

S&C Letter 09-33

April 28, 2009

Survey and Certification Issues Related to Swine Flu Outbreak

- **Memorandum Summary:**

Situation: Human cases of swine influenza A (H1N1) virus infection have been identified in several States in the United States, as well as internationally.

Emergency Declaration: Charles Johnson, the Acting Secretary of the U.S. Department of Health and Human Services, as a consequence of confirmed cases of swine influenza A (swH1N1) in California, Texas, Kansas, and New York, declared that a public health emergency exists nationwide.

Authority: The Centers for Medicare & Medicaid Services (CMS) may waive or modify, to the extent necessary, certain requirements, or timetables if providers, acting in good faith to provide needed forms or services, are unable to comply with the requirements as a result of the effects of the disaster.

EDITOR NOTE: For convenience we have attached copies of swine flu information referenced in this S&C Letter.



DEPARTMENT OF HEALTH & HUMAN SERVICES
Centers for Medicare & Medicaid Services
7500 Security Boulevard, Mail Stop S2-12-25
Baltimore, Maryland 21244-1850



Center for Medicaid and State Operations/Survey and Certification Group

Ref: S&C-09-33

DATE: April 28, 2009

TO: State Survey Agency Directors

FROM: Director
Survey and Certification Group

SUBJECT: Survey and Certification Issues Related to Swine Flu Outbreak

Memorandum Summary

- **Situation:** Human cases of swine influenza A (H1N1) virus infection have been identified in several States in the United States, as well as internationally.
- **Emergency Declaration:** Charles Johnson, the Acting Secretary of the U.S. Department of Health and Human Services, as a consequence of confirmed cases of swine influenza A (swH1N1) in California, Texas, Kansas, and New York, declared that a public health emergency exists nationwide.
- **Authority:** The Centers for Medicare & Medicaid Services (CMS) may waive or modify, to the extent necessary, certain requirements, or timetables if providers, acting in good faith to provide needed forms or services, are unable to comply with the requirements as a result of the effects of the disaster.

Human cases of swine influenza A (H1N1) virus infection have been identified in the United States as well as internationally. As of this date, there have been 40 confirmed cases of swine influenza A (swH1N1) in California, Texas, Kansas, New York, and Ohio. No deaths in the U.S. have been reported due to the illness. Additional cases of the virus have been confirmed in Mexico and Canada.

Swine flu is a respiratory disease of pigs caused by type A influenza that regularly causes outbreaks of influenza among pigs. Swine flu viruses do not normally infect humans; however, human infections with swine flu do occur, and cases of human-to-human spread of swine flu viruses have been documented.

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The Acting Secretary of the U.S. Department of Health and Human Services (HHS) issued a nationwide public health emergency declaration in response to recent human infections with a newly discovered swine influenza A (swine flu) virus. The declaration, made under section 319 of the Public Health Service Act, will help HHS prepare for prevention and mitigation activities by enabling Food and Drug Administration (FDA) emergency use authorizations of drugs, devices, or medical tests under certain circumstances.

The Centers for Disease Control and Prevention (CDC) is working very closely with officials in States where human cases of swine influenza A (H1N1) have been identified, as well as with health officials in Mexico, Canada and the World Health Organization. This includes deploying staff domestically and internationally to provide guidance and technical support.

For more guidance on swine flu precautions, please see the following websites:

CDC Websites

- CDC Swine Flu Main Page: <http://www.cdc.gov/swineflu/>
- Interim Recommendations for Facemask and Respirator Use in Certain Community Settings Where Swine Influenza A (H1N1) Virus Transmission Has Been Detected: <http://www.cdc.gov/swineflu/masks.htm>
- Interim Guidance on Case Definitions to be Used For Investigations of Swine Influenza A (H1N1) Cases: http://www.cdc.gov/swineflu/casedef_swineflu.htm
- Risk of Swine Flu Associated with Travel to Affected Areas: <http://www.cdc.gov/travel/content/SwineFluTravel.aspx>
- Checklist for long term care facilities: <http://pandemicflu.gov/plan/pdf/longtermcare.pdf>

