



State of New Hampshire
Interim Influenza Pandemic
Epidemiologic and Surveillance Plan



New Hampshire Communicable Disease Epidemic Control Committee
VERSION: July 25, 2004

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Abbreviations Used in This Document

BEM	DOS Bureau of Emergency Management
CDCS	DHHS, Communicable Disease Control Section
CDSS	DHHS, Communicable Disease Surveillance Section
CDC	U.S. Centers for Disease Control and Prevention
CDECC	NH Communicable Disease Epidemic Control Committee
DHHS	NH Department of Health and Human Services
DOS	NH Department of Safety
DPHS	DHHS, Division of Public Health Services
EOC	Emergency Operation Center
EOP	Emergency Operation Plan
ESF	Emergency Support Function
HAN	Health Alert Network
HCW	Health care worker
U.S. HHS	U.S. Department of Health and Human Services
HRSA	U.S. HHS Health Resources and Services Administration
ILI	Influenza-like illness
IP	DHHS Immunization Program
NH	New Hampshire
NHHA	New Hampshire Hospital Association
PHLIS	Public Health Laboratory Information System
PHL	DHHS, Public Health Laboratories
PIO	DHHS, Public Information Office
PPE	Personal protective equipment
RSA	Revised Statutes Annotated
SARS	Severe Acute Respiratory Syndrome
U.S.	United States
VACMAN	CDC's Vaccine Management System
VAERS	Vaccine Adverse Events Reporting System
WHO	World Health Organization

SECTION I. INTRODUCTION TO INFLUENZA PANDEMIC PLANNING

1. BACKGROUND

Influenza is a highly infectious viral illness that causes yearly epidemics reported since at least the early 1500s. An increase in mortality, typically occurring during each epidemic year, is caused by influenza and pneumonia, and/or by exacerbations in underlying cardiopulmonary or other chronic diseases. In the U.S., influenza causes up to 36,000 deaths each year, primarily among the elderly. The virus is transmitted in most cases by droplets, but it can be transmitted as well by direct contact. Maximum communicability occurs one to two days before onset of symptoms to four to five days after symptom onset. The incubation period is usually two days, but can vary from one to five days. Typical symptoms include abrupt onset of fever (101°F to 102°F), chills, myalgia, sore throat, and nonproductive cough, and may include runny nose, headache, substernal chest burning, eye pain, or sensitivity to light. Gastro-intestinal symptoms, such as abdominal pain, nausea and vomiting, may also occur and are more commonly seen in children than adults. An annual influenza vaccination is the best method of protection against influenza. Other measures, such as frequent handwashing and the institution of public health measures for universal respiratory hygiene and cough etiquette, will help stop the spread of influenza in communities as well as in health care facilities.

Two influenza virus types, A and B, are known to cause illness in humans. Influenza type A has further subtypes, determined by the surface antigens hemagglutinin (H) and neuraminidase (N), which undergo periodic changes. A minor change in these antigens (antigenic drift) may result in epidemics, since incomplete protection remains from past exposure to similar viruses. A major change (antigenic shift) may result in a worldwide pandemic if the virus, for which humans have no protection, is efficiently transmitted from human to human.

Influenza viruses are distinctive in their ability to cause sudden, pervasive illness in all age groups on a global scale. Previous pandemics, however, caused disproportionate illness and death in young, previously healthy adults. Also, new data from recent epidemic years show that young children are at increased risk for complications, hospitalizations, and death from influenza. Within the 0- to 4-year-old age group, hospitalization rates are highest among children 0 to 1 years of age and are comparable to rates reported in persons ≥65 years of age. Influenza viruses present biological threats because of a number of factors, including a high degree of transmissibility, the presence of a vast reservoir of novel variants (primarily in aquatic birds), and unusual properties of the viral genome. Recently, several subtypes of avian influenza A have been shown to cross the species barrier and infect humans in Asia (1997-present), in Europe (2003), and in North America (2003-2004). Such occurrences are reminders that a novel strain could occur at any time, with the potential for efficient person-to-person transmission. With the increase in global travel, as well as urbanization and overcrowded conditions, global epidemics due to a novel influenza virus are likely to quickly spread around the world.

An influenza pandemic is considered to be a high probability event. Given the potential for rapid virus transmission and evolution, there may be as little as one to six months warning before outbreaks begin in the United States. Outbreaks are expected to occur simultaneously throughout much of the country and in the State as well, preventing shifts in human and material resources that normally occur in most other natural disasters. The impact of the next pandemic could have devastating effects on the health and well being of New Hampshire citizens. Estimates suggest up to 420,000 persons (approximately 35% of the State's population) could become clinically ill (Centers for Disease Control and Prevention [CDC] 2004 draft guidance). Further predicted

complications include a shortage of vaccine and antiviral agents and the increased risk of exposure for health care providers and first responders.

1.1 Surveillance

The purpose of surveillance is to monitor influenza morbidity and mortality in New Hampshire (NH) and to detect any unusual virus subtypes, particularly a novel virus strain that might signal the beginning of a pandemic. Most likely, a novel virus strain will emerge in a setting outside the U.S. but could emerge in the U.S. and even in NH.

Nationally, surveillance for influenza has four main components:

1. *Virologic surveillance*: Each week, approximately 75 U.S. collaborating laboratories that are part of the World Health Organization's (WHO) Influenza Surveillance Network and 50 National Respiratory and Enteric Virus Surveillance System laboratories report the number of clinical specimens tested for influenza and the number of positive results by virus type (A or B) and subtype (A/H1, A/H3N2 or not subtyped).
2. *Surveillance for influenza-like illness (ILI)*: Approximately 900 sentinel health care providers/clinics participating in the U.S. Influenza Sentinel Provider Surveillance System located in 49 states regularly report the number of patient visits for ILI by age group and the total number of patient visits each week.
3. *Surveillance for influenza and pneumonia deaths*: The Vital Statistics Offices of 122 U.S. cities report each week the percentage of total deaths caused by influenza and pneumonia.
4. *Influenza activity levels*: State and territorial epidemiologists assess influenza activity levels in their respective states each week and report the activity as widespread, regional, local, sporadic, or no activity.

In NH, influenza is not a reportable disease, but surveillance systems currently in place help determine the extent of illness and current circulating influenza virus subtypes. The systems are modeled after the national influenza surveillance system and consist of:

1. *Virologic surveillance*: The NH Public Health Laboratories (PHL) isolates and subtypes influenza viruses year round and transmits these data electronically to the Centers for Disease Control and Prevention (CDC) via the Public Health Laboratory Information System (PHLIS). Unusual specimens are sent to the CDC for further antigenic characterization. Influenza testing is provided to health care providers free of charge under certain conditions.
2. *U.S. Influenza Sentinel Provider Surveillance System participation*: Approximately 25 volunteer NH health care providers (specializing in family practice, internal medicine, pediatric, or student health) participate in this system and report the number of patient visits for ILI by age group and the total number of patient visits each week during the influenza season (beginning of October through mid-May). Approximately 10 sentinel providers continue to report weekly during the summer months to contribute to establishing a baseline for ILI activity in the summer months and to help detect any unusual influenza virus subtypes.
3. *Pneumonia and influenza-related deaths*: Starting in 2003, the New Hampshire Department of Health and Human Services (DHHS) began monitoring pneumonia and influenza-related deaths on a weekly basis.
4. *Estimated influenza activity*: Overall influenza activity in the State is based on reports of ILI, increased fever or respiratory rates reported through the emergency department

syndromic surveillance system, and reports of confirmed influenza. In the event of a pandemic, data from other syndromic surveillance systems will be used as appropriate.

1.2 Influenza Immunization

Past pandemics have been characterized by multiple waves of disease: a first wave lasting six to eight weeks, followed by second and third waves 3 to 12 months later. Although it is not possible to predict how quickly a novel virus could arrive in the U.S., the planning time horizon could be short.

The current influenza vaccine manufacturing procedure is a complex process that requires six to eight months before large amounts of vaccine are available. Ordinarily vaccine virus strains for the annual influenza season are selected in January/February for vaccine distribution in August/September. This vaccine would not be effective against a newly emerged pandemic virus strain. A new virus strain might not appear during the winter months, when influenza viruses normally circulate, but could emerge as a threat at any time of year.

Because of the long production period required, vaccine may not be available prior to the arrival of the novel virus in the U.S. If vaccine is available, it is likely to be in short supply. However, when the same novel virus reappears in the second and third pandemic waves several months later, vaccine will likely be available. Influenza vaccine will be of significant value in preventing morbidity and mortality during the latter stages of a pandemic.

There are other factors worth mentioning that may complicate production: 1) The vaccine is grown in embryonated chicken eggs, and availability of large quantities of eggs on short notice is uncertain; 2) In addition, avian influenza virus cannot be grown in embryonated chicken eggs because it kills the embryo; and, 3) With a novel virus, two doses of vaccine may be required to achieve robust immunity. The first dose may confer some immunity in a serologically negative individual, but immunologic response after a single dose is believed to be poor. Therefore, it is recommended that a second dose be given 30 days after the first. This would further lengthen the time it would take to achieve high levels of immunity in the population.

The vaccine for the annual influenza season, while ineffective against the novel strain, would be of value in preventing secondary infection with the previously circulating virus strains. Vaccination with pneumococcal vaccine would also reduce secondary and multiple infections.

The implication of the above is that while vaccination remains important, planners must be mindful that other strategic responses, such as maintaining strict infection control practices and managing hospital surge capacity, may be equally important, especially during the initial stages of the pandemic.

