



Preparing for Pandemic Flu in New Mexico Schools: *Information for Educators and Community Members*



New Mexico Public Education Department
School and Family Support Bureau

New Mexico Department of Health
Bureau of Health Emergency Management
Office of School and Adolescent Health (OSAH)

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OVERVIEW OF PANDEMIC FLU DOCUMENTS

The following information on pandemic flu (which may be avian or bird flu) is designed for both school personnel and community members across New Mexico. While the contents are in English, links are given to parallel information on the web that is in Spanish.

Information is divided into brief “documents” that are aimed at different questions and audiences. To find the document that you want, first identify which of the following three populations you fall into.

- 1) School and district administrators
- 2) School teachers, nurses and other staff
- 3) Parents, students and concerned community members

For each population, there are documents that answer four major questions.

- a) Background information on the risk and potential impact of Pandemic Flu.
- b) How you can plan and prepare for Pandemic Flu.
- c) How you can help to prevent the spread of Pandemic Flu.
- d) What you can do if Pandemic Flu breaks out.

The following chart illustrates and directs you to the 9 documents for these populations and questions. Each document also provides links to additional resources on the Internet.

CHART OF DOCUMENT STRUCTURE AND CONTENT

What you can do if you are a...	<i>Background information on the risk and potential impact of Pandemic Flu...</i>	<i>How you can plan and prepare for Pandemic Flu...</i>	<i>How you can help to prevent the spread of Pandemic Flu...</i>	<i>What you can do if Pandemic Flu breaks out....</i>
School or District Administrator →	<p><i>... in your school or district:</i></p> <p>The Risk of Pandemic Flu in Our Schools DOCUMENT #1</p>	<p><i>... in your school or district:</i></p> <p>School Emergency Plans DOCUMENT #3</p>	<p><i>... in your school or district:</i></p> <p>District Wellness Policies DOCUMENT #5</p>	<p><i>... in your school or district:</i></p> <p>School Closure and Operation during an Outbreak DOCUMENT #8</p>
School Teacher, Nurse or Other Staff Member →	<p><i>... in your school:</i></p> <p>The Risk of Pandemic Flu in Our Schools DOCUMENT #1</p>	<p><i>... in your school:</i></p> <p>School Emergency Plans DOCUMENT #3</p>	<p><i>... in your school:</i></p> <p>Health Promotion and Infection Control Efforts DOCUMENT #6</p>	<p><i>... in your school:</i></p> <p>School Closure and Operation during an Outbreak DOCUMENT #8</p>
Parent, Student or Concerned Community Member →	<p><i>... in your home and community:</i></p> <p>Our Risk of Pandemic Flu DOCUMENT #2</p>	<p><i>... in your home and community:</i></p> <p>Family Emergency Plan and Supplies DOCUMENT #4</p>	<p><i>... in your home and community:</i></p> <p>Prevention for Your Home and Family DOCUMENT #7</p>	<p><i>... in your home and community:</i></p> <p>Home Care and Protecting Your Family DOCUMENT #9</p>

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Kristine M. Meurer, PhD, Director
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Tres Schnell, Bureau Chief
Anne Pascarelli Barraza, Population Outreach Manager
Joan Murphy, Population Outreach Planning Coordinator
- ***New Mexico Department of Health (NMDOH), Office of School and Adolescent Health (OSAH)***
Yolanda Cordova, Director
Jane McGrath, MD, School Health Officer
Naomi Kistin, MD, MPH, Regional Health Officer
Janet Mason, School Health Advocate
- ***Albuquerque Public Schools (APS), Health/Mental Health Department***
Lynn Pedraza, Director
Cindy Greenberg, Nursing Coordinator
- ***Margot White***, Assistant Professor, Institute for Public Health, University of New Mexico

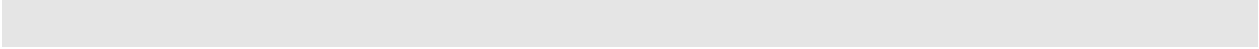
The following Internet sites provided a significant portion of the background information that is summarized in this document.

- NMDOH emergency response plan on flu
<http://www.health.state.nm.us/flu/providers/Master%20Pandemic%20Influenza%20Appendices%2010March2006%20FINAL1.pdf>
- New Mexico avian flu information from state agencies
<http://www.nmbirdflu.org/>
- One-stop access to U.S. Government avian and pandemic flu information
<http://www.pandemicflu.gov/> and
<http://www.pandemicflu.gov/plan/community/mitigation.html>
- Pandemic Flu School Action Kit by the Contra Costa Health Services, California
http://www.cchealth.org/topics/pandemic_flu/ and
http://www.cchealth.org/topics/pandemic_flu/school_action_kit/
- Avian Influenza (Bird Flu) information from the Centers for Disease Control and Prevention
<http://www.cdc.gov/flu/avian/>
- World Health Organization information on avian flu outbreaks internationally
http://www.who.int/csr/disease/avian_influenza/en/ and
http://www.who.int/csr/disease/avian_influenza/country/en/
- American Red Cross pandemic flu education
<http://www.redcross.org/news/ds/panflu/>

The following are key resources in Spanish.

- *Federal Pandemic Flu website, entirely in Spanish*
http://espanol.pandemicflu.gov/pandemicflu/enes/24/pandemicflu_gov/index.html
- *Community Mitigation Strategy*
Estrategia comunitaria para mitigar la influenza pandémica
http://espanol.pandemicflu.gov/pandemicflu/enes/24/pandemicflu_gov/plan/community/communitymitigation.html
- *School District Influenza Planning Checklist*
Listas de planificación para la influenza pandémica en los distritos escolares (K-12)
http://espanol.pandemicflu.gov/pandemicflu/enes/24/pandemicflu_gov/plan/school/schoolchecklist.html
- *Checklist for Individuals and Families*
Lista de planificación para la gripe pandémica para individuos y familias

http://espanol.pandemicflu.gov/pandemicflu/enes/24/_pandemicflu_gov/plan/individual/checklist.html



DOCUMENTS ON PANDEMIC FLU

Document 1: The Risk of Pandemic Flu in Our Schools

What you need to know

A pandemic is a global disease outbreak. A flu pandemic occurs when a new influenza virus emerges for which people have little or no immunity, and for which there is no vaccine. The disease spreads easily person-to-person, causes serious illness, and can sweep across the country and around the world in very short time. There is no flu pandemic at this time.

