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State of Maine
Pandemic Influenza Plan

DRAFT

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I. Introduction

The Maine Pandemic Influenza Plan is based on guidelines provided by:

Draft Pandemic Influenza Preparedness and Response Plan. Washington, DC: U. S. Department of Health and Human Services; August 2004.

WHO global influenza preparedness plan: The role of WHO and recommendations for national measures before and during pandemics. Switzerland, World Health Organization, Department of Communicable Disease Surveillance and Response Global Influenza Programme; 2005.

Pre-pandemic (WHO Phase 1,2)
No new influenza virus subtypes have been detected in humans. An influenza virus subtype that has caused human infection may be present in animals, or a circulating animal influenza poses a substantial risk of human disease.

LEVEL I (WHO Phase 3)
Human infection(s) with a new subtype, but no human-to-human spread, or at most rare instances of spread to a close contact.

LEVEL II (WHO Phase 4)
Small cluster(s) with limited human-to-human transmission but spread is highly localized, suggesting that the virus is not well adapted to humans.

LEVEL III (WHO Phase 5)
Larger cluster(s) but human-to-human spread still localized, suggesting that the virus is becoming increasingly better adapted to humans, but may not yet be fully transmissible.

LEVEL IV (WHO Phase 6)
Pandemic Phase: Increased and sustained transmission in the general population.

LEVEL V Post-Pandemic
Indices of influenza activity have returned to pre-pandemic levels.

Influenza viruses are unique in their ability to cause sudden infection in all age groups on a global scale. The importance of influenza viruses as biological threats is due to a number of factors, including the high degree of transmissibility, the presence of a vast reservoir of novel variants (primarily aquatic birds), and the unusual properties of the viral genome. The infamous “Spanish flu” of 1918-19 was responsible for more than 20 million deaths worldwide, primarily among young adults. Mortality rates associated with the more recent pandemics of 1957 (A/Asia [H2N2]) and 1968 (A/Hong Kong [H3N2]) were reduced, in part, by antibiotic therapy for secondary bacterial infections and more aggressive supportive care. However, both of these later pandemics were associated with high rates of morbidity and social disruption. The extent of spread of the current avian influenza virus (H5N1) in Southeast Asia poses even more concern regarding the potential for influenza pandemic.

Using software provided by the Centers for Disease Control and Prevention (CDC), it was estimated that there would be approximately 165,000 outpatient visits, 4,000 hospital admissions, and 900 deaths in Maine during an influenza pandemic. Estimates were based on an overall attack rate of 25% over an 8-week period. At the peak of pandemic, influenza patients would

require 23% of hospital capacity, 61% of ICU capacity, and 25% of ventilator capacity in the state. All estimates have wide margins of error and should be considered rough approximations.

To prepare for the next pandemic, an event considered by many experts to be inevitable, the Maine Department of Health and Human Services, Bureau of Health in cooperation with various state and local organizations has developed Maine Pandemic Influenza Control and Prevention Recommendations to outline strategies by which pandemic influenza-related morbidity, mortality, and social disruption may be reduced.

II. Background

A. Influenza

Influenza is a highly infectious viral illness that causes yearly seasonal epidemics reported since at least the early 1500's. In the U.S., complications of influenza cause an average of 36,000 deaths each year, primarily among the elderly. Complications include pneumonia and exacerbations in underlying cardiopulmonary or other chronic diseases. The virus is transmitted in most cases by droplets through the coughing and sneezing of infected persons, but it can be transmitted as well by direct contact. The incubation period for influenza is 1-4 days, with an average of 2 days. Adults typically are infectious the day before symptoms begin through approximately 5 days after illness onset. Children can be infectious for more than 10 days, and young children can shed virus for up to 6 days before their illness onset. Severely immunocompromised persons ca shed virus for weeks or months. Typical symptoms include abrupt onset of fever (101°F to 102°F), headache, chills, fatigue, muscular pain or tenderness, sore throat, and nonproductive cough, and may include runny or stuffy nose, substernal chest burning, eye pain, or sensitivity to light. Gastro-intestinal symptoms, such as abdominal pain, nausea and vomiting, may also occur rarely, 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 hand washing, staying home when sick, 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.

There are three types of influenza viruses: A, B and C. Types A and B cause widespread outbreaks of influenza illness each year. Influenza A and B possess two surface glycoprotein's: the hemagglutinin (H) and neuraminidase (N). Influenza A viruses are further subdivided into subtypes dependent on differences in these surface glycoprotein's. 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 drift) may result in a worldwide pandemic if the virus, for which humans have no protection, is efficiently transmitted from human to human. Antigenic shift occurs only with influenza A viruses. Influenza A viruses were the cause of the three Pandemics in the 20th Century.

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-persons 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.

There are two types of influenza viruses which cause disease in humans - type A and type B. Influenza A viruses are composed of two major antigenic structures essential to vaccines and immunity: hemagglutinin (H) and neuraminidase (N). The structure of these two components defines the virus sub-type. Antigenic drift is a minor change caused by mutation that results in the emergence of a new strain within a sub-type. Drifts can occur in both type A and B influenza viruses. Antigenic shift is a major change caused by genetic recombination that results in the emergence of a novel sub-type (i.e., never before occurred in humans) associated with influenza pandemics. This shift occurs with influenza type A viruses. Influenza A viruses are unique because they can infect both humans and animals and cause more severe illness. Antigenic shifts in influenza A viruses have been the cause of three pandemics in the 20th century.

B. Pandemic influenza

A pandemic is defined as a novel influenza virus affecting humans that demonstrates sustained transmission from person to person. Pandemic Influenza is a unique public health emergency or community disaster.

Pandemic influenza is considered to be a relatively high probability event, even inevitable by many experts, yet no one knows when the next pandemic will occur; there may be very little warning. Most experts believe that we will have between one to six months between the identification of a novel influenza virus and the time that widespread outbreaks begin to occur in the U.S. Outbreaks are expected to occur simultaneously throughout much of the U.S., preventing relocation of human and material resources. The effect of influenza on individual communities will be relatively prolonged – six to eight weeks – when compared to the minutes-to-hours observed in most other natural disasters. Due to the prolonged nature of a pandemic influenza event, the World Health Organization (WHO) has defined phases to a pandemic in order to facilitate coordinated plans.

The impact of the next pandemic could have a devastating effect on the health and well being of the American public. The Centers for Disease Control and Prevention (CDC) estimates that, in the United States alone, up to 200 million people will be infected, 50 million people will require outpatient care, two million people will be hospitalized, and between 100,000 and 500,000 persons will die. Effective preventive and therapeutic measures – including vaccines and antiviral agents will likely be in short supply, as may some antibiotics to treat secondary infections. Health-care workers and other first responders will likely be at even higher risk of exposure and illness than the general population, further impeding the care of victims. Widespread illness in the community will also increase the likelihood of sudden and potentially significant shortages of personnel who provide other essential community services.

For the purposes of consistency and coordination of the national, state and local response, identification and declaration of pandemic phases will be done at the national level using levels determined by the World Health Organization (WHO). Maine has identified response levels aligned with those established by WHO.

