



INFLUENZA

MANUAL FOR COMMUNITY LEADERS AND COMMUNITY HEALTH WORKERS

Health Initiative of the Americas
School of Public Health
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MAHRC
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PURPOSE OF THE MANUAL

The purpose of this manual is to train community leaders and community health workers on the topic of influenza (flu), so they can inform and educate their community members and at the same time protect themselves and prevent the spread of the disease.

The information presented in this manual has been reviewed and approved by the Centers of Disease Control and Prevention of the United States Department of Health and Human Services, and the Mexican Secretariat of Health.

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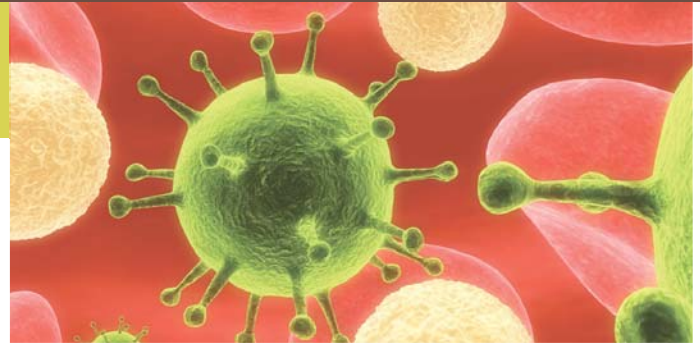
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The Disease



What is influenza?

Influenza, also called the flu, is a contagious respiratory illness caused by influenza viruses. It can cause mild to severe illness, and at times can lead to death.

Some people, such as older people, young children, pregnant woman, and people with certain chronic medical conditions, are at high risk for serious flu complications.

However, even healthy people can get very sick from the flu, and spread it to others.

Is the flu a serious illness?

Influenza can cause mild to severe illness, and at times lead to death. While most people who get the flu will not need medical care or treatment, hospitalizations and deaths from infection with influenza viruses occur every year.

Studies going back 30 years show that seasonal flu-related deaths in the United States have ranged from about 3,000 people to nearly 49,000 people annually.

What are the symptoms?

People who have the flu often feel some or all of these symptoms:

- Fever* or feeling feverish/chills
- Cough
- Sore throat
- Runny or stuffy nose
- Muscle or body aches
- Headaches
- Fatigue (tiredness)
- Some people may have vomiting and diarrhea

* It is important to note that not everyone with flu will have a fever.

What is the difference between seasonal & pandemic influenza?

Seasonal influenza is the one that occurs annually. In the United States the flu season typically goes from October through May peaking in January or February. Seasonal influenza is caused by influenza viruses that are similar to those already in circulation, and it generally causes modest impact on society.

Pandemic Influenza occurs when a new influenza virus emerges for which there is little or no immunity in the human population and spreads on a worldwide scale, infecting a large portion of the human population. Pandemic influenza can cause serious illness among people of all age groups, and can have a very severe impact on society.

Differences between Seasonal Influenza and Pandemic Influenza

Seasonal Influenza	Pandemic Influenza
Outbreaks follow predictable seasonal patterns; occurs annually, usually in winter, in temperate climates	Occurs rarely (three times in 20th Century)
Usually some immunity built up from previous exposure	No previous exposure; little or no pre-existing immunity
Healthy adults usually not at risk for serious complications; the very young, the elderly and those with certain underlying chronic medical conditions at increased risk for serious complications	Healthy people may be at increased risk for serious complications
Health systems can usually meet public and patient needs	Health systems may be overwhelmed
Vaccine developed based on known flu strains and available for annual flu season	Vaccine probably would not be available in the early stages of a pandemic
Adequate supplies of antivirals are usually available	Effective antivirals may be in limited supply
Average U.S. deaths approximately 3,000 to 49,000 per year	Number of deaths could be quite high (e.g., U.S. 1918 death toll approximately 675,000)
Symptoms can include: fever, cough, runny nose, muscle pain. Deaths often caused by complications, such as pneumonia.	Symptoms may be more severe and complications more frequent
Generally causes modest impact on society (e.g., encouragement of people who are sick to stay home)	May cause major impact on society (e.g. wide-spread restrictions on travel, closings of schools and businesses, cancellation of large public gatherings)
Manageable impact on domestic and world economy	Potential for severe impact on domestic and world economy

Are the recommendations for seasonal influenza and pandemic influenza the same?