HHS Websites:

- U.S. Department of Health and Human Services: <http://www.hhs.gov/>
- HHS Public Health Emergency declaration: www.hhs.gov/secretary/phe_sw1n1.html
- Pandemic Flu Website: <http://www.pandemicflu.gov/>

/s/

Thomas E. Hamilton

cc: Survey and Certification Regional Office Management

LONG-TERM CARE AND OTHER RESIDENTIAL FACILITIES PANDEMIC INFLUENZA PLANNING CHECKLIST



Planning for pandemic influenza is critical for ensuring a sustainable healthcare response. The Department of Health and Human Services (HHS) and the Centers for Disease Control and Prevention (CDC) have developed this checklist to help long-term care and other residential facilities assess and improve their preparedness for responding to pandemic influenza. Based on differences among facilities (e.g., patient/resident characteristics, facility size, scope of services, hospital affiliation), each facility will need to adapt this checklist to meet its unique needs and circumstances. This checklist should be used as one tool in developing a comprehensive pandemic influenza plan. Additional information can be found at www.pandemicflu.gov. Information from state, regional, and local health departments, emergency management agencies/authorities, and trade organizations should be incorporated into the facility's pandemic influenza plan. Comprehensive pandemic influenza planning can also help facilities plan for other emergency situations.

This checklist identifies key areas for pandemic influenza planning. Long-term care and other residential facilities can use this tool to self-assess the strengths and weaknesses of current planning efforts. Links to websites with helpful information are provided throughout this document. However, it will be necessary to actively obtain information from state and local resources to ensure that the facility's plan complements other community and regional planning efforts.

1. Structure for planning and decision making.

Completed	In Progress	Not Started	
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Pandemic influenza has been incorporated into emergency management planning and exercises for the facility.
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	A multidisciplinary planning committee or team¹ has been created to specifically address pandemic influenza preparedness planning. (List committee's or team's name.) _____
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	A person has been assigned responsibility for coordinating preparedness planning, hereafter referred to as the pandemic influenza response coordinator. (Insert name, title and contact information.) _____
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Members of the planning committee include (as applicable to each setting) the following: (Develop a list of committee members with the name, title, and contact information for each personnel category checked below and attach to this checklist.) <input type="checkbox"/> Facility administration <input type="checkbox"/> Medical director <input type="checkbox"/> Nursing administration <input type="checkbox"/> Infection control <input type="checkbox"/> Occupational health <input type="checkbox"/> Staff training and orientation <input type="checkbox"/> Engineering/maintenance services <input type="checkbox"/> Environmental (housekeeping) services <input type="checkbox"/> Dietary (food) services <input type="checkbox"/> Pharmacy services <input type="checkbox"/> Occupational/rehabilitation/physical therapy services <input type="checkbox"/> Transportation services <input type="checkbox"/> Purchasing agent <input type="checkbox"/> Facility staff representative <input type="checkbox"/> Other member(s) as appropriate (e.g., clergy, community representatives, department heads, resident and family representatives, risk managers, quality improvement, direct care staff, collective bargaining agreement union representatives)

1. An existing emergency or disaster preparedness team may be assigned this responsibility.

1. Structure for planning and decision making *(continued)*.

Completed	In Progress	Not Started	
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Local and state health departments and provider/trade association points of contact have been identified for information on pandemic influenza planning resources. (Insert name, title and contact information for each.) Local health department contact: _____ State health department contact: _____ State long-term care professional/trade association: _____ _____
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Local, regional, or state emergency preparedness groups, including bioterrorism/communicable disease coordinators points of contact have been identified. (Insert name, title and contact information for each.) City: _____ County: _____ Other regional: _____
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Area hospitals points of contact have been identified in the event that facility residents require hospitalization or facility beds are needed for hospital patients being discharged in order to free up needed hospital beds. (Attach a list with the name, title, and contact information for each hospital.)
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	The pandemic influenza response coordinator has contacted local or regional pandemic influenza planning groups to obtain information on coordinating the facility's plan with other influenza plans.