Schools are likely to be an important contributor to the spread of influenza in a community, due to the number of close contacts among students and staff. At the same time, schools can play a significant role in responding to a pandemic. Health care facilities can be overwhelmed, creating a shortage of hospital staff, beds, ventilators and other supplies. If existing health care centers and providers are at capacity, it may be necessary to deliver care at non-traditional sites such as clinics opened at schools.

The illness rates for both seasonal and pandemic flu are high among children. Although scientists cannot predict the specific consequences of an influenza pandemic, it is likely that many age groups would be seriously affected. The populations at greatest risk of serious illness, hospitalization and even death will be infants, the elderly, and those with underlying health conditions, if the outbreak follows the patterns of the last two pandemics in 1957 and 1968. However, in the 1918 pandemic, most deaths occurred in young adults. Few, if any, people will have immunity to the virus.

A mild-to-moderate pandemic may cause an impact on society that includes some short-term school closings and encouragement of people who are sick to stay home. A severe pandemic has the potential for a larger impact on the community, including the following:

- Schools and day care/child care facilities may be closed.
- Public and social gatherings may be discouraged.
- The patterns of daily life could be changed for some time with basic services and access to supplies possibly disrupted.

Key resources and links

Seasonal flu, avian flu, and pandemic flu are not the same. See the *glossary* page for definitions.

Get 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. You can stay informed about pandemic flu using the following resources.

- Reliable, accurate, and timely information is available at www.pandemicflu.gov.

- Another source 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. TTY: 1-888-232-6348. Questions can be e-mailed to cdcinfo@cdc.gov.

Document 2: Our Risk of Pandemic Flu

Seasonal flu, avian flu, and pandemic flu

Seasonal flu, avian flu, and pandemic flu are not the same.

- **Seasonal Influenza (common flu)** is a respiratory illness that can be transmitted person to person. It occurs every year some time between December and March. While the flu changes a little each year, people who have had the flu or a flu shot in the past will have some resistance to it. Getting vaccinated each year with a flu shot provides greater protection.
- **Pandemic Influenza** refers to influenza that is much different than the influenza infections that occurred in previous years. Because it is so different, people have little or no immunity to it and many more people become ill and die. This is how it may cause a global outbreak, or pandemic, of serious illness. Currently, there is no pandemic flu. Pandemics are rare, having occurred only 3 times in the 20th century, the last in 1968.
- **Avian Influenza (bird flu)** is caused by influenza viruses that occur naturally among wild birds. Some forms are common and cause few problems, while H5N1 is highly deadly to domestic fowl and can be transmitted from birds to humans. There is no human immunity and no vaccine is available. Avian flu is receiving a lot of attention because there is a possibility that it could change into a form that could infect humans and pass easily from one person to another, causing a pandemic. As of 2006, there have been no cases of avian flu in the United States.

Roughly 36,000 Americans die of seasonal flu in an average year. In a Category 1 pandemic, it is estimated that 90,000 Americans would die. The most serious scenario, a Category 5 pandemic, assumes that 1.8 million persons would die

What you need to know

A pandemic is a global disease outbreak. A flu pandemic occurs when a new influenza virus emerges for which people have little or no immunity, and for which there is no vaccine. The disease spreads easily person-to-person, causes serious illness, and can sweep across the country and around the world in very short time. It is difficult to predict when the next influenza pandemic will occur or how severe it will be.

A pandemic may come and go in waves, each of which can last for six to eight weeks. An especially severe influenza pandemic could lead to high levels of illness, death, social disruption, and economic loss. Everyday life would be disrupted because so many people in so many places become seriously ill at the same time. Once a pandemic begins, a virus-specific vaccine may not be available for 4-6 months after the initial identification of the virus causing the pandemic.

Human influenza virus is mainly transmitted from person to person when an infected individual coughs or sneezes. A lesser mode of transmission occurs when a person touches something that

has the flu virus on it and then touches his or her mouth or nose. Some individuals who are infected may never show symptoms or may only have mild symptoms, yet they can still spread the virus to others. People also are contagious and spread virus before they show symptoms.

The symptoms of avian flu are similar to those of the seasonal flu:

- Fever, cough, sore throat, muscle aches.
- Severe respiratory illness like pneumonia.
- Some persons may show other symptoms like diarrhea, coma and eye infections.

The exact symptoms of a pandemic strain of flu will only be known once an outbreak occurs. Based on previous pandemics, experts predict that the early symptoms will be the same as those from the seasonal flu virus, but with higher fever. As it progresses, the symptoms will become more serious, probably very quickly.

While most people have some immunity to various strains of seasonal flu, viruses are constantly changing and producing new strains. When a virus emerges that is so different from previous strains that few, if any, people have any immunity to it, the impact is more severe and widespread than with seasonal flu. There is no flu pandemic at this time.

Most cases of H5N1 avian influenza infection in humans have resulted from direct or close contact with infected poultry (e.g., domesticated chicken, ducks, and turkeys). For a pandemic of influenza to occur, avian influenza must mutate/change to be able to be passed easily from person to person. A pandemic of influenza might arise from changes that occur in existing and highly deadly strains of bird flu to allow easier infection of humans, but no one knows when or even if this will happen. Today, there have been no reported cases of sustained human-to-human transmission of avian flu.

