



ALASKA SMALL COMMUNITY PANDEMIC FLU PLANNING GUIDE

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INTRODUCTION

Somewhere in Mexico probably in January a new human influenza strain appeared. By April it had spread across the country and in May it began to spread around the world. The H1N1 strain is typical of all pandemic strains; it is highly infectious and different enough so that no one, or very few people have a natural immunity. Fortunately however it is still rather mild and the mortality rate is low.

None the less it is apt to make a lot of people sick. The Centers for Disease Control estimates 20 – 40 percent of our population could become ill. That would put an immense strain on a community.

Fortunately we know much about the features of epidemics and how to implement preventive strategies that reduce the rate of infection. This guide is designed to help communities develop plans for dealing with the pandemic.

HOW TO USE THIS DOCUMENT

This document is designed to be used to develop a community pandemic flu plan. Ideally your community already has an emergency disaster plan. If so this guide can be used to develop an annex of the community plan.

If a community does not have a plan this guide could be used to develop a specific pandemic flu community plan.

This guide addresses specific issues a community would face and probably have to deal with should a severe pandemic occur. The first part of the guide lists features of a pandemic that community leaders should understand and should be considered in developing the plan.

WHO SHOULD DEVELOP THE PLAN?

Ideally your community already has a disaster plan and a disaster planning committee, if so they would be the community entity that could develop a pandemic flu plan. If your community does not have a plan or a committee or group tasked for emergency response it will be up to community leaders to develop plans to deal with the pandemic.

Other organizations might be available to help the community with a plan. This could be the borough government or a regional tribal entity.

The Tribal health corporation might also be a good resource for a community to use to assist in the process. If so the CHAP director, EMS coordinator,

community health services director or environmental health/safety coordinator would be good resources to help the community.

FEATURES OF A PANDEMIC

Mortality: Fortunately the current H1N1 strain is relatively mild. Mortality from current circulating strains in the US is estimated to range from .2 - .05 percent. However a common feature of pandemic strains is that they mutate very rapidly and may become more severe. That is what happened in the fall of 1918. The strain circulating in the spring of that year was relatively mild. But when it reappeared in the fall it had become much more lethal and mortality was 5 – 10 percent!

Morbidity: Morbidity or the illness rate is also high during a pandemic. Generally 20 – 40 percent of the population will be affected.

Clinical Features: Flu symptoms usually develop within three to four days of contact with an infected person, though it may take up to seven days. However those infected shed the virus 1 – 2 days before symptoms develop. Symptoms are little different than seasonal influenza and include: fever, chills, headache, upper respiratory tract symptoms (cough, sore throat, shortness of breath), sore muscles and joints, fatigue, and occasionally vomiting, or diarrhea.

Epidemic duration: Classic influenza epidemics normally last about six weeks in a community. In a smaller community this could be compressed. What this means is that after the virus is introduced into a community cases increase over two – three weeks and then taper off over the next two – three weeks. However as in 1918 – 1919 several waves occurred and communities suffered through several epidemic periods.

However if effective control measures, such as social distancing described below, are implemented, fewer cases may occur and the number of cases may be spread out making management of the impacts of the outbreak easier.

Medical Care: A pandemic with a strain that causes severe illness would have catastrophic impacts on local, regional, state, national and international infrastructure support. The resource that would be hardest hit is medical care. Alaska has 1,400 licensed hospital beds. Most days, most of these are filled. Should a severe pandemic strain hit, capacity in Alaska to provide in-patient hospital care would be severely stressed. Currently less than four percent of confirmed cases with the H1N1 virus in Alaska are hospitalized.

Transportation such as commercial air and other essential services could also be very severely compromised. Medevac companies and other airlines that could transport patients could be grounded or operate on a greatly reduced capacity.

Health care workers to provide health care for all victims will be a critical need and could pose significant problems across Alaska. In a severe pandemic there just may not be enough healthcare workers to provide care to all those in need. Communities may have to augment health care staff from within the community.

Immunization: The capacity to develop a vaccine for new pandemic strains has increased dramatically. Vaccine against the H1N1 strain is projected to arrive 15 October. Additional weekly shipments will also be received. Those in groups that seem to be hit the hardest will be immunized first. Currently this includes pregnant women and those under age 25. Health care workers and EMS personnel will also be immunized first. Ultimately vaccine for everyone in the US who wants one will be available.

Anti - Viral Medications: Fortunately the current H1N1 strain has not developed significant drug resistance. Tamiflu the current drug of choice for treating those infected with influenza works well.

Supplies/Equipment: The state of Alaska has stockpiled items such as ventilators and personal protective equipment. These will be available to health care entities that need them.

COMMUNITY ISSUES

Community Responsibilities: First and foremost it must be understood that a response to and management of a pandemic in a community is a community responsibility; not a clinic responsibility. Dealing with and managing an emergency as wide spread as a pandemic will require many resources and many people. Health care staff will be responsible for health care but they will need much support that must come from the community. Other functions such as maintenance of infrastructure will be solely the responsibility of the community.

Emergency/Disaster Plan: Ideally the community will have a disaster plan. The plan should define responsibilities and procedures for how the community would organize to respond to a disaster or emergency. The plan should be specific enough to provide guidance for managing an emergency such as an epidemic.

Who Is In Charge? Two people in the community will have to assume leadership roles for managing the response in a pandemic. Ideally the community will have a disaster or emergency response plan. The individual named to coordinate that response, the incident commander, should be in charge of directing community operations during a pandemic.

The other leader will direct health care activities. The individual designated as the medical incident commander in the clinic and or community disaster plan should

be designated as the person in charge of directing clinic operations during a pandemic. This would probably be the senior health care professional in the clinic.

Health Care Support: Support for patients, patient care areas, and health care staff may be needed in a large outbreak. This could include food service, housekeeping, laundry, soliciting and managing volunteers, other. The community Incident Commander should coordinate these support functions.

Public Information: A community public information officer should be designated and serve as the source for receiving and disseminating information to the public.

Managing Fatalities: Fortunately the mortality rate from the current H1N1 strain is quite low, less than half a percent. None the less the Centers for Disease Control predicts up to 90,000 deaths may occur. A pandemic could very well be the cause of death for some community residents. Procedures for handling fatalities from a pandemic should be the same as for any other cause of death. Information on safe handling of fatalities should be available from the Alaska Division of Public Health.

COMMUNITY DISEASE CONTROL

Alaska communities have a long and remarkable history of pulling together to manage emergencies and crises. Often the key to this success is active community involvement in the process. A pandemic flu epidemic would be managed best by community wide participation for developing plans and decisions to deal with a pandemic. Decisions such as closing schools, establishing and supporting alternate care sites would work best if they are community decisions. The community emergency/disaster plan should address the leadership for dealing with emergencies. It should serve as the basis for responding to a flu pandemic.

Community leaders along with community involvement through mechanisms such as town meetings and other forms of active community participation would best serve to develop and guide the community response. Also the Tribal Health Corporation, Public Health Nurse, Division of Public Health and other entities are available to provide guidance to the community on dealing with a pandemic.

Transmission of Influenza Viruses: Influenza, like many diseases, is actually infectious one or two days before the victim develops illness. So one or two days before a person becomes ill they are shedding virus which can infect others. Of course this makes it more difficult to control because people who don't even know they are infected are already infecting others. .

Influenza is transmitted by two mechanisms. When Infectious patients cough, they shed millions of viruses attached to small droplets that are expelled. These spread out in the air generally over a distance of up to six feet before they settle out. A susceptible victim breathing in these droplets and viruses becomes infected.

The other method is from hand to mouth. When an infectious person touches their nose or mouth, or worse yet coughs or sneezes into their hands they become contaminated with viruses. These are transmitted to anything they touch. When another person touches a doorknob, telephone, printer, keyboard, counter top or other object and then touches their mouth or nose – they become infected.

PREVENTION STRATEGIES

Sanitation and Hygiene: A number of very good practices are highly effective in reducing transmission of influenza viruses.

Cover Your Cough: Coughing into a Kleenex or your sleeve prevents the escape of virus infected droplets.

Hand Washing: Frequent hand washing is probably the most effective way to prevent spread of the virus. It gets rid of or neutralizes viruses on the hands preventing transmission to the mouth and to other surfaces.

Disinfectants: Influenza viruses are not that hardy and virtually any commercial disinfectant used according to directions will kill the virus. Objects and areas that are commonly touched and handled by people should be disinfected frequently.