Because of the anticipated vaccine shortage, the CDC recommends that initial supplies be administered in a prioritized manner to targeted groups. As information about the impact of the novel virus becomes available, recommendations will be formulated at the national level and will be adapted by the State public health officials, depending on local factors. The following groups targeted for vaccine administration are shown from highest to lowest priority and are based on the current CDC guidelines, but could change as the pandemic unfolds:

- Health care workers who care for patients in acute and long-term care facilities and home care settings, public health workers involved in vaccine delivery effort, first responders, and household members of these groups
- Workers performing vital community services (such as public safety and order; maintaining utility service and essential transportation; working on production of influenza vaccine)

- Persons at high risk of developing severe outcomes based on age, underlying conditions, or residence in a long-term care facility
- Household contacts of persons with high-risk medical conditions
- Healthy children and adults younger than 65 years of age

Monitoring vaccine adverse events will be necessary during a pandemic. Currently, providers of State-supplied vaccines for children report adverse events to the State Immunization Program, which investigates and reports to the national Vaccine Adverse Events Reporting System (VAERS). Providers of adult vaccines generally report to the national VAERS directly. In a pandemic, the State may need to be more directly involved in the reporting and investigations of adverse events among adults as well as children.

1.3 Antiviral Medications

Antiviral medications may play an important role for the control and prevention of influenza, especially in the event that vaccine is not available. Background information for clinicians on antiviral agents for influenza can be found on the CDC website at <http://www.cdc.gov/flu/professionals/antiviralback.htm>. Guidelines for NH health care providers are updated as needed, based on CDC guidance, and are available on the NH DHHS website at: <http://www.dhhs.nh.gov/DHHS/BCDCS/flu.htm>. However, supplies of antivirals are currently far from sufficient to provide prophylaxis or treatment for the population, and there is currently no plan to stockpile antivirals for influenza pandemic management purposes at the national level. Similar to planning for vaccine distribution, planning should be considered for different scenarios, including:

- Federal purchase of the existing supply and distribution to the states
- State purchase of antivirals using emergency funds
- Status quo (i.e., the bulk of antivirals available in the private sector)

Prophylaxis

The adamantines – amantadine and rimantadine – are best suited for prophylaxis (preventive care) because of the high potential for the emergence of viral resistance during treatment, the potential supply, and their cost. The central nervous system side effects, although substantially less with rimantadine than amantadine, may preclude the use of these drugs for certain target groups, such as pilots and surgeons. The neuraminidase inhibitor oseltamivir is an alternative option. As with vaccine, recommendations for prioritizing antivirals will be made at the national level, and State public health officials will review these recommendations and revise as needed, based on local factors.

Identification of influenza within a community, based on either isolation of the pandemic strain or an increase in ILI, should be the trigger for initiating prophylaxis.

Therapy

Neuraminidase inhibitors – oseltamivir and zanamivir – should be used for therapy because of the potential for viral resistance when adamantines are used for therapy. Therapy is effective only if offered within two days of developing symptoms. As with prophylaxis, recommendations for priority groups for therapy will be formulated at the national level. Distribution of drugs for therapy is a challenge given the limited amount available, the large number of points of care, and the need to begin treatment within two days of symptom onset.

In the absence of State or federal purchase of drugs, the role of the State will consist mainly of providing physicians with guidelines for appropriate use of antivirals. If there is federal or State

purchase, in addition to providing guidelines, the State will need to determine how drugs will be distributed and whether it will require any controls for dispensation of drugs, such as the necessity of a positive rapid test. Public education will be important given the scarcity of antivirals.

1.4 Communications

Open flow of information among the State agencies, local health departments, local health officials, and health care providers and the dissemination of accurate and timely information via the media to NH citizens will be essential to help control the spread of illness and the possibility of panic in the event of confirmation of pandemic influenza. The DHHS emergency communications function includes utilization of the following: personnel currently employed by the State and local health departments; federal, state, and local resources and equipment; and, volunteers necessary to coordinate and distribute information during influenza pandemic phases.

The CDC provides a number of materials before and during normal influenza epidemic years. These will be revised as the influenza pandemic unfolds. The materials include: basic communication materials on influenza, vaccine, antivirals, and other relevant topics in various languages; recommendations and guidelines for health care providers; training modules (Web-based, printed, and video); “canned” presentations, slide sets, videos, and documentaries; and, symposia on surveillance, treatment, and prophylaxis.

Because of anticipated shortages of both vaccine and antivirals, planning concerning messages informing citizens about availability of these agents, and addressing the rationale for priority groups, as well as measures to be taken until such agents are available will be critical. Other important topics include: information about the course of the pandemic (contagiousness, geographic spread, case counts); information about which symptoms should prompt the seeking of medical assistance, and which symptoms should be managed at home; information about school and business closures and suspended public meetings; and, information about travel restrictions and quarantine laws.

2. PURPOSE

The purpose of this document is to advise health care workers, health care facility administrators, State and local health department officials, and community officials in appropriate activities toward preparedness for and response during an influenza pandemic. The strategies, guidelines, and tools included in this document are designed to achieve the following objectives:

- Rapidly and efficiently identify increases in ILI and increases in deaths due to pneumonia or influenza
- Rapidly and efficiently identify circulating influenza viral strains and submit to the CDC any specimens that cannot be readily identified by the PHL
- Ensure rapid information exchange among clinicians, public health officials, and administrators of health care facilities about increases in ILI and/or potential novel influenza virus strains
- Rapidly and effectively implement measures to prevent the transmission of influenza and the development of secondary complications
- Continually monitor the course and characteristics of influenza outbreaks and promptly revise control strategies as needed

- Implement effective communication and education strategies for the public, the media, community officials, health care communities, and public health communities to ensure an appropriate response to the developing influenza pandemic
- Coordinate and integrate influenza pandemic preparedness and response planning efforts with other preparedness plans and systems

3. PROCESS

The first New Hampshire Influenza Pandemic Preparedness Plan was completed in 2001 and was modeled on the CDC guidance, *Pandemic Influenza: Planning Guide for State and Local Officials*, Version 2.1, January 1999. The New Hampshire Department of Health and Human Services' (DHHS) Communicable Disease Surveillance and Immunization Program staff developed this first plan with guidance from the Executive Committee that periodically reviewed and commented on the plan as it was being developed. Since New Hampshire's first pandemic plan was developed, bioterrorism preparedness activities have considerably changed the public health landscape. States began receiving funds through the CDC's Bioterrorism Preparedness and Response cooperative agreements in 1999 and, starting in 2001, through the Health Resources and Services Administration's (HRSA) National Bioterrorism Hospital Preparedness Program. The smallpox planning initiative, implemented by federal, state, and local agencies and public health officials, is an example of bioterrorism preparedness activities resulting in new infrastructures and the formation of key linkages. Many details of the original influenza pandemic planning guidance are subsumed under other preparedness activities. An example of this, called for by the CDC cooperative agreement, is the development of effective communications systems to ensure connectivity among public health departments, health care organizations, public officials, and others. Another example, from the HRSA cooperative agreement, is to maximize health care facility surge capacity and integrate health care facilities into the public health and general emergency response systems.

The CDC's 2004 draft pandemic plan guidance guided revisions made to New Hampshire's pandemic preparedness plan. Because of similarities in purpose, scope, and response, the *State of New Hampshire Interim Severe Acute Respiratory Syndrome (SARS) Epidemic Preparedness Plan*, Version January 7, 2004, was also used as a model for influenza pandemic preparedness and response. As with the SARS preparedness plan, the *State of New Hampshire Interim Influenza Pandemic Epidemiologic and Surveillance Plan*, was reviewed by the NH Communicable Disease Epidemic Control Committee (CDECC), which consists of representatives from the two local health departments, physicians specializing in infectious diseases and epidemiology, representatives from the NH Bureau of Emergency Management (BEM), the State and Deputy State Epidemiologists, other officials from DHHS, and partners such as the NH Hospital Association (NHHA). The *NH Influenza Pandemic Epidemiologic and Surveillance Plan* is intended to undergo periodic revisions as situations in New Hampshire change and as guidance from CDC is updated. It will be reviewed regularly by the NH CDECC and revised as appropriate.

The development of the *NH Influenza Pandemic Epidemiologic and Surveillance Plan* was based on the following assumptions:

- A novel influenza virus strain will likely emerge in a country other than the United States, but could emerge first in the United States and possibly in New Hampshire.
- The federal government will assume the responsibility of influenza vaccine research, development, and procurement.

- It is highly likely that moderate or severe shortages of vaccine will exist early in the course of the pandemic and also possible that no vaccine will be available.
- The supply of antiviral medications used for prevention and treatment of influenza will be limited.
- With the emergence of a novel influenza virus strain, it is likely that all persons will need two doses of vaccine to achieve optimal antibody response.
- The federal government has limited resources allocated for State and local plan implementation, and therefore the State will provide supplementary resources in the event of a pandemic, which may include the redirection of personnel and monetary resources from other programs.
- The federal government has assumed the responsibility for developing materials and guidelines, including basic communication materials for the general public on influenza, influenza vaccine, antiviral agents, and other relevant topics in various languages; information and guidelines for health care providers; and training modules. Until these materials are developed, the State has the responsibility to develop such materials for its citizens.
- Emergency response, including maintenance of critical services and surge capacity issues, is addressed in the CDC and HRSA cooperative agreements, will be included in the State Emergency Operations Plan (EOP) Emergency Support Function 8 (ESF-8), and should not be duplicated in the pandemic planning process.

4. RESPONSIBILITIES AND LEGAL AUTHORITY IN PUBLIC HEALTH EMERGENCY PLANNING

The preparation for and response to an influenza pandemic requires a coordinated response by public health authorities, emergency management authorities, and other emergency response entities at the local, state, and federal levels of government.

4.1 Federal Authority

The Department of Health and Human Services (U.S. HHS) is the U.S. Government's lead agency for the preparation, planning, and response to pandemic influenza. As such, U.S. HHS will coordinate the U.S. Government's response to the public health and medical requirements of pandemic influenza. The U.S. HHS Secretary's Command Center will serve as the national incident command center for all health and medical preparedness, response, and recovery activities.

As the component of U.S. HHS responsible for disease prevention and control, the CDC will have primary responsibility for tracking pandemic influenza and managing the operational aspects of the public health response. To this end, CDC will augment local and state resources for disease surveillance, epidemiologic response, diagnostic laboratory services and reagents, education and communication, and disease containment and control. As a pandemic unfolds, updated CDC guidelines and recommendations will be found on the CDC website <http://www.cdc.gov/flu/>.