2. Development of a written pandemic influenza plan.

Completed	In Progress	Not Started	
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Copies have been obtained of relevant sections of the HHS Pandemic Influenza Plan (available at www.hhs.gov/pandemicflu/plan/) and available state, regional, or local plans are reviewed for incorporation into the facility's plan.
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	The facility plan includes the elements listed in #3 below.
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	The plan identifies the person(s) authorized to implement the plan and the organizational structure that will be used.

3. Elements of an influenza pandemic plan.

Completed	In Progress	Not Started	
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<p>A plan is in place for surveillance and detection of the presence of pandemic influenza in residents and staff.</p> <p><input type="checkbox"/> A person has been assigned responsibility for monitoring public health advisories (federal and state), and updating the pandemic response coordinator and members of the pandemic influenza planning committee when pandemic influenza has been reported in the United States and is nearing the geographic area. For more information, see www.cdc.gov/flu/weekly/fluactivity.htm. (Insert name, title and contact information of person responsible.) _____</p> <p><input type="checkbox"/> A written protocol has been developed for weekly or daily monitoring of seasonal influenza-like illness in residents and staff. For more information, see www.cdc.gov/flu/professionals/diagnosis/. (Having a system for tracking illness trends during seasonal influenza will ensure that the facility can detect stressors that may affect operating capacity, including staffing and supply needs, during a pandemic.)</p> <p><input type="checkbox"/> A protocol has been developed for the evaluation and diagnosis of residents and/or staff with symptoms of pandemic influenza.</p> <p><input type="checkbox"/> Assessment for seasonal influenza is included in the evaluation of incoming residents. There is an admission policy or protocol to determine the appropriate placement and isolation of patients with an influenza-like illness. (The process used during periods of seasonal influenza can be applied during pandemic influenza.)</p>

3. Elements of an influenza pandemic plan *(continued)*.

Completed	In Progress	Not Started	
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<p><input type="checkbox"/> A system is in place to monitor for, and internally review transmission of, influenza among patients and staff in the facility. Information from this monitoring system is used to implement prevention interventions (e.g., isolation, cohorting). (This system will be necessary for assessing pandemic influenza transmission.)</p> <p>A facility communication plan has been developed. For more information, see www.hhs.gov/pandemicflu/plan/sup10.htm.</p> <p><input type="checkbox"/> Key public health points of contact during an influenza pandemic influenza have been identified. (Insert name, title and contact information for each.)</p> <p><input type="checkbox"/> Local health department contact: _____</p> <p><input type="checkbox"/> State health department contact: _____</p> <p><input type="checkbox"/> A person has been assigned responsibility for communications with public health authorities during a pandemic. (Insert name, title and contact information.) _____</p> <p>_____</p> <p><input type="checkbox"/> A person has been assigned responsibility for communications with staff, residents, and their families regarding the status and impact of pandemic influenza in the facility. (Having one voice that speaks for the facility during a pandemic will help ensure the delivery of timely and accurate information.)</p> <p><input type="checkbox"/> Contact information for family members or guardians of facility residents is up-to-date.</p> <p><input type="checkbox"/> Communication plans include how signs, phone trees, and other methods of communication will be used to inform staff, family members, visitors, and other persons coming into the facility (e.g., sales and delivery people) about the status of pandemic influenza in the facility.</p> <p><input type="checkbox"/> A list has been created of other healthcare entities and their points of contact (e.g., other long-term care and residential facilities, local hospitals' emergency medical services, relevant community organizations [including those involved with disaster preparedness]) with whom it will be necessary to maintain communication during a pandemic. (Insert location of contact list and attach a copy to the pandemic plan.)</p> <p>_____</p> <p><input type="checkbox"/> A facility representative(s) has been involved in the discussion of local plans for inter-facility communication during a pandemic.</p>
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<p>A plan is in place to provide education and training to ensure that all personnel, residents, and family members of residents understand the implications of, and basic prevention and control measures for, pandemic influenza.</p> <p><input type="checkbox"/> A person has been designated with responsibility for coordinating education and training on pandemic influenza (e.g., identifies and facilitates access to available programs, maintains a record of personnel attendance). (Insert name, title, and contact information.) _____</p> <p>_____</p> <p><input type="checkbox"/> Current and potential opportunities for long-distance (e.g., web-based) and local (e.g., health department or hospital-sponsored) programs have been identified. See www.cdc.gov/flu/professionals/training/.</p> <p><input type="checkbox"/> Language and reading-level appropriate materials have been identified to supplement and support education and training programs (e.g., available through state and federal public health agencies such as www.cdc.gov/flu/groups.htm and through professional organizations), and a plan is in place for obtaining these materials.</p> <p><input type="checkbox"/> Education and training includes information on infection control measures to prevent the spread of pandemic influenza.</p> <p><input type="checkbox"/> The facility has a plan for expediting the credentialing and training of non-facility staff brought in from other locations to provide patient care when the facility reaches a staffing crisis.</p> <p><input type="checkbox"/> Informational materials (e.g., brochures, posters) on pandemic influenza and relevant policies (e.g., suspension of visitation, where to obtain facility or family member information) have been developed or identified for residents and their families. These materials are language and reading-level appropriate, and a plan is in place to disseminate these materials in advance of the actual pandemic. For more information, see www.cdc.gov/flu/professionals/infectioncontrol/index.htm and www.cdc.gov/flu/groups.htm.</p>

