccination program provides substantial health benefits in terms of averted flu cases, medical visits and flu-related hospitalizations. Researchers suggested that increasing flu vaccination coverage has the potential to prevent additional flu-associated disease outcomes, particularly among non-elderly adults – a group that makes up a disproportionately large portion of the population, but for whom vaccine coverage tends to be the lowest.

In addition, the authors said that there is a need for better, more effective flu vaccines for the elderly, who generally do not respond as well to vaccination. Better flu vaccines could improve flu-associated disease outcomes for this age group – especially hospitalization – which occur at much higher rates in the elderly.

The study is available online from the PLOS ONE website (http://www.plosone.org/article/info:doi/10.1371/journal.pone.0066312) and (http://www.cdc.gov/Other/disclaimer.html).
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 parents/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 May 17, 2013, the most recent versions of the VISs are as follows:

<table>
<thead>
<tr>
<th>Vaccine</th>
<th>Date</th>
<th>Vaccine</th>
<th>Date</th>
</tr>
</thead>
<tbody>
<tr>
<td>Adenovirus</td>
<td>7/14/11</td>
<td>Meningococcal</td>
<td>10/14/11</td>
</tr>
<tr>
<td>Anthrax</td>
<td>3/10/10</td>
<td>Multi-vaccine</td>
<td>11/16/12</td>
</tr>
<tr>
<td>Chickenpox</td>
<td>3/13/08</td>
<td>PCV13</td>
<td>2/27/13</td>
</tr>
<tr>
<td>DTaP</td>
<td>5/17/07</td>
<td>PPSV</td>
<td>10/6/09</td>
</tr>
<tr>
<td>Hib</td>
<td>12/16/08</td>
<td>Polio</td>
<td>11/8/11</td>
</tr>
<tr>
<td>Hepatitis A</td>
<td>10/25/11</td>
<td>Rabies</td>
<td>10/6/09</td>
</tr>
<tr>
<td>Hepatitis B</td>
<td>2/2/12</td>
<td>Rotavirus</td>
<td>12/6/10</td>
</tr>
<tr>
<td>HPV-Cervarix</td>
<td>5/3/11</td>
<td>Shingles</td>
<td>10/6/09</td>
</tr>
<tr>
<td>HPV-Gardasil</td>
<td>5/17/13</td>
<td>Td/Flup (use for Td)</td>
<td>1/24/12</td>
</tr>
<tr>
<td>Influenza</td>
<td>7/2/12</td>
<td>Tdap (use for Tdap)</td>
<td>5/9/13</td>
</tr>
<tr>
<td>Japanese enceph.</td>
<td>12/7/11</td>
<td>Typhoid</td>
<td>5/29/12</td>
</tr>
<tr>
<td>MMR</td>
<td>4/20/12</td>
<td>Yellow fever</td>
<td>3/30/11</td>
</tr>
<tr>
<td>MMRV</td>
<td>5/21/10</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Source: www.cdc.gov/vaccines/pubs/vis/vis-facts.htm
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)
- MMR and MMRV
- Td and 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, poliovirus (IPV), or rotavirus (RV). The multi-vaccine VIS can also be used when giving combination vaccines (e.g., Pediatrix, 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), you must give out all relevant single VISs. For example, before administering Twinrix, you must give your patient the VISs for both hepatitis A and hepatitis B vaccines.

Fact 2  VISs are required for both public and private sectors
Federal law requires use of VISs in both the public and private sectors 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., Pediatrix, 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), you must give out all relevant single VISs. For example, before administering Twinrix, you must 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 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.
Influenza Vaccine
(Flu Vaccine, Inactivated)
2013-2014

1 Why get vaccinated?

Influenza ("flu") is a contagious disease that spreads around the United States every winter, usually between October and May.

Flu is caused by the influenza virus, and can be spread by coughing, sneezing, and close contact.

Anyone can get flu, but the risk of getting flu is highest among children. Symptoms come on suddenly and may last several days. They can include:
- fever/chills
- sore throat
- muscle aches
- fatigue
- cough
- headache
- runny or stuffy nose

Flu can make some people much sicker than others. These people include young children, people 65 and older, pregnant women, and people with certain health conditions—such as heart, lung or kidney disease, or a weakened immune system. Flu vaccine is especially important for these people, and anyone in close contact with them.

Flu can also lead to pneumonia, and make existing medical conditions worse. It can cause diarrhea and seizures in children.

Each year thousands of people in the United States die from flu, and many more are hospitalized.

Flu vaccine is the best protection we have from flu and its complications. Flu vaccine also helps prevent spreading flu from person to person.

2 Inactivated flu vaccine

There are two types of influenza vaccine:

You are getting an inactivated flu vaccine, which does not contain any live influenza virus. It is given by injection with a needle, and often called the “flu shot.”

A different, live, attenuated (weakened) influenza vaccine is sprayed into the nostrils. This vaccine is described in a separate Vaccine Information Statement.

Flu vaccine is recommended every year. Children 6 months through 8 years of age should get two doses the first year they get vaccinated.

Flu viruses are always changing. Each year’s flu vaccine is made to protect from viruses that are most likely to cause disease that year. While flu vaccine cannot prevent all cases of flu, it is our best defense against the disease. Inactivated flu vaccine protects against 3 or 4 different influenza viruses.

It takes about 2 weeks for protection to develop after the vaccination, and protection lasts several months to a year.

Some illnesses that are not caused by influenza virus are often mistaken for flu. Flu vaccine will not prevent these illnesses. It can only prevent influenza.

A “high-dose” flu vaccine is available for people 65 years of age and older. The person giving you the vaccine can tell you more about it.

Some inactivated flu vaccine contains a very small amount of a mercury-based preservative called thimerosal. Studies have shown that thimerosal in vaccines is not harmful, but flu vaccines that do not contain a preservative are available.

3 Some people should not get this vaccine

Tell the person who gives you the vaccine:

- If you have any severe (life-threatening) allergies, including an allergy to eggs. If you ever had a life-threatening allergic reaction after a dose of flu vaccine, or have a severe allergy to any part of this vaccine, you may be advised not to get a dose.
- If you ever had Guillain-Barré Syndrome (a severe paralyzing illness, also called GBS). Some people with a history of GBS should not get this vaccine. This should be discussed with your doctor.
- If you are not feeling well. They might suggest waiting until you feel better. But you should come back.
4 Risks of a vaccine reaction

With a vaccine, like any medicine, there is a chance of side effects. These are usually mild and go away on their own.

Serious side effects are also possible, but are very rare. Inactivated flu vaccine does not contain live flu virus, so getting flu from this vaccine is not possible.

Brief fainting spells and related symptoms (such as jerking movements) can happen after any medical procedure, including vaccination. Sitting or lying down for about 15 minutes after a vaccination can help prevent fainting and injuries caused by falls. Tell your doctor if you feel dizzy or light-headed, or have vision changes or ringing in the ears.

Mild problems following inactivated flu vaccine:
- soreness, redness, or swelling where the shot was given
- hoarseness; sore, red or itchy eyes; cough
- fever
- aches
- headache
- itching
- fatigue

If these problems occur, they usually begin soon after the shot and last 1 or 2 days.

Moderate problems following inactivated flu vaccine:
- Young children who get inactivated flu vaccine and pneumococcal vaccine (PCV13) at the same time may be at increased risk for seizures caused by fever. Ask your doctor for more information. Tell your doctor if a child who is getting flu vaccine has ever had a seizure.

Severe problems following inactivated flu vaccine:
- A severe allergic reaction could occur after any vaccine (estimated less than 1 in a million doses).
- There is a small possibility that inactivated flu vaccine could be associated with Guillain-Barré Syndrome (GBS), no more than 1 or 2 cases per million people vaccinated. This is much lower than the risk of severe complications from flu, which can be prevented by flu vaccine.

The safety of vaccines is always being monitored. For more information, visit: www.cdc.gov/vaccinesafety/

5 What if there is a serious reaction?

What should I look for?
- Look for anything that concerns you, such as signs of a severe allergic reaction, very high fever, or behavior changes.

Signs of a severe allergic reaction can include hives, swelling of the face and throat, difficulty breathing, a fast heartbeat, dizziness, and weakness. These would start a few minutes to a few hours after the vaccination.

What should I do?
- If you think it is a severe allergic reaction or other emergency that can’t wait, call 9-1-1 or get the person to the nearest hospital. Otherwise, call your doctor.
- Afterward, the reaction should be reported to the Vaccine Adverse Event Reporting System (VAERS). Your doctor might file this report, or you can do it yourself through the VAERS web site at www.vaers.hhs.gov, or by calling 1-800-822-7967.

VAERS is only for reporting reactions. They do not give medical advice.

6 The National Vaccine Injury Compensation Program

The National Vaccine Injury Compensation Program (VICP) is a federal program that was created to compensate people who may have been injured by certain vaccines.

Persons who believe they may have been injured by a vaccine can learn about the program and about filing a claim by calling 1-800-338-2382 or visiting the VICP website at www.hrsa.gov/vaccinecompensation.

7 How can I learn more?

- Ask your doctor.
- Call your local or state health department.
- Contact the Centers for Disease Control and Prevention (CDC):
  - Call 1-800-232-4636 (1-800-CDC-INFO) or
  - Visit CDC’s website at www.cdc.gov/flu

Vaccine Information Statement (Interim)
Inactivated Influenza Vaccine

07/26/2013

42 U.S.C. § 300aa-26
Influenza Authorization Record
Registro de Autorización para la Administración de la Vacuna Contra la Influenza

Date: ___________________________  Manufacturer and Lot No. ___________________________

Clinic Site: ___________________________

This form must be signed on the date the vaccine is administered by the person to receive the vaccine, or by the parent, guardian, or other authorized person.

I have read or had explained to me the influenza [Injectable] Vaccine Information Statement, 2013-2014. I have had an opportunity to ask questions which were answered to my satisfaction. I believe I understand the benefits and risks of influenza vaccine and request that it to be given to me or to the person for whom I am authorized to make this request.

Esta forma debe ser firmada por el recipiente de la vacuna, su padre o representante, o otra persona autorizada, para la fecha en que se administra la vacuna.

He leído y me han explicado la Hoja de Información Sobre la Vacuna Contra la Influenza [Inyectada], 2013-2014. He tenido la oportunidad de hacer preguntas las cuales fueron contestadas a mi satisfacción. Entiendo los beneficios y riesgos de la vacuna contra la influenza y solicito que se me administre o se le administre a la persona por quien estoy autorizando (a) para efectuar esta solicitud.

<table>
<thead>
<tr>
<th>PRINT CLEARLY</th>
<th>D.O.B</th>
<th>GENDER</th>
<th>RT</th>
<th>LT</th>
<th>INDICATE AGE: IN APPROPRIATE COLUMN</th>
</tr>
</thead>
<tbody>
<tr>
<td>of the person to receive the immunization or signature of the authorized person who will also include the name of the person immunized.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>(3-6)</td>
</tr>
</tbody>
</table>

*PLEASE PRINT* ESCRIBIR CON LETRA DE IMPRENTA el recipiente o la persona autorizada de aprobar esta immunizacion, incluyendo el nombre de recipiente.

1 2 3 4 5 6 7 8 9 10 11 12 13 14 15

VACCINE ADMINISTERED TOTALS: ___________________________
Screening Checklist for Contraindications to Inactivated Injectable Influenza Vaccination

For adult patients as well as parents of children to be vaccinated: The following questions will help us determine if there is any reason we should not give you or your child inactivated injectable influenza vaccination today. If you answer "yes" to any question, it does not necessarily mean you (or your child) should not be vaccinated. It just means additional questions must be asked. If a question is not clear, please ask your healthcare provider to explain it.

<table>
<thead>
<tr>
<th>Question</th>
<th>Yes</th>
<th>No</th>
<th>Don't Know</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Is the person to be vaccinated sick today?</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2. Does the person to be vaccinated have an allergy to eggs or to a component of the vaccine?</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3. Has the person to be vaccinated ever had a serious reaction to influenza vaccine in the past?</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>4. Has the person to be vaccinated ever had Guillain-Barré syndrome?</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Information for Health Professionals about the Screening Checklist for Contraindications to Inactivated Injectable Influenza Vaccination

Are you interested in knowing why we included a certain question on the screening checklist? If so, read the information below. If you want to find out even more, consult the sources listed at the bottom of this page.

1. Is the person to be vaccinated sick today?
   There is no evidence that acute illness reduces vaccine efficacy or increases vaccine adverse events. People with an acute febrile illness usually should not be vaccinated until their symptoms have improved. Minor illnesses with or without fever do not contraindicate use of influenza vaccine. Do not withhold vaccination if a person is taking antibiotics.

2. Does the person to be vaccinated have an allergy to eggs or to a component of the vaccine?
   Allergic reactions to any vaccine component can occur. The majority of reactions probably are caused by residual egg protein. Although current influenza vaccines contain only a limited quantity of egg protein, this protein can induce immediate allergic reactions among people who have severe egg allergy.

   People who have experienced a serious systemic or anaphylactic reaction (e.g., hives, swelling of the lips or tongue, acute respiratory distress, or collapse) after eating eggs should consult a specialist for appropriate evaluation to help determine if vaccine should be administered. People who have documented immunoglobulin E (IgE)-mediated hypersensitivity to eggs, including those who have had occupational asthma or other allergic responses to egg protein, might also be at increased risk for allergic reactions to influenza vaccine. Protocols have been published for safely administering influenza vaccine to people with egg allergies (see source 3).

   Some people who report allergy to egg might not be egg-allergic. If a person can eat lightly cooked eggs (e.g., scrambled eggs), they are unlikely to have an egg allergy. However, people who can tolerate egg in baked products (e.g., cake) might still have an egg allergy. If the person develops hives only after ingesting eggs, CDC recommends 1) they receive TIV (not LAIV), 2) the vaccine be administered by a healthcare provider familiar with the potential manifestations of egg allergy, and 3) the vaccine recipient be observed for at least 30 minutes after receipt of the vaccine for signs of a reaction.

   Fluzone (sanofi pasteur) contains gelatin as a stabilizer; therefore, a history of anaphylactic reaction to gelatin is a contraindication. Some inactivated influenza vaccines contain thimerosal as a preservative. Most people who had sensitivity to thimerosal when it was used in contact lens solution do not have reactions to thimerosal when it is used in vaccines. Check the package insert at www.immunize.org/packageinserts for a list of the vaccine components (i.e., excipients and culture media) used in the production of the vaccine, or go to www.cdc.gov/vaccines/pubs/pinkbook/downloads/appendices/B/excipient-table-2.pdf.

   Some vaccines also contain latex in the prefilled syringe cap which may cause allergic reactions in latex sensitive people. Check the package inserts at www.immunize.org/packageinserts for information on which vaccines are affected, or go to www.cdc.gov/vaccines/pubs/pinkbook/downloads/appendices/B/latex-table.pdf.

3. Has the person to be vaccinated ever had a serious reaction to influenza vaccine in the past?
   Patients reporting a serious reaction to a previous dose of inactivated influenza vaccine should be asked to describe their symptoms. Immediate—presumably allergic—reactions are usually a contraindication to further vaccination against influenza.

   Fever, malaise, myalgia, and other systemic symptoms most often affect persons who are first-time vaccinees. These mild-to-moderate local reactions are not a contraindication to future vaccination. Also, red eyes or mild upper facial swelling following vaccination with inactivated injectable influenza vaccine is most likely a coincidental event and not related to the vaccine; these people can receive injectable vaccine without further evaluation.

4. Has the person to be vaccinated ever had Guillain-Barré syndrome?
   It is prudent to avoid vaccinating people who are not at high risk for severe influenza complications (see source 3) but who are known to have developed Guillain-Barré syndrome (GBS) within 6 weeks after receiving a previous influenza vaccination. As an alternative, physicians might consider using influenza antiviral chemoprophylaxis for these people. Although data are limited, the established benefits of influenza vaccination for the majority of people who have a history of GBS, and who are at high risk for severe complications from influenza, justify yearly vaccination.

Sources:
1. CDC. Epidemiology & Prevention of Vaccine-Preventable Diseases, W.I. Atkinson et al., editors, at www.cdc.gov/vaccines/pubs/pinkbook.
Cuestionario de contraindicaciones para la vacuna inyectable contra la gripe

Para pacientes adultos y para los padres de niños a los que se van a vacunar:

Las siguientes preguntas nos ayudarán a determinar si hay algún motivo por el cual no deberíamos aplicar hoy la vacuna inyectable contra la influenza (la gripe) a usted o a su hijo. Si contesta “sí” a alguna de las preguntas, eso no siempre quiere decir que usted (o su hijo) no se debe vacunar. Simplemente quiere decir que hay que hacerles más preguntas. Si alguna pregunta no está clara, pida a su profesional de la salud que se la explique.

<table>
<thead>
<tr>
<th>Pregunta</th>
<th>Sí</th>
<th>No</th>
<th>No sabe</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. La persona que se va a vacunar, ¿está enferma hoy?</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2. La persona que se va a vacunar, ¿es alérgica a los huevos o a algún componente de la vacuna?</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3. La persona que se va a vacunar, ¿tuvo alguna vez una reacción seria a la vacuna contra la influenza (gripe)?</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>4. La persona que se va a vacunar, ¿tuvo alguna vez el síndrome de Guillain-Barré?</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Formulario llenado por: ___________________________________________ Fecha: _________________

Formulario revisado por: ___________________________________________ Fecha: _________________
Information for Health Professionals about the Screening Checklist for Contraindications to Inactivated Injectable Influenza Vaccination

Are you interested in knowing why we included a certain question on the screening checklist? If so, read the information below. If you want to find out even more, consult the sources listed at the bottom of this page.

1. Is the person to be vaccinated sick today?
   There is no evidence that acute illness reduces vaccine efficacy or increases vaccine adverse events. People with an acute febrile illness usually should not be vaccinated until their symptoms have improved. Minor illnesses with or without fever do not contraindicate use of influenza vaccine. Do not withhold vaccination if a person is taking antibiotics.

2. Does the person to be vaccinated have an allergy to eggs or to a component of the vaccine?
   Allergic reactions to any vaccine component can occur. The majority of reactions probably are caused by residual egg protein. Although current influenza vaccines contain only a limited quantity of egg protein, this protein can induce immediate allergic reactions among people who have severe egg allergy.

   People who have experienced a serious systemic or anaphylactic reaction (e.g., hives, swelling of the lips or tongue, acute respiratory distress, or collapse) after eating eggs should consult a specialist for appropriate evaluation to help determine if vaccine should be administered. People who have documented immunoglobulin E (IgE)-mediated hypersensitivity to eggs, including those who have had occupational asthma or other allergic responses to egg protein, might also be at increased risk for allergic reactions to influenza vaccine. Protocols have been published for safely administering influenza vaccine to people with egg allergies (see source 3).

   Some people who report allergy to egg might not be egg-allergic. If a person can eat lightly cooked eggs (e.g., scrambled eggs), they are unlikely to have an egg allergy. However, people who can tolerate egg in baked products (e.g., cake) might still have an egg allergy. If the person develops hives only after ingesting eggs, CDC recommends 1) they receive TIV (not LAIV), 2) the vaccine be administered by a healthcare provider familiar with the potential manifestations of egg allergy, and 3) the vaccine recipient be observed for at least 30 minutes after receipt of the vaccine for signs of a reaction.

   Fluzone (sanofi pasteur) contains gelatin as a stabilizer; therefore a history of anaphylactic reaction to gelatin is a contraindication. Some inactivated influenza vaccines contain thimerosal as a preservative. Most people who had sensitivity to thimerosal when it was used in contact lens solution do not have reactions to thimerosal when it is used in vaccines. Check the package inserts at www.immunize.org/packageinserts for information on which vaccines are affected, or go to www.cdc.gov/vaccines/pubs/pinkbook/downloads/appendices/B/excipient-table-2.pdf.

   Some vaccines also contain latex in the prefilled syringe cap which may cause allergic reactions in latex sensitive people. Check the package inserts at www.immunize.org/packageinserts for information on which vaccines are affected, or go to www.cdc.gov/vaccines/pubs/pinkbook/downloads/appendices/B/latex-table.pdf.

3. Has the person to be vaccinated ever had a serious reaction to influenza vaccine in the past?
   Patients reporting a serious reaction to a previous dose of inactivated influenza vaccine should be asked to describe their symptoms. Immediate—presumably allergic—reactions are usually a contraindication to further vaccination against influenza.

