OBJECTIVE:

To train health workers on influenza or flu*, including Pandemic Influenza H1N1 (also known as “swine flu”), so that they can inform and educate the Spanish-speaking population, protect themselves and prevent the spread of the disease.

* The words “flu” and “influenza” have the same meaning and are used indistinctively in this manual.

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Symbols

Manual designed by Tania Figueroa www.smartcrowd.us
Photographs courtesy of Marc Schenker and HIA photo archives
What is the flu or influenza?
The flu (influenza) is a contagious respiratory illness caused by influenza viruses. It is very common among humans, but animals (such as pigs, birds, whales, cats, horses, etc.) can also get the flu. The flu virus has the propensity to easily “mutate”, that is to frequently change its genetic information, which is why it is referred to as a “seasonal” flu, i.e. the type of influenza that occurs every year, usually during the cold season (October to May).

What is the flu or influenza H1N1?
The H1N1 flu (originally referred to as “swine flu”) is a new influenza virus first detected in humans in the United States in April 2009. Currently this virus is found in all countries and that is why the World Health Organization named it “2009 pandemic flu—or influenza—H1N1”

Why is the H1N1 virus sometimes called “swine flu”?
The virus was originally nicknamed “swine flu” because laboratory tests indicated that this virus was very similar to influenza viruses that normally occur in pigs. Later studies showed that the new virus is very different from the one that normally spreads among pigs. The H1N1 has two parts (genes) of pig influenza viruses, in addition to those of birds and humans.
Is the flu a serious illness?
The diseases caused by the influenza virus range from mild to severe. While the vast majority of people who get sick will recover without medical treatment, hospitalizations and deaths from infection with this virus have occurred.

Each year in the United States, between 5% and 20% of the population is infected by influenza. An average of 36,000 people die annually from complications related to seasonal flu and more than 200,000 are hospitalized from flu-related causes. Most cases of seasonal flu occur among people over 65 and children under 5 years.

In the case of the H1N1 flu CDC estimates that between April 2009 and January 2010 approximately 57 million people were infected in the United States; 257,000 people were hospitalized and 11,690 died; 87% of deaths occurred in people younger than 65 years.

The main difference between seasonal flu and influenza H1N1 is that H1N1 affects mostly young people and adults (between 11-64 years) and very little the elderly.

Most people who are hospitalized or die from the H1N1 flu are people who also have other diseases and are considered at “high risk.”
What people are considered at “high risk”? 
The following groups of people are more likely to develop health complications if they catch influenza H1N1:
  - Children under 5 years
  - Pregnant women
  - People with certain diseases such as:
    - Asthma
    - Diabetes
    - Heart diseases
    - Anemia
    - Cancer
    - Liver diseases
    - Kidney problems
    - Neurological disorders (epilepsy, cerebral palsy, mental retardation)
    - Neuromuscular disorders (muscular dystrophy and multiple sclerosis)
    - Weakened immune system (people with HIV or AIDS)
    - Persons under 19 years of age who are receiving long-term therapy based on aspirin

These people should call their doctor as soon as they feel the first symptoms of influenza.
How does the H1N1 virus affect Hispanics?
Information collected by health authorities shows that Hispanics in the United States have been more affected by the influenza H1N1 virus compared with whites.

In the context of California, the State Department of Public Health reported that, between April and December 2009, statistics showed that the number of deaths from H1N1 was twice as high among people of Hispanic race, compared with whites.

The reason why H1N1 has disproportionately affected more the Hispanics may be related to the fact that this disease affects young people, and the average age of the Hispanic population is 27 years (13 years younger than the white population). It may also be associated with the fact that this virus causes more complications among people with diseases such as diabetes and hypertension, which are common diseases among Hispanics. Another reason may be that fewer Hispanics have health insurance, which means they have less access to preventive care, the vaccine and medication, and they often wait to become very ill before seeing a doctor.

How does the virus spread?
The virus spreads from person to person directly from airborne droplets that are expelled by coughing or sneezing, if the other person is less than 6 feet (2 meters) away.