III. Federal Responsibilities

A. The Federal government has assumed primary responsibility for a number of key elements of the national plan, including:

1. Vaccine research and development.
2. Coordinating national and international surveillance.
3. Assessing and potentially enhancing vaccine and antiviral capacity and coordinating public-sector procurement.
4. Devising a suitable liability program for vaccine manufacturers and persons administering the vaccine.
5. Developing a national "clearinghouse" for vaccine availability information, vaccine distribution and redistribution.
6. Developing a national adverse events surveillance system.
7. Developing a national information database/exchange/clearinghouse on the Internet.
8. Developing "generic" guidelines and/or "information templates" that can be modified and/or adapted as needed at the State and local levels, including:
    a. Fact sheets on influenza, the influenza vaccine, and antiviral agents.
    b. Strategies and guidelines for interacting with the media and communicating effectively with public health, medical communities and the general public.
    c. Guidelines for triage and treatment of influenza patients in outpatient, inpatient and non-traditional medical care settings.
    d. Guidelines for distribution of influenza vaccine
    e. Guidelines for setting up and operating mass vaccination programs
    f. Guidelines for distribution and use of antiviral drugs utilizing Federally established Priority Groups.

B. The Federal government is currently pursuing mechanisms by which influenza vaccine can be made available more rapidly and in much larger quantities prior to and during the next pandemic.

IV. Assumptions

1. Initially when a Pandemic influenza strain first infects people in the U.S., there will likely be no or very limited amounts of vaccine available.
2. Liability protection for vaccine manufacturers and persons who administer influenza vaccine will likely be made available through Congressional legislation.

3. Although antiviral agents are available that can theoretically be used for both treatment and prophylaxis during the next pandemic, these agents will likely be available only for limited distribution.

4. Resources may be expected to be made available from the national level for plan implementation.

5. Numerous difficult and ethical decisions concerning priority groups for vaccination and antivirals need to be made by the federal government to assure uniformity across states.

V. Command and Control Procedures

A. Command and Control

Pandemic planning requires special emphasis on certain functions that are not specifically addressed in the Maine Bureau of Health, Public Health Emergency Risk Communications Plan (BOH RCP). Therefore, sections of the BOH RCP have been modified and incorporated into the pandemic prevention and control guidelines.

Pre-pandemic (WHO Phase 1,2)
No new influenza virus subtypes have been detected in humans. An influenza virus subtype that has caused human infection may be present in animals, or a circulating animal influenza poses a substantial risk of human disease.

1. The Governor of Maine designates the Bureau of Health Director as the leader and decision-maker of the state's public health and health care-related response to pandemic influenza.

2. The Bureau of Health Incident Management Team-Initial Response Team will serve as the leaders and decision-maker of the state's public health and health care-related response to pandemic influenza, assess the Public health incident/Emergency and how the Bureau response will be phased.

3. In collaboration with the Bureau of Health Director, the Director, Division of Disease Control will designate a leader for the BOH pandemic response, and the response in his/her absence.

4. The Health and Environmental Laboratory (HETL) will provide testing and technical support to the BOH pandemic response.

5. The BOH Pandemic Influenza Workgroup will review Maine Guidelines for Prevention and Control of Pandemic Influenza on an annual basis and update the plan as needed. This group will include: OPHEP Medical Director, Director, Division of Disease Control, State Epidemiologist, Medical Epidemiologist, Public Health Emergency Preparedness Coordinator, Bureau of Health, Incident Management Team Information Team Leader, Maine Immunization Program Provider Relations Specialist. See Appendix A

6. Bureau of Health Divisions and programs have the following personnel and other resources to assist in the pandemic response: See Appendix B
Family Health: Public health nurses, public health educators, staff with nursing, medical, mental health training and experience, health planners.
Disease Control: Epidemiologists, physicians, veterinarians, and experienced disease investigators.
Environmental Health: Toxicologists, physicians, epidemiologists, field research scientists and other environmental technicians.
Health Engineering: Sanitarians, health physicists, environmental engineers, hydrologists, and other technicians.
Health and Environmental Testing Laboratory: Chemists, microbiologists, laboratory technicians, and other laboratory staff, together with laboratory testing facilities for infectious agents, are available to provide assessment data as part of a response to a novel influenza virus.
Integrated Public Health Information System: Technical specialists for health information communication.
Office of Public Health Emergency Preparedness (OPHEP): Physicians and public health emergency preparedness managers and coordinators.

7. Resource lists maintained by divisions are as follows: See Appendix C
Family Health: State / regional public health nursing directors and staff.
Disease Control: Regional Medical Officers, Regional Epidemiologists, Statewide Tribal Liaison, infection control practitioners, on-call personnel by subject expertise, list of notifiable conditions.
Environmental Health: State and local environmental health contacts.
Health Engineering: public water supply contacts, restaurant and food safety contact, licensed and certified health care facilities and services.
Health and Environmental Testing Laboratory: clinical and environmental laboratories, laboratory directors/managers, and key laboratory staff.
Integrated Public Health Information System: hospital and healthcare facility contacts.
Office of Public Health Emergency Preparedness: Bureau of Health Public Health Risk Communication Plan defining protocol for communication during a public health emergency including: Internal BOH communication, communicating with providers, the public, and the Maine Emergency Management Agency (MEMA); protocol for activation of the Health Alert Network and phone banks; and protocol for detecting and correcting hoaxes. Lists of morticians, crematories, medical examiners/coroners, physicians, hospital safety officers. See Appendix D

LEVEL I (WHO Phase 3)
Human infection(s) with a new subtype, but no human-to-human spread, or at most rare instances of spread to a close contact.

1. In collaboration with the Bureau of Health Director, the Director, Division of Disease Control will convene a Pandemic Influenza Response Team of Bureau of Health staff to coordinate and implement the Maine pandemic response activities. The team may include staff from other affected divisions, as appropriate.

2. In collaboration with the Bureau of Health Director, the Director, Division of Disease Control will assign an administrative coordinator to the Pandemic Influenza Response Team to track assigned responsibilities, perform follow-up, and provide administrative support.

3. The Maine Bureau of Health Pandemic Influenza Response Team will include designated members of: Bureau of Health Administration, Division of Disease Control, Incident Management Team, Health and Environmental Testing Laboratory (HETL), and additional Bureau of Health staff as deemed appropriate. See Appendix E

LEVEL II (WHO Phase 4)

Small cluster(s) with limited human-to-human transmission but spread is highly localized, suggesting that the virus is not well adapted to humans.

1. The Maine Bureau of Health Pandemic Influenza Response Team will convene to review the Maine Pandemic Influenza Plan.

2. If the Bureau of Health Director, OPHEP Medical Director, and the Director, Division of Disease Control determine that the pandemic response requires more assistance than the assigned staff, additional assistance will be requested. Utilizing the framework of the Maine Bureau of Health Incident Management Team, and Scale Back Plan, a determination will be made concerning what division priority activities must be continued. Re-assigned staff will be utilized to assist in the pandemic response. Utilizing the framework of the Maine Bureau of Health Incident Management Team, the Bureau of Health Director, in consultation with the OPHEP Medical Director, and Director, Division of Disease Control will determine how work will be re-assigned as designated IMS Team staff are needed in the pandemic response. See BOH IMS Team Organizational Chart. See Appendix F

LEVEL III (WHO Phase 5)

Larger cluster(s) but human-to-human spread still localized, suggesting that the virus is becoming increasingly better adapted to humans, but may not yet be fully transmissible.

1. The Bureau of Health Pandemic Influenza Response Team will convene to plan for the implementation of the Maine Pandemic Influenza Plan.

2. In collaboration with the Bureau of Health Director, Director, the Director, Division of Disease Control will monitor staffing needs and request additional assistance as necessary, utilizing the BOH IMS Team as deemed appropriate.

3. In collaboration with the Bureau of Health Director, the OPHEP Director, Public Health Emergency Preparedness Coordinator, and designated members of the Bureau of Health IMS Team will be responsible for regular communication with BOH Division Directors regarding the status of the pandemic and Maine's response.

4. All BOH divisions will assume a supportive role, working with the affected division in ways appropriate to their program authority and responsibilities. This will be done in coordination with the Bureau of Health Incident Management Team.