3. Elements of an influenza pandemic plan (continued).

Completed	In Progress	Not Started	
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	An infection control plan is in place for managing residents and visitors with pandemic influenza that includes the following: (For information on infection control recommendations for pandemic influenza, see www.hhs.gov/pandemicflu/plan/sup4.html .)
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	An infection control policy that requires direct care staff to use Standard (www.cdc.gov/ncidod/dhqp/gl_isolation_standard.html) and Droplet Precautions (i.e., mask for close contact) (www.cdc.gov/ncidod/dhqp/gl_isolation_droplet.html) with symptomatic residents.
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	A plan for implementing Respiratory Hygiene/Cough Etiquette throughout the facility. (See www.cdc.gov/flu/professionals/infectioncontrol/resphygiene.htm .)
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	A plan for cohorting symptomatic residents or groups using one or more of the following strategies: ² 1) confining symptomatic residents and their exposed roommates to their room, 2) placing symptomatic residents together in one area of the facility, or 3) closing units where symptomatic and asymptomatic residents reside (i.e., restricting all residents to an affected unit, regardless of symptoms). The plan includes a stipulation that, where possible, staff who are assigned to work on affected units will not work on other units.
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Criteria and protocols for closing units or the entire facility to new admissions when pandemic influenza is in the facility have been developed.
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Criteria and protocols for enforcing visitor limitations have been developed.
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	An occupational health plan for addressing staff absences and other related occupational issues has been developed that includes the following:
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/> A liberal/non-punitive sick leave policy that addresses the needs of symptomatic personnel and facility staffing needs. The policy considers: <ul style="list-style-type: none"> - The handling of personnel who develop symptoms while at work. - When personnel may return to work after having pandemic influenza. - When personnel who are symptomatic, but well enough to work, will be permitted to continue working. - Personnel who need to care for family members who become ill.
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/> A plan to educate staff to self-assess and report symptoms of pandemic influenza before reporting for duty.
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/> A list of mental health and faith-based resources that will be available to provide counseling to personnel during a pandemic.
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/> A system to monitor influenza vaccination of personnel.
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/> A plan for managing personnel who are at increased risk for influenza complications (e.g., pregnant women, immunocompromised workers) by placing them on administrative leave or altering their work location.
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	A vaccine and antiviral use plan has been developed.
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/> CDC and state health department websites have been identified for obtaining the most current recommendations and guidance for the use, availability, access, and distribution of vaccines and antiviral medications during a pandemic. For more information, see www.hhs.gov/pandemicflu/plan/sup6.html and www.hhs.gov/pandemicflu/plan/sup7.html .
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/> HHS guidance has been used to estimate the number of personnel and residents who would be targeted as first and second priority for receipt of pandemic influenza vaccine or antiviral prophylaxis. For more information, see www.hhs.gov/pandemicflu/plan/sup6.html and www.hhs.gov/pandemicflu/plan/sup7.html .
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/> A plan is in place for expediting delivery of influenza vaccine or antiviral prophylaxis to residents and staff as recommended by the state health department.