It is also spread by touching surfaces contaminated with the virus, such as handles, toys, telephones, handrails, etc. The virus can live in an area for up to 8 hours.

Most adults can infect others from 1 day before having symptoms until 5-7 days after developing the disease. This means that a person can spread flu to others before they know they are sick.
How can we prevent it?

It is important to observe the following guidelines to prevent infection:

- **Wash your hands** frequently with soap and water for 15-20 seconds (what it takes to sing “Happy Birthday” twice). If you have no soap and water you can use an alcohol-based gel (rub your hands until the gel is dry).

- **Cover your mouth** when coughing or sneezing. Do not cover your mouth with your hands. Do it with your elbow or in a tissue; throw the tissue in the trash after you use it.

- **Avoid touching** your eyes, nose or mouth.

- **Avoid close contact** with persons who might be suffering from the flu.

- **Stay home** when sick.

- **Get vaccinated against seasonal flu and H1N1 influenza.**

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What are the symptoms of the flu or influenza?

The H1N1 flu symptoms are similar to the symptoms of seasonal flu and may include:

- Fever (temperature)
- Cough
- Sore throat
- Runny or stuffy nose
- Headache
- Body aches
- Fatigue
- Chills
- Vomiting and/or occasional diarrhea
Is the common cold the same as the flu or influenza?

No. Both are respiratory illnesses but are caused by different viruses. Although the two diseases have similar symptoms, they also have differences that determine the mildness or severity of each.

<table>
<thead>
<tr>
<th>SYMPTOMS</th>
<th>COMMON COLD (COLD)</th>
<th>FLU OR INFLUENZA</th>
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<tr>
<td>Fever (temperature)</td>
<td>Rarely or very low</td>
<td>Usually over 100°F (38°C)</td>
</tr>
<tr>
<td>Headache</td>
<td>Rare</td>
<td>Intense</td>
</tr>
<tr>
<td>General malaise</td>
<td>Slight</td>
<td>Severe</td>
</tr>
<tr>
<td>Fatigue, weakness</td>
<td>Mild or moderate</td>
<td>Intense and may last 2-3 weeks</td>
</tr>
<tr>
<td>Extreme weakness/tiredness, prostration</td>
<td>Never</td>
<td>Intense</td>
</tr>
<tr>
<td>Nasal congestion</td>
<td>Common</td>
<td>Sometimes</td>
</tr>
<tr>
<td>Sneezing</td>
<td>Frequent</td>
<td>Sometimes</td>
</tr>
<tr>
<td>Sore throat</td>
<td>Common</td>
<td>Sometimes</td>
</tr>
<tr>
<td>Cough</td>
<td>Mild or moderate</td>
<td>Can be severe and is usually dry</td>
</tr>
<tr>
<td>Diarrhea</td>
<td>Rare</td>
<td>Sometimes</td>
</tr>
<tr>
<td>Vomiting</td>
<td>Rare</td>
<td>Sometimes</td>
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Is there a vaccine against influenza?

**YES.** For several years now, the vaccine against seasonal flu has been used in the United States, and people must get vaccinated each year as soon as the vaccine is available (usually in September or October). As the influenza virus changes every year, the vaccine is different each year too, so people must get vaccinated once a year. In 2009, a new vaccine was produced against influenza H1N1 and it has been available to the public since October 2009.

Are vaccines against seasonal flu and influenza H1N1 different?

**YES.** The two vaccines are different because the two viruses are different. The new vaccine against influenza H1N1 is not a substitute for seasonal flu vaccine, and people should get the two vaccines when available. However, for the upcoming 2010-2011 flu season, the vaccine will include protection against both viruses; that is, we will just receive a single shot and will be protected against both seasonal flu and H1N1.

Who should get vaccinated against influenza H1N1?

In the beginning, the vaccine was only available for certain priority groups. However, there are now enough vaccines for everyone and it is recommended for all persons, 6 months old and older to get vaccinated.

Where can I get the vaccine?