Vaccination: A vaccine against the H1N1 virus is expected to arrive in Alaska in mid October. When it arrives it will be given first to those at highest risk for death or serious illness. These include pregnant women and those under the age of 25. Health care workers and EMS personnel will also get the first vaccine. Additional vaccine is expected to arrive weekly.

Social Distancing: Social distancing is a new term that refers to actions and behaviors that cut down the amount of contact between residents of a community. It is aimed at reducing the spread through infectious droplets but it also cuts down on spread through contaminated objects such as door knobs, telephones and counter tops. Social distancing can include actions such as closing schools, canceling sporting events, expanding hours for retail business to reduce customer contact, working from homes, canceling church services or changing them to reduce personal contact and other actions.

School Closure: Currently public health officials are strongly recommending against school closure, mainly because school closure would be so disruptive to

community life. See the attachment for additional information on reducing the spread in schools.

Home Care: If an outbreak hits a community the best possible way to manage patients is to care for them at home. The home care guide annex can be used for other family members or others who provide home care.

Isolation: Isolation refers to separation of influenza patients while they are contagious. Normally the period of infectiousness is over when the patient has not taken medication to control fever and is free of fever for 24 hours.

Quarantine: Quarantine is the isolation of people who have been exposed to an infectious disease agent, are not ill but may develop the disease. Many diseases including influenza can be spread by people before they develop symptoms. So for diseases like influenza, quarantine can be an effective tool in reducing the spread. When effective it can also serve to decrease the number of cases at any given time during the epidemic making it easier to manage those who become sick.

The incubation period (time from exposure to symptoms) for influenza is from 3 – 7 days. Adults are infectious from a day or two before symptoms develop to 5 days after onset. Children can be infectious for 10 days or longer.

The objective of quarantine is to prevent exposed but healthy individuals from infecting others. For influenza, quarantine should extend through the period when symptoms would develop if the individual were infected. For adults a maximum of one week from exposure should be sufficient, two weeks for children. But information for a quarantine period should be obtained from the Alaska Division of Public Health.

There are several types of quarantine.

- Home quarantine involves staying in one's home through the duration of the incubation period. Home quarantine could be used for those known to have been exposed or to keep from getting exposed.
- Work quarantine would involve keeping people at their place of work. This might be used in hospitals or for people in an emergency operations center.
- Community quarantine could be implemented by Alaska statute or a community could elect to voluntarily establish quarantine. Community quarantine would be very difficult to manage and would probably only be feasible if the H1N1 virus were to mutate and become much more severe.

Quarantine can be implemented through statutory powers given to the State Division of Public Health. If quarantine powers are enacted guidelines will be available from State officials within the Division of Public Health.

A community could also elect to implement quarantine restrictions. If so guidance from the Division of Public Health could be used to develop a community quarantine program. However as long as the virus stays relatively mild, community quarantine is not recommended because of the difficulty of implementing and the considerable inconvenience it would cause.

Quarantine Official: Someone in the community should be designated for implementing and coordinating quarantine actions. This would involve communicating with State officials, individuals that are quarantined and coordination of support for quarantined individuals such as food, medical evaluations and other services. The mayor or VPSO would be a good choice to serve as quarantine officer.

A health care professional should also be involved and provide periodic screening for symptoms suggesting exposure has occurred.

Voluntary quarantine may also be implemented. People who have been exposed or think they have been exposed could limit contact with others for the duration of the incubation period.

Protection of Essential Workers: When a vaccine becomes available, immunization of essential workers in the community may be a viable strategy to limit the number of cases and keep essential community workers and leaders healthy.

The Community should have a system to identify the essential workers in a community.

Essential workers could include: health care workers, volunteers, local government leaders and employees, airport and road maintenance, water & utilities operators, pilots, ham radio operators, Fire/EMS; VPSO/Law enforcement, others.

Mass Immunization Clinics: When vaccine becomes readily available mass immunization clinics can be planned and implemented. People under 25 are high on the list of those who should be immunized. School immunization clinics would be a very good way to do this. Organizing and coordinating these should be the responsibility of community leaders as defined by the community emergency plan. The State Division of Public Health has guidelines and checklists to assist communities in doing these clinics.

PUBLIC INFORMATION

A huge amount of information both for the public, community leaders and health care professionals are available and more will be coming. There will also very

likely be contradictory information from the public media and through distortion of information as it circulates through a community.

Timely, accurate information is vital to combating public hysteria and for providing useful information to the public. A system to disseminate this information within the community should be part of the community emergency plan. If not a system to disseminate information should be established.

Dissemination of information for the public: Who will do this? It would work best if information that comes into the community for the public be disseminated by one source, a community Public Information Officer. It would work best if this individual was in local municipal or tribal government. Most information will probably come through public media such as radio and TV. The community information officer should also be available to respond to community concerns and issues involving information on the event. Ideally the community emergency plan has a Public Information Officer designated to keep community members informed.

Dissemination of information to Community leaders: Information will be generated for community leaders and officials managing the response to the epidemic. This information will come from the State Emergency Coordination Center (SECC) and a State Joint Information Center. The community information officer should receive this information and also ensure appropriate leaders receive this information.

SECC/State Agency Support: The SECC is planning on initiating periodic (probably weekly) teleconferences for all Alaska communities. These teleconferences will include updates, questions and answers and the opportunity for communities to request help if needed.

The SECC will release daily Situation Reports (Sitreps) on the pandemic. These are available on the Division of Homeland Security and Emergency Management website at: <http://www.ak-prepared.com/homelandsecurity/>

EDUCATION/TRAINING

Public education to teach people how to protect themselves and care for themselves and family members who become ill will be a major tasking. There will be much information available to assist with this education. Check on the CHAP website at: <http://www.akchap.org/> for links to educational material.

Information education can be delivered a number of ways. Schools will be a very important forum for education especially since school age children are a target group for the H1N1 virus. Also of course the community clinic can have much

information available. Information should also be posted on all community gathering locations such as stores, post office community hall etc.

WHO ELSE CAN HELP

Pandemic influenza would be a disaster like any other disaster and the local community capacity to manage the outbreak could easily be overwhelmed. While a pandemic could strain resources there are entities that can help. Resources to provide help should be listed in both the community and clinic emergency plans.

City/borough government: Community governments whether they are municipal or tribal have an emergency preparedness responsibility. Ideally the village would have a disaster plan which would define how community leaders would support a disaster and an epidemic. These plans should be activated and community resources should be mobilized to help with the response.

About one third of Alaska is governed by boroughs. Some of these have disaster plans and they should also serve as a resource to assist communities deal with the epidemic.

Community Service Organizations/Churches: Service organizations and churches can be the source of many volunteers and much help during a disaster or emergency.

Community Youth: A number of Alaska communities have programs that utilize their young people as resources for helping during an emergency. These efforts have all been very successful and more communities could benefit from this resource.

Regional Health Corporation: The regional health corporation may have personnel, equipment and supply assets that will go to helping communities, but they may not. However the regional health corporations can provide technical advice on patient management, patient care, infection control, isolation, quarantine, information for the public and information for clinicians.

Alaska Native Tribal Health Consortium: The Alaska Native Tribal Health Consortium will be able to provide expertise such as that described for the health corporation. ANTHC also maintains the Regional Service Supply Center which provides equipment and supplies to tribal hospitals and community clinics.

Public Health Nurse: Public health nursing could be an invaluable resource to communities providing technical assistance on issues ranging from infection control to quarantine. And they may be a source for additional staffing. They would also serve as a source of information both to the public and to clinicians.

Division of Public Health: The Division of public health would implement their Emergency Operations Plan which would define how they mobilize public health assets in response to the epidemic.

State Emergency Coordination Center: The State Emergency Coordination Center (SECC) falls within the Alaska Division of Homeland Security and Emergency Management. The SECC would function to coordinate all state and federal resources available for supporting communities in responding to the epidemic.

NOVEL INFLUENZA A H1N1
A GUIDE FOR INDIVIDUALS AND FAMILIES

August 2009

The attached information can be used as guidance to help individuals and families cope with a pandemic.

The document was taken from the US Health and Social Services Website at:

<http://www.pandemicflu.gov/plan/individual/familyguide.html>

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A GUIDE FOR INDIVIDUALS AND FAMILIES

Pandemic Influenza - Get Informed. Be Prepared.

This guide is designed to help you understand the threat of a pandemic influenza outbreak in our country and your community. It describes commonsense actions you can take now in preparing for a pandemic. We cannot predict how severe the next pandemic will be or when it will occur, but being prepared may help lower the impact of an influenza pandemic on you and your family. Additional information including a planning checklist for individuals and families can be found at www.pandemicflu.gov.