The CDC has assumed primary responsibility for a number of key elements of the national plan, including:

- Vaccine research and development
- Coordinating national and international surveillance

- Assessing and potentially enhancing the coordination of vaccine and antiviral capacity, and coordinating public-sector procurement
- Assessing the need for and scope of a suitable liability program for vaccine manufacturers and persons administering the vaccine
- Developing a national "clearinghouse" for vaccine availability information, vaccine distribution, and redistribution
- Developing a vaccine adverse events reporting system (VAERS) at the national level
- Developing a national information database/exchange/clearinghouse on the Internet

Table 1. Statutory Authority

Statute	Agency	Authority
US Public Law 93-288	Federal government	Provides authority to respond to emergencies and provide assistance to protect public health; implemented by Federal Emergency Management Act
RSA 21-P: Department of Safety	Governor BEM	Allows Governor to delegate authority to BEM Director to carry out necessary functions to preserve lives of the people of NH during an emergency
RSA 4: Powers of the Governor and Council	Governor	Allows Governor to declare a state of emergency as that term is defined in RSA 21-P: 35, VIII Gives Governor direction and control of emergency management (see RSA 4:45, 4:46 & 4:47)
RSA 141-C: Communicable Disease	DHHS	Authorizes the DHHS to purchase and distribute pharmaceutical agents to prevent the acquisition and spread of communicable disease Authorizes the DHHS to adopt rules to distribute prescription pharmaceuticals in public clinics Establishes a vaccine purchase fund for the purchase of antitoxins, serums, vaccines and immunizing agents Allows DHHS to issue complaint to an individual and seek assistance of law enforcement; allows law enforcement officials to take an individual into custody and transport him/her to the place where he/she can be isolated, quarantined or treated; and, allows due process for such individuals (the right to a superior court hearing)
RSA 99-D: Defense & Indemnification of State Officers & Employees	DHHS	Protects State employees who administer immunizations as part of their official duties; see also RSA 21-P:41 which provides similar protection to all emergency management workers (whether or not they are State employees)
RSA 541-A: Administrative Procedure Act	State Agencies	Allows State agencies to adopt emergency rules when there is imminent peril to public health or safety, without going through normal rule making process; see also RSA 4:47, III which allows the Governor to make, amend, suspend or rescind orders, rules and regulations during a state of emergency

4.2 State Authority

The State of NH has designated DHHS to oversee the influenza pandemic planning process in cooperation with local health agencies and other partners. DHHS will convene necessary experts as needed to review the pandemic plan and give technical advice. During a pandemic, DHHS will have primary responsibility for:

- Making recommendations to local health departments, health care providers and facilities, and the general public to aid in controlling the spread of influenza
- Maintaining surveillance systems to monitor the spread of disease
- Keeping the public informed

4.3 Local Authority

Each community in the State, including those without existing health departments, should consider developing an influenza pandemic plan, using this document as a template. Each city and town in the State has a local Health Officer; their roles and responsibilities in the event of a public health emergency are as follows:

- Assist the State in distributing fact sheets and other educational information to the community
- Assist in logistical support
- Assist in mobilizing community resources
- Collect local information regarding disease outbreaks (e.g., assist the NH Communicable Disease Control Section [CDCS] in locating contacts within a community or locating citizens that may be home-bound)
- Assist DHHS in public education efforts, as well as assisting in identifying potential audiences for public education
- Assist the local community to establish alternative shelter
- Provide information to citizens regarding where local services (e.g., mental health counseling or local welfare) can be accessed
- Act as a liaison between the public and State and federal contacts, and serve as a conduit of information to the public
- Participate in after-action meetings to discuss the public health emergency
- Coordinate their roles locally with the Incident Commander of their community
- Follow up on information and data that the State may need in its response efforts in the event of a public health emergency
- Assist in the closure of public buildings for sanitary and public health purposes
- Work with the State Medical Examiner's office to establish temporary mortuaries
- Participate in the recovery process following an emergency (e.g., conduct sanitary inspections of water supplies, housing, septic systems, public bathing facilities, and, in some communities, food establishments)

5. LEGAL PREPAREDNESS

Legal preparedness is an essential component of pandemic influenza preparedness and response. While no provision of law addresses pandemic influenza specifically, numerous statutory provisions authorize relevant actions. Planning and effective response to an influenza pandemic requires knowledge of the following legal issues:

- Quarantine laws and how they apply in a public health emergency
- Statutes for mandatory vaccination during an infectious disease emergency
- Laws and procedures for closing businesses or schools and suspending public meetings during a declared state of emergency
- Medical volunteer licensure, liability, and compensation laws for in-state, out-of-state, and returning retired and non-medical volunteers
- Workers' compensation laws as they apply to health care workers and other essential workers who have taken antivirals for prophylaxis

In general, the federal government has primary responsibility for preventing the introduction of communicable diseases from foreign countries into the United States, and the State and local NH jurisdictions have primary responsibility for isolation and quarantine within their borders. By statute, the U.S. HHS Secretary may accept state and local assistance in the enforcement of federal quarantine and other health regulations and may assist the State and local officials in the control of communicable diseases. The CDC, through its Division of Global Migration and Quarantine, is empowered to detain, medically examine, and/or conditionally release persons suspected of having certain communicable diseases. Because isolation and quarantine are “police power” functions, public health officials at the federal, state, and local levels may seek the assistance of their respective law enforcement counterparts to enforce a public health order (see RSA 141-C: 12, III, and RSA 141-C: 17, VI).

The State of NH is following recommendations for legal preparedness from the CDC and the Association of State and Territorial Health Officers (*State Health Official Checklist: Are You and Your State Ready for Pandemic Influenza?*). DHHS legal counsel confirms that:

- NH's laws and procedures on quarantine, isolation, closing premises, and suspending public meetings have been reviewed and can be implemented to help control an epidemic.
- For some persons (e.g., those providing essential community services), influenza vaccination may be required; for others, vaccination may be recommended (see RSA 21-P: 49, V & VI relative to public health emergencies).
- NH's statutes regarding medical licensure, liability, and compensation for in-state, out-of-state, returning retired, and non-medical volunteers have been reviewed. NH law allows the State to enter into mutual aid agreements for reciprocal emergency management aid and assistance. Parties to such agreements shall be entitled to the same immunities and exemptions as are afforded by statute to NH entities engaged in emergency management functions. During a public health emergency, requirements for a professional license shall not apply to authorized emergency management workers. Dentists, nurses, medical students, physician assistant students, student nurses, and emergency medical technicians shall be regarded as authorized emergency management workers and may perform certain medical procedures that fall outside the scope of their usual practice. Emergency management workers from outside the State of NH shall

possess the same powers, duties, immunities, and privileges as the worker would normally possess if performing his/her regular duties in his/her state of origin.

- During the course of a public health emergency, rules and regulations regarding licensure can be suspended or modified as necessary to allow health care institutions to use temporary facilities as necessary for the provision of medical care and treatment.
- Workers' Compensation and Unemployment Compensation laws have been reviewed to determine if and how they would or could be used in the event that a person misses work due to being subjected to an order of isolation or quarantine. The State will be considering what provisions need to be in place to allow a person subject to such orders to be compensated for the time that the person is out of work (see RSA 21-P: 41, I).

6. EMERGENCY OPERATIONS AND INCIDENT COMMAND STRUCTURE

The sustained, coordinated efforts required to control pandemic influenza lend themselves to the principles and structure of incident command and management systems. The NH Public Health Incident Command Structure is currently under development; it will be a predetermined organizational structure for potential mass casualty events that address planning, operations, logistics, finance, and administration.

In the event that an influenza pandemic reaches the status of a public health emergency, the NH EOP will be activated. The EOP provides an all-hazards approach to disaster response and recovery and outlines the roles and responsibilities of organizations and State agencies that would likely be involved in an emergency situation. At the heart of the EOP are 16 Emergency Support Functions (ESFs). One or more of these ESFs might be activated in the event of a disaster. Each ESF is headed by one primary agency, with one or more support agencies assigned to the ESF to help with operations. DHHS is the primary agency for ESF-8, Health and Medical Services, and plays a support role in seven other ESFs.

The State Emergency Operations Plan can be found on the Internet at <http://www.nhoem.state.nh.us/Planning/contents.shtm>. DHHS roles and responsibilities when the EOP-ESF-8 is invoked are:

- Activate the DHHS' Incident Management Team, as well as ESF-8 and its support agencies as needed to support emergency operations
- Coordinate with ESF-2, Communications and Alerting, to establish and maintain a secure communication capability within the health, human services and medical groups
- Coordinate all emergency operations and activities of this ESF to ensure that emergency health, medical and human services capabilities are sustained during emergency operations
- Coordinate with ESF-7, Resource Support, to obtain additional medical equipment and supplies, as needed and as available
- Coordinate with ESF-10, Hazardous Materials, for decontamination capabilities at hospitals and other medical facilities, as needed. Provide information on health risk assessment and injury prevention to first responders and the general public
- Coordinate with support agencies to help assure the health, medical, human services, and mental health needs of disaster victims and first responders are being met
- Coordinate with ESF-1, Transportation, for the provision of vehicles to deploy personnel and resources to the field
- Provide personnel and resources to conduct patient tracking, trace backs, epidemiological investigations, and medical surveillance, as required
- Provide appropriate monitoring and surveillance capabilities
- Provide for the collection, transfer and testing of laboratory samples, as needed
- Provide personnel and resources to help ensure drug safety, as well as the safety of the public's food and potable water supplies
- Coordinate with ESF-14, Public Information, for the dissemination of public health and safety information, and to control and dispel rumors
- Coordinate with ESF-4, Firefighting, ESF-13, Law Enforcement & Security, and ESF-15 Volunteers and Donations, to help ensure the health, safety, and mental well being of emergency workers
- Provide crisis counseling and critical incident stress debriefing and management as needed or requested

- Coordinate with ESF-13, Law Enforcement & Security, to provide necessary security, transportation, and escort
- Prioritize resource requests and allocations, as needed
- Coordinate interfacility transfers using State and federal resources
- Coordinate with ESF-15, Volunteers and Donations, to recruit and use volunteer health practitioners and non-clinician volunteers to support disaster victims and emergency response personnel
- Coordinate with the Medical Examiner's Office to manage the deceased
- Ensure that an Incident Action Plan is developed for each operational period and that it is coordinated with the Emergency Operations Center (EOC) Operations Officer and ESF-5, Information and Planning
- Collect and maintain status information pertinent to ESF-8 and coordinate with ESF-5, Information and Planning, to ensure that it is included in the Situation Report
- Coordinate with ESF-13, Law Enforcement & Security, to conduct joint incident investigations as necessary
- Coordinate with ESF-10, Hazardous Materials, to ensure the proper disposal of hazardous materials
- Communicate necessary health-related information to responders
- Coordinate the provision of acute crisis, intermediate, and long-term mental health support to patients, families, the general community, and responders
- Coordinate with colleges and universities as necessary

In summary, in the event of an influenza pandemic, the goal will be to reduce influenza-related morbidity and mortality and keep social disruption and economic loss at a minimum. To meet this goal, we need to maximize the use of limited resources, monitor the status of the outbreak, collect and organize situational information, manage staffing needs and requirements, monitor/supply persons in isolation and quarantine, maintain an inventory of respirators and other personal protective equipment (PPE), track the status of/procure essential supplies, operate special/temporary facilities, and manage administrative and financial aspects of the response.