LEVEL IV (WHO Phase 6)
Pandemic Phase: Increased and sustained transmission in the general population.

1. The Bureau of Health Pandemic Influenza Response Team will convene to monitor ongoing implementation of the Maine Pandemic Influenza Plan.

2. In collaboration with the Bureau of Health Director, the OPHEP Medical Director and the Director, the Director, Division of Disease Control will monitor staffing needs, and request additional assistance as necessary, utilizing the BOH IMS Team as deemed appropriate.

3. In collaboration with the Bureau of Health Director, the OPHEP Director, Public Health Emergency Preparedness Coordinator, and designated members of the Bureau of Health IMS Team will be responsible for regular communication with BOH Division Directors regarding the status of the pandemic and Maine's response.

4. All other divisions will assume a supportive role, working with the affected division in ways appropriate to their program authority and responsibilities.

LEVEL V Post-Pandemic
Indices of influenza activity have returned to pre-pandemic levels.

1. The Bureau of Health Pandemic Influenza Response Team will convene to evaluate Maine post-pandemic response.

2. In collaboration with the Bureau of Health Director, the OPHEP Medical Director and the Director, the Director, Division of Disease Control will monitor staffing needs and request additional assistance as necessary.

3. In collaboration with the Bureau of Health Director, the OPHEP Director, Public Health Emergency Preparedness Coordinator, and designated members of the Bureau of Health IMS Team will be responsible for regular communication with BOH Division Directors regarding the status of the pandemic and Maine's response.

4. All other divisions will assume a supportive role, working with the affected division in ways appropriate to their program authority and responsibilities.

B. Coordination and Continuity

In collaboration with the Bureau of Health Director, the OPHEP Medical Director will ensure that the Maine response activities are coordinated. This includes assigning responsibilities to appropriate divisions and coordinating their pandemic response activities. This function may be delegated to a Bureau of Health Pandemic Influenza Response Team member.

Pre-pandemic (WHO Phase 1,2)
No new influenza virus subtypes have been detected in humans. An influenza virus subtype that has caused human infection may be present in animals, or a circulating animal influenza poses a substantial risk of human disease.

1. In collaboration with the Bureau of Health Director, the OPHEP Medical Director will be responsible for coordinating the Maine pandemic response activities with other state and federal agencies, as appropriate. State agencies may include the Maine Department of Agriculture; Maine Department of Health and Human Services, Integrated Services Division; Maine Department of Education; Maine Department of Public Safety; Bureau of Elder and Adult Services; Maine Emergency Management Agency (MEMA); and Maine Emergency Medical Services (EMS). Federal agencies may include the Centers for Disease Control and Prevention (CDC); Federal Emergency Management Agency (FEMA); Food and Drug Administration (FDA). See Appendix G

2. The Maine pandemic influenza control activities will be coordinated in consultation with local agencies: hospitals including Regional Resource Centers, health centers, and County Emergency Management who should develop local Emergency Operations Plans including plans for pandemic influenza to assist in coordination of these activities. Local agencies may also refer to Bureau of Health templates developed for emergency response. See Appendix H

3. The Health Alert Network (HAN) will be used for communication between the Maine Bureau of Health and local partners; it will assist in coordination of Maine response activities.

LEVEL I (WHO Phase 3)
Human infection(s) with a new subtype, but no human-to-human spread, or at most rare instances of spread to a close contact.

1. In collaboration with the Bureau of Health Director, the OPHEP Medical Director will be responsible for initiating the coordination of Maine pandemic response activities with other state and federal agencies, as appropriate. State and federal agencies may include those listed in section V.B.1.

LEVEL II (WHO Phase 4)
Small cluster(s) with limited human-to-human transmission but spread is highly localized, suggesting that the virus is not well adapted to humans.

1. In collaboration with the Bureau of Health Director, the OPHEP Medical Director will be responsible for continuing the coordination of Maine pandemic response activities with other state and federal agencies, as appropriate. State and federal agencies may include those listed in section V.B.1.

LEVEL III (WHO Phase 5)
Larger cluster(s) but human-to-human spread still localized, suggesting that the virus is becoming increasingly better adapted to humans, but may not yet be fully transmissible.

1. In collaboration with the Bureau of Health Director, the OPHEP Medical Director will be responsible for continuing the coordination of Maine pandemic response activities with other state and federal agencies, as appropriate. State and federal agencies may include those listed in section V.B.1.

LEVEL IV (WHO Phase 6)
Pandemic Phase: Increased and sustained transmission in the general population.

1. In collaboration with the Bureau of Health Director, the OPHEP Medical Director will be responsible for continuing the coordination of Maine pandemic response activities with other state and federal agencies, as appropriate. State and federal agencies may include those listed in section V.B.1.

LEVEL V Post-Pandemic
Indices of influenza activity have returned to pre-pandemic levels

1. In collaboration with the Bureau of Health Director, the OPHEP Medical Director will be responsible for continuing the coordination of Maine pandemic response activities with other state and federal agencies, as appropriate. State and federal agencies may include those listed in section V.B.1.

C. Facilities

Pre-pandemic (WHO Phase 1,2)
No new influenza virus subtypes have been detected in humans. An influenza virus subtype that has caused human infection may be present in animals, or a circulating animal influenza poses a substantial risk of human disease.

1. Types of facilities that have been identified to support the Maine pandemic response include:
   a. Onsite or local facilities made available by the Maine Department of Health and Human Services, Regional Resource Centers, city health departments, health centers, hospitals and local agencies.

b. Facilities pre-wired and identified for use as Emergency Operations Centers (EOC), Situation Rooms, or telephone banks:
   i. Maine Bureau of Health
   ii. Maine Emergency management Agency (MEMA)
   iii. Regional Resource Centers
   iv. Local EOCs.

LEVEL I (WHO Phase 3)
Human infection(s) with a new subtype, but no human-to-human spread, or at most rare instances of spread to a close contact.

1. In collaboration with the Bureau of Health Director, the OPHEP Medical Director will designate a member(s) of the Bureau of Health Pandemic Influenza Response Team to confirm the availability of facilities that can be used to support the Maine pandemic response.

LEVEL II (WHO Phase 4)
Small cluster(s) with limited human-to-human transmission but spread is highly localized, suggesting that the virus is not well adapted to humans.

1. In collaboration with the Bureau of Health Director, the BOH IMS Team Operations Unit Leader will review the BOH Public Health Emergency Risk Communication Plan, a document held by the Office of Public Health Emergency Preparedness. As needed, facilities will be designated to activate an information center and telephone bank to answer questions regarding a specific aspect of the pandemic (e.g., surveillance, vaccine distribution, medical response, or general public concerns).

2. In collaboration with the Bureau of Health Director, the BOH IMS Team Operations Unit Leader will coordinate with the BOH Liaison Unit Leader and local emergency managers for use of other facilities as needed.

LEVEL III (WHO Phase 5)
Larger cluster(s) but human-to-human spread still localized, suggesting that the virus is becoming increasingly better adapted to humans, but may not yet be fully transmissible.

1. Coordination with the Governor's office, IPHIS and MEMA to assure that offices and systems can provide facilities, support staff, supplies, telecommunications, and Maine network connections.

2. In consultation with the Bureau of Health Director, and BOH IMS Team is made aware of a possible quick jump to higher levels. Ensure lines of communication with MEMA and local partners.

3. Pandemic response support from MEMA and local partners may be requested by the Bureau of Health Director.

4. In collaboration with the Bureau of Health Director, the BOH IMS Operations Unit Leader will determine if partial or full activation of the Bureau of Health Situation Room is appropriate.

LEVEL IV (WHO Phase 6)
Pandemic Phase: Increased and sustained transmission in the general population.