What You Need to Know

An influenza (flu) pandemic is a worldwide outbreak of flu disease that occurs when a new type of influenza virus appears that people have not been exposed to before (or have not been exposed to in a long time). The pandemic virus can cause serious illness because people do not have immunity to the new virus. Pandemics are different from seasonal outbreaks of influenza that we see every year. Seasonal influenza is caused by influenza virus types to which people have already been exposed. Its impact on society is less severe than a pandemic, and influenza vaccines (flu shots and nasal-spray vaccine) are available to help prevent widespread illness from seasonal flu.

Influenza pandemics are different from many of the other major public health and health care threats facing our country and the world. A pandemic will last much longer than most flu outbreaks and may include "waves" of influenza activity that last 6-8 weeks separated by months. The number of health care workers and first responders able to work may be reduced. Public health officials will not know how severe a pandemic will be until it begins.

A Historical Perspective

In the last century there were three influenza pandemics. All of them were called pandemics because of their worldwide spread and because they were caused by a new influenza virus. The 1918 pandemic was especially severe.

- 1918-1919 Most severe, caused at least 675,000 U.S. deaths and up to 50 million deaths worldwide.
- 1957-1958 Moderately severe, caused at least 70,000 U.S. deaths and 1-2 million deaths worldwide.
- 1968-1969 Least severe, caused at least 34,000 U.S. deaths and 700,000 deaths worldwide.

Some Differences Between Seasonal Flu and Pandemic Flu

Seasonal Flu	Pandemic Flu
Caused by influenza viruses that are similar to those already circulating	Caused by a new influenza virus that people have not been exposed to before. Likely to be more severe, affect more

among people.	people, and cause more deaths than seasonal influenza because people will not have immunity to the new virus.
Symptoms include fever, headache, tiredness, dry cough, sore throat, runny nose, and muscle pain. Deaths can be caused by complications such as pneumonia.	Symptoms similar to the common flu but may be more severe and complications more serious.
Healthy adults usually not at risk for serious complications (the very young, the elderly, and those with certain underlying health conditions at increased risk for serious complications).	Healthy adults may be at increased risk for serious complications.
Every year in the United State, on average: <ul style="list-style-type: none"> • 5% to 20% of the population gets the flu; • More than 200,000 people are hospitalized from flu complications; and • About 36,000 people die from flu. 	The effects of a severe pandemic could be much more damaging than those of a regular flu season. It could lead to high levels of illness, death, social disruption, and economic loss. Everyday life could be disrupted because so many people in so many places become seriously ill at the same time. Impacts could range from school and business closings to the interruption of basic services such a public transportation and food delivery.

Importance and Benefits of Being Prepared

The effects of a pandemic can be lessened if you prepare ahead of time. Preparing for a disaster will help bring peace of mind and confidence to deal with a pandemic.

When a pandemic starts, everyone around the world could be at risk. A pandemic could touch every aspect of society, so every part of society must begin to prepare. All have roles in the event of a pandemic. Federal, state, tribal, and local governments are developing, improving, and testing their plans for an influenza pandemic. Businesses, schools, universities, and other faith-based and community organizations are also preparing plans.

As you begin your individual or family planning, you may want to review what is happening in Alaska. The Community Health Aid Program website at: <http://www.akchap.org/> has information timely information, visit the federal government's official Web site at www.pandemicflu.gov.

Pandemic Influenza - Challenges and Preparation

As you and your family plan for an influenza pandemic, think about the challenges you might face, particularly if a pandemic is severe.

You can start to prepare now to be able to respond to these challenges. The following are some challenges you or your family may face and recommendations to help you cope. In addition, checklists and other tools have been prepared to guide your planning efforts. A series of planning checklists can be found at www.pandemicflu.gov/plan/checklists.html.

Essential Services You Depend on May Be Disrupted

- Plan for the possibility that usual services may be disrupted. These could include services provided by hospitals and other healthcare facilities, banks, restaurants, government offices, telephone and cellular phone companies, and post offices.
- Stores may close or have limited supplies. The planning checklists can help you determine what items you should stockpile to help you manage without these services
- Transportation services may be disrupted and you may not be able to rely on public transportation. Plan to take fewer trips and store essential supplies.
- Public gatherings, such as volunteer meetings and worship services, may be canceled. Prepare contact lists including conference calls, telephone chains, and email distribution lists, to access or distribute necessary information.
- Consider that the ability to travel, even by car if there are fuel shortages, may be limited.
- You should also talk to your family about where family members and loved ones will go in an emergency and how they will receive care, in case you cannot communicate with them.
- In a pandemic, there may be widespread illness that could result in the shut down of local ATMs and banks. Keep a small amount of cash in small denominations for easy use.

Food and Water Supplies May Be Interrupted and Limited

Food and water supplies may be interrupted so temporary shortages could occur. You may also be unable to get to a store. To prepare for this possibility you should store at least one to two weeks supply of non-perishable food and fresh water for emergencies.

Food

- Store two weeks of nonperishable food.
- Select foods that do not require refrigeration, preparation (including the use of water), or cooking.
- Insure that formulas for infants and any child's or older person's special nutritional needs are a part of your planning.

Water

- Store two weeks of water, 1 gallon of water per person per day. (2 quarts for drinking, 2 quarts for food preparation/sanitation), in clean plastic containers. Avoid using containers that will decompose or break, such as milk cartons or glass bottles.

Being Able to Work May Be Difficult or Impossible

- Ask your employer how business will continue during a pandemic.
- Discuss staggered shifts or working at home with your employer. Discuss telecommuting possibilities and needs, accessing remote networks, and using portable computers.
- Discuss possible flexibility in leave policies. Discuss with your employer how much leave you can take to care for yourself or a family member
- Plan for possible loss of income if you are unable to work or the company you work for temporarily closes.

For the Business Checklist visit:

<http://www.pandemicflu.gov/plan/business/businesschecklist.html>

Schools and Daycare Centers May Be Closed for an Extended Period of Time

Schools, and potentially public and private preschool, childcare, trade schools, and colleges and universities may be closed to limit the spread of flu in the community and to help prevent children from becoming sick. Other school-related activities and services could also be disrupted or cancelled including: clubs, sports/sporting events, music activities, and school meals. School closings would likely happen very early in a pandemic and could occur on short notice.

- Talk to your teachers, administrators, and parent-teacher organizations about your school's pandemic plan, and offer your help.
- Plan now for children staying at home for extended periods of time, as school closings may occur along with restrictions on public gatherings, such as at malls, movie theaters.
- Plan home learning activities and exercises that your children can do at home. Have learning materials, such as books, school supplies, and educational computer activities and movies on hand.
- Talk to teachers, administrators, and parent-teacher organizations about possible activities, lesson plans, and exercises that children can do at home if schools are closed. This could include continuing courses by TV or the internet.
- Plan entertainment and recreational activities that your children can do at home. Have materials, such as reading books, coloring books, and games, on hand for your children to use.

For the "Childcare, School, and University Checklist," visit:

<http://www.pandemicflu.gov/plan/tab5.html>

Medical Care for People with Chronic Illness Could be Disrupted

In a severe pandemic, hospitals and doctors' offices may be overwhelmed.

- If you have a chronic disease, such as heart disease, high blood pressure, diabetes, asthma, or depression, you should continue taking medication as prescribed by your doctor.
- Make sure you have necessary medical supplies such as glucose and blood-pressure monitoring equipment.
- Talk to your healthcare provider to ensure adequate access to your medications.
- If you receive ongoing medical care such as dialysis, chemotherapy, or other therapies, talk with your health care provider about plans to continue care during a pandemic.
- A "Family Emergency Health Information Sheet" is provided in this guide and at: <http://www.pandemicflu.gov/planguide/familyhealthinfo.html>

Pandemic Influenza - Prevention and Treatment

Stay Healthy

These steps may help prevent the spread of respiratory illnesses such as the flu:

- Cover your nose and mouth with a tissue when you cough or sneeze-throw the tissue away immediately after you use it.
- Wash your hands often with soap and water, especially after you cough or sneeze. If you are not near water, use an alcohol-based (60-95%) hand cleaner.
- Avoid close contact with people who are sick. When you are sick, keep your distance from others to protect them from getting sick too.
- If you get the flu, stay home from work, school, and social gatherings. In this way you will help prevent others from catching your illness.
- Try not to touch your eyes, nose, or mouth. Germs often spread this way.