The information and recommendations provided in this manual apply for both seasonal and pandemic influenza. It is important to keep in mind that during an influenza pandemic the public health authorities might modify the recommendations and/or take more strict measures in order to reduce the spread of the disease and the impact on society. It is essential that the public follows those recommendations.

THE 2009 H1N1 PANDEMIC

In 2009-2010, a new and very different flu virus (called 2009 H1N1) spread worldwide causing the first flu pandemic in more than 40 years.

According to surveillance conducted by CDC (Centers for Disease Control and Prevention) during the 2009 H1N1 pandemic, Latinos had a higher rate of illness due to 2009 H1N1 flu than non-Latino whites. Latinos also had higher rates of hospitalizations, which were 2 to 3 times as high as non-Latino whites in some areas, as well as higher rates of death associated with 2009 H1N1.



Is the common cold the same as influenza (flu)?

NO. Both are respiratory illnesses but caused by different viruses. Because these two types of illnesses have similar flu-like symptoms, it can be difficult to tell the difference between them based on symptoms alone. In general, the flu is worse than the common cold, and symptoms such as fever, body aches, extreme tiredness, and dry cough are more common and intense. Colds are usually milder than the flu. Colds generally do not result in serious health problems, such as pneumonia, bacterial infections, or hospitalizations.

How does the flu virus spread?

Most experts think that influenza viruses are spread mainly by droplets made when people with influenza cough, sneeze or talk. These droplets can land in the mouths or noses of people who are nearby or possibly be inhaled into the lungs. People with influenza can spread it to others up to about 6 feet away. Less often, a person might also get influenza by touching a surface or object that has influenza virus on it and then touching their own mouth or nose.

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.



Who is considered at “high risk” for flu related complications?

Anyone can get the flu (even healthy people), and serious problems from influenza can happen at any age, but some people are at higher risk of developing serious flu-related complications if they get sick:

- Children younger than 5, but especially children younger than 2 years old
- Pregnant women
- Adults 65 years of age and older
- People who have chronic medical conditions including:
 - Asthma
 - Diabetes
 - Heart disease
 - Blood disorders
 - Cancer
 - Kidney disorders
 - Liver disorders
 - Neurological and neurodevelopmental conditions (such as epilepsy, cerebral palsy, stroke, mental retardation)
 - Metabolic disorders
 - Chronic lung disease
 - Weakened immune system due to disease or medication (such as people with HIV or AIDS, or cancer, or those on chronic steroids)
 - People younger than 19 years of age who are receiving long-term aspirin therapy
 - People who are morbidly obese (Body Mass Index, or BMI, of 40 or greater)

The Vaccine

How can flu be prevented?

- CDC recommends a yearly flu vaccine as the first and most important step in protecting against flu viruses.
- All people 6 months and older are now recommended to receive an annual influenza vaccine, even if they have been vaccinated in previous years.

It is also important to take these everyday preventive actions:

- Wash your hands often with soap and water. If soap and water are not available, use an alcohol-based hand rub.
- Cover your nose and mouth with a tissue when you cough or sneeze. Throw the tissue in the trash after you use it.
- Avoid touching your eyes, nose and mouth. Germs spread this way.
- Avoid close contact with sick people.
- Stay at home 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.)
- Limit contact with others as much as possible while sick to keep from infecting them.



Why should I get a flu vaccine each year?