1. The Bureau of Health will respond and support response activities to the second wave, providing facilities, support staff, supplies, telecommunications, and other network connections.

2. Pandemic response support from local agencies may be requested.

3. In collaboration with the Bureau of Health Director, the BOH IMS Operations Unit Leader will determine if partial or full activation of the Bureau of Health Situation Room is appropriate.

LEVEL V Post-Pandemic
Indices of influenza activity have returned to pre-pandemic levels

1. The Bureau of Health will respond and support post-pandemic activities of pandemic influenza recovery providing facilities, support staff, supplies, telecommunications, and other network connections.

2. Post-pandemic response support from MEMA and local partners may be requested by the Bureau of Health Director and/or the BOH IMS Team Finance and Administration Unit Leader.

3. In consultation with the Bureau of Health Director, the BOH IMS Team Operations Unit Leader will determine when closure of the Bureau of Health Situation Room is appropriate.

VI. Surveillance

A. Because influenza viruses have constantly changing antigenic properties, both virologic surveillance, in which influenza viruses are isolated for antigenic and genetic analysis, and disease surveillance, in which the epidemiological features and clinical impact of new variants are assessed, should be viewed as equally critical for pandemic preparedness.

Pre-pandemic (WHO Phase 1,2)
No new influenza virus subtypes have been detected in humans. An influenza virus subtype that has caused human infection may be present in animals, or a circulating animal influenza poses a substantial risk of human disease.

1. National and international surveillance.
In the United States, international influenza surveillance activities are coordinated by the World Health Organization (WHO) Collaborating Center for Influenza Reference and Research at the CDC. National surveillance is coordinated by CDC, with state and local health departments assuming primary responsibility for carrying out virologic, morbidity, and mortality surveillance components. Current U.S. surveillance activities include:

a. Approximately 120 laboratories, including the Maine HETL that report the number and type of influenza viruses isolated each week, and send representative and unusual viral specimens to CDC for comparative antigenic and genetic analysis. This information is updated weekly and is available online (http://www.cdc.gov/flu/weekly/fluactivity.htm).

b. State and territorial epidemiologists report the level of influenza activity in their state each week as "widespread," "regional," "local", "sporadic" or "no activity." This information is updated weekly and is available online (http://www.cdc.gov/flu/weekly/fluactivity.htm).

c. A voluntary, national network of approximately 1,500 sentinel physicians report the number of patients presenting with influenza-like illness (ILI) defined as:
   - Temperature of >100.0 F (37.8 C) and either cough or sore throat in the absence of a known cause.
   - Total number of patient visits by four defined age groups each week. This information is updated weekly and is available online (http://www.cdc.gov/flu/weekly/fluactivity.htm).

d. Vital Statistics Offices of 122 U.S. cities report, on a weekly basis, the percentage of total deaths caused by influenza and pneumonia.

e. A variety of other sources, from local and state levels which spontaneously report influenza outbreaks or other influenza-associated events.

2. Maine influenza surveillance

a. Current influenza surveillance in Maine from October through May includes:

i. Submission of influenza isolates to the HETL for confirmed strain sub-typing.

ii. Reporting of ILI outbreaks in long-term care facilities.

iii. Reporting of absenteeism in approximately 40 schools.

iv. Reporting of absenteeism $\geq$ 15% in any schools.

v. A network of participants in the national surveillance system of sentinel physicians reports the number of patients presenting with ILI and the total number of patient visits by age group each week. In 2004-2005, there were 20 participating sentinel physicians representing Maine's 16 counties and 4 largest cities.

vi. Investigations of pediatric influenza-related deaths in Maine.

vii. Reporting of ILI admissions from the emergency departments of three referral hospitals designated as Regional Resource Centers in Maine.

viii. Reporting of influenza and pneumonia deaths from the three Metropolitan Statistical Areas in Maine.

ix. Ongoing evaluation of each component of the surveillance system.

b. Year round influenza surveillance includes:
ii. Reporting of ILI outbreaks
iii. Submission of viral cultures for persons with severe ILI.

LEVEL I (WHO Phase 3)
Human infection(s) with a new subtype, but no human-to-human spread, or at most rare instances of spread to a close contact.

1. Laboratory directors, infection control practitioners, physicians, and emergency rooms, will be directed to submit a specimen for viral culture on patients hospitalized with ILI and a history of travel within 10 days of symptom onset to a country with a documented novel influenza virus in poultry or humans. Testing should be considered on a case-by-case basis for outpatients with ILI and a similar travel history.

2. A split specimen should be obtained. One specimen should be submitted to the usual laboratory provider for testing (i.e., identifying influenza A or B) and one specimen should be submitted directly to the HETL for novel virus testing. HETL is currently the only Maine laboratory capable of sub-typing influenza isolated and is likely to be the only Maine laboratory with antigens used in testing for new subtypes.

LEVEL II (WHO Phase 4)
Small cluster(s) with limited human-to-human transmission but spread is highly localized, suggesting that the virus is not well adapted to humans.

1. Once pandemic influenza has been identified circulating internationally, the goal of surveillance is to identify the novel influenza virus in Maine. Activities noted in Level I will continue. The Division of Disease Control will evaluate current surveillance activities and consider expanded efforts as appropriate.

LEVEL III (WHO Phase 5)
Larger cluster(s) but human-to-human spread still localized, suggesting that the virus is becoming increasingly better adapted to humans, but may not yet be fully transmissible.

1. Once pandemic influenza has been identified in Maine, the focus of surveillance efforts will be to monitor the impact on the state. Activities noted for Level II will continue. Consideration will be given to expanding the number of reporting sites to better monitor disease impact statewide.

LEVEL IV (WHO Phase 6)
Pandemic Phase: Increased and sustained transmission in the general population.

1. Continue activities as noted for Level III.

LEVEL V Post-Pandemic
Indices of influenza activity have returned to pre-pandemic levels.

The goals of post-pandemic surveillance are to provide a detailed retrospective characterization of the pandemic and to evaluate the efficacy of protective action recommendations and emergency management strategies. These Statewide surveillance activities may include:

1. Review death certificates for influenza-related pneumonia and influenza deaths.

2. Review hospital admissions for ILI.
    i. Evaluate surveillance systems for influenza.
    ii. Conduct studies of how well public health recommendations were implemented.
    iii. Assess the effectiveness of vaccine and antiviral distribution.

VII. Vaccine

Initially, when a pandemic influenza strain first infects people in the U.S., there will likely be nor or very limited amounts of vaccine available. This period could last for up to six months depending on when the pandemic strain is detected and how rapidly it spreads to the U.S. and on how rapidly vaccine development and production proceed. In the absence of vaccine, primary response strategies include interventions to slow the spread of infection, antiviral therapy and prophylaxis, and quality medical care. After vaccine becomes available, for some period, vaccine availability will be far less that national demand, requiring prioritized usage of vaccine to optimally decrease morbidity and mortality. As vaccine production increases with some of the population already having been vaccinated in the initial target program, supply will become adequate t o meet demand. This may lead to changes in strategies for vaccine distribution and administration because there may no longer be a need to limit vaccine only to those in designated priority groups. Tracking vaccine production, delivery, and use will be important to guide appropriate vaccination strategies and use.

The Maine Immunization Program (MIP) has distributed influenza and pneumococcal vaccine to health care providers across the state since 2000. Facilities include: Federally Qualified Health Centers (FQHC's), Regional Health Centers (RHC's), Indian Health Services, Nursing Homes, Long Term Care Facilities, Hospitals, Public Health Clinics, Family Practices, Pediatric Practices and other facilities that may vaccinate the high-risk priority groups.