2. CDC guidance on preventing and controlling influenza transmission in long-term care facilities will be a useful resource during pandemic influenza. (See www.cdc.gov/flu/professionals/infectioncontrol/longtermcare.htm.)

3. Elements of an influenza pandemic plan *(continued)*.

Completed	In Progress	Not Started	
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<p>Issues related to surge capacity during a pandemic have been addressed.</p> <ul style="list-style-type: none"> <input type="checkbox"/> A contingency staffing plan has been developed that identifies the minimum staffing needs and prioritizes critical and non-essential services based on residents' health status, functional limitations, disabilities, and essential facility operations. <input type="checkbox"/> A person has been assigned responsibility for conducting a daily assessment of staffing status and needs during an influenza pandemic. (Insert name, title and contact information.) <hr/> <ul style="list-style-type: none"> <input type="checkbox"/> Legal counsel and state health department contacts have been consulted to determine the applicability of declaring a facility "staffing crisis" and appropriate emergency staffing alternatives, consistent with state law. <input type="checkbox"/> The staffing plan includes strategies for collaborating with local and regional planning and response groups to address widespread healthcare staffing shortages during a crisis. <input type="checkbox"/> Estimates have been made of the quantities of essential materials and equipment (e.g., masks, gloves, hand hygiene products, intravenous pumps) that would be needed during a six-week pandemic. <input type="checkbox"/> A plan has been developed to address likely supply shortages, including strategies for using normal and alternative channels for procuring needed resources. <input type="checkbox"/> Alternative care plans have been developed for facility residents who need acute care services when hospital beds become unavailable. <input type="checkbox"/> Surge capacity plans include strategies to help increase hospital bed capacity in the community. <ul style="list-style-type: none"> - Signed agreements have been established with area hospitals for admission to the long-term care facility of non-influenza patients to facilitate utilization of acute care resources for more seriously ill patients. - Facility space has been identified that could be adapted for use as expanded inpatient beds and information provided to local and regional planning contacts. <input type="checkbox"/> A contingency plan has been developed for managing an increased need for post mortem care and disposition of deceased residents. <input type="checkbox"/> An area in the facility that could be used as a temporary morgue has been identified. <input type="checkbox"/> Local plans for expanding morgue capacity have been discussed with local and regional planning contacts.



FDA News

FOR IMMEDIATE RELEASE
April 27, 2009

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888-INFO-FDA

FDA Authorizes Emergency Use of Influenza Medicines, Diagnostic Test in Response to Swine Flu Outbreak in Humans

The U.S. Food and Drug Administration, in response to requests from the U.S. Centers for Disease Control and Prevention, has issued Emergency Use Authorizations (EUAs) to make available to public health and medical personnel important diagnostic and therapeutic tools to identify and respond to the swine flu virus under certain circumstances. The agency issued these EUAs for the use of certain Relenza and Tamiflu antiviral products, and for the rRT-PCR Swine Flu Panel diagnostic test.

The EUA authority allows the FDA, based on the evaluation of available data, to authorize the use of unapproved or uncleared medical products or unapproved or uncleared uses of approved or cleared medical products following a determination and declaration of emergency, provided certain criteria are met. The authorization will end when the declaration of emergency is terminated or the authorization revoked by the agency.

Currently, Relenza is approved to treat acute uncomplicated illnesses due to influenza in adults and children 7 years and older who have been symptomatic for less than two days, and for the prevention of influenza in adults and children 5 years and older. Tamiflu is approved for the treatment and prevention of influenza in patients 1 year and older.