Key resources and links

Information sheet and frequently asked questions on pandemic influenza:

- <http://www.pandemicflu.gov/general/whatis.html>
- http://answers.pandemicflu.gov/cgi-bin/pandemicflu.cfg/php/enduser/std_alp.php
- http://www.who.int/csr/disease/avian_influenza/avian_faqs/en/index.html

How seasonal flu differs from pandemic flu:

- http://www.pandemicflu.gov/general/season_or_pandemic.html

Confirmed human cases of avian influenza around the world:

- http://www.who.int/csr/disease/avian_influenza/country/en/

Get 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. You can stay informed about pandemic flu using the following resources.

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- 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. TTY: 1-888-232-6348. Questions can be e-mailed to cdcinfo@cdc.gov.

Document 3: School Emergency Plans

What you need to know

Local educational agencies (LEAs) play an integral role in protecting the health and safety of their district's staff, students and their families. Building a strong relationship with the local health department is critical for developing a meaningful plan.

Based on studies of past pandemics, the most effective approach seemed to be when actions were taken early and quickly. Cities and jurisdictions that responded faster and with more layered protective measures fared better.

Each school district/LEA should have an Emergency Management Plan. Such plans should be flexible to encompass all hazards, including pandemic flu. Plans should address the four phases of emergency management planning.

1. Mitigation and Prevention
2. Preparedness
3. Response
4. Recovery

Plans should be based on sound data and information. They should be practiced on a regular basis. Plans should also be continually reviewed and updated as new information is available.

Emergency plans for pandemic influenza and broader plans for a variety of emergencies should incorporate the requirements of students with special needs (e.g., low income students who rely on the school food service for daily meals), those in special facilities (e.g., juvenile justice facilities) as well as those who do not speak English as their first language.

Emergency plans should follow and contribute to NMDOH's *Pandemic Influenza Emergency Response Plan*, completed in 2006. The plan notes that, beginning with incident identification, all response is local.

- <http://www.health.state.nm.us/flu/providers/Master%20Pandemic%20Influenza%20Appendicies%2010March2006%20FINAL1.pdf>

NMDOH will take a variety of steps during a pandemic. The following potential responses are most likely to impact schools.

1. Surveillance

- NMDOH will conduct all routine influenza surveillance measures.
- NMDOH, depending on the supply of available antiviral agents, may require all clinical cases of influenza to be reported.

2. Infection Control

- NMDOH and its partners will issue updated guidelines for influenza control in acute care

facilities, outpatient facilities, long-term care facilities, schools, childcare facilities and for the general public.

3. Community Disease Control and Prevention

- Response actions related to quarantine and isolation will be in accordance with established protocols.
- NMDOH will recommend the use of control measures such as individual contact tracing and quarantine as feasible and practical, depending upon the epidemiology of the pandemic.
- NMDOH will recommend the use of social-distancing measures individually, and within groups and communities.
- NMDOH will consider implementation of community-based containment measures, including closure of public buildings and cancellation of school and public events. Such a decision would depend on data showing the severity of the pandemic.

What you can do

School emergency plans should cover four major topics: 1) Planning and coordination, 2) Continuity of student learning and core operations, 3) Infection control policies and procedures, and 4) Communications planning. Each district may develop a plan by using the comprehensive School District Pandemic Flu Planning Checklist, of which key steps include the following.

1. Address pandemic influenza preparedness as part of the district's crisis management plan, with the involvement of all relevant stakeholders in the district (e.g., lead emergency response agency, district administrators, local public health representatives, school health and mental health professionals, teachers, food services director, and parent representatives).
2. Contribute to NMDOH and local plans for added capacity of healthcare and other services to meet the needs of the community (e.g., schools designated as contingency hospitals, schools feeding vulnerable populations, community utilizing school district nurses and other medical staff). In an affected community, at least two pandemic disease waves (about 6-8 weeks each) are likely over several months.
3. Develop a dissemination plan for communication with staff, students, and families, including lead spokespersons and links to other communication networks.
4. Advise district staff, students and families where to find up-to-date and reliable pandemic information from federal, state and local public health sources.
5. Disseminate information from public health sources covering routine infection control (e.g., hand hygiene, cough/sneeze etiquette), pandemic influenza fundamentals (e.g., signs and symptoms of influenza, modes of transmission) as well as personal and family protection and response strategies (e.g., guidance for the at-home care of ill students and family members).
6. Collaborate with NMDOH and local agencies in the development of a surveillance system that would alert these partners to a substantial increase in absenteeism among students.

Key resources and links

School District Pandemic Flu Planning Checklist:

- <http://pandemicflu.gov/plan/schoolchecklist.html>

School Action Kit from Contra Costa County, California:

- http://www.cchealth.org/topics/pandemic_flu/school_action_kit/

Resources on emergency planning for schools:

- <http://www.ed.gov/admins/lead/safety/emergencyplan/index.html>
- <http://www.ed.gov/admins/lead/safety/emergencyplan/pandemic/planning-guide/planning-guide.pdf>

Examples of local plans:

- <http://www.ed.gov/admins/lead/safety/emergencyplan/pandemic/sampleplans/index.html>
- http://www.browardschools.com/info/pdf/draft_checklist.pdf
- http://www.ercm.org/views/documents/SeattlePS_PandemicInfluenzaMgmtPlan.doc

Document 4: Family Emergency Plan and Supplies

What you need to know

You can prepare for an influenza pandemic now. You should know both the magnitude of what can happen during a pandemic outbreak and what actions you can take to help lessen the impact of an influenza pandemic on you and your family.

Learn about routine infection control (e.g., hand hygiene, cough/sneeze etiquette), pandemic influenza fundamentals (e.g., signs and symptoms of influenza, modes of transmission) and personal and family protection and response strategies (e.g., guidance for the at-home care of ill students and family members).