Vaccination

Vaccines are used to protect people from contracting a virus once a particular threat is identified. After an individual has been infected by a virus, a vaccine generally cannot help to combat it. Because viruses change over time, a specific pandemic influenza vaccine cannot be produced until a pandemic influenza virus emerges and is identified. Once a pandemic influenza virus has been identified, it will likely take 4-6 months to develop, test, and begin producing a vaccine. The supply of pandemic vaccine will be limited, particularly in the early stages of a pandemic.

Antivirals

A number of antiviral drugs are approved by the U.S. Food and Drug Administration to treat and prevent seasonal influenza. Some of these antiviral medications may be effective in treating pandemic influenza. These drugs may help prevent infection in people at risk and shorten the duration of symptoms in those infected with pandemic influenza. However, it is unlikely that antiviral medications alone would effectively contain the spread of pandemic influenza. The federal government is stockpiling antiviral medications that would most likely be used in the early stages of an influenza pandemic and working to develop new antiviral medications. These drugs are available by prescription only.

Stay Informed

- Knowing the facts is the best preparation. Identify sources you can count on for reliable information. If a pandemic occurs, having accurate and reliable information will be critical.
- Reliable, accurate, and timely information is available at www.pandemicflu.gov.
- Another source for information on pandemic influenza is the Centers for Disease Control and Prevention (CDC) Hotline at: 1-800-CDC-INFO (1-800-232-4636). This line is available in English and Spanish, 24 hours a day, 7 days a week.
- Look for information on your local and state government Web sites. Links are available to each state department of public health at www.pandemicflu.gov.
- Listen to local and national radio, watch news reports on television, and read your newspaper and other sources of printed and web-based information.
- Talk to your local health care providers and public health officials.

Questions and Answers

Will the seasonal flu shot protect me against pandemic influenza?

- No, it won't protect you against pandemic influenza. But flu shots can help you to avoid seasonal flu.
- Get a flu shot to help protect you from seasonal flu.
- Get a pneumonia shot to prevent secondary infection if you are over the age of 65 or have a chronic illness such as diabetes or asthma. For specific guidelines, talk to your health care provider or call the Centers for Disease Control and Prevention (CDC) Hotline at 1-800-232-4636.
- Make sure that your family's immunizations are up-to-date.

What is the U.S. government doing to prepare for pandemic influenza?

The U.S. government has been preparing for pandemic influenza for several years. In November 2005, the President announced the National Strategy for Pandemic Influenza. Ongoing preparations include the following:

- Supporting the manufacturing and testing of influenza vaccines, including finding more reliable and quicker ways to make large quantities of vaccines through cell-based technologies.
- Developing a national stockpile of antiviral drugs to help treat and control the spread of disease.
- Supporting the efforts of federal, state, tribal, and local health agencies to prepare for and respond to pandemic influenza, including hosting planning summits with state and local leaders in each state.
- Working with federal agencies to prepare and to encourage communities, businesses, and organizations to plan for pandemic influenza. These efforts have included joint exercises in pandemic preparation.

For More Information

- Visit: www.pandemicflu.gov
- The Centers for Disease Control and Prevention (CDC) hotline, 1-800-CDC-INFO (1-800-232-4636), is available in English and Spanish, 24 hours a day, 7 days a week. TTY: 1-888-232-6348. Questions can be emailed to inquiry@cdc.gov.
- Links to state departments of public health can be found at www.pandemicflu.gov/state/statecontacts.html.

NOVEL INFLUENZA A H1N1

SCHOOL GUIDANCE

August 2009

The attached information can be used as guidance to develop programs that will help schools respond to and manage the pandemic caused by the novel H1N1 influenza strain.

The document was taken from the Centers for Disease Control website at:
<http://www.cdc.gov/h1n1flu/groups.htm>

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CDC Guidance for State and Local Public Health Officials and School Administrators for School (K-12) Responses to Influenza during the 2009-2010 School Year

<http://www.flu.gov/plan/school/schoolguidance.html>

This document provides guidance to help decrease the spread of flu among students and school staff during the 2009-2010 school year. This document expands upon earlier school guidance documents by providing a menu of tools that school and health officials can choose from based on conditions in their area. It recommends actions to take this school year and suggests strategies to use if CDC finds that the flu starts causing more severe disease. The guidance also provides a checklist for making decisions at the local level. Detailed information on the reasons for these strategies and suggestions on how to use them is included in the [Technical Report](#). Based on the severity of 2009 H1N1 flu-related illness thus far, this guidance also recommends that students and staff with influenza-like illness remain home until 24 hours after resolution of fever without the use of fever-reducing medications.

For the purpose of this guidance, "schools" will refer to both public and private institutions providing grades K-12 education to children and adolescents in group settings. The guidance applies to such schools in their entirety, even if they provide services for younger or older students. Guidance for child care settings and institutions of higher education will be addressed in separate documents.

The guidance is designed to decrease exposure to regular seasonal flu and 2009 H1N1 flu while limiting the disruption of day-to-day activities and the vital learning that goes on in schools. CDC will continue to monitor the situation and update the current guidance as more information is obtained on 2009 H1N1.

About 55 million students and 7 million staff attend the more than 130,000 public and private schools in the United States each day. By implementing these recommendations, schools and health officials can help protect one-fifth of the country's population from flu. Collaboration is essential: CDC, the U.S. Department of Education, state and local public health and education agencies, schools, students, staff, families, businesses, and communities all have active roles to play.

The decision to dismiss students should be made locally and should balance the goal of reducing the number of people who become seriously ill or die from influenza with the goal of minimizing social disruption and safety risks to children sometimes associated with school dismissal. Based on the experience and knowledge gained in jurisdictions that had large outbreaks in spring 2009, the potential benefits of preemptively dismissing students from school are often outweighed by negative consequences, including students being left home alone, health workers missing

shifts when they must stay home with their children, students missing meals, and interruption of students' education. Still, although the situation in fall 2009 is unpredictable, more communities may be affected, reflecting wider transmission. The overall impact of 2009 H1N1 should be greater than in the spring, and school dismissals may be warranted, depending on the disease burden and other conditions. (See the [Technical Report](#) for discussion of the kinds of circumstances that might warrant preemptive school dismissals.)

Recommended school responses for the 2009-2010 school year

Under conditions with similar severity as in spring 2009

- **Stay home when sick:** Those with flu-like illness should stay home for at least 24 hours after they no longer have a fever, or signs of a fever, without the use of fever-reducing medicines. They should stay home even if they are using antiviral drugs. (For more information, visit <http://www.cdc.gov/h1n1flu/guidance/exclusion.htm>.)
- **Separate ill students and staff:** Students and staff who appear to have flu-like illness should be sent to a room separate from others until they can be sent home. CDC recommends that they wear a surgical mask, if possible, and that those who care for ill students and staff wear protective gear such as a mask.
- **Hand hygiene and respiratory etiquette:** The new recommendations emphasize the importance of the basic foundations of influenza prevention: stay home when sick, wash hands frequently with soap and water when possible, and cover noses and mouths with a tissue when coughing or sneezing (or a shirt sleeve or elbow if no tissue is available).
- **Routine cleaning:** School staff should routinely clean areas that students and staff touch often with the cleaners they typically use. Special cleaning with bleach and other non-detergent-based cleaners is not necessary.
- **Early treatment of high-risk students and staff:** People at high risk for influenza complications who become ill with influenza-like illness should speak with their health care provider as soon as possible. Early treatment with antiviral medications is very important for people at high risk because it can prevent hospitalizations and deaths. People at high risk include those who are pregnant, have asthma or diabetes, have compromised immune systems, or have neuromuscular diseases.
- **Consideration of selective school dismissal:** Although there are not many schools where all or most students are at high risk (for example, schools for medically fragile children or for pregnant students) a community might decide to dismiss such a school to better protect these high-risk students.

Under conditions of increased severity compared with spring 2009

CDC may recommend additional measures to help protect students and staff if global and national assessments indicate that influenza is causing more severe disease. In addition, local health and education officials may elect to implement some of these

additional measures. Except for school dismissals, these strategies have not been scientifically tested. But CDC wants communities to have tools to use that may be the right measures for their community and circumstances.