To get vaccinated against seasonal flu and H1N1 you must see your doctor or visit the nearest health department or community clinic. You can also get the flu shot in some pharmacies. You can find where the vaccine against influenza (seasonal and H1N1) is provided nationwide at:

[www.flu.gov](http://www.flu.gov)
Are vaccines against H1N1 influenza safe?

The H1N1 flu vaccine is made the same way as vaccines against seasonal flu. Millions of seasonal flu vaccines have been administered safely. Millions of individuals have also been safely vaccinated against influenza H1N1. The Centers for Disease Control and Prevention (CDC) believe that side effects after administering H1N1 flu vaccine would be rare. All side effects occurring since people began receiving the vaccine against the 2009 H1N1 have been similar to those following vaccination against seasonal flu.

CDC and the Food and Drug Administration (FDA) are closely monitoring for any signs of the vaccine causing unexpected problems and are working with state and local public health officials and other public health organizations to investigate any unusual events.

People who suffer a severe allergy (life threatening) to eggs or any other substance included in the vaccine should not be vaccinated.

Are there any side effects from the flu shot?

Some people can experience minor side effects after vaccination, such as pain, redness, sensitivity or swelling where the shot was given; fainting (mainly adolescents), headache, muscle aches, fever or nausea. If these symptoms occur, they usually arise immediately after the shot and can last 1-2 days.

Life-threatening allergic reactions to vaccines are very rare. If they do occur, it is usually within a few minutes to a few hours after the shot and a doctor’s assistance should be sought immediately.

More information about the H1N1 flu vaccine can be found at:

http://www.cdc.gov/h1n1flu/vaccination/vaccine_safety_qa.htm
Are there different types of flu vaccines?
Vaccines against influenza (both seasonal and H1N1) may be given in two ways: by injection ("Flu shot"), or in a nasal spray ("Flu mist"). Both are very effective.

- The “flu shot” against influenza is an inactivated vaccine (containing dead virus) that is given with a needle, usually in the upper arm. The use of the injectable flu vaccine has been approved for all persons over 6 months, including people with chronic illnesses and pregnant women.

- The “nasal spray” flu vaccine is a vaccine made with live, but weakened, viruses that CANNOT cause the flu (also called “live attenuated influenza vaccine”, LAIV). The vaccine is administered through a spray in the nose and has been approved only for healthy people 2 to 49 years old who are not pregnant or do not have a chronic illness.

Once I’ve been given the shot, am I immediately protected against the virus?
NO. The antibodies that provide protection against influenza virus infection develop in the body about 2 weeks after vaccination. This means that during those two weeks you may still get the flu.

How many doses of vaccine are needed?
Older people need only one dose. Children under 10 years of age need two doses of vaccine against H1N1 and also they need 2 doses of seasonal flu vaccine unless they have been vaccinated against seasonal flu in previous years.

There must be a 4 week interval of wait between the first dose of the vaccine and the second dose (often referred to as “booster”). Vaccines against seasonal flu and H1N1 influenza can be administered simultaneously unless both vaccines are administered through the nose. If this is the case, you must wait at least 14 days between the two vaccines.
Why do children need two doses?
It has been shown that children only receive a 20% protection with a single dose. That is why a booster dose is needed so the child will be totally protected. In adults, the effectiveness of vaccines against influenza H1N1 is about 90% with a single dose.

Some people say that after getting the flu shot they get the flu. Is this true?
NO. Vaccines are made with dead virus or a very mild form of live virus; therefore you CANNOT get the flu from a flu shot. What happens is that it takes two weeks, after the application of the vaccine, for the body to be protected by antibodies, and the person can get infected during that time; or it may be possible that the person was already infected before getting the vaccine.