It is important to think about health issues that could arise if an influenza pandemic occurs, and how they could affect you and your loved ones. For example, if a mass vaccination clinic is set up in your community, you may need to provide as much information as you can about your medical history when you go, especially if you have a serious health condition or allergy.

Volunteer with local groups to prepare and assist with emergency response. Get involved in your community as it works to prepare for an influenza pandemic.

What you can do

Plan for an extended stay at home during a flu pandemic.

- Plan home learning activities and exercises, especially for your children. Have books and other materials on hand.
- Ask your employer how business will continue during a pandemic, such as whether you can work at home.
- Plan for a possible reduction or loss of income, if you are unable to work or your place of employment is closed.
- Check with your employer or union about leave policies.
- Talk with family members and loved ones about how they would be cared for if they got sick, or what will be needed to care for them in your home.
- Determine whether or not your children are old enough to stay home by themselves for extended periods. Discuss with your employer whether you will be able to take time off or work from home, if you need to care for your children during a pandemic. If not, find a family member or neighbor who will be able to watch them, without interacting with a large group of children who may spread infection.
- Ask your school if they have a pandemic flu or emergency closure plan.

To plan for a pandemic:

- Store a two week supply of water and food. During a pandemic, if you cannot get to a store, or if stores are out of supplies, it will be important for you to have extra supplies on hand. This can be useful in other types of emergencies, such as power outages and disasters.
- Periodically check your regular prescription drugs to ensure a continuous supply in your home. Have any nonprescription drugs and other health supplies on hand, including pain relievers, stomach remedies, cough and cold medicines, fluids with electrolytes, and vitamins.

To limit the spread of germs and prevent infection:

- Teach your children to wash hands frequently with soap and water, and model the correct behavior.
- Teach your children to cover coughs and sneezes with tissues, and be sure to model that behavior.
- Teach your children to stay away from others as much as possible if they are sick. Stay home from work and school if sick.

Collect emergency supplies for your home, using the checklists below. In addition, collect family health information onto an information sheet.

- Non-perishable foods such as protein bars, dry cereal, dried fruit/nuts, canned juices, and bottled water.
- Baby formula and canned baby food.
- Pet food.
- Prescription medications and medical supplies.
- Soap and water, or alcohol-based hand washes or wipes.
- Medicines for fever such as acetaminophen (Tylenol), ibuprofen (Motrin), or aspirin (not for small children).
- Thermometer.
- Fluids with electrolytes, such as Gatorade or Pedialyte.
- Flashlight, portable radio, and extra batteries.
- Tissues, toilet paper, and disposable diapers.

Key resources and links

Individual and family guide:

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

Disaster Supplies Checklist

- http://www.cchealth.org/topics/pandemic_flu/pdf/disaster_supplies_checklist.pdf

Pandemic Flu Planning Checklist for Individuals and Families

- <http://pandemicflu.gov/plan/individual/checklist.html>

Family Emergency Health Information Sheet

- <http://pandemicflu.gov/plan/individual/familyhealthinfo.html>

Preparing for a Flu Pandemic: Coping and Emotional Well-Being

- http://www.redcross.org/news/ds/panflu/pdfs/pan_flu_coping_emotional_well-being.pdf

Document 5: District Wellness Policies

What you need to know

The primary strategies for preventing spread of pandemic influenza include the following infection control efforts by persons with flu symptoms.

- Stay at home.
- Cover nose and mouth when coughing or sneezing.
- Wash hands with soap and water or use alcohol-based hand sanitizers frequently.
- Try to maintain spatial separation of at least three feet from others if possible.

Hand, Cough and Sneeze Hygiene

- When sneezing or coughing, cover the nose and mouth with a tissue or upper arm if a tissue is not available.
- Dispose of used tissues in a wastebasket and wash hands after coughing, sneezing, or blowing nose.
- Use warm water and soap or alcohol-based hand sanitizers to clean hands.
- Wash hands before eating or touching eyes, nose, or mouth.

Social distancing

In a pandemic, the risk of getting the flu is greatest when one has close contact with an infected person. Social distancing measures such as school closure, telecommuting or staggered shifts for the workforce, and cancellation of public gatherings may be effective in reducing transmission risks.

What you can do

Incorporate effective infection control policies and procedures into district wellness policies. The following are key elements for inclusion.

- Work with NMDOH and local health authorities and agencies to implement effective infection prevention policies and procedures that help limit the spread of influenza at schools in the district (e.g. promotion of hand hygiene, cough/sneeze etiquette). Make good hygiene a habit now in order to help protect children from many infectious diseases such as flu.
- Provide sufficient and accessible infection prevention supplies (e.g., soap, alcohol-based/waterless hand hygiene products, tissues and receptacles for their disposal).
- Establish policies and procedures for student and staff sick leave absences that are unique to pandemic flu (e.g., non-punitive, liberal leave).
- Establish sick leave policies for staff and students suspected to be ill or who become ill at school. Staff and students with known or suspected pandemic influenza should not remain at

school and should return only after their symptoms resolve and they are physically ready to return to school.

- Establish policies for transporting ill students.
- Ensure that the pandemic plan for school-based health centers and other health facilities conform to national standards and recommendations for health care providers (www.hhs.gov/pandemicflu/plan/sup4.html.)

Key resources and links

School District Pandemic Flu Planning Checklist

- <http://pandemicflu.gov/plan/schoolchecklist.html>

Document 6: Health Promotion and Infection Control Efforts

What you need to know

Teach good hygiene as part of health curricula and other classes. Encourage students to adopt and regularly practice common-sense steps to limit the spread of germs, so that they make good hygiene a habit.

- Wash hands frequently with soap and water.
- Cover your mouth and nose with a tissue when you cough or sneeze.
- Put used tissues in a waste basket.
- Cough or sneeze into your upper sleeve if you don't have a tissue.
- Clean your hands after coughing or sneezing. Use soap and water or an alcohol-based hand cleaner.
- Stay at home if you are sick.