   Fever, malaise, myalgia, and other systemic symptoms most often affect persons who are first-time vaccines. These mild-to-moderate local reactions are not a contraindication to future vaccination. Also, red eyes or mild upper facial swelling following vaccination with inactivated injectable influenza vaccine is most likely a coincidental event and not related to the vaccine; these people can receive injectable vaccine without further evaluation.

4. Has the person to be vaccinated ever had Guillain-Barré syndrome?
   It is prudent to avoid vaccinating people who are not at high risk for severe influenza complications (see source 3) but who are known to have developed Guillain-Barré syndrome (GBS) within 6 weeks after receiving a previous influenza vaccination. As an alternative, physicians might consider using influenza antiviral chemoprophylaxis for these people. Although data are limited, the established benefits of influenza vaccination for the majority of people who have a history of GBS, and who are at high risk for severe complications from influenza, justify yearly vaccination.

Sources:
1. CDC. Epidemiology & Prevention of Vaccine-Preventable Diseases, W.L. Atkinson et al., editors. at www.cdc.gov/vaccines/pubs/pinkbook.
VACCINE INFORMATION STATEMENT

Influenza Vaccine

What You Need to Know

2013-2014

1 Why get vaccinated?

Influenza (“flu”) is a contagious disease that spreads around the United States every winter, usually between October and May.

Flu is caused by the influenza virus, and can be spread by coughing, sneezing, and close contact.

Anyone can get flu, but the risk of getting flu is highest among children. Symptoms come on suddenly and may last several days. They can include:

- fever/chills
- sore throat
- muscle aches
- fatigue
- cough
- headache
- runny or stuffy nose

Flu can make some people much sicker than others. These people include young children, people 65 and older, pregnant women, and people with certain health conditions—such as heart, lung or kidney disease, or a weakened immune system. Flu vaccine is especially important for these people, and anyone in close contact with them.

Flu can also lead to pneumonia, and make existing medical conditions worse. It can cause diarrhea and seizures in children.

Each year thousands of people in the United States die from flu, and many more are hospitalized.

Flu vaccine is the best protection we have from flu and its complications. Flu vaccine also helps prevent spreading flu from person to person.

2 Live, attenuated flu vaccine—LAIV, Nasal Spray

There are two types of influenza vaccine:

You are getting a live, attenuated influenza vaccine (called LAIV), which is sprayed into the nose. “Attenuated” means weakened. The viruses in the vaccine have been weakened so they can’t make you sick.

A different vaccine, the “flu shot,” is an inactivated vaccine (not containing live virus). It is given by injection with a needle. This vaccine is described in a separate Vaccine Information Statement.

Flu vaccine is recommended every year. Children 6 months through 8 years of age should get two doses the first year they get vaccinated.

Flu viruses are always changing. Each year’s flu vaccine is made to protect from viruses that are most likely to cause disease that year. While flu vaccine cannot prevent all cases of flu, it is our best defense against the disease. LAIV protects against 4 different influenza viruses.

It takes about 2 weeks for protection to develop after the vaccination, and protection lasts several months to a year.

Some illnesses that are not caused by influenza virus are often mistaken for flu. Flu vaccine will not prevent these illnesses. It can only prevent influenza.

LAIV may be given to people 2 through 49 years of age, who are not pregnant. It may safely be given at the same time as other vaccines.

LAIV does not contain thimerosal or other preservatives.

3 Some people should not get this vaccine

Tell the person who gives you the vaccine:

- If you have any severe (life-threatening) allergies, including an allergy to eggs. If you ever had a life-threatening allergic reaction after a dose of flu vaccine, or have a severe allergy to any part of this vaccine, you should not get a dose.

- If you ever had Guillain-Barré Syndrome (a severe paralyzing illness, also called GBS). Some people with a history of GBS should not get this vaccine. This should be discussed with your doctor.

- If you have gotten any other vaccines in the past 4 weeks, or if you are not feeling well. They might suggest waiting. But you should come back.

Many Vaccine Information Statements are available in Spanish and other languages. See www.immunize.org/vis
Hojas de Información Sobre Vacunas están disponibles en Español y en muchos otros idiomas. Visite www.immunize.org/vis

U.S. Department of Health and Human Services
Centers for Disease Control and Prevention
• You should get the flu shot instead of the nasal spray if you:
  - are pregnant
  - have a weakened immune system
  - have certain long-term health problems
  - are a young child with asthma or wheezing problems
  - are a child or adolescent on long-term aspirin therapy
  - have close contact with someone who needs special care for an extremely weakened immune system
  - are younger than 2 or older than 49 years. (Children 6 months and older can get the flu shot. Children younger than 6 months can’t get either vaccine.)

The person giving you the vaccine can give you more information.

4 Risks of a vaccine reaction

With a vaccine, like any medicine, there is a chance of side effects. These are usually mild and go away on their own.

Serious side effects are also possible, but are very rare.

LAIV is made from weakened virus and does not cause flu.

Mild problems that have been reported following LAIV:

Children and adolescents 2-17 years of age:
  • runny nose, nasal congestion or cough
  • fever
  • headache and muscle aches
  • wheezing
  • abdominal pain or occasional vomiting or diarrhea

Adults 18-49 years of age:
  • runny nose or nasal congestion
  • sore throat
  • cough, chills, tiredness/weakness
  • headache

Severe problems that could follow LAIV:
  • A severe allergic reaction could occur after any vaccine (estimated less than 1 in a million doses).

The safety of vaccines is always being monitored. For more information, visit: www.cdc.gov/vaccinesafety/

5 What if there is a serious reaction?

What should I look for?

• Look for anything that concerns you, such as signs of a severe allergic reaction, very high fever, or behavior changes.

Signs of a severe allergic reaction can include hives, swelling of the face and throat, difficulty breathing, a fast heartbeat, dizziness, and weakness. These would start a few minutes to a few hours after the vaccination.

What should I do?

• If you think it is a severe allergic reaction or other emergency that can’t wait, call 9-1-1 or get the person to the nearest hospital. Otherwise, call your doctor.

• Afterward, the reaction should be reported to the Vaccine Adverse Event Reporting System (VAERS). Your doctor might file this report, or you can do it yourself through the VAERS web site at www.vaers.hhs.gov, or by calling 1-800-822-7967.

VAERS is only for reporting reactions. They do not give medical advice.

6 The National Vaccine Injury Compensation Program

The National Vaccine Injury Compensation Program (VICP) is a federal program that was created to compensate people who may have been injured by certain vaccines.

Persons who believe they may have been injured by a vaccine can learn about the program and about filing a claim by calling 1-800-338-2382 or visiting the VICP website at www.hrsa.gov/vaccinecompensation.

7 How can I learn more?

• Ask your doctor.
• Call your local or state health department.
• Contact the Centers for Disease Control and Prevention (CDC):
  - Call 1-800-232-4636 (1-800-CDC-INFO) or
  - Visit CDC’s website at www.cdc.gov/flu

Vaccine Information Statement (Interim)
Live Attenuated Influenza Vaccine

07/26/2013

42 U.S.C. § 300aa-26
Authorization Record

Registro de Autorización para la Administración de la Vacuna Contra la Influenza

Date: ____________________________  Manufacturer and Lot No. ____________________________  Clinic Site: ____________________________

This form must be signed on the date the vaccine is administered by the person to receive the vaccine, or by the parent, guardian, or other authorized person.

I have read or had explained to me the Influenza(Nasal Spray) Vaccine Information Statement, 2013-2014. I have had an opportunity to ask questions which were answered to my satisfaction. I believe I understand the benefits and risks of influenza vaccine and request that it to be given to me or to the person for whom I am authorized to make this request.

Esta forma debe ser firmada por el recipiente de la vacuna, su padre o representante, o otra persona autorizada, para la fecha en que se administra la vacuna.

He leido o me han explicado la Hoja de Información Sobre la Vacuna Contra la Influenza (Roci en la Nariz), 2013-2014. He tenido la oportunidad de hacer preguntas las cuales fueron contestadas a mi satisfacción. Entiendo los beneficios y riesgos de la vacuna contra la influenza y solicito que se me administre o se le administre a la persona por quien estoy autorizando (a) para efectuar esta solicitud.

PRINT CLEARLY of the person to receive the immunization or signature of the authorized person who will also include the name of the person immunized.  

*PLEASE PRINT*  

ESCRIBIR CON LETRA DE IMPRENTA el recipiente o la persona autorizada de aprobar esta inmunización, incluyendo el nombre de recipiente.

<table>
<thead>
<tr>
<th></th>
<th>D.O.B</th>
<th>GENDER M/F</th>
<th>CHECK (v) ONE COLUMN ONLY</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td>(&lt; - 18)</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>(19-49)</td>
</tr>
<tr>
<td>1.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>4.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>5.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>6.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>7.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>8.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>9.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>10.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>11.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>12.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>13.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>14.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>15.</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

TOTAL: _______ _______
Please return this form once you have completed your clinics; also Return any UNOPENED & UNUSED Vials of Vaccine by:

DUE: A.S.A.P – WHEN YOUR CLINICS ARE COMPLETED

Attn: Kelly Austin, Senior PHN
PH# (209) 468-2291
SJC Public Health Services - Immunization Program
1601 E. Hazelton Ave - Stockton CA 95205

FAX# (209) 468-8361

**INJECTABLE INFLUENZA VACCINE ACCOUNTABILITY:**

1. Total doses of Influenza vaccine Received from Public Health: 
2. Total Influenza Vaccine Doses Administered, by age group: 
3. Number of Wasted Influenza doses: 
4. Explanation for Wasted Influenza Vaccine doses:

5. Remaining Influenza Vaccine Returned to Public Health, (IN DOSES - UNOPENED VIALS ONLY):

<table>
<thead>
<tr>
<th>INACTIVE</th>
<th>6-23 mos.</th>
<th>&lt;5 YRS</th>
<th>5-18</th>
<th>19-49</th>
<th>50-59</th>
<th>60-64</th>
<th>65+</th>
<th>TOTAL:</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Provider Name: 
Street Address: 
City/Zip: 
Phone Number: 
Reported By: 
Date: 

REVISED 07/30/13
INFLUENZA VACCINE ACCOUNTABILITY 2013-2014
SAN JOAQUIN COUNTY PUBLIC HEALTH

Please return this form once you have completed your clinics; also Return any UNOPENED & UNUSED Vials of Vaccine by:

DUE: A.S.A.P – WHEN YOUR CLINICS ARE COMPLETED

Attn: Kelly Austin, Senior PHN
PH# (209) 468-2291

SJC Public Health Services - Immunization Program
1601 E. Hazelton Ave - Stockton CA 95205

FAX# (209) 468-8361

FLUMIST INFLUENZA VACCINE ACCOUNTABILITY:

1. Total doses of FluMist Influenza vaccine Received from Public Health:

2. Total FluMist Vaccine Doses Administered, by age group:

3. Number of Wasted FluMist doses:

4. Explanation for Wasted FluMist Vaccine doses:

5. Remaining Flu Mist Vaccine Returned to Public Health, (IN DOSES):

<table>
<thead>
<tr>
<th>FLUMIST</th>
<th>&lt;5 YRS</th>
<th>5-18</th>
<th>19-49</th>
<th>TOTAL:</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Provider Name: ____________________________
Street Address: ___________________________
City/Zip: _________________________________
Phone Number: ____________________________
Reported By: _____________________________ Date: ____________

REVISED 07/30/13
**Screening Checklist for Contraindications to Live Attenuated Intranasal Influenza Vaccination**

For use with people ages 2 through 49 years: The following questions will help us determine if there is any reason we should not give you or your child live attenuated intranasal influenza vaccine (FluMist) today. If you answer "yes" to any question, it does not necessarily mean you (or your child) should not be vaccinated. It just means additional questions must be asked. If a question is not clear, please ask your healthcare provider to explain it.

<table>
<thead>
<tr>
<th>Question</th>
<th>Yes</th>
<th>No</th>
<th>Don't Know</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Is the person to be vaccinated sick today?</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2. Does the person to be vaccinated have an allergy to eggs or to a component of the influenza vaccine?</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3. Has the person to be vaccinated ever had a serious reaction to intranasal influenza vaccine (FluMist) in the past?</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>4. Does the person to be vaccinated have a long-term health problem with heart disease, lung disease, asthma, kidney disease, neurologic or neuromuscular disease, liver disease, metabolic disease (e.g., diabetes), or anemia or another blood disorder?</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>5. If the person to be vaccinated is a child age 2 through 4 years, in the past 12 months, has a healthcare provider ever told you that he or she had wheezing or asthma?</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>6. Does the person to be vaccinated have cancer, leukemia, HIV/AIDS, or any other immune system problem; or, in the past 3 months, have they taken medications that weaken the immune system, such as cortisone, prednisone, other steroids, or anticancer drugs; or have they had radiation treatments?</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>7. Is the person to be vaccinated receiving antiviral medications?</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>8. Is the child or teen to be vaccinated receiving aspirin therapy or aspirin-containing therapy?</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>9. Is the person to be vaccinated pregnant or could she become pregnant within the next month?</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>10. Has the person to be vaccinated ever had Guillain-Barré syndrome?</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>11. Does the person to be vaccinated live with or expect to have close contact with a person whose immune system is severely compromised and who must be in protective isolation (e.g., an isolation room of a bone marrow transplant unit)?</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>12. Has the person to be vaccinated received any other vaccinations in the past 4 weeks?</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Form completed by: ___________________________ Date: ___________________________
Form reviewed by: ___________________________ Date: ___________________________
Information for Health Professionals about the Screening Checklist for Contraindications to Live Attenuated Intranasal Influenza Vaccination

Are you interested in knowing why we included a certain question on the screening checklist? If so, read the information below. If you want to find out even more, consult the sources listed at the bottom of this page.

1. Is the person to be vaccinated sick today?
   There is no evidence that acute illness reduces vaccine efficacy or increases vaccine adverse events. People with an acute febrile illness usually should not be vaccinated until their symptoms have improved. Minor illnesses without fever do not contraindicate use of influenza vaccine. Do not withhold vaccination if a person is taking antibiotics.

2. Does the person to be vaccinated have an allergy to eggs or to a component of the influenza vaccine?
   A history of anaphylactic or non-anaphylactic reaction—such as hives, wheezing, or difficulty breathing, or circulatory collapse or shock (not fainting)—after eating eggs or receiving any component of the intranasal live attenuated influenza vaccine (LAIV, tradename FluMist) is usually a contraindication for further doses. People with egg allergy can usually be vaccinated with trivalent inactivated influenza vaccine (TVI); consult ACIP recommendations (see source 3). For a complete list of vaccine components (i.e., excipients and culture media) used in the production of the vaccine, check the package insert (at www.immunize.org/packageinserts) or go to www.cdc.gov/vaccines/pubs/pinkbook/downloads/appendices/b/excipient-table-2.pdf.

3. Has the person to be vaccinated ever had a serious reaction to intranasal influenza vaccine (FluMist) in the past?
   Patients reporting a serious reaction to a previous dose of LAIV should be asked to describe their symptoms. Immediate—presumably allergic—reactions are usually a contraindication to further vaccination with LAIV.

4. Does the person to be vaccinated have a long-term health problem with heart disease, lung disease, asthma, kidney disease, neurologic or neuromuscular disease, liver disease, metabolic disease (e.g., diabetes), or any other blood disorder?
   People with any of these health conditions should not be given LAIV. Instead, they should be vaccinated with the inactivated injectable influenza vaccine.

5. If the person to be vaccinated is a child age 2 through 4 years, in the past 12 months, has a healthcare provider ever told you that he or she had wheezing or asthma?
   LAIV is not recommended for children this age if their parent or guardian answers yes to this question or if the child has a history of asthma or recurrent wheezing. Instead, the child should be given the inactivated injectable influenza vaccine.

6. Does the person to be vaccinated have cancer, leukemia, HIV/AIDS, or any other immune system problem; or, in the past 3 months, have they taken medications that weaken the immune system, such as cortisone, prednisone, other steroids, or anticancer drugs; or have they had radiation treatments?
   People with weakened immune systems should not be given LAIV. Instead, they should be given the inactivated injectable influenza vaccine.

7. Is the person to be vaccinated receiving antiviral medications?
   Receipt of certain influenza antivirals (e.g., amantadine, rimantadine, zanamivir, oseltamivir) could reduce LAIV vaccine efficacy; therefore, providers may want to defer vaccination with LAIV in people who took these antivirals within the previous 48 hours and to advise avoiding use of these antivirals for 14 days after vaccination, if feasible.

8. Is the child or teen to be vaccinated receiving aspirin therapy or aspirin-containing therapy?
   Because of the theoretical risk of Reye’s syndrome, children and teens on aspirin therapy should not be given LAIV. Instead they should be vaccinated with the inactivated injectable influenza vaccine.

9. Is the person to be vaccinated pregnant or could she become pregnant within the next month?
   Pregnant women or women planning to become pregnant within a month should not be given LAIV. All pregnant women should, however, be vaccinated with the inactivated injectable influenza vaccine.

10. Has the person to be vaccinated ever had Guillain-Barré syndrome?
    It is prudent to avoid vaccinating people who are not at high risk for severe influenza complications who have recovered from Guillain-Barré syndrome (GBS) within 6 weeks after receiving a previous influenza vaccination. As an alternative, physicians might consider using influenza antiviral chemoprophylaxis for these people. Although data are limited, the established benefits of influenza vaccination for the majority of people who have a history of GBS, and who are at high risk for severe complications from influenza, justify yearly vaccination.

11. Does the person to be vaccinated live with or expect to have close contact with a person whose immune system is severely compromised and who must be in a protective isolation (e.g., an isolation room of a bone marrow transplant unit)?
    Inactivated injectable influenza vaccine is preferred for people who anticipate close contact with a severely immunosuppressed person during periods in which the immunosuppressed person requires care in protective isolation (e.g., in a specialized patient-care area with a positive airflow relative to the corridor, high-efficiency particulate air filtration, and frequent air changes). Either the inactivated injectable influenza vaccine or LAIV may be used in people who have close contact with people having lesser degrees of immunosuppression.

12. Has the person to be vaccinated received any other vaccinations in the past 4 weeks?
    People who were given an injectable live virus vaccine (e.g., MMR, MMRV, varicella, zoster, yellow fever) in the past 4 weeks should wait 28 days before receiving LAIV. There is no reason to defer giving LAIV if people were vaccinated with an inactivated vaccine or if they have recently received blood or other antibody-containing blood products (e.g., IG).

Sources:
Summary* Recommendations: Prevention and Control of Influenza with Vaccines: Recommendations of the Advisory Committee on Immunization Practices—(ACIP)—United States, 2013-14

Influenza Prevention and Control Recommendations

This document is a summary of the recommendations of the Advisory Committee on Immunization Practices for the 2013-2014 season in the United States. The full recommendations will be published in Morbidity and Mortality Weekly Report (MMWR) (http://www.cdc.gov/mmwr/).

Note on abbreviations: This document includes revised abbreviations to refer to currently available influenza vaccines. Specifically:

• The former abbreviation TIV (Trivalent Inactivated Influenza Vaccine, previously used for inactivated influenza vaccines) has been replaced with the new abbreviation IIV (Inactivated Influenza Vaccine). For 2013-14, IIVs as a class will include:
  • egg-based and cell culture-based trivalent inactivated influenza vaccines (IIV3), and
  • egg-based quadrivalent inactivated influenza vaccine (IIV4).
• RIV refers to recombinant hemagglutinin influenza vaccine, available as a trivalent formulation (RIV3) for 2013-14;
• LAIV refers to live-attenuated influenza vaccine, available as a quadrivalent formulation (LAIV4) for 2013-14.
• LAIV, IIV, and RIV denote vaccine categories; numeric suffix specifies the number of antigens in the vaccine.
• Where necessary to refer specifically to cell culture-based vaccine, the prefix “cc” is used (e.g., “ccIIV3”).