- **Active screening:** Schools should check students and staff for fever and other symptoms of flu when they get to school in the morning, separate those who are ill, and send them home as soon as possible. Throughout the day, staff should be vigilant in identifying students and other staff who appear ill.
- **High-risk students and staff members stay home:** People at high-risk of flu complications should talk to their doctor about staying home from school when a lot of flu is circulating in the community. Schools should plan now for ways to continue educating students who stay home through instructional phone calls, homework packets, internet lessons, and other approaches.
- **Students with ill household members stay home:** Students who have an ill household member should stay home for five days from the day the first household member got sick. This is the time period they are most likely to get sick themselves.
- **Increase distance between people at schools:** CDC encourages schools to try innovative ways of separating students. These can be as simple as moving desks farther apart or canceling classes that bring together children from different classrooms.
- **Extend the period for ill persons to stay home:** If influenza severity increases, people with flu-like illness should stay home for at least 7 days, even if they have no more symptoms. If people are still sick, they should stay home until 24 hours after they have no symptoms.
- **School dismissals:** School and health officials should work closely to balance the risks of flu in their community with the disruption dismissals will cause in both education and the wider community. The length of time schools should be dismissed will vary depending on the type of dismissal as well as the severity and extent of illness. Schools that dismiss students should do so for five to seven calendar days and should reassess whether or not to resume classes after that period. Schools that dismiss students should remain open to teachers and staff so they can continue to provide instruction through other means.

Reactive dismissals might be appropriate when schools are not able to maintain normal functioning for example, when a significant number and proportion of students have documented fever while at school despite recommendations to keep ill children home.

Preemptive dismissals can be used proactively to decrease the spread of flu. CDC may recommend preemptive school dismissals if the flu starts to cause severe disease in a significantly larger proportion of those affected.

Deciding on a course of action

CDC and its partners will continuously look for changes in the severity of influenza-like illness and will share what is learned with state and local agencies. However, states and local communities can expect to see a lot of differences in disease burden across the country.

Every state and community has to balance a variety of objectives to determine their best course of action to help decrease the spread of influenza. Decision-makers should explicitly identify and communicate their objectives which might be one or more of the following: (a) protecting overall public health by reducing community transmission; (b) reducing transmission in students and school staff; and (c) protecting people with high-risk conditions.

Some strategies can have negative consequences in addition to their potential benefits. In the particular case of school dismissals, decision-makers also must consider and balance additional factors: (a) how to ensure students continue to learn; (2) how to provide an emotionally and physically safe place for students; and (3) how to reduce demands on local health care services. The following questions can help begin discussions and lead to decisions at the state and local levels.

Decision-Makers and Stakeholders

Are all of the right decision-makers and stakeholders involved?

- State and/or local health officials
- State and/or local education officials
- State and/or local homeland security officials
- State and/or local governing officials (e.g., governors, mayors)
- Parent and student representatives
- Representatives of local businesses, the faith community, school-employee unions, and community organizations
- Teachers
- Health care providers and hospitals
- School nurses
- School food service directors
- Vendors that supply schools

Information Collection and Sharing

Can local or state health officials determine and share information about the following?

- Outpatient visits for influenza-like illness
- Hospitalizations for influenza-like illness
- Trends in the numbers of hospitalizations or deaths
- Percent hospitalized patients who require admission to intensive care units (ICU)
- Deaths from influenza
- Groups being disproportionately affected
- Ability of local health care providers and emergency departments to meet increased demand
- Availability of hospital bed, ICU space, and ventilators for influenza patients

- Availability of hospital staff
- Availability of antiviral medications

Can local education agencies or schools determine and share information about the following?

- School absenteeism rates
- Number of visits to school health offices daily
- Number of students with influenza-like illness sent home during the school day

Feasibility

Do you have the resources to implement the strategies being considered?

- Funds
- Personnel
- Equipment
- Space
- Time
- Legal authority or policy requirements

Acceptability

Have you determined how to address the following challenges to implementing the strategies?

- Public concern about influenza
- Lack of public support for the intervention
- People who do not feel empowered to protect themselves
- Secondary effects of strategies (for example, dismissing schools could impact child nutrition, job security, financial support, health service access, and educational progress)



Questions and Answers: Information for Schools

The Centers for Disease Control and Prevention (CDC) recognizes that school administrators, teachers, staff, and parents are concerned about the flu, particularly its effects on children. Schools are instrumental in keeping their communities healthy by taking actions such as posting information about hand hygiene in restrooms, providing flu prevention messages in daily announcements, and being vigilant about cleaning and disinfecting classroom materials.

The following are some answers to questions commonly asked by school administrators, teachers, staff, and parents:

On this page:

- [General Information about the Disease](#)
- [Preventing and Treating the Flu](#)
- [Flu Resources for Schools](#)

General Information about the Disease

What is influenza (flu)?

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. The best way to prevent the flu is by getting a flu **vaccination** each year.

Every year in the United States, on average:

- 5% to 20% of the population gets the flu;
- more than 200,000 people are hospitalized from flu complications;
- 20,000 of those hospitalized are children younger than 5 years of age; and
- about 36,000 people die from flu.

Some people, such as older people, young children, and people with certain health conditions (such as asthma, diabetes, or heart disease), are at high risk for serious flu complications.

How does the flu spread?

Flu viruses spread mainly from person to person through coughing or sneezing of people with influenza. Sometimes people may become infected by touching something with flu viruses on it and then touching their mouth or nose. Most healthy adults may be able to infect others beginning 1 day **before** symptoms develop and up to 5 days **after** becoming sick. **That means that you may be able to pass on the flu to someone else before you know you are sick, as well as while you are sick.**

What are the symptoms of the flu?

Symptoms of flu include:

- fever (usually high)
- headache
- extreme tiredness
- dry cough
- sore throat
- runny or stuffy nose
- muscle aches
- Stomach symptoms, such as nausea, vomiting, and diarrhea, also can occur but are more common in children than adults

Although the term "stomach flu" is sometimes used to describe vomiting, nausea, or diarrhea, these illnesses are caused by certain other viruses, bacteria, or possibly parasites, and are rarely related to influenza. Please also see "[Is it a Cold or the Flu](#)".

How long is a person with flu virus contagious?

The period when an infected person is contagious depends on the age and health of the person. Studies show that most healthy adults may be able to infect others from 1 day prior to becoming sick and for 5 days after they first develop symptoms. Some young children with weakened immune systems may be contagious for longer than a week.

What is the difference between a cold and the flu?

The flu and the common cold are both respiratory illnesses but they are 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. People with colds are more likely to have a runny or stuffy nose. Colds generally do not result in serious health problems, such as pneumonia, bacterial infections, or hospitalizations.

How can you tell the difference between a cold and the flu?

Because colds and flu share many symptoms, it can be difficult (or even impossible) to tell the difference between them based on symptoms alone. Special tests that usually must be done within the first few days of illness can be carried out, when needed to tell if a person has the flu.

For more information about "Flu: The Disease" visit, <http://www.cdc.gov/flu/about/disease/index.htm>

Preventing and Treating the Flu

What can I do to protect myself against the flu?

CDC recommends a yearly [flu vaccine](#) as the first and most important step in protecting against this serious disease. While there are many different flu viruses, the flu vaccine protects against the three main flu strains that research indicates will cause the most illness during the flu season. The vaccine can protect you from getting sick from these three viruses or it can make your illness milder if you get a different flu virus.

If you do get the flu, [antiviral drugs](#) are an important treatment option. Antiviral drugs are prescription medicines (pills, liquid or an inhaler) that fight against the flu by keeping flu viruses from reproducing in your body. Antiviral drugs can make your illness milder and make you feel

better faster. They may also prevent serious flu complications. This could be especially important for people at high risk. For treatment, antiviral drugs work best if started soon after getting sick (within 2 days of symptoms).

In addition, you can take [everyday preventive steps](#) like frequent hand washing to decrease your chances of getting the flu. If you are sick with flu, reduce your contact with others and cover your cough to help keep germs from spreading.

What kind of flu vaccines are there?

There are two types of vaccines that protect against the flu. The "flu shot" is an inactivated vaccine (containing killed virus) that is given with a needle, usually in the arm. The flu shot is approved for use among people 6 months of age or older, including healthy people and those with chronic medical conditions (such as asthma, diabetes, or heart disease). A different kind of vaccine, called the nasal-spray flu vaccine (sometimes referred to as LAIV for Live Attenuated Influenza Vaccine or FluMist®), was approved in 2003. The nasal-spray flu vaccine contains attenuated (weakened) live viruses, and is administered by nasal sprayer. It is approved for use only among healthy* people 2-49 years of age who are not pregnant.