What you can do

You can do an environmental inspection of your school to determine whether the facilities support good health promotion and infection control activities by students and staff. Such an inspection can help to raise awareness of key components of health promotion.

Albuquerque Public Schools (APS) developed an inspection checklist that was implemented at each site by school nurses, though any staff can use it. By implementing the survey at the beginning of one semester and providing feedback to school personnel, there were significant improvements at almost every site when the survey was re-administered later in the same semester. A copy of the survey tool and results of its implementation during 2006 are attached in the Appendices. APS grants permission for other New Mexico school districts to replicate this tool and customize it for their needs. Thanks to Cindy Greenberg and Lynn Pedraza of the APS Health/Mental Health Department for sharing these valuable resources.

Key resources and links

A variety of resources offer educational posters and other materials that are appropriate for schools. CDC posters include “Healthy Habits” (for adults), “Germ Stopper” (for youth) and “Cover Your Cough” (for community and public settings).

- <http://www.cdc.gov/germstopper/materials.htm>

Environmental Inspection Checklist, from Albuquerque Public Schools (APS)

- See Appendices

Document 7: Prevention for Your Home and Family

What you need to know

The seasonal flu shot will not protect against pandemic influenza. But the flu shot can help you to stay healthy. Get a flu shot to help protect yourself from seasonal flu.

The main way that illnesses like colds and flu are spread is from person to person in respiratory droplets of coughs and sneezes. This is called "droplet spread." This can happen when droplets from a cough or sneeze of an infected person move through the air and are deposited on the mouth or nose of people nearby. Sometimes germs also can be spread when a person touches respiratory droplets from another person on a surface like a desk and then touches his or her own eyes, mouth or nose before washing their hands. We know that some viruses and bacteria can live 2 hours or longer on surfaces like cafeteria tables, doorknobs, and desks.

Alcohol-based hand wipes and gel sanitizers work too. When soap and water are not available, alcohol-based disposable hand wipes or gel sanitizers may be used. You can find them in most supermarkets and drugstores. If using gel, rub your hands until the gel is dry. The gel doesn't need water to work; the alcohol in it kills the germs on your hands.

What you can do

There are a number of easy steps you can take to limit the spread of germs. Make good hygiene a habit for both yourself and your children.

- Keep children who are sick at home. Don't send them to school.
- Teach your children to wash hands a lot with soap and water for 20 seconds. Be sure to set a good example by doing this yourself.
- Teach your children to cover coughs and sneezes with tissues or by coughing into the inside of the elbow. Whenever possible, avoid coughing or sneezing into your hands. Be sure to set a good example by doing this yourself.
- Put used tissues in a waste basket.
- Clean your hands after coughing or sneezing. Use soap and water or an alcohol-based hand cleaner.
- Teach your children to stay at least three feet away from people who are sick.
- People who are sick should stay home from work or school and avoid other people until they are better.

It is always a good idea to practice health habits.

- Eat a balanced diet. Be sure to eat a variety of foods, including plenty of vegetables, fruits, and whole grain products. Also include low-fat dairy products, lean meats, poultry, fish, and beans. Drink lots of water and go easy on salt, sugar, alcohol, and saturated fat.

- Exercise on a regular basis and get plenty of rest.

Other healthy habits can help to prevent disease.

- Use soap and water or an alcohol-based hand sanitizer.
- Keep your hands away from your eyes, nose and mouth to keep flu germs from entering your body.
- Avoid sharing objects—such as utensils, cups, bottles and telephones. If you must share, disinfect the objects with soap and hot water both before and after using them.
- Keep your living and work areas clean.

Key resources and links

Family Preparedness Fact Sheet, from the American Red Cross

- http://www.redcross.org/news/ds/panflu/pdfs/pan_flu_fam_prepared_fs.pdf

Preparing for a Flu Pandemic: Coping and Emotional Well-Being

- http://www.redcross.org/news/ds/panflu/pdfs/pan_flu_coping_emotional_well-being.pdf

Document 8: School Closure and Operation during an Outbreak

What you need to know

The best protection against pandemic influenza—a vaccine that is well-matched to the virus causing illness—is not likely to be available at the outset of a pandemic. Community strategies that do not involve vaccines or medications (also called non-pharmaceutical interventions) may serve as a first line of defense to help delay or mitigate the spread of influenza.

Mitigation guidelines issued by the CDC in February 2007 include the following social distancing strategies to reduce contact between people:

- closing schools
- canceling public gatherings
- planning for liberal work leave policies
- tele-commuting or working strategies
- voluntary isolation of cases
- voluntary quarantine of household contacts

What you can do

New Mexico does not have a single standard that is applicable to all school districts in terms of either reporting or responding to a potential flu pandemic. While schools report to NMDOH any unusual outbreaks or patterns of illness that it observes, there is no standard threshold for when to report (i.e. 10%, 20% or 30% of students absent). In addition, each district or school has the authority and jurisdiction to order school closures for a pandemic, based on its own criteria.

Districts can be prepared by creating emergency plans for such situations. This will include development of a strategy for your school and district to determine how to respond to pandemic flu cases and when to take steps such as closing school. You may develop a decision flowchart or list of specific action steps in various scenarios for staff to use in making these decisions, such as in the samples below.

Sample School Response to Pandemic Flu Flow Chart

- http://www.cchealth.org/topics/pandemic_flu/school_action_kit/flowchart.pdf

School Action Steps for Pandemic Flu from Contra Costa County, California:

- http://www.cchealth.org/topics/pandemic_flu/school_action_kit/school_action_steps.pdf

Your school emergency plan may include the following elements as potential action steps.

- Collaborate with NMDOH, local health officials and emergency preparedness officials. They may want to use the schools as a way to disseminate information to families.