Primary Changes and Updates in the Recommendations

• Routine annual influenza vaccination of all persons aged 6 months and older continues to be recommended.
• 2013-14 U.S. trivalent influenza vaccines will contain an A/California/7/2009 (H1N1)-like virus, an H3N2 virus antigenically like the cell-propagated prototype virus A/Victoria/361/2011, and a B/Massachusetts/2/2012-like virus. Quadrivalent vaccines will include an additional vaccine virus, a B/Brisbane/60/2008-like virus.
• Several new, recently-licensed vaccines will be available for the 2013-14 season, and are acceptable alternatives to other licensed vaccines indicated for their respective age groups when otherwise appropriate:
  • A quadrivalent live attenuated influenza vaccine (LAIV4; Flumist® Quadrivalent [MedImmune]) is expected to replace the trivalent (LAIV3) formulation. FluMist® Quadrivalent is indicated for healthy, nonpregnant persons aged 2 through 49 years;
  • A quadrivalent inactivated influenza vaccine (IIV4; Fluarix® Quadrivalent [GlaxoSmithKline]) will be available, in addition to the previous trivalent formulation. Fluarix® Quadrivalent is indicated for persons aged 3 years and older;
  • A quadrivalent inactivated influenza vaccine (IIV4; Fluzone® Quadrivalent [Sanofi Pasteur]) will be available in addition to the previous trivalent formulation. Fluzone® Quadrivalent is indicated for persons aged 6 months and older;
  • A trivalent cell culture-based inactivated influenza vaccine (ccIIV3; Flucelvax® [Novartis]), which is indicated for persons aged 18 years and older; and
  • A recombinant hemagglutinin (HA) vaccine (RIV3; FluBlok® [Protein Sciences]), which is indicated for persons aged 18 through 49 years.
• Within approved indications and recommendations, no preferential recommendation is made for any type or brand of licensed influenza vaccine over another.

Timing of Vaccination

• In general, health-care providers should begin offering vaccination soon after vaccine becomes available, and if possible, by October.
All children aged 6 months--8 years who are recommended for 2 doses (Figure 1) should receive their first dose as soon as possible after vaccine becomes available; these children should receive the second dose ≥4 weeks later.

Available Vaccine Products and Indications

A variety of influenza vaccine products are available (Table 1), including (as of July 2013) five newly approved vaccines. For many vaccine recipients, more than one type or brand of vaccine may be appropriate within indications and ACIP recommendations. Where more than one type of vaccine is appropriate and available, no preferential recommendation is made for use of any influenza vaccine product over another.

Persons at Risk for Medical Complications Due to Influenza

Vaccination to prevent influenza is particularly important for persons who are at increased risk for severe complications from influenza, or at higher risk for influenza-related outpatient, emergency department, or hospital visits. 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, neurological, 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--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;
- Persons who are morbidly obese (BMI ≥40).

Persons Who Live With or Care for Persons at Higher Risk for Influenza-Related Complications

All persons aged ≥6 months should be vaccinated annually. Continued emphasis should be placed on vaccination of persons who live with or care for persons at higher risk for influenza-related complications. When vaccine supply is limited, vaccination efforts should focus on delivering vaccination to persons at higher risk for influenza-related complications listed above, as well as these persons:

- Healthcare personnel (HCP);
- Household contacts (including children) and caregivers of children aged ≤59 months (i.e., aged <5 years) and adults aged ≥50 years, with particular emphasis on vaccinating contacts of children aged <6 months; and
- Household contacts (including children) and caregivers of persons with medical conditions that put them at higher risk for severe complications from influenza.

HCP and persons who are contacts of persons in these groups and who are not contacts of severely immunocompromised persons (those living in a protective environment) may receive any influenza vaccine which is otherwise indicated. Individuals who care for the severely immunocompromised should receive either IIV or RIV3.

Vaccine Dose Considerations for Children 6 Months through 8 Years of Age

Children aged 6 months through 8 years who are receiving influenza vaccine for the first time, and some in this age group who have previously been vaccinated, require two doses of vaccine administered ≥4 weeks apart. Two approaches for determining the number of doses are recommended, both of which are acceptable:

1. The first approach, outlined in the flowchart (Figure 1), takes into consideration only doses of seasonal influenza vaccine received since July 1, 2010. This approach has the advantage of simplicity, particularly in settings in which it is difficult to ascertain vaccination history prior to the 2010-11 season. Using this approach, children 6 months through 8 years of age need only 1 dose of vaccine in 2013-14 if they received a total of 2 or more doses of seasonal vaccine since July 1, 2010. Children who did not receive a total of 2 or more doses of seasonal vaccine since July 1, 2010 require 2 doses in 2013-14.
2. In settings where adequate vaccination history from prior to the 2010-11 season is available, the second
approach may be used. By this approach (Figure 1 (figure1), footnote), if a child 6 months through 8 years of
age is known to have received at least 2 doses of seasonal influenza vaccine during any prior season, and at
least 1 dose of a 2009(H1N1)-containing vaccine—i.e., 2010-11, 2011-12, or 2012-13 seasonal vaccine or the
monovalent 2009(H1N1) vaccine—then the child needs only 1 dose for 2013-14. Using this approach, children 6
months through 8 years of age need only 1 dose of vaccine in 2013-14 if they have received any of the following:
- 2 or more doses of seasonal influenza vaccine since July 1, 2010 or;
- 2 or more doses of seasonal influenza vaccine before July 1, 2010 and 1 or more doses of monovalent 2009
(H1N1) vaccine or;
- 1 or more doses of seasonal influenza vaccine before July 1, 2010 and 1 or more doses of seasonal influenza
vaccine since July 1, 2010.

Children 6 months through 8 years of age for whom one of these conditions is not met require 2 doses in 2013-14.

Influenza Vaccination for Pregnant Women
- Women who are or will be pregnant during influenza season should receive IIV. Live attenuated influenza
vaccine (LAIV) is not recommended for use during pregnancy.
- Postpartum women can receive either LAIV or IIV.
- Pregnant and postpartum women do not need to avoid contact with persons recently vaccinated with LAIV.

Influenza Vaccination of Persons with a History of Egg Allergy
1. Persons with a history of egg allergy who have experienced only hives after exposure to egg should receive
influenza vaccine. Because relatively little data are available for use of LAIV in this setting, IIV or RIV should
be used. RIV is egg-free and may be used for persons aged 18-49 years who have no other contraindications.
However, IIV (egg- or cell-culture based) may also be used, with the following additional safety measures
(Figure 2 (figure2)):
   1. Vaccine should be administered by a healthcare provider who is familiar with the potential
      manifestations of egg allergy; and
   2. Vaccine recipients should be observed for at least 30 minutes for signs of a reaction after administration
      of each vaccine dose (1).
2. Persons who report having had reactions to egg involving such symptoms as angioedema, respiratory distress,
lightheadedness, or recurrent emesis; or who required epinephrine or another emergency medical intervention
may receive RIV3, if aged 18 through 49 years and there are no other contraindications. If RIV3 is not available
or the the recipient is not within the indicated age range, such persons should be referred to a physician with
expertise in the management of allergic conditions for further risk assessment before receipt of vaccine (Figure
2 (figure2)).
3. All vaccines should be administered in settings in which personnel and equipment for rapid recognition and
treatment of anaphylaxis are available.
4. Some persons who report allergy to egg might not be egg-allergic. Those who are able to eat lightly cooked egg
(e.g., scrambled egg) without reaction are unlikely to be allergic. Egg-allergic persons might tolerate egg in
baked products (e.g., bread or cake). Tolerance to egg-containing foods does not exclude the possibility of egg
allergy (2). Egg allergy can be confirmed by a consistent medical history of adverse reactions to eggs and egg-
containing foods, plus skin and/or blood testing for immunoglobulin E antibodies to egg proteins.
5. For individuals who have no known history of exposure to egg, but who are suspected of being egg-allergic on
the basis of previously performed allergy testing, consultation with a physician with expertise in the
management of allergic conditions should be obtained prior to vaccination (Figure 2 (figure2)). Alternatively,
RIV3 may be administered if the recipient is aged 18 through 49 years.
6. A previous severe allergic reaction to influenza vaccine, regardless of the component suspected to be
responsible for the reaction, is a contraindication to future receipt of the vaccine.

Influenza Vaccines and Use of Influenza Antiviral Medications
- Administration of IIV to persons receiving influenza antiviral drugs for treatment or chemoprophylaxis is
acceptable.
- LAIV should not be administered until 48 hours after cessation of influenza antiviral therapy.
- If influenza antiviral medications are administered within 2 weeks after receipt of LAIV, the vaccine dose should
be repeated 48 or more hours after the last dose of antiviral medication.
• Persons receiving antiviral drugs within the period 2 days before to 14 days after vaccination with LAIV should be revaccinated at a later date with any approved vaccine formulation (3).

Concurrent Administration of Influenza Vaccine With Other Vaccines
• Inactivated vaccines do not interfere with the immune response to other inactivated vaccines or to live vaccines.
• Inactivated or live vaccines can be administered simultaneously with LAIV.
• However, after administration of a live vaccine, at least 4 weeks should pass before another live vaccine is administered.

<table>
<thead>
<tr>
<th>Vaccine</th>
<th>Trade name</th>
<th>Manufacturer</th>
<th>Presentation</th>
<th>Mercury content (µg Hg/0.5 mL)</th>
<th>Ovalbulmin content (µg/0.5 mL)</th>
<th>Age indications</th>
<th>Route</th>
</tr>
</thead>
<tbody>
<tr>
<td>Inactivated influenza vaccine, standard dose</td>
<td>Afluria®</td>
<td>CSL Limited</td>
<td>0.5 mL single-dose prefilled syringe</td>
<td>0.0</td>
<td>≤ 0.5</td>
<td>≥ 9 yrs.**</td>
<td>IM†</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>5.0 mL multidose vial</td>
<td>24.5</td>
<td>≤ 0.5</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Fluarix®</td>
<td>GlaxoSmithKline</td>
<td>0.5 mL single-dose prefilled syringe</td>
<td>0.0</td>
<td>≤ 0.05</td>
<td>≥ 3 yrs.</td>
<td>IM†</td>
</tr>
<tr>
<td></td>
<td>Flucelvax®</td>
<td>Novartis Vaccines</td>
<td>0.5 mL single-dose prefilled syringe</td>
<td>0.0</td>
<td>＄ ＄ ＄</td>
<td>≥ 18 yrs.</td>
<td>IM†</td>
</tr>
<tr>
<td></td>
<td>FluLaval®</td>
<td>ID Biomedical Corporation of Quebec (distributed by GlaxoSmithKline)</td>
<td>5.0 mL multidose vial</td>
<td>&lt; 0.05</td>
<td>≤ 0.3</td>
<td>≥ 3 yrs</td>
<td>IM†</td>
</tr>
<tr>
<td></td>
<td>Fluvirin®</td>
<td>Novartis Vaccines</td>
<td>0.5 mL single-dose prefilled syringe</td>
<td>≤ 0.05</td>
<td>≤ 0.05</td>
<td>≥ 4 yrs.</td>
<td>IM†</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>5.0 mL multidose vial</td>
<td>25.0</td>
<td>≤ 0.05</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Fluzone®</td>
<td>Sanofi Pasteur</td>
<td>0.25 mL single-dose prefilled syringe</td>
<td>0.0</td>
<td>＄ ＄ ＄</td>
<td>6-35 mos.</td>
<td>IM†</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>0.5 mL single-dose prefilled syringe</td>
<td>0.0</td>
<td>＄ ＄ ＄</td>
<td>≥ 36 mos.</td>
<td>IM†</td>
</tr>
<tr>
<td>Vaccine</td>
<td>Manufacturer</td>
<td>Dose</td>
<td>Age Group</td>
<td>Route</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>-------------------------------</td>
<td>-----------------------------</td>
<td>-----------------------</td>
<td>-----------</td>
<td>-------</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Fluzone® IntradermalIC</td>
<td>Sanofi Pasteur</td>
<td>0.1 mL prefilled</td>
<td>18-64 yrs.</td>
<td>ID</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Inactivated Influenza Vaccine, Trivalent (IIV3), High Dose**</td>
<td></td>
<td>microinjection system</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Fluzone® High-Dose</td>
<td>Sanofi Pasteur</td>
<td>0.5 mL single-dose prefilled syringe</td>
<td>≥65 yrs.</td>
<td>IM†</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Fluarix® Quadrivalent</td>
<td>GlaxoSmithKline</td>
<td>0.5 mL single-dose prefilled syringe</td>
<td>≥3 yrs.</td>
<td>IM†</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>FluLaval® Corporation of Quebec</td>
<td>distributed by GlaxoSmithKline</td>
<td>5.0 mL multidose vial</td>
<td>≥3 yrs.</td>
<td>IM†</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Fluzone® Quadrivalent</td>
<td>Sanofi Pasteur</td>
<td>0.5 mL single-dose prefilled syringe</td>
<td>≥36 mos.</td>
<td>IM†</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

| Recombinant Influenza Vaccine, Trivalent (RIV3) | FluBlok® | Protein Sciences | 0.5 mL single-dose vial | 0.0 | 0.0 | 18-49 yrs. | IM† |

| Live-attenuated Influenza Vaccine, Quadrivalent (LAIV4) | FluMist® Quadrivalent§§ | MedImmune | 0.2 mL prefilled intranasal sprayer | 0.0 (per 0.2 mL) | <0.24 (per 0.2 mL) | 2-49 yrs.*** | IN |

*IM†: Intramuscular dose
*ID*: Intradermal dose
*IT*: Intranasal dose

**High Dose**: Indicates a higher dose than standard

***LAIV4**: Live-attenuated Intranasal Influenza Vaccine, Quadrivalent

§§§: Prefilled doses in syringes

****: Doses are given as single-dose vials

---

Note: The table provides a summary of available influenza vaccines, their manufacturers, dosages, and recommended age groups and routes of administration. The table includes details on single- and multidose vials, prefilled syringes, and intranasal sprayers, along with specific indications and age ranges for each vaccine type.
IV = Inactivated Influenza Vaccine; IIV3 = Inactivated Influenza Vaccine, Trivalent; IIV4 = Inactivated Influenza Vaccine, Quadrivalent; RIV = Recombinant Influenza Vaccine LAIV = Live-Attenuated Influenza Vaccine; IM = intramuscular; ID = intradermal; IN = intranasal.

Immunization providers should check Food and Drug Administration–approved prescribing information for 2013–14 influenza 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.

For adults and older children, the recommended site of vaccination is the deltoid muscle. The preferred site for infants and young children is the anterolateral aspect of the thigh. Specific guidance regarding site and needle length for intramuscular administration may be found in the ACIP General Recommendations on Immunization [4].

The preferred site is over the deltoid muscle. Fluzone® Intradermal is administered using the delivery system included with the vaccine.

* Inactivated influenza vaccine, high-dose: A 0.5-mL dose contains 60 µg of each vaccine antigen (180 µg total).
† Inactivated influenza vaccine, intradermal: A 0.1-mL dose contains 9 µg of each vaccine antigen (27 µg total).
§ It is anticipated that the quadrivalent formulation of FluMist® will replace the trivalent formulation for the 2013-14 season.
Flumist® is shipped refrigerated and stored in the refrigerator at 35°F–46°F (2°C–8°C) after arrival in the vaccination clinic. The dose is 0.2 mL divided equally between each nostril. Health-care providers should consult the medical record, when available, to identify children aged 2–4 years with asthma or recurrent wheezing that might indicate asthma. In addition, to identify children who might be at greater risk for asthma and possibly at increased risk for wheezing after receiving LAIV, parents or caregivers of children aged 2–4 years should be asked: "In the past 12 months, has a health-care provider ever told you that your child had wheezing or asthma?" Children whose parents or caregivers answer "yes" to this question and children who have asthma or who had a wheezing episode noted in the medical record within the past 12 months should not receive FluMist®.

*** Flumist® is indicated for healthy, non-pregnant persons aged 2–49 years. Individuals who care for severely immunosuppressed persons who require a protective environment should not receive FluMist® given the theoretical risk of transmission of the live attenuated vaccine virus.

++ Age indication per package insert is ≥5 years; however, the ACIP recommends Afluria® not be used in children aged 6 months through 8 years because of increased risk of febrile reactions noted in this age group with CSL's 2010 Southern Hemisphere IIV3. If no other age-appropriate, licensed inactivated seasonal influenza vaccine is available for a child aged 5–8 years who has a medical condition that increases the child's risk for influenza complications, Afluria® can be used; however, providers should discuss with the 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 (5).

$$$ Information not included in package insert. The total egg protein is estimated to be less than 50 femtograms (5 x 10^-14 grams) total egg protein, of which a fraction is ovalbumin, per 0.5 mL dose of Flucelvax®.

**** Available upon request from Sanofi Pasteur, by telephone, 1-800-822-2463, or e-mail, MIS.Emails@sanofipasteur.com.

**TABLE 2. Contraindications and Precautions to the Use of Influenza Vaccines, 2013-14.**

<table>
<thead>
<tr>
<th>Vaccine</th>
<th>Contraindications</th>
<th>Precautions</th>
</tr>
</thead>
<tbody>
<tr>
<td>IIV (includes IIV3, IIV4, and cIIV)</td>
<td>History of severe allergic reaction to any component of the vaccine, including egg protein, or after previous dose of any influenza vaccine.</td>
<td>Moderate to severe illness with or without fever. History of Guillain-Barré syndrome within 6 weeks of receipt of influenza vaccine.</td>
</tr>
<tr>
<td>RIV</td>
<td>History of severe allergic reaction to any component of the vaccine.</td>
<td>Moderate to severe illness with or without fever.</td>
</tr>
</tbody>
</table>
Children aged 2--4 years whose parents or caregivers report that a health-care provider (HCP) has told them during the preceding 12 months that their child had wheezing or asthma or whose medical record indicates a wheezing episode has occurred during the preceding 12 months (see screening guidance, footnote in Table 1);

- Persons with asthma;
- Children and adults who have chronic pulmonary, cardiovascular (except isolated hypertension), renal, hepatic, neurologic/neuromuscular, hematologic, or metabolic disorders;
- Children and adults who have immunosuppression (including immunosuppression caused by medications or by HIV);
- Persons with egg allergy;
- Close contacts and caregivers of severely immunosuppressed persons who require a protected environment;
- Pregnant women

History of Guillain-Barré syndrome within 6 weeks of receipt of influenza vaccine.

Moderate to severe illness with or without fever.

History of Guillain-Barré syndrome within 6 weeks of receipt of influenza vaccine.

FIGURE 1. Influenza vaccine dosing algorithm for children aged 6 months through 8 years — Advisory Committee on Immunization Practices, United States, 2013–14 influenza season.
Doses should be administered at least 4 weeks apart.

For simplicity, this algorithm takes into consideration only doses of seasonal influenza vaccine received since July 2010. As an alternative approach in settings where vaccination history from before July 1, 2010, is available, if a child aged 6 months through 8 years is known to have received at least 2 seasonal influenza vaccines during any previous season, and at least 1 dose of a 2009(H1N1)-containing vaccine (i.e., 2010-11, 2011-12, or 2012-13 seasonal vaccine or the monovalent 2009[H1N1] vaccine), then the child needs only 1 dose for 2013-14. Using this approach, children aged 6 months through 8 years need only 1 dose of vaccine in 2013-14 if they have received any of the following: 1) 2 or more doses of seasonal influenza vaccine since July 1, 2010; 2) 2 or more doses of seasonal influenza vaccine before July 1, 2010, and 1 or more doses of monovalent 2009(H1N1) vaccine; or 3) 1 or more doses of seasonal influenza vaccine before July 1, 2010, and 1 or more doses of seasonal influenza vaccine since July 1, 2010. Children in this age group for whom one of these conditions is not met require 2 doses in 2013-2014.

FIGURE 2. Recommendations regarding influenza vaccination of persons who report allergy to eggs: Advisory Committee on Immunization Practices, United States, 2013-14 Influenza season.
Can the person eat lightly cooked egg (e.g., scrambled egg) without reaction?*

No

After eating eggs or egg-containing foods, does the person experience ONLY hives?

No

After eating eggs or egg-containing foods, does the individual experience other symptoms such as:

- Cardiovascular changes (e.g., hypotension)
- Respiratory distress (e.g., wheezing)
- Gastrointestinal (e.g., nausea/vomiting)
- Reaction requiring epinephrine
- Reaction requiring emergency medical attention

Yes

Administer RIV3, if patient aged 18 through 49 yrs.:

OR

Administer IV

Observe for reaction for at least 30 minutes following vaccination

Yes

Administer RIV3, if patient aged 18 through 49 yrs.:

OR

Refer to a physician with expertise in management of allergic conditions for further evaluation

IIV = Inactivated Influenza Vaccine; RIV3 = Recombinant Influenza Vaccine, Trivalent

*Individuals with egg allergy may tolerate egg in baked products (e.g., bread, cake). Tolerance to egg-containing foods does not exclude the possibility of egg allergy (2).