Each of the two types of vaccine contains three influenza viruses, which are chosen based on information about recently circulating strains. Each of the three vaccine strains in both vaccines – one A (H3N2) virus, one A (H1N1) virus, and one B virus – are representative of the influenza vaccine strains recommended for that year. Viruses for both vaccines are grown in eggs.

* "Healthy" indicates persons who do not have an underlying medical condition that predisposes them to influenza complications.

How do flu vaccines work?

Both flu vaccines (the flu shot and the nasal-spray flu vaccine (LAIV)) cause antibodies to develop in the body. These antibodies provide protection against influenza virus infection.

At what age should a child be vaccinated?

CDC recommends that all children aged 6 months up to their 19th birthday get a flu vaccine. CDC also recommends that people in contact with certain groups of children get a [flu vaccine](#) in order to protect the child (or children) in their lives from the flu.

The following contacts of children are recommended for influenza vaccination by CDC:

- Close contacts of children younger than 5 years old (people who live with them) should get a flu vaccine.
- Out-of-home caregivers (nannies, daycare providers, etc.) of children younger than 5 years old should get a flu vaccine.
- People who live with or have other close contact with a child or children of any age with a chronic health problem (asthma, diabetes, etc.) should get a flu vaccine.
- In addition, CDC recommends that all health care workers be vaccinated each year to keep from spreading the flu to their patients.

Children 6 months up to 9 years of age getting a flu vaccine for the first time will need two doses of vaccine the first year they are vaccinated. If possible, the first dose should be given in September or as soon as vaccine becomes available. The second dose should be given 28 or more days after the first dose. The first dose "primes" the immune system; the second dose provides immune protection. Children who only get one dose but who need two doses can have reduced or no protection from a single dose of flu vaccine. Two doses are necessary to protect these children.

What are influenza antiviral drugs?

Influenza [antiviral drugs](#) are prescription medicines (pills, liquid or an inhaler) that fight against the flu by keeping flu viruses from reproducing in your body. Antiviral drugs can make your illness milder and make you feel better faster. They may also prevent serious flu complications. This could be especially important for people at high risk.

How are antiviral medications used for flu?

While getting a flu vaccine each year is the best way to protect you from the flu, [antiviral drugs](#) can be used as a second line of defense to treat the flu or to prevent flu infection. For treatment, antiviral drugs work best if started soon after getting sick (within 2 days of symptoms). When used this way, these drugs can reduce the severity of flu symptoms and shorten the time you are sick by 1 or 2 days. They also may make you less contagious to other people.

Flu Resources for Schools

Where can I get more information about the flu?

For more information and updates about the flu, call CDC's hotline or visit CDC's Web site. You can call the **CDC Flu Information Hotline** (English and Spanish) at:

800-CDC-INFO (800-232-4636)
888-232-6348 (TTY)

You can visit [CDC's flu Web site](#) where you can access the following:

- Information about preventing the spread of flu in schools;
- "[Be a Germ Stopper](#)" and "[Cover Your Cough](#)" posters formatted for printing;
- "[It's a SNAP](#)" [toolkit](#) (leaves CDC's website), which includes activities that school administrators, teachers; and students and others can do to help stop the spread of germs in schools.

To find contact information for your state or local health department, go to <http://www.cdc.gov/other.htm>.

For "Key Facts about Seasonal Flu," a fact sheet including information about flu symptoms, how flu spreads, and how to prevent flu, go to <http://www.cdc.gov/flu/keyfacts.htm>.

For "The Flu: A Guide for Parents," a flyer answering questions about the flu, how to protect your child, treatment, and more, go to <http://www.cdc.gov/flu/school/index.htm>.

For more information about both the flu shot and the nasal spray vaccine, go to <http://www.cdc.gov/flu/about/qa/flu vaccine.htm>.

For more information about treating flu and flu symptoms, including information about why children or teenagers with flu-like symptoms should NOT take aspirin, go to <http://www.cdc.gov/flu/whattodo.htm>.

**NOVEL INFLUENZA A H1N1
WORKPLACE GUIDANCE**

August 2009

The attached information can be used as guidance to develop programs that will help an organization and manage the pandemic caused by the novel H1N1 influenza strain.

The documents was taken from the Centers for Disease Control website at:
<http://www.cdc.gov/h1n1flu/groups.htm>

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General Business and Workplace Guidance for the Prevention of Novel Influenza A (H1N1) Flu in Workers

<http://www.cdc.gov/h1n1flu/guidance/workplace.htm>

This document has been updated in accordance with the CDC Recommendations for the Amount of Time Persons with Influenza-Like Illness Should be Away from Others. This document provides interim guidance and will be updated as needed.

This guidance is to help employers with employees in OSHA's Lower Risk (Caution) Zone: those employees who have minimal occupational contact with the general public and other coworkers (for example, office employees).*

Note: This guidance was updated on June 25, 2009 in order to provide more specific guidance regarding when a worker who has been exposed to novel influenza A (H1N1) may return to work. This includes exposures which occur in the home, the community, and in the workplace. It was further updated on August 10, 2009 to provide clarification on privacy issues surrounding the disclosure of information to employees during a pandemic.

A novel influenza A (H1N1) virus has infected humans in the United States as well as multiple other countries, and the spread of this virus continues. Businesses and employers, in general, play a key role in protecting employees' health and safety, as well as in limiting the negative impact of the outbreak on the individual, the community, and the nation's economy. This interim guidance is meant to inform and educate management, unions, and employees about appropriate precautions and work practices to minimize the risk of potential employee exposure, illness, and the spread of novel influenza A (H1N1) flu in the workplace through general prevention and preparedness strategies and in the event that a worker becomes ill.

The guidance in this document may change as additional information about novel influenza A (H1N1) becomes known. Please check the website periodically for updated guidance.

Symptoms of Novel Influenza A (H1N1) Flu

The symptoms of this novel influenza A (H1N1) flu virus in people are similar to the symptoms of seasonal flu and include fever, cough, sore throat, runny or stuffy nose, body aches, headache, chills and fatigue. A significant number of people who have been infected with this virus also have reported diarrhea and vomiting. Also, as with seasonal flu, severe illnesses and death have occurred as a result of illness associated with this virus.

Prevention of Illness in Well Employees

Spread of this novel influenza A (H1N1) virus is thought to be happening in the same way that seasonal flu spreads. Flu viruses are spread mainly from person to person through coughing or sneezing by people with influenza. Sometimes people may become infected by touching something with flu viruses on it and then touching their eyes, mouth, or nose.

What can employers do to protect employees?

- Encourage sick workers to stay home and away from the workplace, and provide flexible leave policies.
- Encourage infection control practices in the workplace by displaying posters that address and remind workers about proper hand washing, respiratory hygiene, and cough etiquette. These posters can be found on the [Germ Stopper: Posters and Other Materials page](#).
- Provide written guidance (email, etc.) on novel influenza A (H1N1) flu appropriate for the language and literacy levels of everyone in the workplace. Employers should work closely with local and state public health officials to ensure they are providing the most appropriate and up-to-date information (e.g., the [CDC H1N1 Flu website](#)).
- Provide sufficient facilities for hand washing and alcohol-based (at least 60%) hand sanitizers* (or wipes) in common workplace areas such as lobbies, corridors, and restrooms.
- Provide tissues, disinfectants, and disposable towels for employees to clean their work surfaces, as well as appropriate disposal receptacles for use by employees.
- One study showed that influenza virus can survive on environmental surfaces and can infect a person for up to 2-8 hours after being deposited on the surface. To reduce the chance of spread of the novel influenza A (H1N1) virus, disinfect commonly-touched hard surfaces in the workplace, such as work stations, counter tops, door knobs, and bathroom surfaces by wiping them down with a household disinfectant according to directions on the product label.

What can employees do to reduce the spread of novel influenza A (H1N1) flu in the workplace?

- Stay home if you are sick. If you have symptoms of influenza-like illness, 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). Keep away from others as much as possible. This is to keep from making others sick.
- Employees who are well but who have an ill family member at home with novel H1N1 flu can go to work as usual. These employees should monitor their health every day, notify their supervisor and stay home if they become ill. Employees who have an underlying medical condition or who are pregnant should call their health care provider for advice, because they might need to receive influenza antiviral drugs to prevent illness.
- 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, especially after you cough or sneeze. Alcohol-based hand sanitizers* can be used if soap and water are not available.
- Avoid touching your eyes, nose, or mouth. Germs spread this way.
- Avoid close contact with sick people. If an employee suspects that they have been exposed to a sick person with novel H1N1 influenza they may continue to go to work as usual. These employees should monitor their health every day and should notify their supervisor and stay home if they become ill.