- Decide the roles and responsibilities of school staff (including all ancillary staff) to prevent the spread of flu.
- Train nurses and staff in flu-symptom recognition. Remember that a person who is infected does not show symptoms right away. But children who are getting ill may show different behavior than usual, such as eating less or being irritable.
- Insure that standard surveillance/disease recognition procedures are in place and implemented.
- Improve the hygiene of students and staff. Use simple non-medical ways to reduce the spread of flu by “cough and sneeze etiquette,” clean hands, and clean work areas.
- Determine whether the school should be cleaned differently or more often.
- Decide to what extent you will encourage or require children and staff to stay home when they are mildly ill.
- Review the health needs of students. Identify students who are most vulnerable to serious illness (immune compromised, chronic illness, etc.) Some students may have a greater risk of infections. Encourage those families to talk to their health care provider. Some parents may need to be more cautious in keeping their children out of school.
- Develop alternative learning strategies such as collaborative agreements with local television stations, teleconferencing, or lessons on CDs/DVDs.
- Educate staff, students and parents about: the differences between seasonal flu, bird flu and pandemic flu; best hygienic practices to prevent any sort of flu; what could occur in a pandemic.

School operation during an outbreak should be a key element of emergency planning. Preparation should include the following key steps.

- Develop scenarios describing the potential impact of a pandemic on student learning (e.g., student and staff absences), school closings, and extracurricular activities based on having various levels of illness among students and staff
- Develop alternative procedures to assure continuity of instruction (e.g., web-based distance instruction, telephone trees, mailed lessons and assignments, instruction via local radio or television stations) in the event of district school closures.
- Develop a continuity of operations plan for essential central office functions including payroll and ongoing communication with students and parents.

Key resources and links

Information on pandemic mitigation:

- <http://www.pandemicflu.gov/plan/community/mitigation.html>

School District Pandemic Flu Planning Checklist

- <http://pandemicflu.gov/plan/schoolchecklist.html> or http://www.cchealth.org/topics/pandemic_flu/school_action_kit/school_planning_checklist.pdf

Pandemic Flu School Action Kit by the Contra Costa Health Services, California

- http://www.cchealth.org/topics/pandemic_flu/school_action_kit/

Sample letter on school closure from Contra Costa County, California

- http://www.cchealth.org/topics/pandemic_flu/school_action_kit/school_closure_letter.doc

Document 9: Home Care and Protecting Your Family

What you need to know

The main treatments for pandemic flu include rest, ensuring adequate fluid intake and nutrition, and taking medications to help with fever and pain. These may include aspirin (but not in children) and ibuprofen.

Complications, such as bacterial pneumonia, can develop in some people with flu. Some of these can be treated with antibiotics. Those who are severely affected may need hospitalization.

The effectiveness of antivirals is unclear. To be effective, antivirals must be given within the first day and a half of illness, which is often very difficult. There is also the danger of the virus adapting to these medications.

The pneumococcal vaccine is important for the elderly, as it can prevent secondary bacterial pneumonia, caused by the flu. Your health care provider can give you further advice on whether you should receive seasonal flu and/or pneumococcal vaccines.

In a pandemic, the need for both vaccines and antiviral drugs are both expected to outstrip supply quickly. Shortages are anticipated to continue for a period of many months.

What you can do

Caring for a sick family member.

- Keep the ill person as comfortable as possible. Rest is important.
- Encourage the drinking of plenty of fluids. Dehydration occurs when the body loses too much water and it's not replaced quickly enough. It can be serious. Begin giving soothing drinks at the first signs of the flu. Useful drinks include those with electrolytes (such as Gatorade or Pedialyte), sweet black or green tea, or flat lemonade. In addition to plenty of liquids, give ice and light, easily digested foods, such as soup and broth.
- Use fever reducing medicines.
- Sponging with tepid (wrist-temperature) water can reduce fever for a limited period. Do not sponge with alcohol.
- Avoid alcohol or tobacco.
- Keep a record of the patient's progress. This will be very useful when communicating with a doctor or nurse. At 4 hourly intervals during the day, measure: temperature, pulse rate, breathing rate and blood pressure. (Take pulse by placing your index finger on the inside of the wrist on the side near the patient's thumb and then count beats per minute.) Record the amount of fluid intake and urine output.
- A health-care professional may prescribe antiviral drugs to treat the flu. Antibiotics (like penicillin) don't cure it.

- Contact your healthcare provider for further advice. If the ill person is having difficulty breathing or is getting worse, contact a health care provider right away.

Preventing the spread of flu within the household.

- Keep tissues and a trash bag for their disposal within reach of the patient.
- All members of the household should wash their hands frequently. Keep other family members and visitors away from the person who is ill.
- A person who is ill or has signs of the flu may consider wearing a surgical mask when around others.
- Keep everyone's personal items separate. All household members should avoid sharing computers, pens, papers, clothes, towels, sheets, blankets, food and eating utensils.
- It is OK to wash everyone's dishes and clothes together. Use detergent and very hot water. Wash your hands after handling dirty laundry.
- Disinfect door knobs, switches, handles, toys and other surfaces that are commonly touched around the home or workplace. Mix a fresh batch of disinfectant each time you use it. It should contain ¼ cup of bleach in 1 gallon of water.
- One person should be the caregiver. He or she may benefit by wearing a mask when giving care.

Key resources and links

Home Care for Pandemic Flu, from the American Red Cross

- http://www.redcross.org/news/ds/panflu/pdfs/pandemic_flu_home_care_brochure.pdf

Tips for Parents on Coping with Pandemic Flu

- http://www.cchealth.org/topics/pandemic_flu/school_action_kit/tips_for_parents.pdf

GLOSSARY

The following glossary was excerpted from PandemicFlu.gov. The full listing can be found at <http://www.pandemicflu.gov/glossary/index.html>.