Influenza viruses can change from year to year. Therefore a new vaccine is made each year that will protect against the three influenza viruses that research indicates will be most common during the upcoming season. **Everyone 6 months of age and older should get vaccinated each year** as soon as the vaccine is available in their community (usually in September or October). The flu vaccine will provide protection throughout the current flu season.

Who should get vaccinated?

Everyone 6 months of age and older should get vaccinated against the flu. 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 medical 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 children younger than 6 months and high risk people.

Are there different types of flu vaccines?

There are **TWO** types of vaccines:

1. 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.
2. The **nasal-spray flu vaccine** — a vaccine made with live, weakened flu viruses that do not cause the flu (sometimes called LAIV for “live attenuated influenza vaccine” or FluMist®). LAIV (FluMist®) is approved for use in healthy people 2-49 years of age who are not pregnant. However, the nasal spray should not be given to pregnant women or people with chronic medical conditions, including asthma, or to children 2 through 4 years old with a history of wheezing.



CDC - Public Health Image Library, Photo Credit: James Gathany

Is the flu vaccine offered in the U.S. the same in other countries?

The WHO (World Health Organization) Global Influenza Surveillance Network is in charge of gathering information on circulating strains and epidemiological trends. Twice a year, WHO organizes a consultation with the Directors of the WHO Collaborating Centers and representatives of key national laboratories to review the results of these laboratory and clinical studies, and makes recommendations on the composition of the influenza vaccine. The northern hemisphere meets in February and the southern hemisphere meets in September. The vaccine is produced based on these recommendations and it could be the same or different, depending on whether or not new strains of the influenza virus are circulating since the previous meeting.

Are the influenza vaccination recommendations the same world-wide?

No. WHO provides recommendations on who should receive the vaccine, but it is up to each country to make their own recommendation as to who should be vaccinated.

Are flu vaccines safe?

YES. Hundreds of millions of seasonal flu vaccines have been administered safely over the last 50 years. Every year, CDC works closely with the U.S. Food and Drug Administration (FDA), health care providers, state and local health departments, and other partners to ensure the highest safety standards for flu vaccines. CDC also works closely with FDA to ensure systems are in place to promptly detect unexpected health problems following vaccination.

Do the flu shots contain mercury?

Thimerosal is a mercury-based preservative that has been used for decades in the United States in multi-dose vials (vials containing more than one dose) of some vaccines, such as influenza, to prevent the growth of microorganisms, such as bacteria and fungi, which may contaminate them. The most recent and rigorous scientific research shows that thimerosal-containing vaccines are not harmful.

Is it safe for PREGNANT WOMEN to get the flu vaccine?

YES. Pregnant women can receive the flu shot at any time during pregnancy. Flu shot is a safe way to protect both the mother and unborn baby from serious illness and complications of flu. The nasal-spray flu vaccine is not recommended for pregnant women.

Are there any side effects from the flu shot?

Most people generally do not experience any side effects from the flu vaccine. When they do occur, they are usually mild. The most common side effects from the flu shot are soreness, redness, tenderness or swelling where the shot is given.

Common side effects from the nasal spray are also mild, such as runny nose, cough or nasal congestion.

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



Who should NOT be vaccinated?

There are some people who should not get a flu vaccine without first consulting a physician. These include:

- People who have a severe allergy to chicken eggs.
- People who have had a severe reaction to an influenza vaccination.
- People who developed Guillian-Baré syndrome within 6 weeks of getting an influenza vaccine.
- Children younger than 6 months of age (influenza vaccine is not approved for this age group), and
- People who have a moderate-to-severe illness with a fever (they should wait until they recover to get vaccinated.)

Once I receive the vaccine 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.

For how long will I be protected?

The flu vaccine provides protection that lasts throughout the flu season.

How many doses are needed?

One dose is recommended for people 9 years of age and older and for children that have received two doses in a prior flu season. Two doses are recommended for children 6 months through 8 years of age getting a flu vaccine for the first time, given at least 28 days apart. It usually takes about two weeks after the second dose for protection to begin. Consult with a doctor if there are questions about how many doses a child needs.