If I have already contracted the H1N1 flu, is it necessary for me to get vaccinated?
Usually people who have contracted a virus and have developed the disease develop antibodies (protection) in their body. That is, if the person had the H1N1 flu, it is likely that their body is already resistant to the virus and they probably won’t get it again, so do not need the vaccine. It is important to remember that there are many diseases that present symptoms similar to influenza and that only a blood test can tell for sure if the person has influenza and what type of influenza. Therefore, if you are not absolutely certain that you already had H1N1 it is recommendable for you to get vaccinated anyway, this will not hurt and at the same time you will be better protected.
What will happen in the 2010-2011 flu season?

In February 2010, the Food and Drug Administration Advisory Committee recommended that protection against 2009 H1N1 virus be included in the 2010-2011 seasonal flu vaccine. This means that, barring some unforeseen circumstances, during Fall 2010 in the United States people will be able to return to the traditional routine of having a single flu vaccine. This vaccine, besides protecting against the H1N1 virus, will also include two other types of influenza viruses that may be circulating at the time. Therefore, even if you received the vaccine against H1N1 and/or seasonal flu during 2009-2010 season you must get vaccinated again since the vaccine will include protection against these other new types of flu virus that could make you sick. Although this recommendation is for Fall 2010 flu season, in the meantime you can still protect yourself against the H1N1 flu by getting vaccinated against H1N1 virus now. Supplies are still available and getting immunized now can protect you against the H1N1 virus while it continues to circulate.

The influenza vaccine is recommended for all persons over 6 months of age.
What should I do if I get the flu?
If you have fever along with other symptoms of the flu, you should follow these recommendations:

- Ask your doctor about any special care you may need in case of pregnancy or if you have any health problems such as diabetes, heart disease, asthma or emphysema.
- Ask your doctor whether you should take an antiviral drug.
- Keep your distance from others as much as possible. This helps to prevent others from getting sick. Do not attend work or school while you are sick.
- **Stay home for at least 24 hours after fever or signs of a fever have ceased**, except to get medical care or for other necessities. (The fever should go away without using anti-fever drugs).
- Rest well.
- Drink fluids to prevent dehydration.
- Cover your mouth when coughing and sneezing. Wash hands frequently with soap and water or an alcohol-based hand-rub disinfectant.
- Use a mask, if available and tolerable, when you share common areas with other household members to help prevent the spread of the virus to others. This is very important if other household members are at high risk for complications from influenza.
- Pay attention to emergency warning signs (see page 17) that may indicate you need to get medical attention.
- Most people can receive care at home and feel better after a week.

Pay attention to emergency warning signs (see page 17) that may indicate you need to get medical attention.
Can I use medications for malaise?
The symptoms of fever and pain can be relieved with acetaminophen (Tylenol®) or ibuprofen (Advil®, Motrin®, Nuprin®)
**DO NOT** give aspirin (acetylsalicylic acid) or products that may contain aspirin to children and teenagers who might have the flu, this can cause a serious illness called Reye syndrome. For more information on Reye's syndrome, visit:

Children under 4 years of age should not take cold medications sold over the counter without first consulting a health care provider. The surest way to relieve the symptoms of influenza in children less than 2 years of age is using steam humidifiers and a suction ball to clean the mucus.

Are there medications to treat H1N1 virus infection?
Yes there are, but only prescription drugs called “antiviral drugs”. These are known by the trade names of Tamiflu® and Relenza®. These drugs can improve your health conditions quickly and prevent serious complications. Antiviral drugs work best if started within two days of illness onset.

Antiviral drugs are used mainly to treat people who are very ill, such as people who must be hospitalized, and to treat sick people who are more likely to develop serious complications from the flu. Your health care provider will decide if you need antiviral drugs to treat your illness.

Remember: For most people with H1N1 influenza the illness has been mild and has not required medical attention or antiviral drugs, and this applies also for seasonal flu.

**DO NOT AUTO-MEDICATE YOURSELF!**
Can I use antibiotics to fight the flu?

NO. Antibiotics will not work to fight the flu (influenza). Antibiotics kill bacteria but not viruses and the flu is caused by a virus. Sometimes viral infections can cause bacterial infections, in those cases it is the physician who must decide whether to recommend the use of antibiotics or not. For more information on this topic visit: http://www.cdc.gov/media/subtopic/matte/pdf/GetSmartMattrelaseSpanish.pdf

Is it necessary to use masks?