Realizing that the level of vaccine wastage exceeded the CDC's limits for the first two years, MIP staff developed a vaccine allocation model to encourage greater accountability of vaccine usage while maintaining the Bureau's dedication to reaching those at highest risk. Through this allocation model, the maximum amount of vaccine a provider may order is established by calculation of the previous year's total vaccine administered plus 5%. Providers have the ability to submit a written request, with supporting documentation, for a higher amount of vaccine. This model was first applied in 2002 and was highly successful reaching those in need, despite the vaccine supply shortage, as well as reducing wastage. Outcomes associated with the allocation policy are a high level of provider acceptance and satisfaction; a substantial decrease in vaccine wastage; and maintenance of vaccine delivery to those at the high risk.

To increase vaccination rates and awareness, the State of Maine will need to increase an annual influenza and pneumococcal disease education campaign to all Maine citizens targeting

vaccination and good health habits that prevent the transmission of Infectious diseases such as influenza. By enhancing this campaign this would bring us closer to the 2010 goal. Assuming the Federal Government will be working with the manufactures to ensure adequate supply of vaccine for annual vaccination with out interruptions.

Because the current system for routine influenza vaccination relies on public and private sector distribution and administration, and during pandemic influenza, the vaccine will be distributed solely through public health, the Maine Immunization Program will utilize their third party distribution center, Bellco Drug and Health Company based out of North Amityville New York for vaccine delivery in a pandemic phase.

A. Influenza Vaccine

1. Assumptions

   a. It will take a minimum of six to eight months after the novel virus is identified before the vaccine is available for distribution, unless a DNA vaccine is developed and deemed safe and necessary.

   b. Two doses (administered 4 weeks apart) will be required to develop immunity to the novel virus.

   c. Vaccine produced during the first month (approximately 20 percent of the total need), will be purchased by the federal government and distributed to state agencies. This vaccine supply will be used to vaccinate priority groups as defined by the pandemic influenza control and prevention guidelines (see page 17). Further vaccine made available would need to be purchased with special legislation at the federal or state level.

   d. Once vaccine is available, it may take five months to produce an adequate supply of vaccine for the US population (approximately 20 percent of the vaccine will be produced per month).

   e. Once a pandemic imminent stage has been declared, Maine DHHS Agencies will have one to six months to finalize planning for vaccine delivery and administration. During this time, State activities may include:
      i. Identification of sites for distribution of vaccine.
      ii. Contracting with identified sites
      iii. Correspondence with Bellco Drug and Health Company of the potential additional distribution requests
      iv. Identification of local agencies to determine priority populations following established criteria.

   f. CDC will develop a standard Vaccine Information Statement (VIS) that details the risks of the disease and benefits of vaccine.

   g. These VIS's will be inserted into vaccine shipments along with the vaccine.

Pre-pandemic (WHO Phase 1,2)
No new influenza virus subtypes have been detected in humans. An influenza virus subtype that has caused human infection may be present in animals, or a circulating animal influenza poses a substantial risk of human disease.

Maine will develop a comprehensive influenza and pneumococcal vaccine program in the pre-pandemic phase to facilitate progress toward achieving Healthy Maine 2010 objectives:

a. Objective 14 – 29: Increase the proportion of adults who are vaccinated against influenza and ever vaccinated against pneumococcal disease.
b. Objective 14 - 29 b: Increase the proportion of adults aged 65 and older who received a flu shot within the past 12 months.
Healthy Maine 2010 Baseline: 74%
Healthy Maine 2010 Target: 90%

1. Maine Bureau of Health pre-pandemic activities are designed to support planning for local delivery of influenza vaccine, and prepare for a pandemic.
These include:

   a. Collection of the most current VIS developed by the CDC into various languages for non-English speaking populations.

   b. Collection of written materials for healthcare providers developed by CDC that include a summary of the most current influenza vaccine recommendations issued by the ACIP, a tip sheet with suggestions for strategies that have been successful in reaching at-risk populations and others, camera-ready copies of the VIS, listings of other resources to help promote and deliver adult vaccines.

   c. Providing information to local agencies regarding the mechanism for ordering influenza vaccine from state contracts.

   d. Providing information to consumers who call the Maine Flu Vaccine Hotline as to the location of the nearest community influenza vaccine clinic.

2. Support planning for vaccine delivery and administration including:

   a. Identification of sites for distribution of vaccine
   b. Contracting with identified sites
   c. Correspondence with Bellco Drug and Health Company of the potential additional distribution requests
   d. Identification of local agencies to determine priority populations following established criteria.

3. Develop policies and procedures specifying protocol for to the administration of vaccine at identified sites.

LEVEL I (WHO Phase 3)
Human infection(s) with a new subtype, but no human-to-human spread, or at most rare instances of spread to a close contact.

1. Continue pandemic planning, confirming vaccine distribution sites and developing a distribution plan, including the development of contract language.

LEVEL II (WHO Phase 4)
Small cluster(s) with limited human-to-human transmission but spread is highly localized, suggesting that the virus is not well adapted to humans.

1. Planning

   a. The Maine Bureau of Health will review CDC developed materials to assure that all Maine non-English speaking populations have access to translated CDC-developed VIS.

   b. The Maine Bureau of Health will distribute camera-ready copies of English and translated versions of the VIS to designated agencies.

   c. The Maine Bureau of Health will determine if training sessions are necessary for local agency staff in order to acquaint them with issues related to the delivery of vaccines.

   d. As directed, local agencies including but not limited to hospitals and health centers will assist the Bureau of Health in tabulating supplies for vaccine administration e.g., syringe, emergency kits to manage anaphylaxis, alcohol wipes, etc.).

2. As directed, local agencies including but not limited to hospitals and health centers will tabulate the number of individuals in each predetermined priority group identified in LEVEL III (WHO Phase 5). The total number of vaccine doses needed for each group will be faxed to the Bureau of Health, using as specific a number as possible. The Bureau of Health will be responsible for the distribution of only the number of doses needed to vaccinate priority groups through an established vaccine delivery system. Unique population characteristics will be considered during vaccine distribution.

LEVEL III (WHO Phase 5)
Larger cluster(s) but human-to-human spread still localized, suggesting that the virus is becoming increasingly better adapted to humans, but may not yet be fully transmissible.

1. Priority Groups

   With the assumption that only 20 percent of total vaccine need will be initially available to begin vaccination, an attempt will be made to prioritize those groups to whom vaccine will be directed to maintain health and critical services in Maine.

When a Pandemic Imminent stage has been declared, The Bureau of Health Director, in consultation with the OPHEP Medical Director will determine specific recommendations for vaccination prioritization using CDC guidelines following the following prioritization:

a. Persons necessary to provide legal authority to initiate activities not governed by current state laws: Governor, Attorney General, State Supreme Court.

b. Persons necessary to maintain basic community infrastructure: currently licensed healthcare workers (physicians, physician's assistants, licensed nurses), public health officials, first responders, laboratorians, emergency managers, National Guard (who serve in a priority area), utility (gas, electric, water, sewer, etc) field workers, communications personnel, fuel suppliers, food suppliers.

c. Persons providing essential community services: public transportation drivers, air travel personnel (pilots, air traffic controllers, etc.), morticians, pharmacists, Red Cross field workers, corrections staff, long-term care facility staff, US postal service workers.

d. Immediate family members to those in groups a and b above.

e. Persons providing necessary community services: day care providers, teachers, clergy, and mental health professionals.

f. Persons determined to be at highest risk of developing complications from influenza.

g. Persons providing care to those in-group f.