† For individuals who have no known history of exposure to egg, but who are suspected of being egg-allergic on the basis of previously performed allergy testing, consultation with a physician with expertise in the management of allergic conditions should be obtained prior to vaccination. Alternatively, RIV3 may be administered if the recipient is aged 18 through 49 years.

References

Guides for determining the number of doses of influenza vaccine to give to children age 6 months through 8 years during the 2013–2014 influenza season

**ALGORITHM GUIDE**

Has the child ever received influenza vaccine?

**YES**

Did the child receive 2 or more doses of seasonal influenza vaccine since July 1, 2010?

**YES**

Give 1 dose of 2013–2014 influenza vaccine this season.

**NO/NOT SURE**

Give 2 doses of 2013–2014 influenza vaccine this season, spaced at least 4 weeks apart.

**TABLE GUIDE**

<table>
<thead>
<tr>
<th>Number of doses of influenza vaccine received since July 1, 2010</th>
<th>Number of doses recommended for the 2013–14 season</th>
</tr>
</thead>
<tbody>
<tr>
<td>none or unknown</td>
<td>2</td>
</tr>
<tr>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td>2</td>
<td>1</td>
</tr>
</tbody>
</table>

Note: CDC has developed an alternative approach that may be used with children who have documented histories (e.g., maintained in electronic registries) of influenza vaccination prior to the 2010–11 season. With this approach, children age 6 months through 8 years need only 1 dose of vaccine in 2013–14 if they have received any of the following: 1) 2 or more doses of seasonal influenza vaccine since July 1, 2010; 2) at least 2 doses of seasonal vaccine given before July 1, 2010 and at least 1 dose of monovalent 2009 H1N1 vaccine; or 3) at least 1 dose of seasonal vaccine given before July 1, 2010 and at least 1 dose of seasonal vaccine since July 1, 2010. All other children age 6 months through 8 years should receive 2 doses of 2013–14 vaccine.
FIGURE 2. Recommendations regarding influenza vaccination of persons who report allergy to eggs: Advisory Committee on Immunization Practices, United States, 2013-14 Influenza season.

Can the person eat lightly cooked egg (e.g., scrambled egg) without reaction?*

No

After eating eggs or egg-containing foods, does the person experience ONLY hives?

No

After eating eggs or egg-containing foods, does the individual experience other symptoms such as:
- Cardiovascular changes (e.g., hypotension)
- Respiratory distress (e.g., wheezing)
- Gastrointestinal (e.g., nausea/vomiting)
- Reaction requiring epinephrine
- Reaction requiring emergency medical attention

Yes

Administer vaccine per usual protocol

Administer RIV3, if patient aged 18 through 49 yrs.:

OR

Administer IIV

Observe for reaction for at least 30 minutes following vaccination

Administer RIV3, if patient aged 18 through 49 yrs.:

OR

Refer to a physician with expertise in management of allergic conditions for further evaluation

IIV=Inactivated Influenza Vaccine; RIV3=Recombinant Influenza Vaccine, Trivalent

*Individuals with egg allergy may tolerate egg in baked products (e.g., bread, cake). Tolerance to egg-containing foods does not exclude the possibility of egg allergy (2).

† For individuals who have no known history of exposure to egg, but who are suspected of being egg-allergic on the basis of previously performed allergy testing, consultation with a physician with expertise in the management of allergic conditions should be obtained prior to vaccination. Alternatively, RIV3 may be administered if the recipient is aged 18 through 49 years.
Targeting younger populations may decrease annual influenza transmission cycle


- June 26, 2013

Targeting school-aged children for receipt of the seasonal influenza vaccine could greatly reduce disease morbidity and mortality within the entire population, according to recent study findings published in *Vaccine*.

"In most cases, the available flu vaccine could be used more effectively and save more lives by increasing the number of vaccinated children and young adults," study researcher Jan Medlock, PhD, of the department of biomedical sciences at Oregon State University’s College of Veterinary Medicine, said in a press release. "That approach could really limit the cycle of transmission, preventing a great deal of illness while also reducing the number of deaths among high-risk groups."

The study included participants of all ages, but researchers focused on school-aged children (5 to 17 years) and young adults (18 to 44 years), and measured infections, hospitalizations, deaths, years of life lost and contingent valuation.

Researchers found an attack rate of 32% in the absence of vaccination. Annual vaccination coverage in the United States is 34%, at nearly 100 million doses per year.

"We showed that when more than 60 million doses of vaccine were distributed, optimization over uncertainty robustly yielded prioritization of vaccination to schoolchildren and young adults for all five measures considered," researchers wrote.

When vaccine availability decreased, the priority shifted away from young adults to school-aged children. Researchers also found that if focus of vaccination shifted to include more children, young adults and those at high risk, a 25% to 200% reduction in deaths from influenza or its complications could be achieved.

"A simple program we could consider in our K to 12 schools would be to have the school nurse, or other local professional, give every child an annual flu shot, with the parents being informed about it in advance and having the option to decline," Medlock said. "Vaccinating children could prevent a great deal of illness and save many lives at all ages, not just the children. More aggressive educational campaigns to reach young adults would also be helpful."

**Disclosure:** The study was supported by the National Institute of General Medical Sciences.

---

**Perspective**

- A number of mathematical modeling studies have concluded that, in general, vaccinating a large proportion of children against influenza is the best way to minimize the impact of influenza in all age groups. The authors of this study set about to construct a model in which you could include many of the uncertainties surrounding any given influenza season, including how easily it is spread (the reproductive rate R0, or
‘R nought’), how effective the vaccine is in that season, and how much vaccine is available.
They again concluded that, in general, vaccinating a large proportion of children and young adults provides the
highest protection for the population at large, as well as for the children and young adults. However, they found that
if the amount of available vaccine is low, it becomes better to concentrate on vaccinating those at high risk of
complications. The best strategy was also influenced by how effectively the virus transmitted. When each sick
person infects many new patients (as might occur with a novel strain with a high R nought), then more lives might
be saved by focusing on high-risk persons.

The authors also commented on the difficulty of getting rates of high vaccine coverage among children and young
adults. The effectiveness of the targeted strategy requires better methods to get vaccine into those age groups.

The current US recommendations recommend influenza for all people, so this will not change clinical practice.
However, it can influence public health strategies that aim to improve vaccination rates and may provide insights
into how best to deal with vaccine shortages.

• Andrew T. Pavia, MD, FAAP, FIDSA
  • Chief, Division of Pediatric Infectious Diseases
  University of Utah
# Pediatric/Adult Influenza Vaccine 2013-2014

For influenza vaccines licensed only for adults, see page 2.

<table>
<thead>
<tr>
<th>Age</th>
<th>Manufacturer</th>
<th>Brand Name</th>
<th>Presentation</th>
</tr>
</thead>
<tbody>
<tr>
<td>6–35 months old</td>
<td>sanofi pasteur, Inc.</td>
<td>Fluzone®</td>
<td>0.25 mL single-dose syringe</td>
</tr>
<tr>
<td></td>
<td>sanofi pasteur, Inc.</td>
<td>Fluzone® Quadrivalent</td>
<td>0.25 mL single-dose syringe</td>
</tr>
<tr>
<td>Healthy Persons</td>
<td>MedImmune Vaccines, Inc.</td>
<td>FluMist®</td>
<td>0.2 mL single-dose nasal sprayer</td>
</tr>
<tr>
<td>2–49 years old</td>
<td></td>
<td>Quadrivalent</td>
<td></td>
</tr>
<tr>
<td>36 months &amp; Older</td>
<td>GlaxoSmithKline Biologicals</td>
<td>Fluarix®</td>
<td>0.5 mL single-dose syringe</td>
</tr>
<tr>
<td></td>
<td>GlaxoSmithKline Biologicals</td>
<td>Fluarix® Quadrivalent</td>
<td>0.5 mL single-dose syringe</td>
</tr>
<tr>
<td></td>
<td>sanofi pasteur, Inc.</td>
<td>Fluzone®</td>
<td>0.5 mL single-dose vial</td>
</tr>
<tr>
<td></td>
<td>sanofi pasteur, Inc.</td>
<td>Fluzone® Quadrivalent</td>
<td>0.5 mL single-dose vial</td>
</tr>
<tr>
<td></td>
<td>sanofi pasteur, Inc.</td>
<td>Fluzone®</td>
<td>0.5 mL single-dose syringe</td>
</tr>
<tr>
<td></td>
<td>sanofi pasteur, Inc.</td>
<td>Fluzone® Quadrivalent</td>
<td>0.5 mL single-dose syringe</td>
</tr>
<tr>
<td></td>
<td>sanofi pasteur, Inc.</td>
<td>Fluzone®</td>
<td>5.0 mL multi-dose vial</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Quadrivalent</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>4 years &amp; Older</td>
<td>Novartis Vaccines and Diagnostics Ltd.</td>
<td>Fluvirin®</td>
<td>5.0 mL multi-dose vial</td>
</tr>
<tr>
<td></td>
<td>Novartis Vaccines and Diagnostics Ltd.</td>
<td>Fluvirin®</td>
<td>0.5 mL single-dose syringe</td>
</tr>
<tr>
<td>5 years &amp; Older</td>
<td>CSL Limited</td>
<td>Afluria®</td>
<td>0.5 mL single-dose syringe</td>
</tr>
<tr>
<td>(ACIP recommends use for children 9 years and older)</td>
<td>CSL Limited</td>
<td>Afluria®</td>
<td>5.0 mL multi-dose vial</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

All influenza vaccines are stored in the refrigerator. Questions: Toll-free: 877-2Get-VFC (877-243-8832)

1. Contains preservative and cannot be given to children younger than 3 years of age and pregnant women per California law (Health and Safety Code 124172.)

These vaccines are available through the Vaccines for Children Program in 2013-2014 and can only be used for VFC eligible children through 18 years of age.
# Adult Influenza Vaccine

For influenza vaccines licensed for both adults and children, see page 1.

<table>
<thead>
<tr>
<th>Age</th>
<th>Brand Name</th>
<th>Presentation</th>
<th>Image</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>18 years &amp; Older</strong></td>
<td>ID Biomedical (GlaxoSmithKline)</td>
<td>FluLaval® 5.0 mL multi-dose vial</td>
<td><img src="fluLaval.png" alt="Image of FluLaval®" /></td>
</tr>
<tr>
<td></td>
<td>Novartis Vaccines &amp; Diagnostics Ltd.</td>
<td>Flucelvax® 0.5 mL prefilled syringe</td>
<td><img src="flucelvax.png" alt="Image of Flucelvax®" /></td>
</tr>
<tr>
<td><strong>18–64 years</strong></td>
<td>sanofi pasteur, Inc.</td>
<td>Fluzone® Intradermal 0.1 mL prefilled syringe</td>
<td><img src="fluzone.png" alt="Image of Fluzone® Intradermal" /></td>
</tr>
<tr>
<td><strong>18–49 years</strong></td>
<td>Protein Sciences</td>
<td>FluBlok® High-Dose 0.5 mL single-dose vial</td>
<td><img src="fluBlok.png" alt="Image of FluBlok® High-Dose" /></td>
</tr>
<tr>
<td><strong>65 years &amp; Older</strong></td>
<td>sanofi pasteur, Inc.</td>
<td>Fluzone® High-Dose 0.5 mL prefilled syringe</td>
<td><img src="fluzone.png" alt="Image of Fluzone® High-Dose" /></td>
</tr>
</tbody>
</table>

All influenza vaccines are stored in the refrigerator. Questions: Toll-free: 877-2Get-VFC (877-243-8832)

1. Contains preservative and cannot be given to children younger than 3 years of age and pregnant women per California law (Health and Safety Code 124172.)
## Influenza Vaccine Products for the 2013–2014 Influenza Season

<table>
<thead>
<tr>
<th>Manufacturer</th>
<th>Trade Name (vaccine abbreviation)</th>
<th>How Supplied</th>
<th>Mercury Content (μg Hg/0.5mL)</th>
<th>Age Group</th>
<th>Product Code</th>
</tr>
</thead>
<tbody>
<tr>
<td>CSL Limited</td>
<td>Afluria (IIV3)</td>
<td>0.5 mL (single-dose syringe)</td>
<td>0</td>
<td>9 years &amp; older</td>
<td>90656</td>
</tr>
<tr>
<td></td>
<td></td>
<td>5.0 mL (multi-dose vial)</td>
<td>24.5</td>
<td></td>
<td>90658</td>
</tr>
<tr>
<td>GlaxoSmithKline</td>
<td>Fluarix (IIV3)</td>
<td>0.5 mL (single-dose syringe)</td>
<td>0</td>
<td>3 years &amp; older</td>
<td>90656</td>
</tr>
<tr>
<td></td>
<td></td>
<td>0.5 mL (single-dose syringe)</td>
<td>0</td>
<td>3 years &amp; older</td>
<td>90686</td>
</tr>
<tr>
<td>ID Biomedical Corp. of Quebec, a subsidiary of GlaxoSmithKline</td>
<td>Fluviral (IIV3)</td>
<td>5.0 mL (multi-dose vial)</td>
<td>&lt;25</td>
<td>18 years &amp; older</td>
<td>90658</td>
</tr>
<tr>
<td></td>
<td></td>
<td>0.2 mL (single-use nasal spray)</td>
<td>0</td>
<td>2 through 49 years</td>
<td>90672</td>
</tr>
<tr>
<td>MedImmune</td>
<td>FluMist (LAIV4)</td>
<td>0.5 mL (single-dose syringe)</td>
<td>≤1</td>
<td>4 years &amp; older</td>
<td>90656</td>
</tr>
<tr>
<td></td>
<td></td>
<td>5.0 mL (multi-dose vial)</td>
<td>25</td>
<td></td>
<td>90658</td>
</tr>
<tr>
<td></td>
<td></td>
<td>0.5 mL (single-dose vial)</td>
<td>0</td>
<td>18 years &amp; older</td>
<td>90661</td>
</tr>
<tr>
<td>Novartis</td>
<td>Fluvirin (IIV3)</td>
<td>0.5 mL (single-dose syringe)</td>
<td>0</td>
<td>18 through 49 years</td>
<td>90673</td>
</tr>
<tr>
<td></td>
<td></td>
<td>5.0 mL (multi-dose vial)</td>
<td>0</td>
<td></td>
<td>90674</td>
</tr>
<tr>
<td>Protein Sciences Corp.</td>
<td>Flublok (RIV3)</td>
<td>0.5 mL (single-dose vial)</td>
<td>0</td>
<td>6 through 35 months</td>
<td>90655</td>
</tr>
<tr>
<td></td>
<td></td>
<td>0.25 mL (single-use nasal spray)</td>
<td>0</td>
<td>6 through 35 months</td>
<td>90653</td>
</tr>
<tr>
<td></td>
<td></td>
<td>0.5 mL (single-dose syringe)</td>
<td>0</td>
<td>3 years &amp; older</td>
<td>90656</td>
</tr>
<tr>
<td></td>
<td></td>
<td>0.5 mL (single-dose vial)</td>
<td>0</td>
<td>3 years &amp; older</td>
<td>90656</td>
</tr>
<tr>
<td></td>
<td></td>
<td>5.0 mL (multi-dose vial)</td>
<td>25</td>
<td>6 through 35 months</td>
<td>90657</td>
</tr>
<tr>
<td></td>
<td></td>
<td>5.0 mL (multi-dose vial)</td>
<td>25</td>
<td>3 years &amp; older</td>
<td>90658</td>
</tr>
<tr>
<td></td>
<td></td>
<td>0.5 mL (single-dose syringe)</td>
<td>0</td>
<td>6 through 35 months</td>
<td>90685</td>
</tr>
<tr>
<td>sanofi pasteur</td>
<td>Fluzone (IIV3)</td>
<td>0.5 mL (single-dose syringe)</td>
<td>0</td>
<td>6 through 35 months</td>
<td>90654</td>
</tr>
<tr>
<td></td>
<td></td>
<td>0.5 mL (single-dose vial)</td>
<td>0</td>
<td>3 years &amp; older</td>
<td>90686</td>
</tr>
<tr>
<td></td>
<td></td>
<td>0.5 mL (single-dose vial)</td>
<td>0</td>
<td>3 years &amp; older</td>
<td>90686</td>
</tr>
<tr>
<td></td>
<td></td>
<td>0.5 mL (single-dose syringe)</td>
<td>0</td>
<td>65 years &amp; older</td>
<td>90662</td>
</tr>
<tr>
<td></td>
<td></td>
<td>0.1 mL (single-dose microinjection system)</td>
<td>0</td>
<td>18 through 64 years</td>
<td>90654</td>
</tr>
</tbody>
</table>

### Footnotes
1. IIV3 = egg-based and cell culture-based trivalent inactivated influenza vaccine (injectable); where necessary to refer to cell culture-based vaccine, the prefix "cc" is used (e.g., ccIIV3). IIV4 = egg-based quadrivalent inactivated influenza vaccine (injectable); LAIV4 = egg-based quadrivalent live attenuated influenza vaccine (nasal spray); RIV3 = trivalent recombinant hemagglutinin influenza vaccine (injectable).

2. On August 6, 2010, ACIP recommended that Afluria not be used in children younger than age 9 years. If no other age-appropriate IIV is available, Afluria may be considered for a child age 5 through 8 years at high risk for influenza complications, after risks and benefits have been discussed with the parent or guardian. Afluria should not be used in children younger than age 5 years. This recommendation continues for the 2013–2014 influenza season.

Technical content reviewed by the Centers for Disease Control and Prevention.
How to administer intramuscular, intradermal, and intranasal influenza vaccines

### Intramuscular injection
Trivalent Inactivated Influenza Vaccines (TIV)

1. Use a needle long enough to reach deep into the muscle. Infants age 6 through 11 mos: 1"; 1 through 2 yrs: 1-1/4"; children and adults 3 yrs and older: 1-1/2".
2. With your left hand*, bunch up the muscle.
3. With your right hand*, insert the needle at a 90° angle to the skin with a quick thrust.
4. Push down on the plunger and inject the entire contents of the syringe. There is no need to aspirate.
5. Remove the needle and simultaneously apply pressure to the injection site with a dry cotton ball or gauze. Hold in place for several seconds.
6. If there is any bleeding, cover the injection site with a bandage.
7. Put the used syringe in a sharps container.

*Use the opposite hand if you are left-handed.

### Intradermal administration
Trivalent Inactivated Influenza Vaccine (TIV)

1. Gently shake the microinjection system before administering the vaccine.
2. Hold the system by placing the thumb and middle finger on the finger pads; the index finger should remain free.
3. Insert the needle perpendicular to the skin, in the region of the deltoid, in a short, quick movement.
4. Once the needle has been inserted, maintain light pressure on the surface of the skin and inject using the index finger to push on the plunger. Do not aspirate.
5. Remove the needle from the skin. With the needle directed away from you and others, push very firmly with the thumb on the plunger to activate the needle shield. You will hear a click when the shield extends to cover the needle.
6. Dispose of the applicator in a sharps container.

### Intranasal administration
Live Attenuated Influenza Vaccine (LAIV)

1. FluMist (LAIV) is for intranasal administration only. Do not inject FluMist.
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 (i.e., head not tilted back), place the tip just inside the nostril to ensure LAIV is delivered into the nose. The patient should breathe normally.
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 the plunger.
6. Place the tip just inside the other nostril, and with a single motion, depress plunger as rapidly as possible to deliver the remaining vaccine.
7. Dispose of the applicator in a sharps container.
Seek emergency medical care if you or a family member shows the signs below – a life could be at risk!

It’s a fact – every year, people of all ages in the U.S. die from influenza and its complications.