Management of Employee Exposure in the Workplace after a Confirmed Case of Novel Influenza A (H1N1) Flu

What to do when an employee comes to work with influenza-like illness symptoms in a community where novel influenza A (H1N1) virus is circulating

- Notify appropriate health center or first aid personnel.
- Place the employee in a room by him- or herself.
- If the employee needs to go into a common area, he or she should cover coughs/sneezes with a tissue or wear a facemask if available and tolerable.
- Notify the employee's supervisor or employer.
- Send the employee home as soon as possible.
- Call for emergency medical services if the ill person develops any of the emergency warning signs. See [What to Do If You Get Flu-Like Symptoms](#) to review emergency warning signs and for more information on what employees should do if they become sick.
- Ensure the ill employee stays home for at least 24 hours after your fever is gone except to get medical care or for other necessities (their fever should be gone without the use of a fever-reducing medicine).
- For recommendations on facemask and respirator use for the person assisting the ill employee see [Interim Recommendations for Facemask and Respirator Use to Reduce Novel Influenza A \(H1N1\) Virus Transmission](#).

What to do for co-workers of an employee who is a suspected or confirmed case of novel influenza A (H1N1) flu

- Inform the employees of their exposure in the workplace with confirmed, probable, or suspected novel H1N1 flu during the ill person's infectious period. Such disclosure of information should be conducted in accordance with the privacy and confidentiality requirements of the Americans with Disabilities Act (ADA), which stipulates that employers are required to keep all employees' medical information private and confidential. Please refer to more information on [privacy issues](#).
- Have the exposed employees monitor themselves for symptoms.
- Advise employees to check with their health care provider about any special care they might need if they are pregnant or have a chronic health condition such as diabetes, heart disease, asthma, or emphysema.

What to do for an employee with confirmed novel influenza A (H1N1) flu while he or she is on travel status

- Notify his or her supervisor or employer if an employee becomes ill on travel or temporary assignment.
- If outside the U.S., contact medical provider or overseas medical assistance companies to assist in finding an appropriate medical provider in that country, if needed. A U.S. consular officer can help locate medical services. Take note that U.S. embassies, consulates, and military facilities do not have the legal authority, capability, and resources to evacuate or to give medications, vaccines, or medical care to private U.S. citizens overseas.
- See [Novel H1N1 Flu and Travel](#) for more information for travelers.

Considerations for Pregnant Employees with Suspected Novel Influenza A (H1N1) Flu

Pregnant women are known to be at higher risk for seasonal influenza complications. They might also be at higher risk for novel H1N1 influenza complications. Pregnant women with flu-like symptoms should contact their health care provider. For more information, please visit [What Pregnant Women Should Know About H1N1 Virus](#)

How Businesses Can Respond to the Impact that Novel Influenza A (H1N1) Flu May Have on their Operations and Employees

What businesses can do to anticipate and respond to the impact of novel influenza A (H1N1) flu on operations

- Determine who will be responsible for responding to ill individuals in the workplace, either through an established health clinic or as a first aid duty.
- Share your plans with employees and clearly communicate expectations.
- Review interim recommendations for facemask and respirator use in non-health care settings.
- Identify essential employees, essential business functions, and other critical inputs (e.g. raw materials, suppliers, subcontractor services/products, and logistics) required to maintain business operations by location and function should there be disruptions during the novel influenza A (H1N1) flu outbreak.
- Implement business continuity plans if there is significant absenteeism in the workplace during this outbreak.
- Review your plan with regard to increases or decreases in demand for your products and/or services during the outbreak (e.g., the need for hygiene supplies).
- Review the CDC travel-related websites for up-to-date information and communicate these recommendations to employees who may have upcoming business-related travel.
- Establish an emergency communications plan. This plan includes identification of key contacts (with back-ups), chain of communications (including suppliers and customers), and processes for tracking and communicating business and employee status.
- Develop platforms (e.g., hotlines, dedicated websites) for communicating novel influenza A (H1N1) flu status and actions to employees, vendors, suppliers, and customers inside and outside the worksite in a consistent and timely way, including redundancies in the emergency contact system.

What businesses can do to anticipate and respond to the impact of novel influenza A (H1N1) on employees

- Examine policies for leave and employee compensation and review with managers, supervisors, and employees so they are up-to-date on sick leave policies, leave donation, and employee assistance services that are covered under the different employee-sponsored health plans. Leave policies should be flexible and non-punitive.
- Plan for the possibility of unscheduled leave that encourages employees who are sick to stay at home to care for themselves and others who are ill with the flu or children dismissed from school.
- Establish policies for flexible worksite (e.g., telecommuting) and flexible work hours (e.g., staggered shifts), if needed.
- Communicate policies for employee access to, and availability of, health care, mental health, and social services including corporate and community resources.

**NOVEL INFLUENZA A H1N1
HOMECARE GUIDANCE**

August 2009

The attached information can be used as guidance to help health care professionals manage a pandemic in their community. Specifically it provides guidance for family members who will take care of an individual(s) infected with the H1N1 virus.

The document was taken from the Centers for Disease Control website at:
<http://www.cdc.gov/h1n1flu/groups.htm>

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Interim Guidance for Novel H1N1 Flu (Swine Flu): Taking Care of a Sick Person in Your Home

http://www.cdc.gov/h1n1flu/guidance_homecare.htm

This document has been updated in accordance with the [CDC Recommendations for the Amount of Time Persons with Influenza-Like Illness Should be Away from Others](#). This document provides interim guidance and will be updated as needed.

Novel H1N1 flu virus infection (formerly known as swine flu) can cause a wide range of symptoms, including fever, cough, sore throat, body aches, headache, chills and fatigue. Some people have reported diarrhea and vomiting associated with novel H1N1 flu. Like seasonal flu, novel H1N1 flu in humans can vary in severity from mild to severe. Severe disease with pneumonia, respiratory failure and even death is possible with novel H1N1 flu infection. Certain groups might be more likely to develop a severe illness from novel H1N1 flu infection, such as pregnant women and persons with chronic medical conditions. Sometimes bacterial infections may occur at the same time as or after infection with influenza viruses and lead to pneumonias, ear infections, or sinus infections.

The following information can help you provide safer care at home for sick persons during a flu outbreak or flu pandemic.

How Flu Spreads



The main way that influenza viruses are thought to spread is from person to person in respiratory droplets of coughs and sneezes. This can happen when droplets from a cough or sneeze of an infected person are propelled through the air and deposited on the mouth or nose of people nearby. Influenza viruses may also be spread when a person touches respiratory droplets on another person or an object and then touches their own mouth or nose (or someone else's mouth or nose) before washing their hands.

People with novel H1N1 flu who are cared for at home should:

- check with their health care provider about any special care they might need if they are pregnant or have a health condition such as diabetes, heart disease, asthma, or emphysema
- check with their health care provider about whether they should take antiviral medications
- keep away from others as much as possible. This is to keep from making others sick. Do not go to work or school while ill
- stay home for at least 24 hours after fever is gone, except to seek medical care or for other necessities. (Fever should be gone without the use of a fever-reducing medicine.)
- get plenty of rest
- drink clear fluids (such as water, broth, sports drinks, electrolyte beverages for infants) to keep from being dehydrated
- cover coughs and sneezes. Clean hands with soap and water or an alcohol-based hand rub often and especially after using tissues and after coughing or sneezing into hands
- wear a facemask – if available and tolerable – when sharing common spaces with other household members to help prevent spreading the virus to others. This is especially important if other household members are at high risk for complications from influenza. For more information, see the [Interim Recommendations for Facemask and Respirator Use](#)
- be watchful for emergency warning signs (see below) that might indicate you need to seek medical attention.

Medications to Help Lessen Symptoms of the Flu

Check with your healthcare provider or pharmacist for correct, safe use of medications

Antiviral medications can sometimes help lessen influenza symptoms, but require a prescription. Most people do not need these antiviral drugs to fully recover from the flu. However, persons at higher risk for severe flu complications, or those with severe flu illness who require hospitalization, might benefit from antiviral medications. Antiviral medications are available for persons 1 year of age and older. Ask your health care provider whether you need antiviral medication.

Influenza infections can lead to or occur with bacterial infections. Therefore, some people will also need to take antibiotics. More severe or prolonged illness or illness that seems to get better, but then gets worse again may be an indication that a person has a bacterial infection. Check with your health care provider if you have concerns.