The EUAs allow for Tamiflu also to be used to treat and prevent influenza in children under 1 year, and to provide alternate dosing recommendations for children older than 1 year. In addition, under the EUAs, both medications may be distributed to large segments of the population without complying with the label requirements otherwise applicable to dispensed drugs, and accompanied by written information pertaining to the emergency use. They may also be distributed by a broader range of health care workers, including some public health officials and volunteers, in accordance with applicable state and local laws and/or public health emergency responses.

In authorizing an EUA for the rRT-PCR Swine Flu Panel diagnostic test, the FDA has determined that it may be effective in testing samples from individuals diagnosed with influenza A infections, whose virus subtypes cannot be identified by currently available tests. This EUA allows the CDC to distribute the swine flu test to public health and other qualified laboratories that have the needed equipment and the personnel who are trained to perform and interpret the results.

The test amplifies the viral genetic material from a nasal or nasopharyngeal swab. A positive result indicates that the patient is presumptively infected with swine flu virus but not the stage of infection. However, a negative result does not, by itself, exclude the possibility of swine flu virus infection.

The EUA authority is part of Project BioShield, which became law in July 2004.

Health care professionals and consumers may report serious adverse events (side effects) or product quality problems with the use of this product to the FDA's MedWatch Adverse Event Reporting program either online, by regular mail, fax or phone.

--Online: www.fda.gov/MedWatch/report.htm

--Regular Mail: use postage-paid FDA form 3500 available at: www.fda.gov/MedWatch/getforms.htm and mail to MedWatch, 5600 Fishers Lane, Rockville, MD 20852-9787

--Fax: (800) FDA-0178

--Phone: (800) FDA-1088

For more information:

FDA's Emergency Use Authorization of Medical Products Guidance, go to www.fda.gov/oc/guidance/emergencyuse.html

Centers for Disease Control and Prevention

Interim Recommendations for Facemask and Respirator Use in Certain Community Settings Where Swine Influenza A (H1N1) Virus Transmission Has Been Detected

April 27, 2009 011:00AM ET

This document provides interim guidance and will be updated as needed.

Detailed background information and recommendations regarding the use of masks and respirators in non-occupational community settings can be found on PandemicFlu.gov in the document [Interim Public Health Guidance for the Use of Facemasks and Respirators in Non-Occupational Community Settings during an Influenza Pandemic](#).

Information on the effectiveness of facemasks¹ and respirators² for the control of influenza in community settings is extremely limited. Thus, it is difficult to assess their potential effectiveness in controlling swine influenza A (H1N1) virus transmission in these settings. In the absence of clear scientific data, the interim recommendations below have been developed on the basis of public health judgment and the historical use of facemasks and respirators in other settings.

In areas with confirmed human cases of swine influenza A (H1N1) virus infection, the risk for infection can be reduced through a combination of actions. No single action will provide complete protection, but an approach combining the following steps can help decrease the likelihood of transmission. These actions include frequent handwashing, covering coughs, and having ill persons stay home, except to seek medical care, and minimize contact with others in the household. Additional measures that can limit transmission of a new influenza strain include voluntary home quarantine of members of households with confirmed or probable swine influenza cases, reduction of unnecessary social contacts, and avoidance whenever possible of crowded settings.

When it is absolutely necessary to enter a crowded setting or to have close contact³ with persons who might be ill, the time spent in that setting should be as short as possible. If used correctly, facemasks and respirators may help reduce the risk of getting influenza, but they should be used along with other preventive measures, such as avoiding close contact and maintaining good hand hygiene. A 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 a respirator for long periods of time. More information on facemasks and respirators can be found at www.cdc.gov/swineflu.

When crowded settings or close contact with others cannot be avoided, the use of facemasks¹ or respirators² in areas where transmission of swine influenza A (H1N1) virus has been confirmed should be considered as follows:

1. Whenever possible, rather than relying on the use of facemasks or respirators, close contact with people who might be ill and being in crowded settings should be avoided.
2. Facemasks¹ should be considered for use by individuals who enter crowded settings, both to protect their nose and mouth from other people's coughs and to reduce the wearers' likelihood of coughing on others; the time spent in crowded settings should be as short as possible.
3. Respirators² should be considered for use by individuals for whom close contact with an infectious person is unavoidable. This can include selected individuals who must care for a sick person (e.g., family member with a respiratory infection) at home.