<table>
<thead>
<tr>
<th>Emergency warning signs for children or teens with influenza</th>
<th>Any child or teen who shows the following emergency warning signs needs urgent medical attention – take them to an emergency room or call 9-1-1.</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Fast breathing or trouble breathing</td>
<td>• Fast breathing or trouble breathing</td>
</tr>
<tr>
<td>• Bluish skin color</td>
<td>• Bluish skin color</td>
</tr>
<tr>
<td>• Not waking up or not interacting</td>
<td>• Not waking up or not interacting</td>
</tr>
<tr>
<td>• Being so irritable that the child does not want to be held</td>
<td>• Being so irritable that the child does not want to be held</td>
</tr>
<tr>
<td>• Not drinking enough fluids</td>
<td>• Not drinking enough fluids</td>
</tr>
<tr>
<td>• Not urinating or no tears when crying</td>
<td>• Not urinating or no tears when crying</td>
</tr>
<tr>
<td>• Severe or persistent vomiting</td>
<td>• Severe or persistent vomiting</td>
</tr>
<tr>
<td>• Influenza-like symptoms improve but then return with fever and worse cough</td>
<td>• Influenza-like symptoms improve but then return with fever and worse cough</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Emergency warning signs for adults with influenza</th>
<th>Any adult who shows the following emergency warning signs needs urgent medical attention – take them to an emergency room or call 9-1-1.</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Difficulty breathing or shortness of breath</td>
<td>• Difficulty breathing or shortness of breath</td>
</tr>
<tr>
<td>• Pain or pressure in the chest or abdomen</td>
<td>• Pain or pressure in the chest or abdomen</td>
</tr>
<tr>
<td>• Confusion</td>
<td>• Confusion</td>
</tr>
<tr>
<td>• Severe or persistent vomiting</td>
<td>• Severe or persistent vomiting</td>
</tr>
<tr>
<td>• Sudden dizziness</td>
<td>• Sudden dizziness</td>
</tr>
<tr>
<td>• Influenza-like symptoms improve but then return with fever and worse cough</td>
<td>• Influenza-like symptoms improve but then return with fever and worse cough</td>
</tr>
</tbody>
</table>

Keep this handy! Post it on your refrigerator or another place where it will be easy to find!
Maternal flu shots protect newborns
September 2008

BOSTON (Reuters) - Flu shots given to pregnant women a month or more before delivery will prevent most cases of influenza during the first six months of their babies' lives, researchers said.

"Immunize the mother and you protect the infant," Dr. Mark Steinhoff, a pediatrician with the Johns Hopkins University Bloomberg School of Public Health, said in a telephone interview.

The shots are not licensed for children younger than six months old -- who are in turn more likely to be hospitalized for influenza than any other group.

In the test of 340 pregnant women in Bangladesh, the shots cut the risk of flu by 63 percent and the risk of respiratory illness overall by 29 percent. There were six confirmed cases of influenza in the vaccinated group, compared to 16 among the mothers given a different vaccine.

The injections also lowered the likelihood of fever and respiratory illness among the mothers by 36 percent.

Doctors have known for years that immunizations given to a woman can protect her newborn, so there was no reason to believe the flu vaccine would not work the same way, said Steinhoff. "We always assumed it, but nobody's done the study before," he said.

Flu shots have been recommended for pregnant women by the U.S. Centers for Disease Control and Prevention since 1997, but the advice has been widely ignored, he said. The new study, published in the New England Journal of Medicine, may change that.

"This might persuade more mothers to say, 'Hey, it really helps me and it really helps the baby,'" Steinhoff said.

Only 15 percent of pregnant U.S. women receive the vaccine each year.

The vaccinations in the Bangladesh study were given during the third trimester because in 2004 and 2005, "at the time we did the study, that was the recommendation," he said.

The current advice to pregnant women is to get the vaccine during the flu season, although it takes about a month for the protection to build in the baby.
California’s New Law Limiting Mercury in Vaccines: 
Frequently Asked Questions

Letter and impact of the law

Q. What does the mercury law say?  
A. As of July 1, 2006, California law prohibits administering vaccines whose mercury content exceeds the legal limit to:
- Women who are knowingly pregnant or
- Children under the age of three years.

Legal limit: Vaccines given to pregnant women or to children under the age of three years in California may not exceed:
- 1.0 microgram of mercury per 0.5 milliliters of influenza vaccine
- 0.5 micrograms of mercury per 0.5 milliliters of all other vaccines
- Note: Most vaccines are administered in 0.5 milliliter doses, but the dose of influenza vaccine for children age six months to 23 months is 0.25 milliliters.

Exemptions: The law allows California’s Governor and Secretary of Health and Human Services to permit providers to administer vaccines that exceed the mercury limit if there is an epidemic, vaccine shortage, or other public health emergency.

Penalties: Penalties for violation are not specified in the law.

Text of the law is available at:  
www.leginfo.ca.gov/pub/03-04/bill/asm/ab_2901-2950/ab_2943_bill_20040928_chaptered.html  
(California Health and Safety Code, Section 124172 Chapter 837, Statutes of 2004, AB2943, Pavley)

Q. Will the mercury law affect my administration of influenza vaccine?  
A. Possibly. Formulations of influenza vaccine vary as to whether they:
- meet the legal limit for mercury content; for example, multi-dose vials of influenza vaccine exceed the limit
- are licensed for use in pregnant women and children under three years of age

Please review the list of influenza vaccines at www.getimmunizedca.org in order to provide your patients with vaccine formulations that comply with the new law.

Q. Will the mercury law affect my administration of routine vaccines besides influenza vaccine?  
A. No. All vaccines other than influenza vaccine commonly given to pregnant women and children under three years of age meet the legal limit for mercury content.

Q. Which multi-dose vaccines besides influenza vaccine are restricted by the new law?  
A. Certain multi-dose formulations of diphtheria and tetanus, tetanus toxoids, tetanus and diphtheria toxoids, and meningococcal polysaccharide vaccine exceed the mercury limit for pregnant women and children under three years of age. Alternatives to these formulations are readily available. For more information on these vaccines and their alternatives, please refer to the summary chart Vaccines (other than influenza vaccine) in a Multi-dose Vial Formulation that Exceed the California Legal Limit for Mercury Content, July 2006 at www.getimmunizedca.org,
Mercury and vaccine safety

Q. Why has mercury been used in vaccines?
A. The vaccine preservative thimerosal contains ethylmercury. Thimerosal has been used in vaccines since the 1930s to prevent bacterial contamination of vaccines, especially those stored in multi-dose vials. In recent years advances in vaccine manufacturing have enabled thimerosal to be phased out of most vaccine production. By the time the mercury law was enacted, the only routinely used childhood vaccine that did not meet the law's limits was the multi-dose vial formulation of influenza vaccine.

Q. Why was this law passed?
A. Thimerosal has been hypothesized to be a cause of childhood autism. This hypothesis is not supported by the results of extensive study. However, proponents of the law remain concerned about exposure to thimerosal.

Q. How can I reassure my patients about vaccine safety?
A. When Governor Schwarzenegger signed the law, he said, "While I take this action in an abundance of caution, I want to encourage parents to get their children vaccinated. There are significant risks associated with the failure to vaccinate children which far outweigh any theoretical risk associated with thimerosal."

According to the Centers for Disease Control and Prevention (CDC) there is no conclusive evidence that any vaccine or vaccine additive increases the risk of developing autism or any other behavior disorder. Rather, evidence is accumulating of lack of any harm resulting from exposure to vaccine containing thimerosal as a preservative.

An April 3, 2006 letter to Congress stated that "...there is no documented scientific evidence that ethylmercury in the form of thimerosal in the doses administered in vaccines causes any risk to health." The letter was signed by representatives of the American Academy of Pediatrics (AAP), American Academy of Family Physicians (AAFP), American College of Preventive Medicine (ACPM), American Medical Directors Association (AMDA), American Pharmacists Association (APhA), Pediatric Infectious Diseases Society (PIDS), and Society for Adolescent Medicine (SAM).

The following are additional sources of information about mercury and vaccines.
- CDC provides information on vaccine safety for consumers and health care providers at: www.cdc.gov/nip/vacsafe/concerns/thimerosal/default.htm.
- Food and Drug Administration background on thimerosal can be found at: www.fda.gov/cber/vaccine/thimerosal.htm.
- The Children's Hospital of Philadelphia’s website contains a comprehensive summary of studies that indicates “evidence showing that, while some things do cause autism, mercury in vaccines isn't one of them.” For more information go to: www.chop.edu/consumer/jsp/division/generic.jsp?id=75751.
HOW DO VACCINES / IMMUNIZATIONS WORK?

WHAT ARE ANTIBODIES?

- Antibodies are like soldiers. They fight germs that make you sick.
- When you get a germ your body starts to make antibodies.
- Antibodies usually stay in your body even after you get better.
- They protect you from germs if they come back again.
- This is called immunity.

WHAT IS A VACCINE?

- A vaccine is a way to protect you from diseases.
- A vaccine is made from weak or dead germs; when you get a vaccine your body starts to make antibodies.
- The vaccine does not give you the disease.
- The antibodies that form stay in your body.
- They protect you from getting sick from the real germs.

IS VACCINATION BETTER THAN GETTING THE DISEASE? ~ YES

The vaccine is so much like the real germs that your body makes the antibodies. The antibodies protect you without making you sick.

VACCINES > IMMUNIZATIONS PROTECT AGAINST DISEASE!

San Joaquin County Public Health Services
Immunization Program

For More Information Call (209) 468-3481
¿COMO FUNCIONAN LAS VACUNAS / INMUNIZACIONES?

¿QUE SON LOS ANTICUERPOS?

- Los anticuerpos son como soldados. Estos atacan los microbios/bacterias que causan enfermedades.
- El cuerpo por sí mismo desarrolla anticuerpos en cuanto entran los microbios/bacterias.
- Los anticuerpos permanecen dentro del cuerpo aun después que la persona se majora.
- Ellos siguen protegiendo por si regresan los microbios/bacterias.
- Esto se llama inmunidad.

¿QUE ES UNA VACUNA?

- Las vacunas son una forma de proteger contra las enfermedades.
- Una vacuna está hecha de germen es que están débiles o muertos; el cuerpo empieza a desarrollar anticuerpos en cuanto usted recibe la vacuna.
- La vacuna no causa las enfermedades.
- Los anticuerpos desarrollados permanecen dentro del cuerpo.
- Ellos lo protegen en caso que usted se vuelva a infectar con algún microbio/bacteria.

¿ES MEJOR RECIBIR LA VACUNA A ENFERMARSE? ~ Sí

La vacuna es muy parecida al microbio/bacteria, lo cual permite que el cuerpo desarrolle los anticuerpos necesarios. Los anticuerpos protegen sin causar enfermedad.

LAS VACUNAS > INMUNIZACIÓNES PROTEGEN
CONTRA LAS ENFERMEDADES

Departamento de Salud Publica del Condado de San Joaquin
Programa de Inmunizaciones

Para más información – llame al (209) 468-3481

07/30/13
Influenza (flu):

"How long are you contagious with the flu?"

You can shed flu virus 2-3 days before you know you have the flu. Adults continue to be contagious about 5 days after symptoms appear. Children continue to be contagious about 7 days after symptoms appear.

Help prevent the flu, its complications, and spreading of the virus. Cover you cough/sneezes, wash your hands frequently and please get flu vaccine annually.

Remember, the flu vaccine CANNOT give you the flu.
The typical incubation period for influenza is 1--4 days (average: 2 days). Adults shed influenza virus from the day before symptoms begin through 5--10 days after illness onset. However, the amount of virus shed, and presumably infectivity, decreases rapidly by 3--5 days after onset in an experimental human infection model. Young children also might shed virus several days before illness onset, and children can be infectious for 10 or more days after onset of symptoms. Severely immunocompromised persons can shed virus for weeks or months.
Influenza
Description

Three types of viruses – influenza A, B, and C cause influenza, or flu. Types A and B are to blame for epidemics of respiratory illness that occur most in winters. Type C causes mild illness or no symptoms at all. Flu viruses are spread from one person to another by sneezing, coughing, or direct contact. Each year an estimated 25 million to 50 million Americans contract the flu. Most people recover in a week or two, but the flu can be life threatening for the very young, the old, or those with chronic disease. About 36,000 die from flu complications each year. Bacterial pneumonia is the most serious complication.

What are some myths about flu?

Myth #1: Influenza is merely a nuisance.
WRONG. Influenza is a major cause of illness and death in the United States and leads to an average of about 36,000 deaths and 2,000,000 hospitalizations per year.

Myth #2: Flu shots cause the flu.
WRONG. The licensed injectable flu vaccine used in the United States, which is made from inactivated or killed flu viruses, cannot cause the flu and does not cause flu illness.

Myth #3: Flu vaccine doesn’t work.
NOT EXACTLY. When the viruses in the vaccine and circulating viruses are similar, the flu shot is very effective. There are several reasons why people think influenza vaccine doesn’t work. People who have gotten a flu vaccination may then get sick from a different virus that causes respiratory illness but is mistaken for the flu; the flu shot only prevents illness caused by the influenza virus. In addition, protection from the vaccine is not 100%. Studies of healthy young adults have shown flu vaccine to be 70% to 90% effective in preventing the flu. In the elderly and those with certain long-term medical conditions, the flu shot is often less effective in preventing illness. However, in the elderly, flu vaccine is very effective in reducing hospitalizations and death from flu-related causes.

Myth #4: There is no need to get a flu vaccine every year.
WRONG. The flu viruses are constantly changing. Generally, new influenza strains circulate every flu season, so the vaccine is changed each year. Flu vaccine helps prevent respiratory illnesses and deaths related to influenza infection. Get flu vaccine very year.
WHAT DO YOU HAVE?

Symptoms to consider when making your own preliminary diagnosis:

Influenza
- Headache
- High fever
- Dry cough
- Chest pains
- Chills
- Severe fatigue
- Severe aches

NOTE: H1N1 virus also causes some gastrointestinal distress

Cold
- Sneezing
- Stuffy nose
- Hacking cough
- Mild sore throat
- Mild fatigue

Strep throat
- A sore throat, but no stuffy nose, may mean it's a streptococcal bacterial infection — antibiotics can help
- High fever
- Pus on tonsils
- Very sore throat

Stomach flu
- Virus enters via mouth and multiplies in small intestine; symptoms can appear in a few hours, but usually take a day; food poisoning is usually a bacterial infection, such as E. coli

-headed
- Vomiting
- Fatigue
- Diarrhea

WHAT DO YOU HAVE?

Influenza
Antiviral medications can help people feel better if taken within 48 hours of onset of symptoms

Sneezing
Stuffy nose
Hacking cough
Mild sore throat
Mild fatigue

Strep throat
- A sore throat, but no stuffy nose, may mean it's a streptococcal bacterial infection — antibiotics can help
- High fever
- Pus on tonsils
- Very sore throat

Stomach flu
- Virus enters via mouth and multiplies in small intestine; symptoms can appear in a few hours, but usually take a day; food poisoning is usually a bacterial infection, such as E. coli

-head
- Vomiting
- Fatigue
- Diarrhea

FOLLOWING AN INFECTION

FLU TRAVELS

Flu viruses constantly mutate, making it tough for our immune defenses to recognize the virus and combat it. Since the current strain of the H1N1 virus (known as swine flu) is relatively new, it may be more contagious than seasonal flu, although it seems no more virulent and most cases should be resolved without significant medical intervention. Here is a look at how flu infections spread:

John goes to work feeling fine; while he is out to lunch, Jill sneezes into her hands and then uses John's phone and keyboard while leaving, he rubs his eyes and transfers virus into his system

John enjoys an evening with family; unfortunately, he does not realize that he is spreading virus around the house; it can take a day or so after you become infected before you show signs of illness

The disease is at its most contagious levels and Karen tries to protect herself from breathing in the virus; on the morning of the fourth day John's fever is gone and he figures he can go back to work; unfortunately, he is still shedding thousands of flu viruses when he exhales

John and Billy share bowl of popcorn; now Billy has virus

Driving to work, John starts feeling symptoms — mild headache, low fever — and returns home

Flu symptoms usually come on quickly; in less than 24 hours, John and Billy have high fevers, severe aches and fatigue; the next three days are spent in bed, miserable; Karen gives them acetaminophen, nonprescription flu medications and plenty of fluids

After three days, Billy's symptoms don't lessen and Karen wonders if she should seek medical help

Flu symptoms usually come on quickly; in less than 24 hours, John and Billy have high fevers, severe aches and fatigue; the next three days are spent in bed, miserable; Karen gives them acetaminophen, nonprescription flu medications and plenty of fluids

The disease is at its most contagious levels and Karen tries to protect herself from breathing in the virus; on the morning of the fourth day John's fever is gone and he figures he can go back to work; unfortunately, he is still shedding thousands of flu viruses when he exhales

John and Billy need to be symptom-free for 24 hours before returning to work or school; some older, younger or weaker people can still be contagious for a couple of weeks because their immune system has a harder time eliminating the virus from their bodies

WAS Y TO AVOID FLU

Vaccination
- Vaccination provides up to 90% protection
- Swine flu shots should be ready by October
- It takes about two weeks before protection begins
- H1N1 vaccination will be in two doses, a couple weeks apart; healthy adults may only need one H1N1 vaccination
- Seasonal flu vaccination is one shot, but for children under 9 they may need two seasonal flu shots, bringing the total to four

Wash hands
- Wash hands five times a day for at least 20 seconds; this is what it takes to prevent the spread of germs and viruses; less than half the people wash this long and this often

Wear mask
- Masks can be worn by sick people so any droplets they expel do not easily land on objects or people; most masks are not as effective if worn by people who are well trying to avoid breathing in a virus

© 2009 MCT
Source: U.S. Centers for Disease Control and Prevention, Centers for Disease Control and Prevention, U.S. Department of Health and Human Services
Graphic: Scott Brink, Orange County Register

Vomiting
- After three days, Billy's symptoms don't lessen and Karen wonders if she should seek medical help

DAY 1
DAY 2
DAY 3
DAY 4

John kisses Karen goodbye and gives her the virus

Karen carries virus to school

Billy carries virus back to office

John and Billy share bowl of popcorn; now Billy has virus

John goes to work feeling fine; while he is out to lunch, Jill sneezes into her hands and then uses John's phone and keyboard while leaving, he rubs his eyes and transfers virus into his system

Studies of office equipment found that 86% of viruses survived for an hour; 33% survived for 18 hours

John enjoys an evening with family; unfortunately, he does not realize that he is spreading virus around the house; it can take a day or so after you become infected before you show signs of illness

The disease is at its most contagious levels and Karen tries to protect herself from breathing in the virus; on the morning of the fourth day John's fever is gone and he figures he can go back to work; unfortunately, he is still shedding thousands of flu viruses when he exhales

John and Billy need to be symptom-free for 24 hours before returning to work or school; some older, younger or weaker people can still be contagious for a couple of weeks because their immune system has a harder time eliminating the virus from their bodies

© 2009 MCT
Source: U.S. Centers for Disease Control and Prevention, Centers for Disease Control and Prevention, U.S. Department of Health and Human Services
Graphic: Scott Brink, Orange County Register

Wash hands
- Wash hands five times a day for at least 20 seconds; this is what it takes to prevent the spread of germs and viruses; less than half the people wash this long and this often

Wear mask
- Masks can be worn by sick people so any droplets they expel do not easily land on objects or people; most masks are not as effective if worn by people who are well trying to avoid breathing in a virus

© 2009 MCT
Source: U.S. Centers for Disease Control and Prevention, Centers for Disease Control and Prevention, U.S. Department of Health and Human Services
Graphic: Scott Brink, Orange County Register

Vomiting
- After three days, Billy's symptoms don't lessen and Karen wonders if she should seek medical help

DAY 1
DAY 2
DAY 3
DAY 4

John kisses Karen goodbye and gives her the virus

Karen carries virus to school

Billy carries virus back to office

John and Billy share bowl of popcorn; now Billy has virus

John goes to work feeling fine; while he is out to lunch, Jill sneezes into her hands and then uses John's phone and keyboard while leaving, he rubs his eyes and transfers virus into his system

Studies of office equipment found that 86% of viruses survived for an hour; 33% survived for 18 hours

John enjoys an evening with family; unfortunately, he does not realize that he is spreading virus around the house; it can take a day or so after you become infected before you show signs of illness

The disease is at its most contagious levels and Karen tries to protect herself from breathing in the virus; on the morning of the fourth day John's fever is gone and he figures he can go back to work; unfortunately, he is still shedding thousands of flu viruses when he exhales

John and Billy need to be symptom-free for 24 hours before returning to work or school; some older, younger or weaker people can still be contagious for a couple of weeks because their immune system has a harder time eliminating the virus from their bodies

© 2009 MCT
Source: U.S. Centers for Disease Control and Prevention, Centers for Disease Control and Prevention, U.S. Department of Health and Human Services
Graphic: Scott Brink, Orange County Register

Wash hands
- Wash hands five times a day for at least 20 seconds; this is what it takes to prevent the spread of germs and viruses; less than half the people wash this long and this often

Wear mask
- Masks can be worn by sick people so any droplets they expel do not easily land on objects or people; most masks are not as effective if worn by people who are well trying to avoid breathing in a virus

© 2009 MCT
Source: U.S. Centers for Disease Control and Prevention, Centers for Disease Control and Prevention, U.S. Department of Health and Human Services
Graphic: Scott Brink, Orange County Register
# Is It a Cold or the Flu?