7. DEFINITIONS

An **antiviral** medication destroys or inhibits the growth and reproduction of viruses.

A **confirmed case** of influenza disease is a person with influenza-like illness and with laboratory-confirmed influenza virus infection. However, a diagnosis of influenza is usually made on a clinical basis, particularly if influenza has been reported in the community.

Community containment measures refer to the separation of infected or exposed persons from non-infected persons by use of isolation, quarantine, or other restrictions on movement and activities.

A **contact** is a person who has been exposed to an influenza case during the infectious period. A **close contact** is a person who has cared for or lived with someone with influenza or had direct contact with respiratory secretions or body fluids of a patient with influenza. Examples of close contact include kissing or hugging, sharing eating or drinking utensils, talking to someone within 3 feet, and touching someone directly. Close contact does not include activities such as walking by a person or sitting across a waiting room or office for a brief time.

Health care worker refers to any employee who has close contact within 3 feet of patients, patient-care areas (i.e., patient rooms, procedure areas), or patient-care items (i.e., linens and other waste).

The **incubation period** is the time from exposure to an infectious disease to symptom onset. The incubation period for influenza is usually two days, but can vary from one to five days.

Infection control measures decrease the risk for transmission of infectious agents through proper hand hygiene, scrupulous work practices, and use of PPE (masks, gloves, gowns, and eye protection). The types of infection control measures are based on how an infectious agent is transmitted and include standard, contact, droplet, and airborne precautions (<http://www.cdc.gov/ncidod/hip/ISOLAT/Isolat.htm>). The recommendations for influenza are standard, contact, and droplet precautions, defined below:

- **Standard precautions** are work practices required for the basic level of infection control. They center on proper hand hygiene and include use of PPE to serve as protective barriers and appropriate handling of clinical waste.
- **Contact precautions** are work practices designed to reduce the risk of transmitting infectious agents by direct or indirect contact with an infectious person. Direct contact transmission involves a direct body surface-to-body surface contact and physical transfer of infectious agents between an infected person and a susceptible host. Indirect-contact transmission involves contact of a susceptible host with a contaminated intermediate object, such as contaminated instruments or dressings, or contaminated hands that are not washed or gloves that are not changed between patients. Contact precautions may also include the use of PPE (gloves, gown, surgical mask, goggles or face shield) to reduce the spread of infectious agents.
- **Droplet precautions** are designed to reduce the risk of droplet transmission of infectious agents. Droplet transmission occurs when droplets containing infectious agents generated by an infectious person are propelled a short distance through the air (i.e., by coughing, sneezing, or talking) and deposited on the conjunctivae or mucous membranes of the mouth or nose of a susceptible person. Droplet precautions include the use of PPE (gloves, gown, surgical or other mask, and goggles or face shield) to reduce the spread of infectious agents.

Influenza-like illness (ILI) is defined as 1) a fever $\geq 100^{\circ}\text{F}$ and 2) cough and/or sore throat in the absence of a known cause.

An **influenza pandemic** is a worldwide outbreak of a novel influenza virus causing sudden, pervasive illness in all age groups, and can severely impact even otherwise healthy individuals. Influenza pandemics occur infrequently and at irregular intervals and have the potential for substantial impact resulting in increased morbidity and mortality, significant social disruption, and severe economic costs.

Isolation and quarantine are standard practices in public health, and both aim to control exposure to infected or potentially infected persons. Both may be used voluntarily or compelled by public health authorities and can be applied on an individual or population level.

- **Isolation** refers to the separation of persons with a specific contagious illness from contact with susceptible persons and the restriction of their movement to contain the spread of that illness. Isolation usually occurs in a hospital but can be in a home or dedicated isolation facility.
- **Quarantine** refers to the separation and restriction of movement of well persons who may have been exposed to an infectious agent and may be infected but are not yet ill. Quarantine usually occurs in the home but can be in a dedicated facility or hospital. The term “quarantine” can also be applied to restrictions of movement into or out of buildings, other structures, and public conveyances. States generally have authority to

invoke and enforce quarantine within their jurisdictions, although quarantine laws vary among states. The CDC is also empowered to detain, medically examine, or conditionally release persons suspected of carrying certain communicable diseases at points of arrival in and departure from the United States or across state lines.

- **Work quarantine** – In the event that quarantine is used as an occupational exposure management tool, some health care workers (HCWs) may need to continue working to ensure sufficient staffing levels. Appropriate measures should be developed for HCWs to comply with quarantine orders and to continue working at the health care facility. Limitations on alternative employment will be needed.

Nosocomial refers to a health care setting, such as a hospital or clinic. Typically, nosocomial transmission refers to spread of an infectious disease from a patient in a health care setting or from a health care worker to another patient, worker, or visitor in the same setting.

An **outbreak** is a sudden increase in the number of cases of a specific disease or clinical symptom.

Personal protective equipment (PPE) is barrier protection to be used by an individual to prevent disease transmission. PPE may include gowns, gloves, masks, goggles, or face shields. The type of mask (i.e., surgical, N95, or powered, air-purified respirator) is disease-specific and defined in the type of precautions.

Prophylaxis is the prevention of or protective treatment for a disease.

Respiratory hygiene and cough etiquette refers to the institution of public health measures to avert the transmission of influenza and/or other infectious diseases. The specific measures are listed in Appendix 1.

SECTION II. PLAN FOR CONTAINMENT BY PANDEMIC PHASE

1. INTRODUCTION AND PANDEMIC PHASE CHART

The response to pandemic influenza will use much the same infrastructure as that needed for response to any bioterrorism event. However, there are areas that are specific to pandemic influenza and therefore require specific consideration. These priority areas are: 1) surveillance; 2) vaccine delivery; 3) antivirals; and, 4) communications. An overview of each priority area can be found in Section I. Introduction to Pandemic Planning. This plan focuses on preparedness and response activities for each of these priority areas, and addresses them by pandemic influenza phase defined by the WHO. The pandemic phases are outlined in the following table; specific activities for each priority area by pandemic influenza phase follow. Activities listed in the early inter-pandemic phases are cumulative, and should be continued in subsequent phases as appropriate.

Phase	Level	Definition
0 Inter-pandemic Phase	0	Epidemic influenza viruses circulate in human populations causing yearly outbreaks No evidence that a novel influenza virus has infected humans
	1	<i>Novel Virus Alert:</i> identification of a novel influenza virus but no evidence of person-to-person transmission
	2	Confirmation that a novel influenza virus has infected two or more humans, but the ability of the virus to readily spread from person to person and cause multiple outbreaks questionable
	3	<i>Pandemic Alert:</i> confirmation of person-to-person transmission Novel virus causing at least one outbreak lasting for a minimum 2 week period in one country
1		Influenza pandemic confirmed Confirmation that the novel influenza virus is spreading and causing severe disease or death in one or more countries
2		Regional and multi-regional epidemics of pandemic influenza abroad or outbreaks in the U.S. occurring
3		End of the first wave of the pandemic Influenza activity stopped or reversed in initially affected areas
4		Confirmation of a second outbreak of the same novel virus strain Recrudescence of epidemic activity within 3 to 9 months following the initial wave of infection; may affect different segments of the population
5		Confirmation that the pandemic has ended Cessation of the successive pandemic “waves,” accompanied by the return (in the U.S.) of the more typical wintertime “epidemic” cycle; may take up to 2 to 3 years to be declared

2. PHASE 0, LEVEL 0 – Interpandemic Phase

Epidemic influenza viruses circulate in human populations causing yearly outbreaks
No evidence that a novel influenza virus has infected humans

2.1 Plan for Influenza Surveillance – Phase 0, Level 0

2.1.a Activities for Health Care Providers and Facilities

- Maintain strict infection control practices
- Consider posting Mask Hygiene Poster and Hand Hygiene Poster in your office or facility (posters can be found on the DHHS website at <http://www.dhhs.nh.gov/DHHS/BCDCS/flu.htm>)
- Institute “Guidelines for Respiratory Hygiene and Cough Etiquette” to help limit spread of infectious disease transmission (see Appendix 1)
- Keep alert for increased ILI in your facility or community and follow DHHS recommendations for the prevention and control of influenza available on the DHHS website at <http://www.dhhs.nh.gov/DHHS/BCDCS/flu.htm>
- Educate staff in the different methods of influenza testing available; information can be obtained from the PHL (603-271-4660) or from the CDC website at <http://www.cdc.gov/flu/professionals/labdiagnosis.htm>
- Early in an outbreak, consider performing rapid influenza testing on naso-pharyngeal swab or nasal-wash specimens from patients with recent onset of symptoms of ILI
- Consult with public health experts from the CDCS (603-271-4496) to determine whether or not influenza culture specimens for patients with ILI should be sent to the PHL
- Report any cluster or unusual cases of ILI to the CDCS (603-271-4496, or after hours to 1-800-852-3345 ext. 5300)