Is there a special flu vaccine for adults 65 years and older?

- The Fluzone High-Dose is a new influenza vaccine, designed specifically for people 65 years and older. This vaccine contains 4 times the amount of antigen (the part of the vaccine that prompts the body to make antibody) contained in regular flu shots.
- This vaccine was developed because human immune defenses become weaker with age, which places older people at greater risk of severe illness from influenza. A higher dose vaccine could provide better protection. Whether or not the improved immune response leads to greater protection against influenza disease after vaccination is not yet known. Adults 65 and older should talk to their doctor or nurse about which flu vaccine is best for them.

Some people say that after getting the flu shot they get the flu. Is this true?

NO. Flu vaccines are made with dead or weakened flu viruses; therefore you **CANNOT** get the flu from a flu vaccine. 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.

Where can I get the vaccine?

To get vaccinated against seasonal flu you must see your doctor or visit the nearest health department or community clinic. You can also get a flu vaccine in some pharmacies.

If you have Internet access you can consult www.flu.gov to find the closest place where the vaccine is offered. To find the nearest health center please visit:
<http://findahealthcenter.hrsa.gov>

How much does it cost?

Most health insurance covers the cost of the flu vaccine or requests a co-payment. If you don't have health insurance you will have to pay for the flu vaccine. It is about \$30. Some County Health Departments provide free or low cost vaccines to uninsured people. Contact your local Health Department to find out if they are providing flu vaccines, their locations, schedules and cost of their vaccines.

You can find the contact information of all health departments in the U.S. at this website:

www.healthguideusa.org/local_health_departments.htm

Do I have to be a U.S. citizen in order to receive the flu vaccine?

In the United States anyone can get a flu vaccine at public vaccination clinics (sponsored by the federal government) regardless of their nationality or immigration status. You will not be asked to present any documents or additional information.



CDC - Public Health Image Library, Photo Credit: James Gathany

What to do if you get the Flu

What should I do if I get the flu?

If you have flu symptoms you should follow these recommendations:

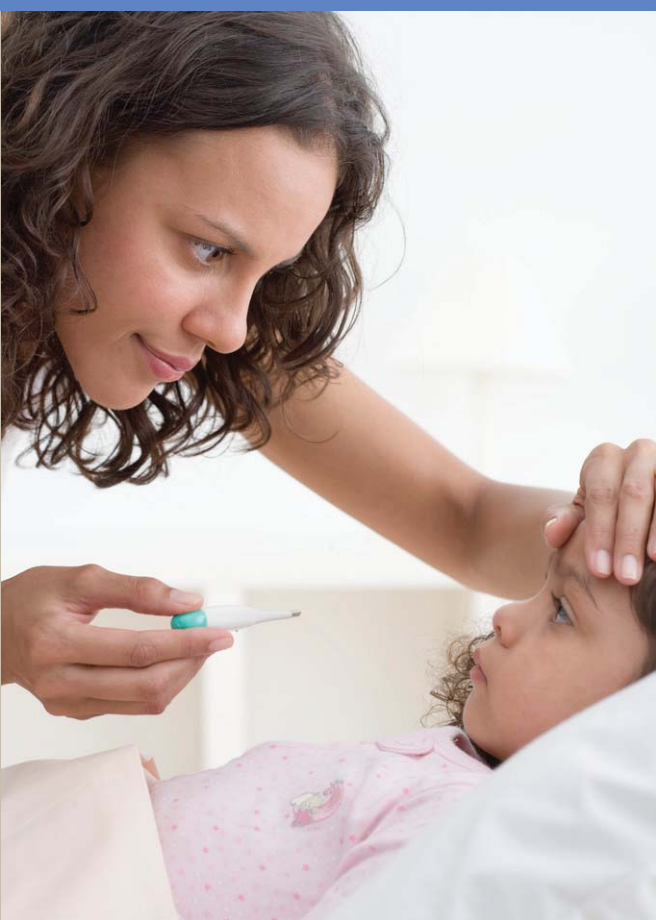
- Ask your doctor about any special care you may need if you are pregnant or if you have any chronic medical conditions such as diabetes, heart disease, asthma or emphysema.
- Ask your doctor whether you should take an antiviral drug.
- Keep your distance from others as much as possible. This helps to 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).
- Cover your mouth when coughing and sneezing. Wash hands frequently with soap and water. Use an alcohol-based hand disinfectant rub if soap and water are not available.
- Pay attention to emergency warning signs that may indicate you need to get immediate medical attention.
- Most people can receive care at home and feel better after about a week.