2. Vaccine Delivery

Vaccine delivery will be based on vaccine availability and CDC recommendations:

a. Vaccine will be distributed through Bellco Health and Drug Company.

b. The Bureau of Health will distribute specified numbers through established distribution centers based on population distribution and distribution of essential service personnel.

c. The Bureau of Health will coordinate assistance in the transportation of vaccine supplies and vaccine storage and security, as appropriate.

d. Utilizing established criteria, decisions will be made concerning distribution of supplies for vaccine administration e.g., syringe, emergency kits to manage anaphylaxis, alcohol wipes, etc.).

3. Vaccine Administration

   a. Maine State law governs who may administer a vaccine. The Bureau of Health will establish vaccine administration centers based on population distribution and distribution of essential service personnel. Assigned staff at local agencies will be responsible for planning and overseeing the administration of vaccine to persons in their respective communities. For priority groups, it may be most efficient for vaccine to be given work sites.

   b. For vaccine administration designated administration centers, established policies and protocol will be utilized. These policies and protocol must include: dosage, site of administration, contraindication to vaccination, precautions to vaccination, and response to anaphylaxis. Protocol will include review and validation of indication for vaccination.

   c. The Bureau of Health will coordinate assistance for transportation and security for vaccine supplies and security at public immunization clinics as appropriate.

LEVEL IV (WHO Phase 6)
Pandemic Phase: Increased and sustained transmission in the general population.

1. Remaining 80% of vaccine is available.

2. SNS is mobilized

LEVEL V Post-Pandemic
Indices of influenza activity have returned to pre-pandemic levels

Tracking and Monitoring for Adverse Vaccine Reactions

1. State and/or federal resources will be utilized for data collection to track vaccine distribution and administration. This database will include summary information required for vaccine tracking (i.e., lot number, clinic dates, etc.).

2. The Vaccine Adverse Event Reporting System (VAERS) or other specified documentation method will be used to track adverse vaccine reactions. See Appendix F

B. Pneumococcal Vaccine

1. Assumptions

   a. Pneumococcal vaccine will assist in the prevention of secondary bacterial infections

   b. Vaccine produced during the first month (approximately 20 percent of the total need), will be purchased by the federal government and distributed to state agencies. This vaccine supply will be used to vaccinate priority groups as defined by the pandemic influenza control and prevention guidelines (see page 23). Further vaccine made available would need to be purchased with special legislation at the federal or state level.

   c. Once a pandemic imminent stage has been declared, Maine DHHS Agencies will have one to six months to finalize planning for vaccine delivery and administration. During this time, State activities may include:

      i. Identification of sites for distribution of vaccine.
      ii. Contracting with identified sites.
      iii. Correspondence with Bellco Drug and Health Company of the potential additional distribution requests
      iv. Identification of local agencies to determine priority populations following established criteria.

   d. CDC will develop a standard Vaccine Information Statement (VIS) that details the risks of the disease and benefits of vaccine.

Pre-pandemic (WHO Phase 1,2)
No new influenza virus subtypes have been detected in humans. An influenza virus subtype that has caused human infection may be present in animals, or a circulating animal influenza poses a substantial risk of human disease.

Maine will develop a comprehensive influenza and pneumococcal vaccine program in the pre- pandemic phase to facilitate progress toward achieving Healthy Maine 2010 objectives:

c. Objective 14 – 29: Increase the proportion of adults who are vaccinated against influenza and ever vaccinated against pneumococcal disease.

d. Objective 14 – 29 a: Increase the proportion of adults aged 65 and older who have ever had a pneumonia vaccination against streptococcus pneumoniae.
Healthy Maine 2010 Baseline: 57%
Healthy Maine 2010 Target:: 75%

LEVEL I (WHO Phase 3)
Human infection(s) with a new subtype, but no human-to-human spread, or at most rare instances of spread to a close contact.

1. Continue pandemic planning, confirming vaccine distribution sites and developing a distribution plan, including the development of contract language.

LEVEL II (WHO Phase 4)
Small cluster(s) with limited human-to-human transmission but spread is highly localized, suggesting that the virus is not well adapted to humans.

1. Planning

   a. The Maine Bureau of Health will review CDC developed materials to assure that all Maine non-English speaking populations have access to translated CDC-developed VIS.

   b. The Maine Bureau of Health will distribute camera-ready copies of English and translated versions of the VIS to designated agencies.

   c. The Maine Bureau of Health will determine if training sessions are necessary for local agency staff in order to acquaint them with issues related to the delivery of vaccines.

   d. Utilizing criteria established for the Maine MEDS program, decisions will be made concerning supplies for vaccine administration e.g., syringe, emergency kits to manage anaphylaxis, alcohol wipes, etc.).

LEVEL III (WHO Phase 5)
Larger cluster(s) but human-to-human spread still localized, suggesting that the virus is becoming increasingly better adapted to humans, but may not yet be fully transmissible.

1. Priority Groups
   a. The Bureau of Health will notify all health care providers of the need to vaccinate persons age 65 and persons recommended by ACIP (MMWR 1997; v46:No.RR-8) with pneumococcal vaccine as a method of decreasing morbidity and mortality associated with pandemic influenza.

   b. The Bureau of Health will notify the media to inform the general public of the need for persons 65 and other persons high-risk persons to receive pneumococcal vaccine as defined by ACIP.

   c. Pneumococcal vaccine will be distributed and administered by Bellco Drug and Health Company.

LEVEL IV (WHO Phase 6)
Pandemic Phase: Increased and sustained transmission in the general population.

1. Maine DHHS will continue efforts to notify providers and persons recommended by ACIP to receive pneumococcal vaccine as described above.

2. SNS is mobilized

LEVEL V Post-Pandemic
Indices of influenza activity have returned to pre-pandemic levels

1. Maine DHHS will continue efforts to notify providers and persons recommended by ACIP to receive pneumococcal vaccine.

VIII. Antivirals

Antiviral drugs for influenza are an important adjunct to influenza vaccine for the control and prevention of non-pandemic influenza. Four currently approved agents are available in the United States: amantadine, rimantadine, zanamivir, and oseltamivir. Amantadine and rimantadine are chemically related antiviral drugs with activity against influenza A viruses, but not influenza B viruses. Zanamivir and oseltamivir are neuraminidase inhibitors with activity against both influenza A and B viruses. A pandemic strain may be resistant to one or more of the antivirals currently available.

See Table 1. Antiviral Drugs Approved for Influenza by FDA, page 25.

Antiviral drug	Year approved	Approved use	Influenza strains affected by drug	Approved population	Cost per adult treatment
Amantadine (Symmetrel)	1976	prophylaxis and treatment	A strains	≥ 1 year of age	$5.80
Rimantadine (Flumadine)	1993	prophylaxis and treatment	A strains	≥1 year of age	$16.10
Zanamivir (Relenza)	1999	treatment	A and B strains	≥7 years of age	$57.00
Oseltamivir (Tamiflu)	1999	prophylaxis and treatment	A and B strains	≥1 year of age for treatment and ≥13 years of age for prophylaxis	$72.10

- Cost for 5 days' treatment at adult dosage using generic formulations when available according to Medical Letter, 10/25/04.

1. There are a number of formidable problems and limitations associated with widespread use of these antiviral agents during a pandemic:

   a. Under present circumstances, the supply of these drugs would be well below the anticipated demand during an influenza pandemic.

   b. Relative priorities regarding target groups and the use of limited supplies for chemoprophylaxis versus therapy have not yet been established.

   c. A pandemic strain may be resistant to the currently available antivirals or may develop resistance after widespread use of antivirals.

   d. Adverse reactions.

   e. Cost.

f. Stockpiling antivirals is complicated by the fact that the drugs have expiration dates.

g. Legal issues.