The CDC does not recommend the general use of masks to prevent the spread of the disease. They recommend the use of N95 respirators in health centers and also in the care of a sick person with influenza H1N1. Also recommended is the appropriate use of masks in people who have flu symptoms, when in contact with others, to prevent transmission. For more information on the use of masks visit: http://www.cdc.gov/h1n1flu/
What are the “emergency warning signs”?

If the sick person has any of these signs, seek emergency medical attention (call 911 or go to the nearest hospital):

### In children
- Fast breathing or trouble breathing
- Bluish skin color (cyanosis)
- Not drinking enough fluids
- Difficulty waking up or lack of interaction
- Being so irritable that the child does not want to be held
- Flu-like symptoms improve but then return with fever and worse cough
- Fever with rash

### In adults
- Difficulty breathing or shortness of breath
- Pain or pressure in the chest or abdomen
- Lips blue or purple
- Sudden dizziness
- Confusion
- Severe or persistent vomiting

### How long can an infected person spread the virus to others?

People infected with seasonal flu or H1N1 influenza can transmit the virus and can infect others from 1 day before getting sick until 5 to 7 days after the onset of the disease. This period may be longer in some people, especially children and people with weakened immune systems.
What if I am pregnant and get the H1N1 flu?
Contact your doctor immediately if you have flu symptoms or are in close contact with someone who has the flu. Pregnant women who contract H1N1 flu can develop serious health problems. They may be sicker than others. Some pregnant women with H1N1 flu have experienced preterm labor and severe pneumonia. Some women have died. If you are pregnant and have symptoms of the flu, take it seriously. Call your doctor immediately for advice. Chances are your doctor may prescribe an antiviral medicine.

What can I do to protect myself and my baby?
Getting a flu shot is the single best way to protect yourself against the flu. You should be vaccinated against seasonal flu and H1N1 flu so you and your baby will both be protected. It has been proven that the flu vaccine protects both mother and baby (up to 6 months) from flu-like illnesses. Children under 6 months of age should not be vaccinated, that is why it is important that people in contact with the child get vaccinated.
Is it safe for pregnant women to get vaccinated against the flu?

Millions of pregnant women have been vaccinated against seasonal flu over many years. It has not been proven that the flu vaccine would cause any harm to pregnant women or their babies. The H1N1 flu vaccine is produced in the same manner and at the same locations as the vaccine against seasonal flu. It is very important that pregnant women receive both the vaccine against seasonal flu as H1N1 flu. For more information visit:

http://cdc.gov/h1n1flu/vaccination/pregnant_qa.htm

If I have flu, can I still breastfeed my baby?

If you can, continue with breastfeeding. Breast milk is the best food for your baby. Breastfeeding and breast milk protect the health of your baby in many ways. The flu can be very serious in newborn babies. You don’t need to stop breastfeeding if you have the flu, but you must be careful to protect your baby from getting the disease. If you are breast-feeding or bottle-feeding your baby, it is advisable not to expose him/her to the flu virus; do as follows:

- If possible, pump the milk and ask a healthy person to feed and care for your baby.
- In case another person cannot care for your baby while you are sick, try wearing a mask all the time, when feeding or caring. Also, do not forget to wash your hands and take daily precautions to prevent your baby from getting the flu.
- Using a cloth blanket between you and your baby while feeding may also help. It is okay to take medicine to treat the flu during lactation.
How can the other people at home protect themselves from getting infected?