2.1.b Activities for State Agencies

- NH Communicable Disease Surveillance Section (CDSS) Chief will ensure that section staff are knowledgeable about the roles and responsibilities described in the EOP–ESF-8 that pertain to surveillance activities in the event that the EOP is activated (see page 18 of this document for the EOP–ESF-8 activities)
- CDSS will maintain existing surveillance systems, including monitoring pneumonia and influenza deaths
- PHL will perform influenza testing, type/subtype influenza culture isolates, and send unusual isolates to the CDC for further antigenic characterization
- PHL will transmit influenza data (positives and negatives) to the CDC electronically via PHLIS each week
- PHL will provide influenza testing free of charge to participants in the U.S Influenza Sentinel Provider Surveillance System
- CDSS will encourage sentinel providers to send specimens collected on patients with ILI at the beginning, middle, and end of the influenza season

Section II – Plan for Containment by Pandemic Phase

Interpandemic – PHASE 0, LEVEL 0

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- PHL will provide influenza testing free of charge to health care providers in facilities such as hospitals, long-term care facilities, or schools reporting outbreaks of ILI or unusual cases of ILI
 - CDSS will ensure that at least the minimum number of sentinel providers regularly report their weekly ILI data to the CDC via the Internet year round
 - CDSS will monitor sentinel provider data weekly for completeness and/or accuracy
 - CDSS will provide feedback and maintain contact with sentinel providers weekly to encourage reporting and follow-up on unusual reports
 - CDSS will assess the overall influenza activity level in the State (widespread, regional, local, sporadic, or no activity) and report to the CDC by noon each Tuesday
 - CDCS, in coordination with the DHHS Public Information Office (PIO), will provide recommendations to health care facilities, health care providers, and the general public regarding the prevention and control of influenza
 - CDSS will develop a contingency plan for enhancing disease-based surveillance, e.g., increased frequency of reporting and methods to monitor hospitalized cases
 - PHL will develop a contingency plan for enhancing virologic surveillance, including laboratory surge capacity and safety issues
 - PHL Director will ensure there are sufficient staff fully trained for influenza testing
 - PHL will establish agreement(s) with appropriate private laboratory(ies) in the State to assist with viral culture if capacity of PHL is reached
 - PHL will maintain Biosafety Level (BSL) 3+ laboratory conditions

2.2 Plan for Influenza Immunization – Phase 0, Level 0

2.2.a *Activities for Health Care Providers and Facilities*

- Ensure that the most recent recommendations and guidelines for administration of influenza and pneumococcal polysaccharide vaccine are available in your facility and/or office
- Ensure that all health care workers in office settings with direct patient contact are encouraged to receive annual influenza vaccination
- Ensure that all health care workers in licensed facilities (hospitals, residential care facilities, adult day care facilities, and assisted living facilities) are provided annual influenza vaccine (SB 438)
- All licensed facilities (hospitals, residential care facilities, adult day care facilities, and assisted living facilities) shall document evidence of annual influenza immunization of all consenting patients in accordance with current ACIP recommendations (SB 438)
- All licensed facilities (hospitals, residential care facilities, adult day care facilities, and assisted living facilities) shall document evidence of immunization of all consenting patients against pneumococcal disease in accordance with current ACIP recommendations (SB 438)
- All licensed facilities (hospitals, residential care facilities, adult day care facilities, and assisted living facilities) shall collect aggregate data regarding patient influenza and pneumococcal immunization and report the data to DHHS annually, beginning July 1, 2005 (SB 438)

2.2.b Activities for State Agencies

- The DHHS Immunization Program (IP) will implement plans to increase influenza and pneumococcal vaccination coverage to increase overall immunity to vaccine-preventable respiratory disease and reduce the risk of multiple and secondary infections
- DHHS will develop a plan, in consultation with partners and stakeholders (i.e., DHHS Commissioner or designee, Immunization Advisory Board, partner EOP–ESF-8 agencies, Hospital Association and members, CDC), that defines priority groups to receive vaccine as supplies become available; consider two major categories:
 1. First tier/first responders (and their household members) whose absence due to illness could have an impact on essential services (e.g., fire, emergency medical services, law enforcement, utilities, hospitals)
 2. High-risk populations determined by age groups and/or medical-risk profiles
- IP and BEM will develop a plan for vaccination of first tier/first responders to be implemented when the first supplies arrive in New Hampshire; include identification of personnel to administer vaccine, sites, security, and funding
- BEM will discuss vaccination plan with first-responder organizations (e.g., fire departments, utility companies), as appropriate, to refine the plan and develop written agreements
- IP and BEM will develop a plan for mass vaccination of the general public to be implemented once sufficient amounts of vaccine are available, to include the following:
 - a. Assuring readiness of vaccination clinic supplies, which may be in high demand nationally and may not be provided by the CDC in push packs
 - b. Building on the network of volunteer community vaccination teams that administered smallpox vaccine in 2003
 - c. Developing written commitments for agencies, institutions, and volunteer mass vaccination teams to outline their scope of responsibility during a pandemic influenza emergency
 - d. Assuring that communication with all vaccination clinic sites is maintained so that a list of clinics scheduled around the State will be available
 - e. Consider conducting mass vaccination exercises with volunteer community teams, based on availability of free influenza vaccine provided by the CDC for this purpose, to further develop community teams' abilities
 - f. Coordinating with bordering states (VT, ME, MA) and with Canada in collaboration with federal authorities in vaccination plan development
- IP will ensure that contingency plans have been considered for emergency distribution of unlicensed vaccines using emergency investigational new drug provisions, including inventory control, record keeping, and completion of a signed consent form.
- IP will develop a plan for investigation of adverse events using the existing VAERS reporting system; consider identifying pre-existing networks of neurologists that could serve as sentinels for serious adverse events such as Guillain-Barré Syndrome.
- IP will maintain CDC's current Vaccine Management System (VACMAN) system to track vaccine supply, distribution, and use

Section II – Plan for Containment by Pandemic Phase

Interpandemic – PHASE 0, LEVEL 0

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- IP will consider CDC's recommendation to develop a recall-reminder system to track administration of both vaccine doses and conduct recall for second doses
 - IP will compare their Swift Information System FAX-blast database of vaccine providers to the Health Alert Network's (HAN) database of providers to identify any gaps or additions needed for information flow about vaccine in the pandemic context
 - DHHS Legal Counsel, NH Department of Safety (DOS) Legal Counsel, and the State Epidemiologist will ensure that appropriate legal authorities are in place that will allow for implementation of major elements of this plan
 - IP will review and modify vaccination plans as needed, and at least annually

2.3 Plan for Antiviral Medications – Phase 0, Level 0

2.3.a *Activities for Health Care Providers and Facilities*

- Ensure that the most recent recommendations and guidelines for the use of antiviral medications for influenza treatment and prophylaxis are available in your facility and/or office. (Background information for clinicians on antiviral agents for influenza can be found on the CDC website at <http://www.cdc.gov/flu/professionals/antiviralback.htm> and on the DHHS website at <http://www.dhhs.nh.gov/DHHS/BCDCS/flu.htm>)
- Consult with public health experts from the CDCS if you have questions regarding the use of antiviral medications for influenza treatment and/or prophylaxis
- If using antiviral medications for treatment and/or prophylaxis during an influenza outbreak in your facility, make sure to report the outbreak to the CDCS (603-271-4496, or after hours to 1-800-852-3345 ext. 5300)

2.3.b *Activities for State Agencies*

- CDCS will ensure that the most recent recommendations and guidelines for the use of antiviral medications for influenza treatment and prophylaxis are available to health care providers and health care facilities
- DHHS will define the process through which national recommendations for priority groups will be reviewed
- CDCS will quantify high-priority populations for prophylaxis and therapy and develop drug distribution contingency plans for the different possible scenarios
- State Epidemiologist, in coordination with PIO, will develop plans for education and notification of the medical community and of the public around appropriate prescribing information
- BEM will coordinate with bordering jurisdictions
- DHHS Legal Counsel will review workers' compensation laws as they apply to health care workers and other essential workers who have taken antivirals for prophylaxis
- CDSS will develop a data management system to track antiviral supplies, distribution, and use

2.4 Plan for Communications – Phase 0, Level 0

2.4.a *Activities for Health Care Providers*

- Report any cluster or unusual cases of ILI to the NH CDCS (603-271-4496, or after hours to 1-800-852-3345 ext. 5300)
- Consult with public health experts from the NH CDCS to determine whether or not influenza culture specimens for patients with ILI should be sent to the PHL
- Maintain communications between DHHS and the State’s hospitals through the NH Hospital Association (NHHA) Liaison
- Access the CDC and DHHS websites each week for updated recommendations, guidelines, and influenza surveillance reports

2.4.b *Activities for State Agencies*

- ESF-8 Coordinator will ensure that appropriate staff are knowledgeable about the roles and responsibilities described in the EOP–ESF-8 that pertain to communications activities in the event that the EOP is activated (see page 18 of this document for the EOP–ESF-8 activities)
- The State Epidemiologist will issue guidelines for all health care providers and health care facilities and encourage them to institute “Guidelines for Respiratory Hygiene and Cough Etiquette” to help limit spread of infectious disease transmission (see Appendix 1)
- PIO will work with the web team to ensure that the DHHS recommendations for the prevention and control of influenza are updated and available to health care providers and health care facilities on the DHHS website at <http://www.dhhs.nh.gov/DHHS/BCDCS/flu.htm>
- State Epidemiologist, in coordination with PIO, will keep the public informed of influenza and ILI outbreaks in an effort to control and prevent the spread of disease
- State Epidemiologist will maintain communications with the State’s hospitals through the NHHA Liaison
- State Epidemiologist will collaborate with BEM to send timely messages to health care facilities and health care providers, including requests for reporting any cluster or unusual cases of ILI and requests for influenza culture specimens to be sent to the PHL, via the Health Alert Network (HAN) as needed
- State Epidemiologist, in coordination with PIO, will identify and train other spokespersons to help ensure that accurate and consistent information is given to the press and to the public and plan responses to anticipated questions
- State Epidemiologist, in coordination with PIO, will plan for coordination of messages between state and local public health officials and health care providers and other stakeholders
- State Epidemiologist will determine when Community-Based Containment Measures (see Section III) will be implemented
- CDCS and PIO will develop materials and messages for the general public, including rationale for priority groups for vaccine and antivirals, and measures to be taken until such are available
- CDCS and PIO will review CDC materials and adapt and revise as needed