2. The federal government is assessing the best use of antiviral medication during a pandemic. It should be assumed that antiviral drugs will be reserved for high priority groups that have yet to be determined. The federal government will be considering ways in which limited supplies may be distributed and used equitably. It is anticipated that the CDC will release the national pandemic flue plan in August 2005 in which priority groups for anti-virals will be identified. Maine's plan for use of anti-virals during a pandemic is expected to be based on these recommendations.

The purpose of antiviral pandemic influenza planning in the Maine Guidelines is to establish a contingency distribution system of antivirals for individuals in priority groups, as established by the federal government. The above guidelines utilized for the 2004-2005 season are one example of how groups may be prioritized for antiviral use.

Pre-pandemic (WHO Phase 1,2)
No new influenza virus subtypes have been detected in humans. An influenza virus subtype that has caused human infection may be present in animals, or a circulating animal influenza poses a substantial risk of human disease.

1. The Bureau of Health will develop and maintain a list of distributors of antivirals in Maine and attempt to determine baseline consumption levels.

2. The Bureau of Health will inventory pharmaceutical providers to determine the supply of antiviral drugs in Maine.

3. The Bureau of Health will estimate the baseline use of amantadine for patients with diseases such Parkinson's disease.

4. The Bureau of Health, in collaboration with partners, will consider the advisability of a state stockpile of anti-virals.

5. The Bureau of Health will plan a statewide distribution system for antivirals in coordination with pre-existing plans for the Strategic National Stockpile.

LEVEL I (WHO Phase 3)
Human infection(s) with a new subtype, but no human-to-human spread, or at most rare instances of spread to a close contact.

1. The Bureau of Health will review CDC guidelines and the current antiviral supply estimates to determine the appropriate use of the limited antiviral supply including the identification of priority groups and management of antivirals in the private sector.

LEVEL II (WHO Phase 4)
Small cluster(s) with limited human-to-human transmission but spread is highly localized, suggesting that the virus is not well adapted to humans.

1. Continue activities as above

LEVEL III (WHO Phase 5)
Larger cluster(s) but human-to-human spread still localized, suggesting that the virus is becoming increasingly better adapted to humans, but may not yet be fully transmissible.

1. The Bureau of Health will consider activating and distributing antivirals as available.

2. The Bureau of Health will consider redistribution of pharmacy antiviral supplies.

LEVEL IV (WHO Phase 6)
Pandemic Phase: Increased and sustained transmission in the general population.

1. Continue distribution and use of antiviral as indicated.

LEVEL V Post-Pandemic
Indices of influenza activity have returned to pre-pandemic levels

1. Discontinue antiviral distribution system.

IX. Community-based Containment Measures

A. 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 Maine, authority to mandate involuntary quarantine and isolation is granted to the Director of the Bureau of Health (BOH) (LD-1405).

Following the 2003 Severe Acute Respiratory Syndrome (SARS) 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:

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

B. 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.

Grouping 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:

1. When possible, place patients with documented or suspected influenza in a private room
2. When the number of patients with influenza exceeds the available private rooms, try to place influenza cases together in multi-bed rooms or wards
3. When patients with and without influenza must be placed in a room together, try to avoid including uninfected patients most susceptible to influenza complications

4. 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)
5. 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).

Basic Activities (Level I & II)

1. 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.
2. Isolation facilities should meet the following minimum requirements:
    a. Primary caregiver (family member) available, if necessary, to assist the patient with basic needs
    b. Functioning telephone, electricity, and drinkable water
    c. Separate bedroom that will be occupied only by the influenza case and with a door that can be kept closed at all times
    d. Separate bathroom that is designated for use only by the influenza case
3. 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).
4. 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.
5. All persons in contact with the influenza case should be educated regarding appropriate infection control practices, including hand hygiene and environmental decontamination. See www.mainpublichealth.gov for more information.

6. 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.

Enhanced Activities: Isolation of Influenza Patients in Community Facilities (Level III & IV)

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.

1. 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")
2. Consider the following features in assessing appropriateness of sites:
    a. Separate rooms for patients
    b. Independent ventilation for each room
    c. Access control to each room
    d. Availability of potable water, bathroom, and shower facilities
    e. Capacity for providing basic needs to patients
    f. Rooms and corridors amenable to disinfection
    g. Facilities for collecting and disposing of waste materials
    h. Facilities for collecting and laundering items
    i. Ease of access for delivery of supplies
    j. Legal/property considerations
    k. Ability to support appropriate infection control measures
    l. Availability of food services and supplies
    m. Ability to provide an environment that supports the social and psychological well-being of patients
    n. Ability to support appropriate medical care
    o. Access to communication systems that allow for dependable communication within and outside the facility (telephones)

C. Management of Contacts to Influenza Cases

Basic Activities (Level II & III)

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:

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

Enhanced Activities (Level III & IV)

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:

1. Individuals with close contact (e.g., household contact) to a known influenza case
2. Small groups with close contact (e.g., co-workers, health care workers with unprotected exposure) to an influenza case
3. Larger groups with an unspecified extent of exposures (e.g., social groups, persons in congregate settings, passengers on airplanes) to an influenza case
4. 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:

1. 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.
2. 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 be quarantined in specific facilities (motels, nursing homes, apartments, etc.) designated for this purpose.
3. 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:

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

D. 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 BOH should be contacted for further instructions.

E. 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, number of cases per town, number of cases per week, 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 BOH, through the IMS structure and with guidance from the CDC, may carry out both basic and enhanced activities to curb the spread of illness within ME, as follows.

Basic Activities (Level II & III)

1. BOH will provide community information and education about influenza, its spread, and how to prevent transmission
2. BOH will promote practices of "respiratory hygiene" and hand hygiene, as a means for the general public to protect itself

Enhanced Activities (Level III & IV)

1. Enhanced activities may include:
2. Institute "snow days" or "shelter in place"
3. Suspend public gatherings
4. Monitor fever in public places
5. Close public buildings and spaces
6. Cancel public events
7. Close non-essential government functions (public library, etc.)
8. 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:

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

F. Communications

A. 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 ME 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. BOH emergency communications function includes utilization of the following: personnel currently employed by local health departments; federal, State, and local resources and equipment; and volunteers necessary to coordinate and distribute information.

B. Communications at Level I & II

As part of its day-to-day activities, BOH 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 Office of Public Health Emergency Preparedness (OPHEP) will ensure that the proper personnel give out the appropriate information. Division of Disease Control (DDC) 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.

C. Communications at Level III & IV

1. The BOH Director 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.
2. The OPHEP Director will collaborate with the Director, Division of Disease Control, the BOH Director, the Governor's Office and other appropriate State agencies, government officials, and community partners as required.
3. The State Epidemiologist will disseminate, through the Health Alert Network (HAN), additional influenza surveillance recommendations to all ME hospitals, health care providers, and appropriate sub-specialist (i.e., pulmonologists, infectious disease specialists) as necessary.
4. The State Epidemiologist will disseminate, through the HAN, updated diagnostic, isolation, and treatment recommendations to all ME hospitals, health care providers, and emergency management officials.
5. The State Epidemiologist will disseminate through the HAN updates on the status of the pandemic to all ME hospitals and health care providers. Daily information may also be available to health care facilities and providers through web-based sources.
6. The State Epidemiologist will disseminate, through the HAN, updates on clinical laboratory specimen collection and handling to all ME clinical laboratories.

D. 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:

1. Provide surgical masks to all patients with symptoms of a respiratory illness; provide instructions on the proper use and disposal of masks
2. 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

3. Provide hand hygiene materials in waiting room areas and encourage patients with respiratory symptoms to perform hand hygiene
4. 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
5. Place patients with respiratory symptoms in a private room or cubicle as soon as possible for further evaluation
6. Implement use of surgical or procedure masks by health care personnel during the evaluation of patients with respiratory symptoms
7. Consider the installation of Plexiglas barriers at the point of triage or registration to protect health care personnel from contact with respiratory droplets
8. 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
9. 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 BOH website at www.mainepublichealth.gov.