<table>
<thead>
<tr>
<th>Symptoms</th>
<th>Cold</th>
<th>Flu</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fever</td>
<td>Rare</td>
<td>Usual; high (100°F to 102°F, occasionally higher, especially in young children); lasts 3 to 4 days</td>
</tr>
<tr>
<td>Headache</td>
<td>Rare</td>
<td>Common</td>
</tr>
<tr>
<td>General Aches, Pains</td>
<td>Slight</td>
<td>Usual; often severe</td>
</tr>
<tr>
<td>Fatigue, Weakness</td>
<td>Sometimes</td>
<td>Usual; can last up to 2 to 3 weeks</td>
</tr>
<tr>
<td>Exhaustion</td>
<td>Never</td>
<td>Usual; at the beginning of the illness</td>
</tr>
<tr>
<td>Stuffy Nose</td>
<td>Common</td>
<td>Sometimes</td>
</tr>
<tr>
<td>Sneezing</td>
<td>Usual</td>
<td>Sometimes</td>
</tr>
<tr>
<td>Sore Throat</td>
<td>Common</td>
<td>Sometimes</td>
</tr>
<tr>
<td>Chest Discomfort, Cough</td>
<td>Mild to moderate; hacking cough</td>
<td>Common; can become severe</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Treatment</th>
<th>Antihistamines</th>
<th>Antiviral medicines—see your doctor</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Decongestants</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Nonsteroidal anti-inflammatory medicines</td>
<td></td>
</tr>
</tbody>
</table>

| Prevention                | Wash your hands often with soap and water; avoid close contact with anyone with a cold | Annual vaccination; antiviral medicines—see your doctor |

<table>
<thead>
<tr>
<th>Complications</th>
<th>Sinus congestion</th>
<th>Bronchitis, pneumonia; can worsen chronic conditions; can be life-threatening. Complications more likely in the elderly, those with chronic conditions, young children, and pregnant women</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Middle ear infection</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Asthma</td>
<td></td>
</tr>
</tbody>
</table>

---

U.S. Department of Health and Human Services  
National Institutes of Health  
National Institute of Allergy and Infectious Diseases  
November 2008  
www.niaid.nih.gov
**¿Será un resfrió o será la gripe?**

<table>
<thead>
<tr>
<th>Síntomas</th>
<th>Resfrió</th>
<th>Gripe</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fiebre</td>
<td>Rara vez</td>
<td>Es común; fiebre alta (de 100°F a 102°F, especialmente en niños pequeños); dura de 3 a 4 días</td>
</tr>
<tr>
<td>Dolor de cabeza</td>
<td>Rara vez</td>
<td>Con frecuencia</td>
</tr>
<tr>
<td>Malestar general, dolor</td>
<td>Leve</td>
<td>Es común; muchas veces son severos</td>
</tr>
<tr>
<td>Fatiga, debilidad</td>
<td>A veces</td>
<td>Es común; puede durar hasta 2 o 3 semanas</td>
</tr>
<tr>
<td>Agotamiento</td>
<td>Nunca</td>
<td>Es común; al principio</td>
</tr>
<tr>
<td>Tiene la nariz tapada o congestionada</td>
<td>Con frecuencia</td>
<td>A veces</td>
</tr>
<tr>
<td>Estornudos</td>
<td>Es común</td>
<td></td>
</tr>
<tr>
<td>Dolor de garganta</td>
<td>Con frecuencia</td>
<td></td>
</tr>
<tr>
<td>Molestia en el pecho, tos</td>
<td>De leve a moderada; tos seca</td>
<td>Con frecuencia; puede volverse severa</td>
</tr>
<tr>
<td><strong>Tratamiento</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Medicinas con antihistamínicos</td>
<td>Medicinas retrovirales—visite a su doctor</td>
</tr>
<tr>
<td></td>
<td>Descongestionantes</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Medicinas anti-inflamatorias sin esteroides</td>
<td></td>
</tr>
<tr>
<td><strong>Prevención</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Lávese las manos frecuentemente con agua y jabón; evite el contacto estrecho con alguien que esté resfriado</td>
<td>Hágase vacunarse cada año; Medicinas retrovirales—visite a su doctor</td>
</tr>
<tr>
<td>Complicaciones</td>
<td>Sinusitis o congestión nasal</td>
<td>Bronchitis, pneumonia; los problemas crónicos de salud pueden empeorar; puede ser mortal. Las complicaciones son más frecuentes entre los ancianos, aquellos con problemas crónicos de salud, los niños pequeños y las mujeres embarazadas</td>
</tr>
<tr>
<td></td>
<td>Infección del oído medio</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Asma</td>
<td></td>
</tr>
</tbody>
</table>

Departamento de Salud y Servicios Humanos de los Estados Unidos
Institutos Nacionales de la Salud
Instituto Nacional de Alergias y Enfermedades Infecciosas
Noviembre 2008
www.niaid.nih.gov
# Is It a Cold or an Allergy?

<table>
<thead>
<tr>
<th>Symptoms</th>
<th>Cold</th>
<th>Airborne Allergy</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cough</td>
<td>Common</td>
<td>Sometimes</td>
</tr>
<tr>
<td>General Aches, Pains</td>
<td>Slight</td>
<td>Never</td>
</tr>
<tr>
<td>Fatigue, Weakness</td>
<td>Sometimes</td>
<td>Sometimes</td>
</tr>
<tr>
<td>Itchy Eyes</td>
<td>Rare or Never</td>
<td>Common</td>
</tr>
<tr>
<td>Sneezing</td>
<td>Usual</td>
<td>Usual</td>
</tr>
<tr>
<td>Sore Throat</td>
<td>Common</td>
<td>Sometimes</td>
</tr>
<tr>
<td>Runny Nose</td>
<td>Common</td>
<td>Common</td>
</tr>
<tr>
<td>Stuffy Nose</td>
<td>Common</td>
<td>Common</td>
</tr>
<tr>
<td>Fever</td>
<td>Rare</td>
<td>Never</td>
</tr>
<tr>
<td>Duration</td>
<td>3 to 14 days</td>
<td>Weeks (for example, 6 weeks for ragweed or grass pollen seasons)</td>
</tr>
</tbody>
</table>

## Treatment
- Antihistamines
- Decongestants
- Nonsteroidal anti-inflammatory medicines

## Prevention
- Wash your hands often with soap and water
- Avoid close contact with anyone with a cold
- Avoid those things that you are allergic to such as pollen, house dust mites, mold, pet dander, cockroaches

## Complications
- Sinus infection
- Middle ear infection
- Asthma
- Sinus infection
- Asthma

U.S. Department of Health and Human Services
National Institutes of Health
National Institute of Allergy and Infectious Diseases

November 2008
www.niaid.nih.gov
<table>
<thead>
<tr>
<th>Síntomas</th>
<th>Resfrió</th>
<th>Alergias Transmitidas por el Aire</th>
</tr>
</thead>
<tbody>
<tr>
<td>Tos</td>
<td>Con frecuencia</td>
<td>A veces</td>
</tr>
<tr>
<td>Malestar general, dolor</td>
<td>Leve</td>
<td>Nunca</td>
</tr>
<tr>
<td>Fatiga, debilidad</td>
<td>A veces</td>
<td>A veces</td>
</tr>
<tr>
<td>Rasquiña o picazón en los ojos</td>
<td>Rara vez o nunca</td>
<td>Con frecuencia</td>
</tr>
<tr>
<td>Estornudos</td>
<td>Con frecuencia</td>
<td>Con frecuencia</td>
</tr>
<tr>
<td>Dolor de garganta</td>
<td>Con frecuencia</td>
<td>A veces</td>
</tr>
<tr>
<td>Le moquea la nariz</td>
<td>Con frecuencia</td>
<td>Con frecuencia</td>
</tr>
<tr>
<td>Tiene la nariz tapada o congestionada</td>
<td>Con frecuencia</td>
<td>Con frecuencia</td>
</tr>
<tr>
<td>Fiebre</td>
<td>Rara vez</td>
<td>Nunca</td>
</tr>
<tr>
<td>Duración</td>
<td>Entre 3 y 14 días</td>
<td>Varias semanas (por ejemplo, 6 semanas cuando es época de polen de la hierba o la maleza)</td>
</tr>
</tbody>
</table>

**Tratamiento**

- Medicinas con antihistamínicos
- Descongestionantes
- Medicinas anti-inflamatorias sin esteroides
- Medicinas con antihistamínicos
- Esteroides nasales
- Descongestionantes

**Prevención**

- Lávase las manos frecuentemente con agua y jabón. Evite el contacto cercano con alguien que esté resfriado
- Evite las cosas que le causan alergias como el polen, el polvo casero, el mocho, el pelo de mascotas, o las cucarachas

**Complicaciones**

- Sinusitis (infección causada por la congestión nasal)
- Infección del oído medio
- Asma
- Sinusitis (infección causada por la congestión nasal)
- Asma

Departamento de Salud y Servicios Humanos de los Estados Unidos
Institutos Nacionales de la Salud
Instituto Nacional de Alergias y Enfermedades Infecciosas
Noviembre 2008
www.niaid.nih.gov
How to Clean and Disinfect Schools to Help Slow the Spread of Flu

Cleaning and disinfecting are part of a broad approach to preventing infectious diseases in schools. To help slow the spread of influenza (flu), the first line of defense is getting vaccinated. Other measures include covering coughs and sneezes, washing hands, and keeping sick people away from others. Below are tips on how to slow the spread of flu specifically through cleaning and disinfecting.

1. Know the difference between cleaning, disinfecting, and sanitizing.

Cleaning removes germs, dirt, and impurities from surfaces or objects. Cleaning works by using soap (or detergent) and water to physically remove germs from surfaces. This process does not necessarily kill germs, but by removing them, it lowers their numbers and the risk of spreading infection.

Disinfecting kills germs on surfaces or objects. Disinfecting works by using chemicals to kill germs on surfaces or objects. This process does not necessarily clean dirty surfaces or remove germs, but by killing germs on a surface after cleaning, it can further lower the risk of spreading infection.

Sanitizing lowers the number of germs on surfaces or objects to a safe level, as judged by public health standards or requirements. This process works by either cleaning or disinfecting surfaces or objects to lower the risk of spreading infection.

2. Clean and disinfect surfaces and objects that are touched often.

Follow your school's standard procedures for routine cleaning and disinfecting. Typically, this means daily sanitizing surfaces and objects that are touched often, such as desks, countertops, doorknobs, computer keyboards, hands-on learning items, faucet handles, phones, and toys. Some schools may also require daily disinfecting these items. Standard procedures often call for disinfecting specific areas of the school, like bathrooms.

Immediately clean surfaces and objects that are visibly soiled. If surfaces or objects are soiled with body fluids or blood, use gloves and other standard precautions to avoid coming into contact with the fluid. Remove the spill, and then clean and disinfect the surface.

3. Simply do routine cleaning and disinfecting.

It's important to match your cleaning and disinfecting activities to the types of germs you want to remove or kill. Most studies have shown that the flu virus can live and potentially infect a person for only 2 to 8 hours after being deposited on a surface. Therefore, it is not necessary to close schools to clean or disinfect every surface in the building to slow the spread of flu. Also, if students and staff are dismissed because the school cannot function normally (e.g., high absenteeism during a flu outbreak), it is not necessary to do extra cleaning and disinfecting.

Flu viruses are relatively fragile, so standard cleaning and disinfecting practices are sufficient to remove or kill them. Special cleaning and disinfecting processes, including wiping down walls and ceilings, frequently using room air deodorizers, and fumigating, are not necessary or recommended. These processes can irritate eyes, noses, throats, and skin; aggravate asthma; and cause other serious side effects.
4. Clean and disinfect correctly.

Always follow label directions on cleaning products and disinfectants. Wash surfaces with a general household cleaner to remove germs. Rinse with water, and follow with an EPA-registered disinfectant to kill germs. Read the label to make sure it states that EPA has approved the product for effectiveness against influenza A virus.

If an EPA-registered disinfectant is not available, use a fresh chlorine bleach solution. To make and use the solution:

- Add 1 tablespoon of bleach to 1 quart (4 cups) of water.
  For a larger supply of disinfectant, add 1/4 cup of bleach to 1 gallon (16 cups) of water.
- Apply the solution to the surface with a cloth.
- Let it stand for 3 to 5 minutes.
- Rinse the surface with clean water.

If a surface is not visibly dirty, you can clean it with an EPA-registered product that both cleans (removes germs) and disinfects (kills germs) instead. Be sure to read the label directions carefully, as there may be a separate procedure for using the product as a cleaner or as a disinfectant. Disinfection usually requires the product to remain on the surface for a certain period of time.

Use disinfecting wipes on electronic items that are touched often, such as phones and computers. Pay close attention to the directions for using disinfecting wipes. It may be necessary to use more than one wipe to keep the surface wet for the stated length of contact time. Make sure that the electronics can withstand the use of liquids for cleaning and disinfecting.

Routinely wash eating utensils in a dishwasher or by hand with soap and water. Wash and dry bed sheets, towels, and other linens as you normally do with household laundry soap, according to the fabric labels. Eating utensils, dishes, and linens used by sick persons do not need to be cleaned separately, but they should not be shared unless they've been washed thoroughly. Wash your hands with soap and water after handling soiled dishes and laundry items.

5. Use products safely.

Pay close attention to hazard warnings and directions on product labels. Cleaning products and disinfectants often call for the use of gloves or eye protection. For example, gloves should always be worn to protect your hands when working with bleach solutions.

Do not mix cleaners and disinfectants unless the labels indicate it is safe to do so. Combining certain products (such as chlorine bleach and ammonia cleaners) can result in serious injury or death.

Ensure that custodial staff, teachers, and others who use cleaners and disinfectants read and understand all instruction labels and understand safe and appropriate use. This might require that instructional materials and training be provided in other languages.

6. Handle waste properly.

Follow your school's standard procedures for handling waste, which may include wearing gloves. Place no-touch waste baskets where they are easy to use. Throw disposable items used to clean surfaces and items in the trash immediately after use. Avoid touching used tissues and other waste when emptying waste baskets. Wash your hands with soap and water after emptying waste baskets and touching used tissues and similar waste.

www.cdc.gov/flu/school
1-800-CDC-INFO
What is she getting for the holidays?

- Dolls
- Books
- Clothes
- Toys
- Fever
- Chills
- Muscle aches
- Sore throat

Most people get the flu in January and February. You can spread the flu virus even before you feel sick.

Protect Yourself and Others.

- Get vaccinated
- Get a flu test

Visit www.FluSupplyNews.com to find a clinic and learn more.
85% of Americans, including many healthy adults, are recommended to receive the flu vaccine each year.

- Influenza leads to 200,000 hospitalizations and 36,000 deaths every year.
- Flu vaccination should begin as soon as vaccine is available and continue throughout January, February and beyond.
- Annual vaccination protects against getting the flu and can make the illness milder if it is contracted.

Source: U.S. Centers for Disease Control and Prevention

Visit www.FluSupplyNews.com to learn more.
Stop Germs! Stay Healthy! Wash Your Hands

WHEN?

- Before, during, and after preparing food
- Before eating food
- Before and after caring for someone who is sick
- Before and after treating a cut or wound
- After using the toilet
- After changing diapers or cleaning up a child who has used the toilet
- After blowing your nose, coughing, or sneezing
- After touching an animal or animal waste
- After touching garbage

HOW?

- Wet hands with clean, running water and apply soap.
- Rub hands together to make a lather. Scrub the backs of hands, between fingers, and under nails.
- Continue scrubbing for at least 20 seconds. Need a timer? Hum the “Happy Birthday” song from beginning to end twice.
- Rinse hands well under running water.
- Dry hands using a clean towel or air dry.

For more details on handwashing, visit CDC’s Handwashing Website at www.cdc.gov/handwashing

Keeping hands clean is one of the most important things we can do to stop the spread of germs and stay healthy.
The flu can make your children sick enough to miss school, activities, or even be hospitalized.

Rarely, even healthy children can die from flu complications.

Vaccinate your kids against the flu.

PROTECT ME FROM FLU. VACCINATE ME.

For information, visit http://www.flu.gov, or http://www.cdc.gov/flu
The best way to protect against influenza is to get a flu vaccine every flu season.

Why get vaccinated against influenza (flu)?

Influenza (flu) is a contagious respiratory disease that can lead to serious complications, hospitalization, or even death. Anyone can get the flu, and vaccination is the single best way to protect against influenza. Even healthy children and adults can get very sick from the flu and spread it to family and friends.

There are two reasons for getting a yearly flu vaccine.

1) The first reason is that because flu viruses are constantly changing, flu vaccines may be updated from one season to the next to protect against the most recent and most commonly circulating viruses.

2) The second reason that annual vaccination is recommended is that a person's immune protection from vaccination declines over time and annual vaccination is needed for optimal protection.

Who should get a flu vaccine?

Everyone is at risk for seasonal influenza.

Health experts now recommend that everyone 6 months of age and older get vaccinated against influenza. While everyone should get a flu vaccine each flu season, it's especially important that the following groups get vaccinated either because they are at high risk of having serious flu-related complications or because they live with or care for people at high risk for developing flu-related complications:

- Pregnant women
- Children younger than 5, but especially children younger than 2 years old
- People 50 years of age and older
- People of any age with certain chronic medical conditions
- People who live in nursing homes and other long-term care facilities
- People who live with or care for those at high risk for complications from flu, including:
  - Health care workers
  - Household contacts of persons at high risk for complications from the flu
  - Household contacts and out of home caregivers of children less than 6 months of age (these children are too young to be vaccinated)

Some children 6 months to 8 years of age may need 2 doses of the vaccine to be fully protected. Ask your doctor.

For a complete list, see "Who Should Get Vaccinated Against Influenza" at http://www.cdc.gov/flu/protect/whoshouldvax.htm

Who should NOT get a flu vaccine?

- Influenza vaccine is not approved for use in children younger than 6 months so they should not be vaccinated, but their caregivers should be vaccinated instead. And people who are sick with fever should wait until their symptoms pass to get vaccinated. Some people should not be vaccinated before talking to their doctor. This includes:
  - People who have a severe allergy to chicken eggs.
  - People who have had a severe reaction to an influenza vaccination in the past.
  - People who developed Guillian-Barré syndrome (GBS) within 6 weeks of getting an influenza vaccine previously.

If you have questions about whether you should get a flu vaccine, consult your health care provider.

For a complete list, see "Who Should Get Vaccinated Against Influenza" at http://www.cdc.gov/flu/protect/whoshouldvax.htm

National Center for Immunization and Respiratory Diseases
When to Get Vaccinated

Get vaccinated as soon as vaccine becomes available in your community. Vaccination before December is best since this timing ensures that protective antibodies are in place before flu activity is typically at its highest. However, flu season can last as late as May so getting vaccinated later in the flu season could still provide protective benefit. About 2 weeks after vaccination, antibodies that provide protection against the influenza viruses in the vaccine develop in the body.

Flu vaccines are offered in many doctors' offices and clinics. Even if you don't have a regular doctor or nurse, you can get a flu vaccine at other places like your local health department, a pharmacy, an urgent care clinic, and maybe your school, college health center, or workplace.

What kinds of flu vaccines are available?

There are two types of flu vaccine available:

- The “flu shot” — an inactivated vaccine (containing killed virus) that is given with a needle, usually in the arm. The flu shot is approved for use in people older than 6 months, including healthy people and people with chronic medical conditions.

There are three different flu shots available:
- a regular flu shot approved for people ages 6 months and older
- a high-dose flu shot approved for people 65 and older, and
- an intradermal flu shot approved for people 18 to 64 years of age.