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



Is there treatment for the flu?

YES. If you get sick, there are drugs that can treat flu illness. They are called antiviral drugs and they can make your illness milder and make you feel better faster. Antiviral drugs are not sold over-the-counter and are different from antibiotics. You can only get them if you have a prescription from your doctor or health care provider.

DO NOT SELF-MEDICATE!

It's very important that INFLUENZA antiviral drugs be used early to treat flu in people who are very sick with flu (for example people who are in the hospital) and people who are sick with flu and have a greater chance of getting serious flu complications. Most healthy people with flu, however, do not need to be treated with antiviral drugs.

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 or not to recommend the use of antibiotics or not. For more information on this topic visit: <http://www.cdc.gov/getsmart/antibiotic-use/antibiotic-resistance-faqs.html>

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 adolescents who might have the flu, this can cause a serious illness called Reye's Syndrome.

CHILDREN under 4 years of age should not take cold medications sold over the counter without first consulting a health care provider.



- Buy pain and fever medicines that say “children’s” on the label.
- The dose you give your child depends on the child’s age and weight. Call the doctor if your child is very small or very large for his or her age so you will be sure to give the right amount of medicine.
- Use a special medicine spoon, dropper, or the cap that came with the medicine.
- Store all medicines out of reach of children. Place them in a locked cabinet where children can’t reach them.

How can the other people at home protect themselves from getting infected?

- **Physical distance:** Sick people should avoid direct contact with other house members as much as possible.
- **Caregiver:** 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.
- **Utensils:** Do not share cups, plates, utensils or food with someone with flu.
- **Household cleaning:** Keep surfaces clean, wipe them with a cloth and a household disinfectant according to the instructions on the product. Do not share linen, utensils and dishes used by the sick person without cleaning them properly first.
- **Ventilation:** If possible, consider maintaining good ventilation in the common areas of the home.
- **Antiviral:** ask your health care provider if certain household members should take antiviral medicine as preventive measure.

More Information

What can you do as a community leader or as a community health worker?

Community leaders and community health workers play an important role in the influenza education because they serve as bridges between the health care providers and the community.



Here are some examples on how you can help:

- Set an example with your actions: wash your hands frequently, cover coughs and sneezes properly, get vaccinated, and stay home if sick.
- 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.
- Encourage flu vaccination as the first and most important step for protection and stay informed where the flu vaccines are given in your community so you can inform others.
- When talking with friends and neighbors explain to them why it is important to prevent the spread of the flu and what they can do to prevent it.
- 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 the flu in groups meetings such as neighborhood, parents, church, work, and school.
- Establish alliances between community-based organizations and community health centers and/or public health departments, to facilitate vaccination clinics in your community.
- Learn how to differentiate myths from facts about the flu and give people the correct information.
- Learn where to find reliable information about the topic.

Where can I get more information about influenza?

Health centers and community clinics can provide you more information about influenza.

- If you have Internet access, we suggest you to visit the following sites:
 - www.cdc.gov/flu
 - www.flu.gov
 - www.salud.gob.mx
- You can call CDC info at 1-800-232-4636. This phone call is free and confidential.
- We also suggest you visit the official websites of the State and the County Health Departments where you live. You can find them at <http://www.cdc.gov/mmwr/international/relres.html>