Seasonal flu, avian flu, and pandemic flu are not the same.

- **Seasonal Influenza (common flu)** is a respiratory illness that can be transmitted person to person. It occurs every year some time between December and March. While the flu changes a little each year, people who have had the flu or a flu shot in the past will have some resistance to it. Getting vaccinated each year with a flu shot provides greater protection.
- **Pandemic Influenza** refers to influenza that is much different than the influenza infections that occurred in previous years. Because it is so different, people have little or no immunity to it and many more people become ill and die. This is how it may cause a global outbreak, or pandemic, of serious illness. Currently, there is no pandemic flu. Pandemics are rare, having occurred only 3 times in the 20th century, the last in 1968.
- **Avian Influenza (bird flu)** is caused by influenza viruses that occur naturally among wild birds. Some forms are common and cause few problems, while H5N1 is highly deadly to domestic fowl and can be transmitted from birds to humans. There is no human immunity and no vaccine is available. Avian flu is receiving a lot of attention because there is a possibility that it could change into a form that could infect humans and pass easily from one person to another, causing a pandemic. As of 2006, there have been no cases of avian flu in the United States.

Roughly 36,000 Americans die of seasonal flu in an average year. In a Category 1 pandemic, 90,000 Americans would die. The most serious scenario, a Category 5 pandemic, assumes that 1.8 million persons would die.

Absenteeism rate: Proportion of employed persons absent from work at a given point in time or over a defined period of time.

Antibiotic: A substance produced by bacteria or fungi that destroys or prevents the growth of other bacteria and fungi.

Antibody: A protein produced by the body's immune system in response to a foreign substance (antigen). Our bodies fight off an infection by producing antibodies. An antibody reacts specifically with the antigen that triggered its formation and its function is to inactivate the antigen.

Avian flu: A highly contagious viral disease with up to 100% mortality in domestic fowl caused by influenza A virus subtypes H5 and H7. All types of birds are susceptible to the virus but outbreaks occur most often in chickens and turkeys. The infection may be carried by migratory wild birds, which can carry the virus but show no signs of disease. Humans are only rarely affected.

Carrier: A bearer and transmitter of an agent capable of causing infectious disease. An asymptomatic carrier shows no symptoms of carrying an infectious agent.

Case fatality ratio: Proportion of deaths among clinically ill persons.

CDC: Centers for Disease Control and Prevention, the U.S. government agency at the forefront of public health efforts to prevent and control infectious and chronic diseases, injuries, workplace hazards, disabilities, and environmental health threats. CDC is one of 13 major operating components of the Department of Health and Human Services.

Clinically ill: Those persons who are infected with pandemic influenza and show signs and symptoms of illness.

Community mitigation strategy: A strategy for the implementation at the community level of interventions designed to slow or limit the transmission of a pandemic virus.

Contagious: A contagious disease is easily spread from one person to another by contact with the infectious agent that causes the disease. The agent may be in droplets of liquid particles made by coughing or sneezing, contaminated food utensils, water or food.

Cough etiquette: Covering the mouth and nose while coughing or sneezing; using tissues and disposing in no-touch receptacles; coughing into your sleeve; and washing of hands often to avoid spreading an infection to others.

Countermeasures: Refers to pre-pandemic and pandemic influenza vaccine and antiviral medications.

Epidemic: A disease occurring suddenly in humans in a community, region or country in numbers clearly in excess of normal.

Epizootic: A disease occurring suddenly in animals in a community, region or country in numbers clearly in excess of normal.

H5N1: A variant of avian influenza, which is a type of influenza virulent in birds. It was first identified in Italy in the early 1900s and is now known to exist worldwide. This strain first infected humans in Hong Kong in 1997.

Hand hygiene: Hand washing with either plain soap or antimicrobial soap and water or use of alcohol-based products (gels, rinses, foams containing an emollient) that do not require the use of water.

H5N1: Highly Pathogenic form of Avian Influenza. Avian flu viruses are classified based upon the severity of the illness and H5N1 is extremely infectious among humans. The rapid spread of H5N1, with outbreaks occurring at the same time, is of growing concern for human health as well as for animal health. See LPAI.

Illness rate or clinical attack rate: Proportion of people in a community who develop illness (symptomatic cases ÷ population size).

Incubation period: The interval (in hours, days, or weeks) between the initial, effective exposure to an infectious organism and the first appearance of symptoms of the infection.

Infection control: Hygiene and protective measures to reduce the risk of transmission of an infectious agent from an infected person to uninfected persons (e.g., hand hygiene, cough etiquette, use of personal protective equipment, such as face masks and respirators, and disinfection).

Infectious agent: Any organism, such as a pathogenic virus, parasite, or bacterium, that is capable of invading body tissues, multiplying, and causing disease.

Influenza pandemic: A worldwide epidemic caused by the emergence of a new or novel influenza strain to which humans have little or no immunity and which develops the ability to infect and be transmitted efficiently and between humans for a sustained period of time in the community.

Influenza: A serious disease caused by viruses that infect the respiratory tract.

Isolation of ill people: Separation or restriction of movement of persons ill with an infectious disease in order to prevent transmission to others.

Mutation: Any alteration in a gene from its natural state. This change may be disease causing or a benign, normal variant. Specific mutations and evolution in influenza viruses cannot be predicted, making it difficult if not impossible to know if or when a virus such as H5N1 might acquire the properties needed to spread easily among humans.

NMDOH or DOH: New Mexico Department of Health.

NMPED or PED: New Mexico Public Education Department

Pandemic: The worldwide outbreak of a disease in humans in numbers clearly in excess of normal.

Seasonal flu: A respiratory illness that can be transmitted person to person. Most people have some immunity, and a vaccine is available. This is also known as the common flu or winter flu.

Seasonal influenza: Influenza virus infections in familiar annual patterns.