- The nasal-spray flu vaccine — a vaccine made with live, weakened flu viruses that is given as a nasal spray (sometimes called LAIV for "Live Attenuated Influenza Vaccine"). The viruses in the nasal spray vaccine do not cause the flu. LAIV is approved for use in healthy* people 2 through 49 years of age who are not pregnant.

What are the benefits of getting the flu vaccine?

- Protection for yourself.
- Protection for newborns and infants who are too young to get vaccinated.
- Protection for people at high risk for complications from flu.

Flu seasons are unpredictable and can be severe. Over a period of 30 years, between 1976 and 2007, estimates of flu-related deaths in the United States range from a low of 3,000 people to a high of about 49,000 people. Each year, more than 200,000 people are hospitalized from the flu, including an average of 20,000 children younger than 5 years of age.

What are the side effects of the flu vaccine?

Flu shots are safe and cannot give you the flu because they are made from killed or very weakened virus, but there may be some mild side effects from the two different types of vaccines (shot and nasal spray).

The most common side effects from the flu shot are soreness, redness, tenderness or swelling where the shot is given.

Side effects from the nasal spray vaccine include runny nose, cough, or nasal congestion.

Everyone, 6 months of age and older, is recommended to get vaccinated against the flu.

A flu vaccine reduces your risk of illness, hospitalization, or even death and can prevent you from spreading the virus to your loved ones. Protect your family from flu; get vaccinated.

For more information about the seriousness of influenza and the benefits of influenza vaccination, talk to your doctor or nurse, visit www.cdc.gov, or call CDC at 1-800-CDC-INFO.
La mejor manera de protegerse contra la influenza es vacunarse cada temporada.

¿Por qué vacunarse contra la influenza (gripe)?

La influenza (gripe) es una enfermedad respiratoria contagiosa que puede causar complicaciones graves, requerir de hospitalización e incluso provocar la muerte. Cualquier persona puede contraer la influenza. La forma más eficaz de protegerse contra esta enfermedad es vacunándose.

Los virus de la influenza cambian constantemente y, en cada temporada, se pueden propagar diferentes virus que transmiten esta enfermedad. Al vacunarse contra la influenza cada temporada usted se protege contra los tres virus de la influenza que, según las investigaciones, causarán la mayor cantidad de infecciones durante ese ese temporada. Los Centros para el Control y la Prevención de Enfermedades (CDC) recomiendan ponerse la vacuna contra la influenza como el paso más importante para prevenir la enfermedad.

¿Quién debe vacunarse contra la influenza?

Todas las personas tienen riesgos de contraer influenza estacional.

Los expertos en salud recomiendan actualmente que todas las personas de 6 meses de edad o más se vacunen contra la influenza. Aun los niños y adultos saludables pueden enfermarse gravemente de influenza, pero ciertas personas tienen más riesgos de sufrir complicaciones graves debido a esta enfermedad, entre ellos se cuentan:

- Personas de 65 años o más
- Niños menores de 5 años, pero en especial si tienen menos de 2 años de edad
- Personas con ciertas afecciones medias crónicas como asma y enfermedad pulmonar obstructiva crónica (EPOC), diabetes (tipo 1 y 2), enfermedades del corazón, afecciones neurológicas y otros problemas de salud
- Mujeres embarazadas

Algunos niños de 6 meses a 8 años pueden necesitar 2 dosis de la vacuna para estar totalmente protegidos. Pregúntele a su médico.

*Para ver la lista completa, consulte "Personas con alto riesgo de sufrir complicaciones relacionadas con la influenza" en http://espanol.cdc.gov/nes/fie/a/about/disease/high_risk.htm

¿Quién NO debe vacunarse contra la influenza?

La vacuna contra la influenza no está aprobada para niños menores de 6 meses, por lo tanto no se les debe vacunar, pero en su lugar se deben vacunar las personas encargadas de su cuidado. Las personas que están enfermas y tienen fiebre deben esperar hasta que se vayan los síntomas antes de vacunarse.

Algunas personas no se deben vacunar antes de consultar primero con su doctor. Por ejemplo:

- Las personas con alergia grave a los huevos de gallina.
- Las personas que en el pasado han tenido una fuerte reacción a la vacuna contra la influenza.
- Las personas que tuvieron síndrome de Guillain-Barré (SGB) en las 6 semanas después de haber recibido una vacuna contra la influenza.

Si tiene preguntas sobre si debe usted recibir la vacuna contra la influensa, consulte a su proveedor de atención médica.

Cuándo se debe vacunar

Vacúnese tan pronto como la vacuna esté disponible en su comunidad. La vacunación temprana brinda protección en caso de que la temporada de influenza comience antes de lo previsto y le rotegará durante toda la temporada de influenza.
¿Cuáles son los tipos de vacunas contra la influenza disponibles?

Hay dos tipos disponibles de vacunas contra la influenza estacional:

1. Una vacuna inactivada (muerta), también conocida como vacuna inyectable contra la influenza, que se administra por medio de una inyección en un músculo, y

2. Una vacuna viva, atenuada (debilitada), también conocida como aerosol nasal, que se aplica con un atomizador directamente dentro de la nariz.

¿Cuáles son los beneficios de recibir la vacuna contra la influenza?

- **Protección** para usted.
- **Protección** para los recién nacidos y bebés que aún son muy jóvenes para vacunarse.
- **Protección** para las personas con alto riesgo de sufrir complicaciones debido a la influenza.

Las temporadas de influenza son impredecibles y pueden ser graves. Durante un periodo de 30 años, entre 1976 y 2007, las estimaciones de muertes relacionadas con la influenza en los Estados Unidos oscilaron desde un nivel bajo de 3,000 personas hasta un punto máximo de 49,000 personas. Cada año, más de 200,000 personas son hospitalizadas debido a la influenza, incluido un promedio de 20,000 niños menores de 5 años de edad.

¿Cuáles son los efectos secundarios de las vacunas contra la influenza?

Las vacunas contra la influenza son seguras y no pueden transmitirle la enfermedad porque están elaboradas con virus muertos o debilitados, pero los dos tipos de vacunas pueden causar efectos secundarios leves.

Los efectos secundarios más comunes son dolor, enrojecimiento, sensibilidad o hinchazón en el sitio donde se aplicó la inyección.

Los efectos secundarios de la vacuna en aerosol pueden ser secreción y congestión nasales y tos.

¿Cuál de las vacunas contra la influenza es la indicada para mujeres embarazadas?

La vacuna contra la influenza en inyección (no el aerosol nasal) es segura para las mujeres embarazadas durante todo el embarazo. Las madres que están amamantando pueden recibir la vacuna inyectable o en aerosol nasal.

Se recomienda que todas las personas de 6 meses de edad y más se vacunen contra la influenza.
La vacuna contra la influenza reduce su riesgo de enfermedad, hospitalización o incluso de muerte y puede evitar la transmisión del virus a sus seres queridos. Proteja a su familia contra la influenza: vacúnese.

Para obtener más información sobre la gravedad de la influenza y los beneficios de la vacuna contra la influenza, converse con su doctor o enfermera, visite www.cdc.gov/flu/espanol o llame al 800-CDC-INFO.
Can the flu be treated?
Yes. There are prescription medications called "antiviral drugs" that can be used to treat influenza illness.

What are antiviral drugs?
Antiviral drugs are prescription medicines (pills, liquid or an inhaled powder) that fight against the flu in your body. Antiviral drugs are not sold over-the-counter. You can only get them if you have a prescription from your doctor or health care provider. Antiviral drugs are different from antibiotics, which fight against bacterial infections.

What should I do if I think I have the flu?
If you get the flu, antiviral drugs are a treatment option. Check with your doctor promptly if you have a high risk condition (see box on next page for full list of high risk conditions) and you get flu symptoms. Flu symptoms can include fever, cough, sore throat, runny or stuffy nose, body aches, headache, chills and fatigue. Your doctor may prescribe antiviral drugs to treat your flu illness.

Should I still get a flu vaccine?
Yes. Antiviral drugs are not a substitute for getting a flu vaccine. While not 100% effective, a flu vaccine is the first and best way to prevent influenza. Antiviral drugs are a second line of defense to treat the flu if you get sick.

What are the benefits of antiviral drugs?
When used for treatment, antiviral drugs can lessen symptoms and shorten the time you are sick by 1 or 2 days. They also can prevent serious flu complications, like pneumonia. For people with a high risk medical condition, treatment with an antiviral drug can mean the difference between having a milder illness versus a very serious illness that could result in a hospital stay.

What are the possible side effects of antiviral drugs?
Some side effects have been associated with the use of flu antiviral drugs, including nausea, vomiting, dizziness, runny or stuffy nose, cough, diarrhea, headache and some behavioral side effects. These are uncommon. Your doctor can give you more information about these drugs or you can check the CDC or the Food and Drug Administration (FDA) websites.

When should antiviral drugs be taken for treatment?
Studies show that flu antiviral drugs work best for treatment when they are started within 2 days of getting sick. However, starting them later can still be helpful, especially if the sick person has a high risk health condition or is very sick from the flu. Follow instructions for taking these drugs.
What antiviral drugs are recommended this flu season?

There are two FDA-approved antiviral drugs recommended by CDC this season. The brand names for these are Tamiflu® (generic name oseltamivir) and Relenza® (generic name zanamivir). Tamiflu® is available as a pill or liquid and Relenza® is a powder that is inhaled. (Relenza® is not for people with breathing problems like asthma or COPD, for example.)

How long should antiviral drugs be taken?

To treat the flu, Tamiflu® and Relenza® are usually prescribed for 5 days, although people hospitalized with the flu may need the medicine for longer than 5 days.

Can children and pregnant women take antiviral drugs?

Yes. Children and pregnant women can take antiviral drugs.

Who should take antiviral drugs?

It's very important that antiviral drugs be used early to treat people who are very sick with the flu (for example people who are in the hospital) and people who are sick with the flu and have a greater chance of getting serious flu complications, either because of their age or because they have a high risk medical condition. Other people also may be treated with antiviral drugs by their doctor this season. Most otherwise-healthy people who get the flu, however, do not need to be treated with antiviral drugs.

Following is a list of all the health and age factors that are known to increase a person's risk of getting serious complications from the flu:

<table>
<thead>
<tr>
<th>Asthma</th>
<th>People younger than 19 years of age on long-term aspirin therapy</th>
</tr>
</thead>
<tbody>
<tr>
<td>Blood disorders (such as sickle cell disease)</td>
<td>People with Chronic Obstructive Pulmonary Disease (COPD)</td>
</tr>
<tr>
<td>Chronic lung disease (such as chronic obstructive pulmonary disease [COPD] and cystic fibrosis)</td>
<td>People with weakened immune systems due to disease or medication (such as people with HIV or AIDS, or cancer, or those on chronic steroids)</td>
</tr>
<tr>
<td>Endocrine disorders (such as diabetes mellitus)</td>
<td>Other people at high risk from the flu:</td>
</tr>
<tr>
<td>Heart disease (such as congenital heart disease, congestive heart failure and coronary artery disease)</td>
<td>Adults 65 years and older</td>
</tr>
<tr>
<td>Kidney disorders</td>
<td>Children younger than 2 years old</td>
</tr>
<tr>
<td>Liver disorders</td>
<td>Pregnant women and women up to 2 weeks from end of pregnancy</td>
</tr>
<tr>
<td>Metabolic disorders (such as inherited metabolic disorders and mitochondrial disorders)</td>
<td>American Indians and Alaska Natives</td>
</tr>
<tr>
<td>Morbid Obesity</td>
<td></td>
</tr>
<tr>
<td>Neurological and neurodevelopmental conditions</td>
<td></td>
</tr>
</tbody>
</table>

For more information visit www.cdc.gov/flu or call 1-800-CDC-INFO.
¿Qué deben saber sobre los medicamentos antivirales contra la influenza

¿Qué son los medicamentos antivirales?

Los medicamentos antivirales son medicinas recetadas (en pastilla, líquido o polvo para inhalar) que ayudan a combatir la influenza en el cuerpo. Aunque los CDC recomiendan la vacuna contra la influenza como la primera medida y la más importante en la prevención de la influenza, los medicamentos antivirales son una segunda línea de defensa contra esta enfermedad. Los medicamentos antivirales no se venden sin receta y son diferentes a los antibióticos. Solo los puede obtener si su doctor o prestador de atención médica le da una receta.

¿Cuáles son los medicamentos antivirales que se recomiendan para esta temporada de influenza?

Hay dos medicamentos antivirales que los CDC recomiendan para esta temporada. Los nombres comerciales son Tamiflu® y Relenza® (los nombres genéricos de estos medicamentos son oseltamivir y zanamivir). Tamiflu® se encuentra disponible en forma de pildora o líquido y Relenza® en forma de polvo para inhalar.

¿Quiénes deben tomar medicamentos antivirales?

Es muy importante administrar los medicamentos antivirales en las etapas iniciales para tratar a personas que están muy enfermas por la influenza (por ejemplo, personas hospitalizadas) y aquellas que tienen influenza y una probabilidad mayor de sufrir complicaciones relacionadas con la enfermedad (consulte el recuadro abajo). Esta temporada, otras personas también pueden recibir tratamiento con medicamentos antivirales. Sin embargo, la mayoría de las personas saludables no necesitarán tratamiento con este tipo de medicamentos.

¿Cuáles son los beneficios de los medicamentos antivirales?

Cuando se usan para el tratamiento, estos medicamentos pueden hacerlo sentir mejor y acortar el período de enfermedad en 1 o 2 días. También pueden prevenir complicaciones graves de la influenza.

¿Cuándo se deben tomar medicamentos antivirales para el tratamiento contra la influenza?

Estudios han indicado que los medicamentos antivirales contra la influenza son más eficaces para el tratamiento si se reciben durante los 2 primeros días de que empieza la enfermedad. Sin embargo, estos medicamentos pueden usarse para el tratamiento, aun si se reciben después de los 2 días, especialmente si la persona enferma tiene un riesgo mayor de sufrir complicaciones graves (consulte el recuadro abajo) o si tiene síntomas específicos (como dificultad para respirar, dolor u opresión en el pecho, mareos o se siente desorientada) o está hospitalizada debido a la influenza.

¿Por cuánto tiempo se deben tomar los medicamentos antivirales?

Por lo general, para tratar la influenza, Tamiflu® y Relenza® se deben tomar por 5 días, aunque las personas hospitalizadas por influenza pueden requerir tomarlos por más de 5 días.

Centers for Disease Control and Prevention National Center for Immunization and Respiratory Diseases
¿Los niños pueden tomar medicamentos antivirales?

Sí. Los niños pueden tomar medicamentos antivirales.

- Tamiflu® ha sido aprobado por la FDA para su uso en niños de 1 año de edad o más. Tamiflu® viene en formulación líquida para niños o en cápsulas. Si su médico le receta a su hijo cápsulas de Tamiflu®, y el niño no puede tragar las cápsulas, usted puede abrir una cápsula y mezclar su contenido con jarabe de chocolate con azúcar o sin azúcar para que se pueda tomar el medicamento mezclado.

- Relenza® ha sido aprobado para el tratamiento de niños de 7 años de edad o más, pero solo para quienes no tienen problemas respiratorios (como asma) o enfermedades cardiacas. Es un polvo para inhalar que se administra con un inhalador en disco.

¿Las mujeres embarazadas pueden tomar medicamentos antivirales?

Sí. En la actualidad, no hay estudios que indiquen que los medicamentos antivirales sean peligrosos para las mujeres embarazadas y sus bebés en gestación. La influenza puede causar enfermedades graves y hasta la muerte en las mujeres embarazadas. Tomar medicamentos antivirales puede ayudar a prevenir estas consecuencias. En la actualidad, el mejor medicamento para el tratamiento de mujeres embarazadas con influenza es Tamiflu®.

¿Cuáles son los efectos secundarios de los medicamentos antivirales?

Los efectos secundarios varían de acuerdo al medicamento antiviral.

Tamiflu® ha sido usado desde 1999. Los efectos secundarios más frecuentes son náuseas o vómito, que ocurren, por lo general, durante los 2 primeros días de tratamiento. Se puede reducir la probabilidad de sufrir estos efectos secundarios tomando Tamiflu® con alimentos.

Relenza® ha sido usado desde 1999. Los efectos secundarios más frecuentes son mareos, sinusitis, secreción o congestión nasal, tos, diarrea, náuseas o dolor de cabeza. Relenza® también puede causar sibilancias y problemas para respirar en las personas que tengan enfermedades de los pulmones.

En casos poco comunes algunas personas, en su mayoría niños, que tenían influenza y recibieron tratamiento con Tamiflu® o Relenza® estuvieron desorientados y presentaron un comportamiento anormal capaz de producir lesiones. La influenza también puede causar estos comportamientos. Sin embargo, a las personas que toman estos medicamentos antivirales se les debe vigilar atentamente por si presentan comportamientos inusuales o problemas para pensar claramente. Esto se debe informar inmediatamente a un proveedor de atención médica.

Si le han recetado un medicamento antiviral, dígale a su médico que le explique cómo usarlo y le informe cualquier posible efecto secundario.

Entre las personas que tienen una posibilidad mayor de sufrir complicaciones graves por la influenza están:

- Niños menores de 2 años de edad*
- Adultos de 65 años en adelante
- Mujeres embarazadas y hasta con 2 semanas después del final del embarazo
- Personas con ciertas afecciones crónicas (como asma, falla cardíaca, enfermedad respiratoria crónica) y aquellas con sistemas inmunitarios debilitados (debido a enfermedades como diabetes y VIH)

*Es importante saber que los niños entre 2 y 4 años de edad, también presentan una tasa alta de complicaciones en comparación con otros niños, a pesar de que su riesgo es menor que el de los menores de 2 años.

Para obtener más información, visite www.cdc.gov/flu/espanol o llame al 800-CDC-INFO.
CDC recommends a three-step approach to fighting the flu.

CDC recommends a three-step approach to fighting influenza (flu). The first and most important step is to get a flu vaccination each year. But if you get the flu, there are prescription antiviral drugs that can treat your illness. Early treatment is especially important for the elderly, the very young, people with certain chronic health conditions, and pregnant women. Finally, everyday preventive actions may slow the spread of germs that cause respiratory (nose, throat, and lungs) illnesses, like flu. This flyer contains information about everyday preventive actions.

How does the flu spread?

Flu viruses are thought to spread mainly from person to person through droplets made when people with flu cough, sneeze, or talk. Flu viruses also may spread when people touch something with flu virus on it and then touch their mouth, eyes, or nose. Many other viruses spread these ways too.

People infected with flu may be able to infect others beginning 1 day before symptoms develop and up to 5-7 days after becoming sick. That means you may be able to spread the flu to someone else before you know you are sick as well as while you are sick. Young children, those who are severely ill, and those who have severely weakened immune systems may be able to infect others for longer than 5-7 days.

What are everyday preventive actions?

• Try to avoid close contact with sick people.
• If you or your child gets sick with flu-like illness, CDC recommends that you (or your child) stay home for at least 24 hours after the fever is gone except to get medical care or for other necessities. The fever should be gone without the use of a fever-reducing medicine.
• While sick, limit contact with others as much as possible to keep from infecting them.
• Cover your nose and mouth with a tissue when you cough or sneeze. Throw the tissue in the trash after you use it.
• Wash your hands often with soap and water. If soap and water are not available, use an alcohol-based hand rub.
• Avoid touching your eyes, nose and mouth. Germs spread this way.
• Clean and disinfect surfaces and objects that may be contaminated with germs like the flu.
• If an outbreak of flu or another illness occurs, follow public health advice. This may include information about how to increase distance between people and other measures.
What additional steps can I take at work to help stop the spread of germs that can cause respiratory illness, like flu?

- Find out about your employer’s plans if an outbreak of flu or another illness occurs and whether flu vaccinations are offered on-site.
- Routinely clean frequently touched objects and surfaces, including doorknobs, keyboards, and phones, to help remove germs.
- Make sure your workplace has an adequate supply of tissues, soap, paper towels, alcohol-based hand rubs, and disposable wipes.
- Train others on how to do your job so they can cover for you in case you or a family member gets sick and you have to stay home.
- If you begin to feel sick while at work, go home as soon as possible.

What additional preventive actions can I take to protect my child from germs that can cause respiratory illness, like flu?