These interim recommendations will be revised as new information about the use of facemasks and respirators in the current setting becomes available.

For more information about human infection with swine influenza virus, visit the [CDC Swine Flu website](http://www.cdc.gov/swineflu).

1 Unless otherwise specified, the term "facemasks" refers to disposable masks cleared by the U.S. Food and Drug Administration (FDA) for use as medical devices. This includes facemasks labeled as surgical, dental, medical procedure,

isolation, or laser masks. Such facemasks have several designs. One type is affixed to the head with two ties, conforms to the face with the aid of a flexible adjustment for the nose bridge, and may be flat/pleated or duck-billed in shape. Another type of facemask is pre-molded, adheres to the head with a single elastic band, and has a flexible adjustment for the nose bridge. A third type is flat/pleated and affixes to the head with ear loops. Facemasks cleared by the FDA for use as medical devices have been determined to have specific levels of protection from penetration of blood and body fluids.

- 2 Unless otherwise specified, "respirator" refers to an N95 or higher filtering facepiece respirator certified by the U.S. National Institute for Occupational Safety and Health (NIOSH).
- 3 Three feet has often been used by infection control professionals to define close contact and is based on studies of respiratory infections; however, for practical purposes, this distance may range up to 6 feet. The World Health Organization uses "approximately 1 meter"; the U.S. Occupational Safety and Health Administration uses "within 6 feet." For consistency with these estimates, this document defines close contact as a distance of up to 6 feet.

Centers for Disease Control and Prevention

Antiviral Drugs and Swine Influenza

April 27, 2009

Antiviral Drugs

Antiviral drugs are prescription medicines (pills, liquid or an inhaler) with activity against influenza viruses, including swine influenza viruses. Antiviral drugs can be used to treat swine flu or to prevent infection with swine flu viruses. These medications must be prescribed by a health care professional. Influenza antiviral drugs only work against influenza viruses -- they will not help treat or prevent symptoms caused by infection from other viruses that can cause symptoms similar to the flu.

There are four influenza antiviral drugs approved for use in the United States (oseltamivir, zanamivir, amantadine and rimantadine). The swine influenza A (H1N1) viruses that have been detected in humans in the United States and Mexico are resistant to amantadine and rimantadine so these drugs will not work against these swine influenza viruses. Laboratory testing on these swine influenza A (H1N1) viruses so far indicate that they are susceptible (sensitive) to oseltamivir and zanamivir.

Benefits of Antiviral Drugs

Treatment: If you get sick, antiviral drugs can make your illness milder and make you feel better faster. They may also prevent serious influenza complications. For treatment, antiviral drugs work best if started as soon after getting sick as possible, and might not work if started more than 48 hours after illness starts.

Prevention: Influenza antiviral drugs also can be used to prevent influenza when they are given to a person who is not ill, but who has been or may be near a person with swine influenza. When used to prevent the flu, antiviral drugs are about 70% to 90% effective. When used for prevention, the number of days that they should be used will vary depending on a person's particular situation.

CDC Recommendation

CDC recommends the use of oseltamivir or zanamivir for the treatment and/or prevention of infection with swine influenza viruses.

- Oseltamivir (brand name Tamiflu®) is approved to both treat and prevent influenza A and B virus infection in people one year of age and older.
- Zanamivir (brand name Relenza®) is approved to treat influenza A and B virus infection in people 7 years and older and to prevent influenza A and B virus infection in people 5 years and older.

Recommendations for using antiviral drugs for treatment or prevention of swine influenza will change as we learn more about this new virus.

Clinicians should consider treating any person with confirmed or suspected swine influenza with an antiviral drug. Visit: <http://www.cdc.gov/swineflu/recommendations.htm> for specific recommendations