Surge capacity: Refers to the ability to expand provision of services beyond normal capacity to meet transient increases in demand. Surge capacity within a medical context includes the ability of healthcare or laboratory facilities to provide care or services above their usual capacity and to

expand manufacturing capacity of essential medical materiel (e.g., vaccine) to meet increased demand.

Vaccine: A preparation consisting of antigens of a disease-causing organism which, when introduced into the body, stimulates the production of specific antibodies or altered cells. This produces immunity to the disease-causing organism. The antigen in the preparation can be whole disease-causing organisms (killed or weakened) or parts of these organisms.

Virulent: Highly lethal; causing severe illness or death.

Virus: Any of various simple submicroscopic parasites of plants, animals, and bacteria that often cause disease and that consist essentially of a core of RNA or DNA surrounded by a protein coat. Unable to replicate without a host cell, viruses are typically not considered living organisms.

Waterfowl: Birds that swim and live near water, including ducks, geese, and swans.

WHO: World Health Organization, an agency of the United Nations established in 1948 to further international cooperation in improving health conditions.

Zoonoses: Diseases that are transferable from animals to humans.

APPENDICES: ENVIRONMENTAL INSPECTION CHECKLIST

Albuquerque Public Schools (APS) developed an inspection checklist that was implemented at each site by school nurses, though any staff can use it. A copy of the survey tool and results of its implementation during 2006 follow. APS grants permission for other New Mexico school districts to replicate this tool and customize it for their needs. Thanks to Cindy Greenberg and Lynn Pedraza of the APS Health/Mental Health Department for sharing these valuable resources.

INSTRUCTIONS FOR CHECKLIST:

- There are two check lists on each page to accommodate those nurses who have 2 schools. Please do not make multiple copies for every bathroom. Use one checklist per school. Put a line through the other checklist if you only have one school. Do not tear this form in half; keep it as one whole page.
- When you have completed the inspection, please give one copy of the inspection to the principal, keep one copy for your own records, and send the original to Nursing Services.
- Use the same checklist format for both your initial inspection and the re-inspection. This will allow measurement of improvements during the intervening time.

Directions for 1st Round of School Environmental Inspections

As part of our Quality, Safe Learning and Working Environment Goal, our Nurses are currently conducting their quarterly environmental inspection check survey. This inspection is to make sure that our schools are in compliance with NM Department of Health (DOH) Standards and recommendations to prevent the spread of infection. Due to the concerns about Pandemic Flu, the Nurses will be conducting another survey before the start of flu season (late November). This information will be shared with NMDOH so that they can support our efforts to prevent the spread of infection, particularly in the area of Pandemic Flu. Remember: **GOOD HAND WASHING IS THE FIRST DEFENSE AGAINST THE SPREAD OF DISEASE!**

Directions for 2nd Round of School Environmental Inspections

Nurses have been asked to oversee the completion of the 2nd Department of Health - Office of School and Adolescent Health Environmental Inspection Checklist. This inspection must be completed and sent into Nursing Services by November 22nd. They will be forwarded to NMDOH. A copy of the surveys will be provided to principals and Risk Management. Dr. McGrath and Dr. Kisten of NMDOH want to support efforts to decrease the spread of infection in schools across New Mexico by making sure that schools have the equipment and supplies they need so everyone is able to wash their hands. Good hand washing and a safe, clean environment are the first line of defense against the spread of infection. Thank you for your cooperation.

ENVIRONMENTAL INSPECTION CHECKLIST
from Albuquerque Public Schools (APS), Health/Mental Health Department

School Name: _____

School Name: _____

Bathrooms total # _____	YES total #	NO total #
toilet tissue		
soap		
paper towel / hand dryer		
running water		
hot		
cold		
toilets work		
ventilation		
windows		
fans		
level of cleanliness in general of all bathrooms	scale of 1-5 1= worst 5=best	
floor		
sinks		
toilets		
walls		
DRINKING FOUNTAINS total # _____	YES total #	NO total #
adequate pressure so that mouth does not touch spigot		
Classrooms total # _____	YES total #	NO total #
Functional drinking fountain		
garbage emptied regularly		
carpets vacuumed regularly		
animals properly cared for		
Cafeteria	YES	NO
are utensils used to serve food		
are gloves worn		
Gym Showers	YES	NO
Hot and cold water (hot water shouldn't exceed 120 degrees F)		
unclogged drains		
clean floors		
adequate water pressure		
Special Ed rooms total #of rooms _____	YES total #	NO total #
easy access to hot and cold water		
soap		
paper towels		
changing tables clean		
safe diaper disposal		
DATE of INSPECTION:		

Bathrooms total # _____	YES total #	NO total #
toilet tissue		
soap		
paper towel / hand dryer		
running water		
hot		
cold		
toilets work		
ventilation		
windows		
fans		
level of cleanliness in general for all bathrooms	scale of 1-5 1= worst 5= best	
floor		
sinks		
toilets		
walls		
DRINKING FOUNTAINS total # _____	YES total #	NO total #
adequate pressure so that mouth does not touch spigot		
Classrooms total # _____	YES total #	NO total #
Functional drinking fountain		
garbage emptied regularly		
carpets vacuumed regularly		
animals properly cared for		
Cafeteria	YES	NO
are utensils used to serve food		
are gloves worn		
Gym Showers	YES	NO
Hot and cold water (hot water shouldn't exceed 120 degrees F)		
unclogged drains		
clean floors		
adequate water pressure		
Special Ed rooms total # of rooms _____	YES total #	NO total #
easy access to hot and cold water		
soap		
paper towels		
changing tables clean		
safe diaper disposal		
DATE of INSPECTION:		

RESULTS OF IMPLEMENTING CHECKLIST AT APS DURING FALL SEMESTER 2006 (2 MONTHS BETWEEN INSPECTION AND RE-INSPECTION):