- Sick people should not receive visits, except from their caregivers. A phone call is safer than a visit.
- If possible, only one adult in the house should care for the sick person. A person in the group at “high risk” should not be designated as the caregiver, if possible.
- If you belong to a group at high risk for complications from the flu you should avoid close contact (within 6 feet) with household members suffering from the disease. If close contact with a sick individual is unavoidable, consider using a mask or respirator if you have one and tolerate it.
- Prevent pregnant women from taking care of the sick person. (Pregnant women are at greater risk of developing flu-related complications).
- Prevent sick family members from caring for babies.
- All household members should wash their hands with soap and water frequently, especially after having contact with the sick person or the room or the bathroom of this person.
- Use disposable towels to dry your hands after you wash them or assign a cloth towel to each household member. For example, towels of different colors for each person.
- If possible, consider maintaining good ventilation in the common areas of the home (e.g., keep the windows open in bathrooms, kitchens, etc.).
- Antiviral drugs can be used to prevent the flu. You should ask your health care provider if certain members of the household should take them.

What steps should I take for household cleaning?

- Throw tissues and other disposable products used by the sick person in the trash. Wash your hands after touching used tissues and similar waste. Keep surfaces clean (especially tables, bathroom surfaces and toys for children), wiping them with a cloth with a household disinfectant according to the instructions on the product label.
- It is not necessary to wash linen, utensils and dishes used by the sick person separately, but it is important that no one else uses these items if not cleaned properly first.
- Machine wash linen (including sheets and towels) in hot water with household detergent and dry it at high temperatures. Avoid touching dirty clothes with your bare hands before washing to avoid contamination. Wash your hands with soap and water after handling dirty laundry.

How CAN I PROTECT MYSELF?
Where I can get more information about H1N1 flu?

To keep informed on Pandemic Influenza H1N1 please regularly visit the following websites:

http://www.cdc.gov/h1n1flu/
http://www.flu.gov/index.html
http://www.cdph.ca.gov/HealthInfo/discond/Pages/H1N1Home.aspx

We also suggest you visit the official websites of the State and the County Health Departments where you live. They will take special precautions depending on the state of alert they are in. To see what information and resources exist for influenza by state, visit:

http://www.flu.gov/whereyoulive/index.html

To access the websites of all the health departments of all states of the United States:

http://www.cdc.gov/mmwr/international/relres.html

To receive regular and updated information on pandemic influenza H1N1 you can subscribe to subscription@hhs.gov (available in English only). If you have questions about influenza, please refer directly to the experts:

http://answers.flu.gov/ or dial 1-800-CDC-INFO (232-4636)
Educational materials related to influenza available on the Internet

We recommend referring to the following materials available and print and distribute to the community the ones you consider most appropriate.

Posters, flyers, brochures:

http://www.cdc.gov/h1n1flu/freeresources.htm
http://www.cdph.ca.gov/HealthInfo/discond/Pages/H1N1Spanish-Recursos.aspx
http://espanol.pandemicflu.gov/pandemicflu/enes/24/_www_flu_gov/outreach/h1n1.html
http://hia.berkeley.edu/

Information in indigenous languages

The Ministry of Health of Mexico in conjunction with the National Indigenous Languages Institute produced audio messages in 41 indigenous languages, explaining what and how to prevent influenza. You can access these capsules: http://www.inali.gob.mx/web/portal/influenza.
As a health worker, what can I do to help the community?

The promotores have an important role in their community because they are reliable persons to whom people turn for information and advice on various health topics.

In reference to influenza, it is important that first of all you be an example in your actions: wash your hands frequently, cover coughs and sneezes properly, get vaccinated, stay home if sick, etc.

After receiving this information and studying it, the ‘promotor’ will be able to go to the community and share what they have learned. This can be formal or informal. Examples:

- Teach your children and other family members how to wash their hands properly and to do so several times a day, tell them to cover their mouth when coughing or sneezing and take them to get vaccinated.
- In informal conversations with friends and neighbors explain why it is important to prevent the spread of the flu and what they can do to prevent it.
- Stay informed where the flu shots are given in your community so you can inform others.
- If you know of any pregnant woman or person within the “high risk” group, explain why it is important to get vaccinated and give them a referral on where to go.
- Give talks about flu in groups meetings such as neighborhood, parents, church, work, or any other group meetings.
- Learn how to differentiate myths from facts about the flu and give people the correct information.