3. PHASE 0, LEVELS 1 & 2 – Interpandemic Phase

Level 1 – *Novel Virus Alert*: Identification of a novel influenza virus but no evidence of person-to-person transmission

Level 2 – Confirmation that a novel influenza virus has infected two or more humans, but the ability of the virus to readily spread from person to person and cause multiple outbreaks questionable

3.1 Plan for Influenza Surveillance – Phase 0, Levels 1 & 2

3.1.a *Activities for Health Care Providers and Facilities*

- Continue activities initiated in previous phase

3.1.b *Activities for State Agencies*

- CDSS and PHL will ensure that all inter-pandemic surveillance activities are underway regardless of the time of year, and that participating laboratories and sentinel providers are reporting data to the CDC each week
- CDSS will recruit and enroll additional sentinel providers, if necessary, to maintain the minimum of one regularly reporting provider for every 250,000 persons (minimum of 10 in states with smaller populations, such as NH)
- PHL will subtype all influenza A viruses identified in clinical specimens and immediately report to the CDC any that cannot be subtyped
- PHL will obtain reagents from the CDC (when they become available) to detect and identify the novel strain
- DHHS will monitor and revise recommendations from the CDC for any additional surveillance activities that should be undertaken
- PHL and CDSS will review contingency plans for further enhancing influenza surveillance if efficient person-to-person transmission of the novel virus is confirmed

3.2 Plan for Influenza Immunization – Phase 0, Levels 1 & 2

3.2.a *Activities for Health Care Providers and Facilities*

- Continue activities initiated in previous phase

3.2.b *Activities for State Agencies*

- CDCS and IP will meet with partners and stakeholders to review and update major elements of the vaccination plan

3.3 Plan for Antiviral Medications – Phase 0, Levels 1 & 2

3.3.a *Activities for Health Care Providers and Facilities*

- Continue activities initiated in previous phase

3.3.b *Activities for State Agencies*

- CDCS will meet with appropriate partners and stakeholders and review major elements of the antiviral plan
- CDCS will modify plan as needed to account for updates, if any, on recommended target groups and projected drug supply
- CDCS will disseminate antiviral use guidelines to the medical community and conduct training for public health staff involved in antiviral distribution protocols and procedures
- BEM will manage the distribution of supplies in the Strategic National Stockpile if/when it is released by CDC

3.4 Plan for Communications – Phase 0, Levels 1 & 2

3.4.a *Activities for Health Care Providers and Facilities*

- Continue activities initiated in previous phase

3.4.b *Activities for State Agencies*

- Continue activities initiated in previous phase
- CDCS will maintain DHHS hotline and tailor messages to keep public informed
- PIO will review materials and revise as needed
- PIO, in coordination with the DHHS web team, will update DHHS website as new information becomes available
- State Epidemiologist will prepare spokesperson(s), in coordination with PIO
- PIO will issue press releases as necessary
- State Epidemiologist will issue health alerts and/or updated recommendations to health care providers through the HAN
- BEM will coordinate with bordering jurisdictions

4. PHASE 0, LEVEL 3 – Interpandemic Phase

Pandemic Alert: Confirmation of person-to-person transmission

Novel virus causing at least one outbreak lasting for a minimum 2 week period in one country

4.1 Plan for Influenza Surveillance – Phase 0, Level 3

4.1.a Activities for Health Care Providers and Facilities

- Continue activities initiated in previous phases

4.1.b Activities for State Agencies

- PHL and CDSS will continue activities initiated in previous phases
- PHL will institute plans for handling substantially more influenza specimens than usual, including the development of a database for tracking specimen subtypes
- PHL will triage specimens for testing and for choosing which isolates to send to the CDC per the CDC guidelines
- PHL will request that a private laboratory(ies) in the State assist with viral culture when capacity of PHL is reached, per previously established agreement(s)
- CDSS will contact participating sentinel providers and laboratories to stress the importance of complete and timely reporting
- CDCS will investigate reported outbreaks and increases in ILI in a timely manner
- CDSS will request enhanced emergency department syndromic surveillance to include daily reports from all NH hospitals
- CDSS will provide data management support for all DHHS-initiated vaccination campaigns

4.2 Plan for Influenza Immunization – Phase 0, Level 3

4.2.a Activities for Health Care Providers and Facilities

- Continue activities initiated in previous phases

4.2.b Activities for State Agencies

- Director of the Division of Public Health Services (DPHS) will ensure that human resources and logistics are in place to begin vaccination, taking into account the need for additional staff due to illness
- BEM will coordinate planned activities with bordering jurisdictions
- IP and BEM will alert relevant agencies and partner groups to the emerging situation and ask them to review vaccine delivery protocols and procedures

4.3 Plan for Antiviral Medications – Phase 0, Level 3

4.3.a Activities for Health Care Providers and Facilities

- Continue activities initiated in previous phases
- Maintain inventory of antivirals in your office/facility

4.3.b *Activities for State Agencies*

- Director of DPHS will ensure that the human resources and logistics are in place to begin drug distribution and administration, taking into account the need for added staff due to illness
- CDCS will ensure that the current CDC guidelines for administration of antivirals are available for health care providers and health care facilities
- State Epidemiologist will request that health care providers and health care facilities share current inventory levels for antivirals, if the situation warrants this
- BEM will coordinate with bordering jurisdictions

4.4 Plan for Communications – Phase 0, Level 3

4.4.a *Activities for Health Care Providers and Facilities*

- Continue activities initiated in previous phases

4.4.b *Activities for State Agencies*

- PIO will ensure that communication messages are available for health care providers and health care facilities regarding the rationale for priority groups for vaccine and antivirals, and measures to be taken until such are available, if the current situation warrants this
- State Epidemiologist will hold a daily press conference to effectively communicate with the media and the public
- PIO will facilitate updates of DHHS website as new information becomes available
- Director of DPHS will alert the Commissioner of DHHS, the Director of the BEM, the Governor's Office and other appropriate State agencies, government officials, and community partners as required
- State Epidemiologist will disseminate, through the HAN:
 - Additional influenza surveillance recommendations to all NH hospitals, health care providers, laboratories, and others as appropriate
 - Updated diagnostic, isolation, and treatment recommendations to all NH hospitals, health care providers, and emergency management officials
 - Updates on the status of influenza activity in NH to all hospitals and health care providers
- PHL Director will provide updates on clinical laboratory specimen collection and handling to all NH clinical laboratories which will be disseminated through the HAN

5. PANDEMIC PHASES 1, 2 & 3

Phase 1 – Influenza pandemic confirmed

Confirmation that the novel influenza virus is spreading and causing severe disease or death in one or more countries

Phase 2 - Regional and multi-regional epidemics of pandemic influenza abroad or outbreaks in the U.S. occurring

Phase 3 – End of the first wave of the pandemic

Influenza activity stopped or reversed in initially affected areas

5.1 Plan for Influenza Surveillance – Phases 1, 2 & 3

5.1.a Activities for Health Care Providers and Facilities

- Continue activities initiated in previous phases
- Isolate and/or cohort patients with influenza (refer to Section III. Community-Based Containment Measures, 2. Isolation of Influenza Patients)
- Refer to the most current CDC and DHHS guidelines; CDC guidance available on the internet at <http://www.cdc.gov/flu/> and the DHHS guidance at <http://www.dhhs.nh.gov/DHHS/BCDCS/flu.htm>

5.1.b Activities for State Agencies

- CDSS will focus on epidemiological and laboratory data collection to characterize changing trends
- State Epidemiologist will use data to modify policy and/or redirect efforts

5.2 Plan for Influenza Immunization – Phases 1, 2 & 3

5.2.a Activities for Health Care Providers and Facilities

- Continue activities initiated in previous phases
- Establish all influenza immunization clinics in coordination with IP and BEM as vaccine becomes available; vaccine supplies to be obtained and distributed by the State IP and BEM

5.2.b Activities for State Agencies

- DHHS Commissioner will fully activate the vaccination plan
- IP will purchase vaccines as they become available, using available funding; pack all vaccines and clinic supplies for delivery; contact disaster storage sites if additional storage is needed
- IP and BEM will distribute vaccine to public and private sector using current distribution system (with arrangements for security as needed) and using VACMAN for inventory tracking; modify distribution system as needed to ensure optimal coverage
- BEM will coordinate activities with bordering jurisdictions
- IP and CDCS will provide technical assistance to local health departments and agencies to establish immunization clinics
- CDECC will be convened on emergency basis, as needed to assist with recommendation and policy development.