Warning! Do *not* give aspirin (acetylsalicylic acid) to children or teenagers who have the flu; this can cause a rare but serious illness called Reye's syndrome. For more information about Reye's syndrome, visit the [National Institute of Health website](#) .

- Check ingredient labels on over-the-counter cold and flu medications to see if they contain aspirin.
- Children 5 years of age and older and teenagers with the flu can take medicines **without** aspirin, such as acetaminophen (Tylenol®) and ibuprofen (Advil®, Motrin®, Nuprin®), to relieve symptoms.
- Children younger than 4 years of age should **NOT** be given over-the-counter cold medications without first speaking with a health care provider.
- The safest care for flu symptoms in children younger than 2 years of age is using a cool-mist humidifier and a suction bulb to help clear away mucus.
- Fevers and aches can be treated with acetaminophen (Tylenol®) or ibuprofen (Advil®,

Motrin®, Nuprin®) or nonsteroidal anti-inflammatory drugs (NSAIDs). Examples of these kinds of medications include:

Generic Name	Brand Name(s)
Acetaminophen	Tylenol®
Ibuprofen	Advil®, Motrin®, Nuprin®
Naproxen	Aleve

- Over-the-counter cold and flu medications used according to the package instructions may help lessen some symptoms such as cough and congestion. Importantly, these medications will not lessen how infectious a person is.
- Check the ingredients on the package label to see if the medication already contains acetaminophen or ibuprofen before taking additional doses of these medications—don't double dose! Patients with kidney disease or stomach problems should check with their health care provider before taking any NSAIDs.

Check with your health care provider or pharmacist if you are taking other over-the-counter or prescription medications not related to the flu. For more information on products for treating flu symptoms, see the [FDA website](#).

When to Seek Emergency Medical Care

Get medical care right away if the sick person at home:

- has difficulty breathing or chest pain
- has purple or blue discoloration of the lips
- is vomiting and unable to keep liquids down
- has signs of dehydration such as dizziness when standing, absence of urination, or in infants, a lack of tears when they cry
- has seizures (for example, uncontrolled convulsions)

is less responsive than normal or becomes confused

Steps to Lessen the Spread of Flu in the Home

When providing care to a household member who is sick with influenza, the most important ways to protect yourself and others who are not sick are to:

- keep the sick person away from other people as much as possible (see “placement of the sick person”) especially others who are at high risk for complications from influenza
- remind the sick person to cover their coughs, and clean their hands with soap and water or an alcohol-based hand rub often, especially after coughing and/or sneezing



- have everyone in the household clean their hands often, using soap and water or an alcohol-based hand rub. Children may need reminders or help keeping their hands clean
- ask your health care provider if household contacts of the sick person—particularly those contacts who may be pregnant or have chronic health conditions—should take antiviral medications such as oseltamivir (Tamiflu®) or zanamivir (Relenza®) to prevent the flu

- If you are in a [high risk group for complications from influenza](#), you should attempt to avoid close contact (within 6 feet) with household members who are sick with influenza. If close contact with a sick individual is unavoidable, consider wearing a facemask or respirator, if available and tolerable. Infants should not be cared for by sick family members. For more information, see the [Interim Recommendations for Facemask and Respirator Use](#)

Placement of the sick person

- Keep the sick person in a room separate from the common areas of the house. (For example, a spare bedroom with its own bathroom, if that's possible.) Keep the sickroom door closed.
- Unless necessary for medical care or other necessities, people who are sick with an influenza-like-illness should stay home and keep away from others as much as possible, including avoiding travel, for at least 24 hours after fever is gone except to get medical care or for other necessities. (Fever should be gone without the use of a fever-reducing medicine). This is to keep from making others sick. Children, especially younger children, might potentially be contagious for longer periods.
- If persons with the flu need to leave the home (for example, for medical care), they should [wear a facemask, if available and tolerable](#), and cover their nose and mouth when coughing or sneezing
- Have the sick person wear a facemask – if available and tolerable – if they need to be in a common area of the house near other persons.
- If possible, sick persons should use a separate bathroom. This bathroom should be cleaned daily with household disinfectant (see below).

Protect other persons in the home

- The sick person should not have visitors other than caregivers. A phone call is safer than a visit.
- If possible, have only one adult in the home take care of the sick person. [People at increased risk of severe illness from flu](#) should not be the designated caretaker, if possible.
- If you are in a high risk group for complications from influenza, you should attempt to avoid close contact (within 6 feet) with household members who are sick with influenza. If close contact with a sick individual is unavoidable, consider wearing a facemask or respirator, if available and tolerable. For more information, see the [Interim Recommendations for Facemask and Respirator Use](#).
- Avoid having pregnant women care for the sick person. (Pregnant women are at increased risk of influenza-related complications and immunity can be suppressed during pregnancy).
- Avoid having sick family members care for infants and [other groups at high risk for complications of influenza](#).
- All persons in the household should clean their hands with soap and water or an [alcohol-based hand rub*](#) frequently, including after every contact with the sick person or the person's room or bathroom.
- Use paper towels for drying hands after hand washing or dedicate cloth towels to each person in the household. For example, have different colored towels for each person.
- If possible, consideration should be given to maintaining good ventilation in shared household areas (e.g., keeping windows open in restrooms, kitchen, bathroom, etc.).
- Antiviral medications can be used to prevent the flu, so check with your health care provider to see if some persons in the home should use antiviral medications.

If you are the caregiver

- Avoid being face-to-face with the sick person.
- When holding small children who are sick, place their chin on your shoulder so that they will not cough in your face.
- Clean your hands with soap and water or use an [alcohol-based hand rub*](#) after you touch the sick person or handle used tissues, or laundry.
- Talk to your health care provider about taking antiviral medication to prevent the caregiver from getting the flu.
- If you are at high risk of influenza associated complications, you should not be the designated caretaker, if possible.
- If you are in a high risk group for complications from influenza, you should attempt to avoid close contact (within 6 feet) with household members who are sick with influenza. Designate a person who is not at high risk of flu associated complications as the primary caretaker of household members who are sick with influenza, if at all possible. If close contact with a sick individual is unavoidable, consider wearing a facemask or respirator, if available and tolerable. For more information, see the [Interim Recommendations for Facemask and Respirator Use](#)
- **Monitor yourself and household members for flu symptoms and contact a telephone hotline or health care provider if symptoms occur.**

Using Facemasks or Respirators

- Avoid close contact (less than about 6 feet away) with the sick person as much as possible.
- If you must have close contact with the sick person (for example, hold a sick infant), spend the least amount of time possible in close contact and try to wear a facemask (for example, surgical mask) or N95 disposable respirator.
- An N95 respirator that fits snugly on your face can filter out small particles that can be inhaled around the edges of a facemask, but compared with a facemask it is harder to breathe through an N95 mask for long periods of time. More information on facemasks and respirators can be found at [H1N1 Flu \(Swine Flu\)](#) website.
- Facemasks and respirators may be purchased at a pharmacy, building supply or hardware store.
- Wear an N95 respirator if you help a sick person with respiratory treatments using a nebulizer or inhaler, as directed by their doctor. Respiratory treatments should be performed in a separate room away from common areas of the house when at all possible.
- Used facemasks and N95 respirators should be taken off and placed immediately in the regular trash so they don't touch anything else.
- Avoid re-using disposable facemasks and N95 respirators, if possible. If a reusable fabric facemask is used, it should be laundered with normal laundry detergent and tumble-dried in a hot dryer.
- After you take off a facemask or N95 respirator, clean your hands with soap and water or an alcohol-based hand sanitizer.
- For more information, see the [Interim Recommendations for Facemask and Respirator Use](#)



Household Cleaning, Laundry, and Waste Disposal

- Throw away tissues and other disposable items used by the sick person in the trash. Wash your hands after touching used tissues and similar waste.
- Keep surfaces (especially bedside tables, surfaces in the bathroom, and toys for children) clean by wiping them down with a household disinfectant according to directions on the product label.
- Linens, eating utensils, and dishes belonging to those who are sick do not need to be cleaned separately, but importantly these items should not be shared without washing thoroughly first.
- Wash linens (such as bed sheets and towels) by using household laundry soap and tumble dry on a hot setting. Avoid “hugging” laundry prior to washing it to prevent contaminating yourself. Clean your hands with soap and water or alcohol-based hand rub right after handling dirty laundry.
- Eating utensils should be washed either in a dishwasher or by hand with water and soap.



For More Information

The Centers for Disease Control and Prevention (CDC) Hotline (1-800-CDC-INFO) is available 24 hours a day, 7 days a week.