- Find out about plans your child’s school, child care program, or college has if an outbreak of flu or another illness occurs and whether flu vaccinations are offered on-site.
- Make sure your child’s school, child care program, or college routinely cleans frequently touched objects and surfaces, and that they have a good supply of tissues, soap, paper towels, alcohol-based hand rubs, and disposable wipes on-site.
- Ask how sick students and staff are separated from others and who will care for them until they can go home.

Everyday preventive actions can help slow the spread of germs that can cause many different illnesses and may offer some protection against the flu.

For more information, visit www.cdc.gov, or call 1-800-CDC-INFO.
Los CDC recomiendan una estrategia de tres pasos para combatir la influenza: El primero y más importante es vacunarse cada año contra la influenza. Pero si usted contrae la influenza, existen medicamentos antivirales recetados para tratar la enfermedad. El tratamiento temprano es especialmente importante para los ancianos, los niños muy pequeños, las personas con algunas afecciones crónicas y las mujeres embarazadas. Finalmente, las medidas preventivas diarias pueden disminuir la propagación de los gérmenes que causan enfermedades respiratorias (en las vías respiratorias: la nariz, la garganta y los pulmones) como la influenza. Este volante contiene información sobre estas medidas a tomar.

¿Cómo se transmite la influenza?

Los virus de la influenza se transmiten principalmente de persona a persona cuando alguien que tiene influenza tose, estornuda o habla cerca de otras personas. También pueden transmitirse cuando una persona toca algún objeto que tiene el virus de la influenza y luego se toca los ojos, la nariz o la boca. Muchos otros virus se transmiten también de esta manera.

Las personas infectadas por el virus de la influenza pueden infectar a otras 1 día antes de que se presenten los síntomas y hasta 5 a 7 días después de enfermarse. Esto significa que usted puede transmitir el virus de la influenza antes de saber que lo ha contraído así como cuando esté enfermo. Los niños pequeños, las personas gravemente enfermas y todas aquellas que tienen sistemas inmunitarios muy debilitados pueden infectar a otras personas por más de 5 a 7 días.

¿Qué son medidas preventivas diarias?

Las medidas preventivas diarias son pasos que se pueden seguir para ayudar a frenar la propagación de los gérmenes que causan enfermedades respiratorias, como la influenza. Estas incluyen las siguientes medidas individuales y comunitarias:
- Evitar el contacto cercano con las personas enfermas.
- Si usted o su hijo contraen una enfermedad respiratoria, como la influenza, limiten el contacto con los demás lo más que puedan para evitar la propagación de la enfermedad. Quédese en la casa (o deje a su hijo en la casa) por al menos 24 horas después de que haya desaparecido la fiebre, excepto para buscar atención médica o para otras necesidades. La fiebre debe haber desaparecido sin usar medicamentos para reducirla.
- Cuando esté enfermo, limite en lo posible el contacto con los demás para evitar contagiarlos.
- Cubrirse la boca y la nariz con un pañuelo desechable al toser o estornudar. Esto evitará la propagación de las gotitas respiratorias de la nariz o la boca que pueden contener gérmenes.
- Lavarse las manos frecuentemente con agua y jabón. Si no hay agua y jabón, usar un limpiador para manos a base de alcohol.
• Evitar tocarse los ojos, la nariz y la boca. Esta es la manera como se propagan los gérmenes.
• Limpie y desinfecte las superficies y los objetos que puedan estar contaminados con gérmenes como los de la influenza.
• Si ocurre un brote de influenza o de otra enfermedad, sigue los consejos de las autoridades de salud pública. Esto puede incluir información sobre cómo mantenerse alejado de las otras personas y otras medidas.

**Puedo tomar en el trabajo para evitar la propagación de los gérmenes que causan enfermedades respiratorias como la influenza?**

• Pregunte sobre los planes que tiene su empleador en caso de un brote de influenza o de otra enfermedad y si se ofrecen vacunas contra la influenza en su lugar de trabajo.
• Lave de manera habitual los objetos y las superficies que se tocan con más frecuencia, como manijas de las puertas, teclados y teléfonos, para ayudar a remover los gérmenes.
• Asegúrese de que en su lugar de trabajo haya un suministro adecuado de jabón, toallas de papel, pañuelos desechables, limpiadores para manos a base de alcohol y toallitas desinfectantes desechables.
• Capacite a otras personas en sus labores para que lo puedan cubrir en caso de que tenga que quedarse en casa porque usted o alguien de su familia está enfermo.
• Si comienza a sentirse mal en el trabajo, váyase a casa lo antes posible.

**¿Qué otras medidas preventivas puedo realizar para proteger a mis hijos de los gérmenes que causan enfermedades respiratorias como la influenza?**

• Pregunte sobre los planes que tienen en la escuela, la guardería o la universidad de sus hijos en caso de un brote de influenza o de otra enfermedad y si se ofrecen vacunas contra la influenza en esos establecimientos.
• Pregunte si en la escuela, la guardería o la universidad de su hijo limpian de manera habitual los objetos y las superficies que se tocan con más frecuencia y si tienen suministros suficientes de jabón, pañuelos desechables, toallas de papel, limpiadores para manos a base de alcohol y toallitas desinfectantes desechables.
• Pregunte cómo mantendrán alejados a los estudiantes y el personal enfermos y quién cuidará de ellos hasta que se puedan ir a su casa.

**Las medidas preventivas diarias pueden ayudar a disminuir la propagación de los gérmenes que causan muchas enfermedades y pueden ofrecer cierta protección contra la influenza.**

Para obtener más información, visite [www.cdc.gov](http://www.cdc.gov), o llame al 1-800-CDC-INFO.
Flu is a **serious contagious** disease that can lead to **hospitalization** and even **death**.

**Flu-like symptoms include:**
- fever
- cough
- sore throat
- runny or stuffy nose
- body aches
- headache
- chills
- fatigue

Some people also may have vomiting and diarrhea. People may be infected with the flu, and have respiratory symptoms without a fever.

**CDC Says**

"**Take 3**"** Actions To Fight The Flu**

For more information, visit [www.cdc.gov/flu](http://www.cdc.gov/flu) or call 800-CDC-INFO.
CDC urges you to take the following actions to protect yourself and others from influenza (the flu):

#1 Take time to get a flu vaccine.
- CDC recommends a yearly flu vaccine as the first and most important step in protecting against flu viruses.
- While there are many different flu viruses, the flu vaccine protects against the viruses that research suggests will be most common.
- Everyone 6 months of age and older should get a flu vaccine as soon as this season's vaccines are available.
- Vaccination of high risk persons is especially important to decrease their risk of severe flu illness.
- People at high risk of serious flu complications include young children, pregnant women, people with chronic health conditions like asthma, diabetes or heart and lung disease and people 65 years and older.
- Vaccination also is important for health care workers, and other people who live with or care for high risk people to keep from spreading flu to high risk people.
- Children younger than 6 months are at high risk of serious flu illness, but are too young to be vaccinated. People who care for them should be vaccinated instead.

#2 Take everyday preventive actions to stop the spread of germs.
- Try to avoid close contact with sick people.
- If you are sick with flu-like illness, CDC recommends that you stay home for at least 24 hours after your fever is gone except to get medical care or for other necessities. Your fever should be gone without the use of a fever-reducing medicine.
- While sick, limit contact with others as much as possible to keep from infecting them.
- Cover your nose and mouth with a tissue when you cough or sneeze. Throw the tissue in the trash after you use it.
- Wash your hands often with soap and water. If soap and water are not available, use an alcohol-based hand rub.
- Avoid touching your eyes, nose and mouth. Germs spread this way.
- Clean and disinfect surfaces and objects that may be contaminated with germs like the flu.

#3 Take flu antiviral drugs if your doctor prescribes them.
- If you get the flu, antiviral drugs can treat your illness.
- Antiviral drugs are different from antibiotics. They are prescription medicines (pills, liquid or an inhaled powder) and are not available over-the-counter.
- Antiviral drugs can make illness milder and shorten the time you are sick. They can also prevent serious flu complications, like pneumonia.
- It's very important that antiviral drugs be used early to treat people who are very sick with the flu (for example, people who are in the hospital) and people who are sick with the flu and have a greater chance of getting serious flu complications, either because of their age or because they have a high risk medical condition. Other people also may be treated with antiviral drugs by their doctor this season. Most otherwise-healthy people who get the flu, however, do not need to be treated with antiviral drugs.
- Flu-like symptoms include fever, cough, sore throat, runny or stuffy nose, body aches, headache, chills and fatigue. Some people also may have vomiting and diarrhea. People may be infected with the flu, and have respiratory symptoms without a fever.
La influenza es una grave enfermedad contagiosa que puede requerir de hospitalización o incluso provocar la muerte.

Los síntomas de la influenza estacional incluyen:

- fiebre
- tos
- dolor de garganta
- moqueo o congestión nasal
- dolores en el cuerpo
- dolor de cabeza
- escalofríos
- fatiga

Algunas personas también pueden presentar diarrea y vómito. Puede ser que algunas personas infectadas por el virus de la influenza tengan síntomas respiratorios sin fiebre.

Para obtener más información, consulte el sitio web http://www.cdc.gov/flu/espanol o llame al 800-CDC-INFO.
Tómese el tiempo para vacunarse contra la influenza.

- Los CDC indican que el paso inicial y más importante para protegerse contra los virus de la influenza (gripe) es la vacunación anual contra la influenza.
- Si bien existen muchos virus de influenza diferentes, la vacuna contra la influenza protege contra los virus que serán los más comunes, según lo indican las investigaciones.
- La vacuna brinda protección contra un virus H3N2 de la influenza A, un virus H1N1 y uno o dos virus de la influenza B, según el tipo de vacuna.
- Todas las personas desde los 6 meses de edad y en adelante deben vacunarse contra la influenza tan pronto como la vacuna esté disponible.
- Entre las personas con más alto riesgo de sufrir complicaciones graves debido a la influenza, se incluyen niños pequeños, mujeres embarazadas, personas con afecciones crónicas como asma, diabetes, enfermedades cardíacas o respiratorias y personas de 65 años o más.
- La vacunación de las personas de alto riesgo es de particular importancia para poder disminuir su riesgo de sufrir influenza grave.
- También es importante que se vacunen los trabajadores de la salud y otras personas que viven con personas en alto riesgo, o se encargan de cuidarlas, para impedir el contagio a otros grupos de alto riesgo.
- Los bebés menores de 6 meses corren un alto riesgo de complicaciones graves por la influenza, pero son muy pequeños para recibir la vacuna. En vez de los bebés, son las personas que los cuidan quienes deben vacunarse.

Tome medidas preventivas todos los días para detener la propagación de microbios.

- Evite el contacto cercano con las personas enfermas.
- Si usted está enfermo con síntomas de la influenza, los CDC recomiendan que se quede en casa por lo menos 24 horas después de que haya desaparecido la fiebre, excepto para ir al médico o para otras necesidades. La fiebre debe desaparecer sin necesidad de tomar medicamentos para reducir la fiebre.
- Cuando esté enfermo, limite en lo posible el contacto con los demás para evitar contagiárlos.
- Cubrrese la nariz y la boca con un pañuelo deseable cuando tosa o estornude. Bote el pañuelo deseable usado a la basura.
- Lávese las manos frecuentemente con agua y jabón. Si no dispone de agua y jabón, use limpiadores para manos a base de alcohol.
- Evite tocarse los ojos, la nariz y la boca. Esta es la manera en que se propagan los microbios.
- Limpie y desinfecte las superficies y los objetos que puedan estar contaminados con gérmenes como los de la influenza.

Tome MEDICAMENTOS antivirales para la influenza si su médico los receta.

- Si usted contrae la influenza, existen medicamentos antivirales que pueden tratar su enfermedad.
- Los medicamentos antivirales son diferentes a los antibióticos. Son medicamentos (en pastillas, jarabe o polvo para inhalar) que no están disponibles para la venta sin receta médica.
- Los medicamentos antivirales pueden hacer que la enfermedad sea más leve y dure menos. También pueden prevenir complicaciones graves de la influenza, como la neumonía.
- Es muy importante el uso de los medicamentos antivirales durante la etapa temprana del tratamiento contra la influenza en personas que están muy enfermas (por ejemplo: las personas que están hospitalizadas) y las personas que contrajeron la influenza y que tienen un mayor riesgo de desarrollar complicaciones graves a causa de la misma, ya sea por la edad o porque padecen una enfermedad de alto riesgo. Otras personas también pueden ser tratadas con medicamentos antivirales durante esta temporada, según lo indique su médico. Sin embargo, la mayoría de las personas sanas que contraen influenza no necesitan ser tratadas con medicamentos antivirales.
CDC SAYS:

"TAKE 3" ACTIONS TO FIGHT THE FLU

1. Vaccinate

- CDC recommends a yearly flu vaccine as the first and most important step in protecting against flu viruses.
- While there are many different flu viruses, the flu vaccine protects against the viruses that research suggests will be most common.
- Everyone 6 months of age and older should get a flu vaccine as soon as this season’s vaccines are available.
- Vaccination of high risk persons is especially important to decrease their risk of severe flu illness.
- People at high risk of serious flu complications include young children, pregnant women, people with chronic health conditions like asthma, diabetes or heart and lung disease and people 65 years and older.
- Vaccination also is important for health care workers, and other people who live with or care for high risk people to keep from spreading flu to high risk people.
- Children younger than 6 months are at high risk of serious flu illness, but are too young to be vaccinated. People who care for them should be vaccinated instead.

2. Stop Germs

- Try to avoid close contact with sick people.
- If you are sick with flu-like illness, CDC recommends that you stay home for at least 24 hours after your fever is gone except to get medical care or for other necessities. Your fever should be gone without the use of a fever-reducing medicine.
- While sick, limit contact with others as much as possible to keep from infecting them.
- Cover your nose and mouth with a tissue when you cough or sneeze. Throw the tissue in the trash after you use it.
- Wash your hands often with soap and water. If soap and water are not available, use an alcohol-based hand rub.
- Avoid touching your eyes, nose and mouth. Germs spread this way.
- Clean and disinfect surfaces and objects that maybe contaminated with germs like the flu.

3. Antiviral Drugs

- If you get the flu, antiviral drugs can treat your illness.
- Antiviral drugs are different from antibiotics. They are prescription medicines (pills, liquid or an inhaled powder) and are not available over-the-counter.
- Antiviral drugs can make illness milder and shorten the time you are sick. They can also prevent serious flu complications, like pneumonia.
- It's very important that antiviral drugs be used early to treat people who are very sick with the flu (for example, people who are in the hospital) and people who are sick with the flu and have a greater chance of getting serious flu complications, either because of their age or because they have a high risk medical condition. Other people also may be treated with antiviral drugs by their doctor this season. Most otherwise-healthy people who get the flu, however, do not need to be treated with antiviral drugs.
- Flu-like symptoms include fever, cough, sore throat, runny or stuffy nose, body aches, headache, chills and fatigue. Some people also may have vomiting and diarrhea. People may be infected with the flu, and have respiratory symptoms without a fever.

Some people also may have vomiting and diarrhea. People may be infected with the flu, and have respiratory symptoms without a fever.
Los CDC recomiendan que "TOME 3" MEDIDAS PARA COMBATIR LA INFLUENZA

1. Vacúnese

- Los CDC indican que el paso inicial y más importante para protegerte contra los virus de la influenza (gripe) es la vacunación anual contra la influenza.
- Si bien existen muchos virus de influenza diferentes, la vacuna contra la influenza protege contra los virus que serán los más comunes, según lo indican las investigaciones.
- La vacuna brinda protección contra un virus H3N2 de la influenza A, un virus H1N1 y uno o dos virus de la influenza B, según el tipo de vacuna.
- Todas las personas desde los 6 meses de edad y en adelante deben vacunarse contra la influenza tan pronto como la vacuna esté disponible.
- Entre las personas con más alto riesgo de sufrir complicaciones graves debido a la influenza, se incluyen niños pequeños, mujeres embarazadas, personas con afecciones crónicas como asma, diabetes, enfermedades cardíacas o respiratorias y personas de 65 años o más.
- La vacunación de las personas de alto riesgo es de particular importancia para poder disminuir su riesgo de sufrir influenza grave.
- También es importante que se vacunen los trabajadores de la salud y otras personas que viven con personas en alto riesgo, o se encargan de cuidarlas, para impedir el contagio a otros grupos de alto riesgo.
- Los bebés menores de 6 meses corren un alto riesgo de complicaciones graves por la influenza, pero son muy pequeños para recibir la vacuna. En vez de los bebés, son las personas que los cuidan quienes deben vacunarse.

2. No propague microbios

- Evite el contacto cercano con las personas enfermas.
- Si usted está enfermo con síntomas de la influenza, los CDC recomiendan que se quede en casa por lo menos 24 horas después de que haya desaparecido la fiebre, excepto para ir al médico o para otras necesidades. La fiebre debe desaparecer sin necesidad de tomar medicamentos para reducir la fiebre.
- Cuando esté enfermo, límite en lo posible el contacto con los demás para evitar contagiarlos.
- Cubra la nariz y la boca con un pañuelo desechable cuando tosa o estornude. Bote el pañuelo desechable usado a la basura.
- Lávese las manos frecuentemente con agua y jabón. Si no dispone de agua y jabón, use limpiadores para manos a base de alcohol.
- Evite tocar los ojos, la nariz y la boca. Esta es la manera en que se propagan los microbios.
- Limpie y desinfecte las superficies y los objetos que puedan estar contaminados con gérmenes como los de la influenza.

3. Medicamentos antivirales

- Si usted contrae la influenza, existen medicamentos antivirales que pueden tratar su enfermedad.
- Los medicamentos antivirales son diferentes a los antibióticos. Son medicamentos (en pastillas, jarabe o polvo para inhalar) que no están disponibles para la venta sin receta médica.
- Los medicamentos antivirales pueden hacer que la enfermedad sea más leve y dure menos. También pueden prevenir complicaciones graves de la influenza, como la neumonía.
- Es muy importante el uso de los medicamentos antivirales durante la etapa temprana del tratamiento contra la influenza en personas que están muy enfermas (por ejemplo: las personas que están hospitalizadas) y las personas que contrajeron la influenza y que tienen un mayor riesgo de desarrollar complicaciones graves a causa de la misma, ya sea por la edad o porque padecen una enfermedad de alto riesgo. Otras personas también pueden ser tratadas con medicamentos antivirales durante esta temporada, según lo indique su médico.
- Sin embargo, la mayoría de las personas sanas que contraen influenza no necesitan ser tratadas con medicamentos antivirales.

**LOS SÍNTOMAS DE LA INFLUENZA ESTACIONAL INCLUYEN:**
- fiebre
- tos
- dolor de garganta
- moqueo o congestión nasal
- dolores en el cuerpo
- dolor de cabeza
- escalofríos fatiga

Algunas personas también pueden presentar diarrea y vómito. Puede ser que algunas personas infectadas por el virus de la influenza tengan síntomas respiratorios sin fiebre.

Para obtener más información, consulte el sitio web [http://www.cdc.gov/flu/espanol](http://www.cdc.gov/flu/espanol) o llame al 800-CDC-INFO.
CONSEJOS PARA PREVENIR LA GRIPE
PROTÉJASE Y PROTEJA A SUS SERES QUERIDOS CONTRA LA GRIPE:

- Vacúnese
- Lávese las manos a menudo
- Cubra sus estornudos y tos
- Quédese en casa si está enfermo

Millones de californianos están en riego de contraer la gripe regular (influenza estacional) este año.

Siga las precauciones arriba y vacúñese. Reduzca su riesgo de contraer la gripe y enfermar a su familia, amigos y colegas.

¡VACÚNESE CONTRA LA GRIPE HOY MISMO!

Para más información, visite VacunasyMiSalud.org

¿Quién necesita la vacuna contra la gripe?

Todas las personas de 6 meses de edad y mayores deben vacunarse contra la gripe.

La vacuna está disponible como inyección o espray nasal.
FLU PREVENTION TIPS

PROTECT YOURSELF AND THOSE YOU LOVE AGAINST FLU:

Get vaccinated
Wash hands often
Cover coughs & sneezes
Stay home when sick

Millions of Californians are at risk of catching influenza this year.

Follow the above precautions and get your flu shot or nasal spray. Reduce your chances of getting the flu and getting family, friends and co-workers sick too.

GET YOUR FLU VACCINE TODAY!

For more information, visit cdph.ca.gov