- DHHS Commissioner will request the activation of ESF-13, Law Enforcement and Security, under the State EOP to assist in protecting and deploying the vaccine and those who administer it, if it is believed that the supply of vaccine is under threat
- DHHS Commissioner will request the activation of ESF-6, Mass Care and Shelter, under the State EOP to assist in coordinating efforts to provide care, shelter, and feeding

5.3 Plan for Antiviral Medications – Phases 1, 2 & 3

5.3.a *Activities for Health Care Providers and Facilities*

- Continue activities initiated in previous phases

5.3.b *Activities for State Agencies*

- DHHS Commissioner will coordinate with BEM the antiviral drug distribution plan
- BEM will continue coordinating with bordering jurisdictions

5.4 Plan for Communications – Phases 1, 2 & 3

5.4.a *Activities for Health Care Providers and Facilities*

- Continue activities initiated in previous phases

5.4.b *Activities for State Agencies*

- Continue activities initiated in previous phase

6. PANDEMIC PHASES 4 & 5

Phase 4 – Confirmation of a second outbreak of the same novel virus strain

Recrudescence of epidemic activity within 3 to 9 months following the initial wave of infection; may affect different segments of the population

Phase 5 – Confirmation that the pandemic has ended

Cessation of the successive pandemic “waves,” accompanied by the return (in the U.S.) of the more typical wintertime “epidemic” cycle; may take up to 2 to 3 years to be declared

Activities undertaken in Phase 4 (second wave of the pandemic) will be the same activities as those initiated in the first wave of the pandemic (Phase 1). One of the main differences will be that influenza vaccine offering protection against the novel virus strain will likely be available. Vaccine supplies may still be limited, however, and priority groups for vaccination may still need to be considered. In addition, priority groups could change if the virus is now affecting population groups different from those affected in the first wave. At this point in the pandemic, staff shortages due to disease, death, staff “burn-out,” and other factors will likely be an issue for health care facilities and offices, public health departments, emergency response organizations, and community service providers.

With confirmation that the pandemic has ended (Phase 5), activities outlined in Phase 0, Level 0 should be resumed. The State Influenza Pandemic Plan should be reviewed by all appropriate parties and revised as appropriate, taking into consideration the lessons learned during the previous phases of the pandemic.

SECTION III. COMMUNITY-BASED CONTAINMENT MEASURES

1. INTRODUCTION

Isolating influenza cases separates them from healthy persons and restricts their movement, thereby preventing transmission to others. It also allows for the focused delivery of specialized health care to ill persons. Quarantining persons who may have been exposed to influenza, but who are not ill, is intended to identify those at greatest risk for developing influenza and to prevent transmission to others. Quarantine allows for the monitoring of symptoms and the institution of appropriate isolation procedures as soon as symptoms are detected. In this way, quarantine reduces both the period of risk of transmission and the number of persons potentially exposed.

Isolation and quarantine are optimally performed on a voluntary basis, although different levels of government (local, state, federal) have the basic legal authority to compel mandatory isolation and quarantine of persons and communities to protect the public's health. At the federal level, the U.S. Secretary of Health and Human Services has the statutory responsibility for preventing the introduction, transmission, and spread of communicable diseases from foreign countries into the United States. Within the State of NH, authority to mandate involuntary quarantine and isolation is granted to the Commissioner of DHHS (RSA 141-C).

Following the 2003 SARS (Severe Acute Respiratory Syndrome) epidemic, many countries adopted community-based strategies to control the spread of SARS-CoV. These strategies could also be considered for use during a large-scale influenza outbreak: requiring fever screening before entry into schools, work sites, and public buildings; requiring face masks in certain settings (e.g., on public transportation systems); establishing fever hotlines and referral services for concerned citizens; and implementing widespread environmental disinfection strategies. A variety of quarantine strategies may also be considered, including:

- Disseminate information (in appropriate languages) on restrictions in the quarantine zone (e.g., print/broadcast media, posters, leaflets, flyers, door-to-door)
- Disseminate information on quarantine rationale, procedures, and restrictions to neighboring zones/communities
- Restrict mass transit as necessary
- Restrict access routes
- Minimize movements into quarantined areas by use of monitoring checkpoints, curfews, travel permits, health certificates
- Establish cooperative arrangement with neighboring zones/communities to prevent movement into or out of quarantine zone
- Clearly define who may enter quarantine zone
- Ensure that enforcement is maintained; this may require fines, penalties, barricades, and visible signs of boundary enforcement
- Discontinue isolation/quarantine measures, maintenance of designated facilities, and enforcement measures at the conclusion of three incubation periods after the last reported case

2. ISOLATION OF INFLUENZA PATIENTS

Preventing influenza transmission requires limiting interactions between influenza cases and others. Influenza cases should be admitted to a health care facility/hospital for the purpose of isolation, especially during early stages of the pandemic, only if their clinical condition warrants, or if isolation in the home or alternate facility cannot be achieved effectively.

If an isolation room is not available for a patient admitted to a health care facility/hospital, the patient should be placed in a room with a patient(s) with suspected or confirmed influenza (cohorting). When a private room is not available and cohorting is not possible, a spatial separation of at least 3 feet should be maintained between the infected patient and other patients or visitors. Special air handling and ventilation is not necessary, and the door may remain open.

Cohorting patients may be difficult to accomplish in many hospitals, and facilities need to develop plans based on their individual resources (personnel, facility design, etc.). The following is CDC's suggested hierarchical approach:

- When possible, place patients with documented or suspected influenza in a private room
- When the number of patients with influenza exceeds the available private rooms, try to place influenza cases together in multi-bed rooms or wards
- When patients with and without influenza must be placed in a room together, try to avoid including uninfected patients most susceptible to influenza complications
- When multiple influenza cases are admitted, minimize the number of staff having contact with infected patients by assigning all influenza patients to a single or small group of health care personnel, who have been vaccinated and/or are taking antiviral medications for prophylaxis (if medications available and appropriate)
- When numerous cases are identified, consider placing all patients with documented or suspected influenza in one designated unit or ward, i.e., an influenza cohort, and assign vaccinated health care personnel to work in the designated influenza cohort unit

It may be preferable for affected individuals to be monitored in their own homes, if certain requirements are met. For example, if there is an immunosuppressed person also inhabiting the home, monitoring in an alternate, non-hospital facility may be necessary. An example of a feasible alternate lodging facility may include a motel room, with a separate entrance to the outside/outdoors, a private bathroom, perhaps a small refrigerator and/or microwave, and communication capabilities to the outside (by telephone).

The following measures are recommendations for isolating influenza cases in residential settings (homes) and alternate facilities (motels).

2.1 Basic Activities

- Before an influenza case is confined to the home, the residence should be assessed to be certain that it has the features necessary for the provision of proper care and proper infection control measures. The primary caregiver, the case himself or herself, or a public health worker may conduct this assessment.
- Isolation facilities should meet the following minimum requirements:
 - Primary caregiver (family member) available, if necessary, to assist the patient with basic needs
 - Functioning telephone, electricity, and drinkable water

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- Separate bedroom that will be occupied only by the influenza case and with a door that can be kept closed at all times
 - Separate bathroom that is designated for use only by the influenza case
 - During the period of isolation, household members of influenza cases who are not providing care to the patient-case should be relocated, if possible. Alternatively, the influenza patient-case could be relocated to another site within the community (a motel room).
 - If relocation is not possible, then interactions between the influenza case and the household members should be minimized. Persons at risk of serious influenza complications—those with underlying medical diseases such as underlying heart or lung disease, persons with diabetes mellitus, and the elderly—should not interact with the patient-case.
 - All persons in contact with the influenza case should be educated regarding appropriate infection control practices, including hand hygiene and environmental decontamination. See <http://www.cdc.gov/handhygiene/> for more details.
 - Influenza patients should wear a surgical mask during close contact (less than 3 feet) with uninfected persons to prevent the spread of infectious droplets. If an influenza patient is unable to wear a surgical mask, then household members should don a surgical mask when interacting with the patient.

2.2 Enhanced Activities: Isolation of Influenza Patients in Community Facilities

If a surge of influenza cases overwhelms existing health care capacity, or if home isolation is not feasible for certain individual patients, then alternate facilities in the community may need to be used for isolating influenza cases and/or their asymptomatic contacts. Influenza pandemic preparedness planning must address the availability and use of existing structures, the management of patients lodged in these facilities, and resources for securing supplies to isolated and quarantined individuals.

- Consider the use of both existing structures (e.g., nursing homes, apartments, motels, and schools) and temporary structures (e.g., trailers, barracks, tents, or “bubble systems”)
- Consider the following features in assessing appropriateness of sites:
 - Separate rooms for patients
 - Independent ventilation for each room
 - Access control to each room
 - Availability of potable water, bathroom, and shower facilities
 - Capacity for providing basic needs to patients
 - Rooms and corridors amenable to disinfection
 - Facilities for collecting and disposing of waste materials
 - Facilities for collecting and laundering items
 - Ease of access for delivery of supplies
 - Legal/property considerations
 - Ability to support appropriate infection control measures
 - Availability of food services and supplies

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- Ability to provide an environment that supports the social and psychological well-being of patients
 - Ability to support appropriate medical care
 - Access to communication systems that allow for dependable communication within and outside the facility (telephones)

3. MANAGEMENT OF CONTACTS TO INFLUENZA CASES

3.1 Basic Activities

In a limited influenza outbreak, close contacts of influenza cases may be managed through either active or passive monitoring and without any restriction of movement *unless* they develop symptoms of disease. Consideration should be given to quarantine of contacts with high-risk exposures (e.g., health care workers involved in aerosol-generating procedures on an influenza patient) even in the absence of symptoms.

Contacts of influenza cases may be advised to:

- Remain vigilant for fever or respiratory symptoms for 6 days after exposure. Temperature readings should be taken and recorded twice a day
- Seek health care if symptoms (e.g., cough, fever, shortness of breath) become severe
- Inform health care provider in advance of presenting at the clinic or hospital that contact has been exposed to influenza and is now symptomatic

3.2 Enhanced Activities

In the event of a large influenza outbreak or high-risk exposure (e.g., exposure of health care personnel during intubation of an influenza patient) quarantine of asymptomatic contacts may be considered as a means of interrupting disease transmission.

Quarantine represents a range of possible interventions that could be applied at the level of the individual, small group, or community. Quarantine may be used for:

- Individuals with close contact (e.g., household contact) to a known influenza case
- Small groups with close contact (e.g., co-workers, health care workers with unprotected exposure) to an influenza case
- Larger groups with an unspecified extent of exposures (e.g., social groups, persons in congregated settings, passengers on airplanes) to an influenza case
- Communities in which the extent of influenza exposure for individuals is unknown but interventions are needed to control potential population exposures by increasing social distance and limiting interactions and movement within a community

Types of quarantine include:

- Home quarantine — Quarantine at home is most suitable for contacts that have a home environment in which their basic needs can be met and where the protection of unexposed household members is feasible.
- Quarantine in designated facilities — Contacts who do not have an appropriate home environment for quarantine or contacts who do not wish to be quarantined at home may

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- be quarantined in specific facilities (motels, nursing homes, apartments, etc.) designated for this purpose.
- Work quarantine — This applies to health care workers or other essential personnel who have been exposed to influenza cases and who may need to continue working (with appropriate infection control precautions) but who are quarantined either at home or in a designated facility during off-duty hours.

The minimum criteria that must be met to enable the optimal implementation of home quarantine include:

- Access to educational materials about influenza and quarantine
- Ability to monitor one’s own symptoms (or have them monitored regularly by a parent, guardian or caregiver)
- Basic utilities (water, electricity, functional plumbing/septic system, garbage collection, and heating and air conditioning as appropriate)
- Basic supplies (clothing, food, hand hygiene supplies, laundry services, etc.)
- Mechanisms for communication, including telephone (for monitoring by health staff, reporting of symptoms, and accessing support services) and a computer if possible
- Access to food and food preparation
- Access to health care providers, health care centers, and ambulance personnel
- Access to supplies such as thermometers, fever logs, phone numbers for reporting symptoms or accessing services, emergency numbers, etc.
- Availability of mental health/psychological support services

4. MANAGEMENT OF HOUSEHOLD MEMBERS OF CONTACTS IN HOME QUARANTINE

No specific precautions are needed for household members of contacts who are in home quarantine, as long as the person under quarantine remains asymptomatic. Household members of quarantined individuals can go to school, work, etc., without restrictions. If the contact develops symptoms, then s/he should immediately notify medical/public health authorities to obtain medical evaluation, and at that point, household members should remain at home. The DHHS should be contacted for further instructions.

5. COMMUNITY-BASED CONTROL MEASURES

Community-based control measures are designed to reduce the risk of influenza transmission by limiting the potential for social interactions (e.g., canceling public events, implementing community “snow days,” etc.) and by implementing broad measures for the public to prevent inadvertent exposures (e.g., fever monitoring in public places, use of masks). The effectiveness of these mass measures has not been completely evaluated. The decision to institute community containment measures, and the nature and scope of these measures, will be made based upon the extent of the outbreak and the availability of resources.

Important factors that will need to be considered in determining a threshold for community action include: numbers of cases and close contacts, characteristics of local disease transmission (i.e., speed of spread, number of generations), types of exposure categories (travel-related, close

contact, health care worker, unlinked transmission, etc.), morbidity and mortality rates, extent of community influx and efflux, and the availability of local health care and public health resources.

The DHHS, through the EOC structure and with guidance from the CDC, may carry out both basic and enhanced activities to curb the spread of illness within NH, as follows.

5.1 Basic Activities

- DHHS will provide community information and education about influenza, its spread, and how to prevent transmission
- DHHS will promote practices of “respiratory hygiene” and hand hygiene, as a means for the general public to protect itself

5.2 Enhanced Activities

Enhanced activities may include:

- Institute “snow days” or “shelter in place”
- Suspend public gatherings
- Monitor fever in public places
- Close public buildings and spaces
- Cancel public events
- Close non-essential government functions (public library, etc.)
- Request voluntary or mandate closing of businesses and institutions (e.g., schools)

There may be circumstances of an advanced epidemic for which other more extreme measures may be enacted, such as:

- Restrict travel (air, rail, water, motor, pedestrian)
- Stop mass transit services
- Restrict geographic re-locations

A checklist to assist community preparedness for activities relevant for community containment is included in Appendix 2.

6. COMMUNICATIONS

6.1 Introduction

Open flow of information between State agencies, local health departments and officials, and health care providers, and the dissemination of accurate and timely information to NH citizens will be essential to help control the spread of influenza illness and the spread of panic in the event of an influenza pandemic. Information for the general public, both oral and written, must be made available in English as well as in other languages to educate non-English speaking citizens. DHHS emergency communications function includes utilization of the following: personnel currently employed by State and local health departments; federal, State, and local resources and equipment; and volunteers necessary to coordinate and distribute information.

6.2 Communications in Phase 0

As part of its day-to-day activities, DHHS has primary responsibility for keeping the public informed of disease outbreaks and helping to control and prevent the spread of disease. The Director of the Division of Public Health Services (DPHS) will ensure that the proper personnel give out the appropriate information. BEM will assist in establishing this communications structure as needed. Key communicators will be established to help ensure that accurate and consistent information is given to the press.

6.3 Communications in Phases 1, 2 & 3

- The Commissioner or designee will hold press conferences at appropriate intervals, potentially daily if needed, to effectively communicate with the media and the public. Daily information may also be available to the press through web-based sources.
- The DPHS Director will alert the Commissioner of DHHS, the Director of BEM, the Governor's Office and other appropriate State agencies, government officials, and community partners as required.
- The State Epidemiologist will disseminate, through the Health Alert Network (HAN), additional influenza surveillance recommendations to all NH hospitals, health care providers, and appropriate sub-specialist (i.e., pulmonologists, infectious disease specialists) as necessary.
- The State Epidemiologist will disseminate, through the HAN, updated diagnostic, isolation and treatment recommendations to all NH hospitals, health care providers, and emergency management officials.
- The State Epidemiologist will disseminate through the HAN updates on the status of the pandemic to all NH hospitals and health care providers. Daily information may also be available to health care facilities and providers through web-based sources.
- The State Epidemiologist will disseminate, through the HAN, updates on clinical laboratory specimen collection and handling to all NH clinical laboratories.

Appendix 1

Guidelines for Respiratory Hygiene and Cough Etiquette

Institution of public health measures for universal respiratory hygiene and cough etiquette will avert influenza and other infectious disease transmission. Key features of this campaign include:

- Provide surgical masks to all patients with symptoms of a respiratory illness; provide instructions on the proper use and disposal of masks
- For patients who cannot wear a surgical mask, provide tissues and instructions on when to use them (i.e., when coughing, sneezing, or controlling nasal secretions), how and where to dispose of them, and the importance of hand hygiene after handling this material
- Provide hand hygiene materials in waiting room areas and encourage patients with respiratory symptoms to perform hand hygiene
- Designate an area in waiting rooms where patients with respiratory symptoms can be segregated (ideally by at least 3 feet) from other patients who do not have respiratory symptoms
- Place patients with respiratory symptoms in a private room or cubicle as soon as possible for further evaluation
- Implement use of surgical or procedure masks by health care personnel during the evaluation of patients with respiratory symptoms
- Consider the installation of Plexiglas barriers at the point of triage or registration to protect health care personnel from contact with respiratory droplets
- If no barriers are present, instruct registration and triage staff to remain at least 3 feet from unmasked patients and to consider wearing surgical masks during respiratory infection season
- Continue to use droplet precautions to manage patients with respiratory symptoms until it is determined that the cause of symptoms is not an infectious agent that requires precautions beyond standard precautions

Posters to promote hand hygiene, as well as respiratory hygiene and cough etiquette are available on the DHHS website at <http://www.dhhs.nh.gov/DHHS/BCDCS/flu.htm>. See Appendices 3 and 4 for a preview of these posters.

Appendix 2

Preparedness Checklist for Community Containment

General

- ☐ Establish an incident command structure that can be used for influenza pandemic response
- ☐ Establish a legal preparedness plan
- ☐ Establish relationships with essential partners, such as law enforcement, first responders, health care facilities, and the legal community
- ☐ Plan for monitoring and assessing factors that determine types and levels of response, including the epidemiologic profile of the outbreak, available local resources, and level of public acceptance and participation
- ☐ Develop message strategies for the public, government decision makers, health care and emergency response providers, and the law enforcement community

Management of Cases and Contacts (including Quarantine)

- ☐ Develop protocols, tools, and databases for
 - Case surveillance
 - Clinical evaluation and management
 - Contact tracing, monitoring, and management
 - Reporting criteria
- ☐ Develop standards and tools for home and non-hospital isolation and quarantine
- ☐ Establish supplies for non-hospital management of cases and contacts
- ☐ Establish a telecommunications plan for “hotlines” or other services for
 - Case and contact monitoring and response
 - Fever triage
 - Public information
 - Provider information
- ☐ Plan to ensure provision of essential services and supplies to those in isolation and quarantine, including:
 - Food and water
 - Shelter
 - Medicines and medical consultations
 - Mental health and psychological support services
 - Other supportive services, e.g., day care, etc.
 - Transportation to medical treatment, if required
- ☐ Plan to address issues of compensation, job security, and prevention of stigmatization

Non-Hospital-Based Isolation of Cases

- ☐ Identify appropriate community-based facilities for isolation of cases without substantial health care requirements
- ☐ Develop policies related to use of these facilities
- ☐ Identify facilities for persons for whom home isolation is indicated but who do not have an appropriate home setting, such as travelers and homeless populations
- ☐ Ensure that required procedures for assessment of potential isolation sites are available and up to date

Community Containment Measures

- ☐ Ensure that legal authorities and procedures are in place to implement the various levels of movement restrictions as necessary
- ☐ Identify key partners and personnel for the implementation of movement restrictions, including quarantine, and provision of essential services and supplies:
 - Law enforcement
 - First responders
 - Other government service workers
 - Utilities
 - Transportation Industry
 - Local businesses
 - Schools and school boards
- ☐ Develop training programs and drills
- ☐ Ensure training in PPE for all identified responders and providers as necessary
- ☐ Develop plans for mobilization and deployment of public health and other community service personnel

Appendix 3

Hand Hygiene Poster

The hand hygiene poster can be found on the DDHS website at <http://www.dhhs.nh.gov/DHHS/BCDCS/flu.htm>



New Hampshire Department of Health and Human Services
Division of Public Health Services
www.dhhs.nh.gov



Appendix 4

Mask Poster

The mask poster can be found on the DDHS website at <http://www.dhhs.nh.gov/DHHS/BCDCS/flu.htm>



New Hampshire Department of Health and Human Services
Division of Public Health Services
www.dhhs.nh.gov

Attach box of masks here.