E. Preparedness Checklist for Community Containment

1. General
    a. Establish a local incident command structure that can be used for influenza pandemic response
    b. Establish a legal preparedness plan
    c. Establish relationships with essential partners, such as law enforcement, first responders, health care facilities, and the legal community
    d. 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
    e. Develop message strategies for the public, government decision makers, health care and emergency response providers, and the law enforcement community

F. Management of Cases and Contacts (including Quarantine)

    a. Develop protocols, tools, and databases for
        i. Case surveillance
        ii. Clinical evaluation and management
        iii. Contact tracing, monitoring, and management
        iv. Reporting criteria
    b. Develop standards and tools for home and non-hospital isolation and quarantine
    c. Establish supplies for non-hospital management of cases and contacts

d. Establish a telecommunications plan for "hotlines" or other services for
    i. Case and contact monitoring and response
    ii. Fever triage
    iii. Public information
    iv. Provider information
e. Plan to ensure provision of essential services and supplies to those in isolation and quarantine, including:
    i. Food and water
    ii. Shelter
    iii. Medicines and medical consultations
    iv. Mental health and psychological support services
    v. Other supportive services, e.g., day care, etc.
    vi. Transportation to medical treatment, if required
f. Plan to address issues of compensation, job security, and prevention of stigmatization
g. Non–Hospital-Based Isolation of Cases
h. Identify appropriate community-based facilities for isolation of cases without substantial health care requirements
i. Develop policies related to use of these facilities
j. 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
k. Ensure that required procedures for assessment of potential isolation sites are available and up to date
l. Ensure that legal authorities and procedures are in place to implement the various levels of movement restrictions as necessary
m. Identify key partners and personnel for the implementation of movement restrictions, including quarantine, and provision of essential services and supplies:
    i. Law enforcement
    ii. First responders
    iii. Other government service workers
    iv. Utilities
    v. Transportation Industry
    vi. Local businesses
    vii. Schools and school boards
n. Develop training programs and drills
o. Ensure training in PPE for all identified responders and providers as necessary
p. Develop plans for mobilization and deployment of public health and other community service personnel

X. Emergency response: Health and Medical and Maintenance of Critical Services

All State and local governments are required to have an emergency management plan which addresses all hazards. However, pandemic influenza is likely to pose unique challenges that may not be addressed in current emergency management plans. For example, in most emergency situations, notification and response is initiated at the local level, followed by state then federal notification and response. In the event of pandemic influenza, notification and response is most likely to be initiated at the national or international level, then state and finally local. Because of

these unique challenges, emergency management plans should incorporate a pandemic influenza plan as an appendix to an existing all hazards plan.

Pre-pandemic (WHO Phase 1,2)

No new influenza virus subtypes have been detected in humans. An influenza virus subtype that has caused human infection may be present in animals, or a circulating animal influenza poses a substantial risk of human disease.

1. The Bureau of Health will coordinate with Regional Resource Centers, hospitals, local healthcare agencies, and local emergency management agencies as needed to obtain an inventory of medical supplies, facilities and services. From information provided by local agency personnel, the Maine Bureau of Health will maintain a statewide inventory. The following services/items will be inventoried:

    a. Medical personnel, including but not limited to: currently licensed physicians, physician assistants, Advanced Practice Registered Nurses (APRN), registered nurses, infection control practitioners, respiratory therapists, licensed practical nurses, medical assistants, and other persons who may be trained in the event of an emergency (e.g., persons with previous patient care experience who currently work outside of patient care).
    b. Beds (hospital and long-term care)
    c. ICU Capacity (adult and pediatric critical care beds)
    d. Ventilators (adult and pediatrics)
    e. Pharmacies, pharmacists, and vendors of pharmaceutical products
    f. Contingency medical facilities (within the jurisdiction)
    g. Mortuary/Funeral Services
    h. Social Services/ Mental Health Services/ Faith Services
    i. Sources of medical supplies (e.g., syringes, gloves)
    j. Hospital Isolation Capacity
    k. Alternate Care Plans
    l. Anti-viral Medications available in state in usual flu season
    m. Routine notifiable disease reporting mechanism
    n. Transport capacity
    o. Out-patient Medical facilities
    p. Available supplies on emergency transport vehicles

2. In collaboration with the Bureau of Health Director, the OPHEP Medical Director will convene the BOH Pandemic Influenza Response Team. The BOH Pandemic Influenza Workgroup will, in collaboration with the BOH Incident Management Team, Information Unit Leader, be responsible for developing recommendations on health issues related to pandemic influenza. The OPHEP Medical Director, in collaboration with the Bureau of Health Director (or designee) will have the final authority to implement the recommendations of the BOH Pandemic Influenza Workgroup.

3. The BOH Pandemic Influenza Response Team will be responsible for estimating the impact of pandemic influenza on health care services, high-risk groups, preventive action recommendations and health-related needs during the pandemic.

4. The Maine BOH Pandemic Influenza Response Team will include: Designated members of the Bureau of Health Incident Management Team and additional BOH staff as deemed appropriate. Input may be solicited from local hospitals and agencies.

5. The BOH Pandemic Influenza Workgroup may request the assistance of technical advisors to provide feedback and support for the Bureau of Health Pandemic Influenza Plan. Bureau of Health Senior Management will determine appropriate advisors that may include: infectious disease physicians, primary care physicians, pulmonologists, emergency medical service representatives, and experts in other related fields. See Appendix G: List of Possible Technical Advisors.

6. An estimate of the impact of pandemic influenza on essential services will be made using estimates developed by the BOH Pandemic Influenza Workgroup.

7. The BOH Pandemic Influenza Workgroup will convene annually to review the existing pandemic influenza plan. The Public Health Emergency Preparedness Coordinator is responsible for convening the workgroup for the purpose of maintaining, updating, and reviewing the plan to ensure workability.

<u>LEVEL I (WHO Phase 3)</u>
Human infection(s) with a new subtype, but no human-to-human spread, or at most rare instances of spread to a close contact.

1. International Identification notification

   a. In collaboration with the Bureau of Health Director, the Director, Division of Disease Control will notify members of the BOH Pandemic Influenza Response Team of human infection(s) with a new subtype, but no human-to-human spread, or at most rare instances of spread to a close contact.

   b. Maine Bureau of Health will notify appropriate members of the BOH IMS Team, Regional Medical Officers, Regional Epidemiologists, and as appropriate, hospitals including Regional Resource Centers of human infection(s) with a new subtype, but no human-to-human spread, or at most rare instances of spread to a close contact.

c. Using the HAN, predetermined local partners will be notified of human infection(s) with a new subtype, but no human-to-human spread, or at most rare instances of spread to a close contact.

2. North American Identification Notification

a. In collaboration with the Bureau of Health Director, the Director, Division of Disease Control will notify members of the BOH Pandemic Influenza Response Team of human infection(s) with a new subtype, but no human-to-human spread, or at most rare instances of spread to a close contact.

b. In collaboration with the Bureau of Health Director, the Director, Division of Disease Control will notify appropriate members of the BOH IMS Team, Regional Resource Centers, Regional Medical Officers, Regional Epidemiologists, and hospitals of human infection(s) with a new subtype, but no human-to-human spread, or at most rare instances of spread to a close contact.

c. Laboratories will be notified though the Laboratory Notification System.

d. Using the HAN, predetermined local partners will be notified of human infection(s) with a new subtype, but no human-to-human spread, or at most rare instances of spread to a close contact.

e. Bureau of Health will notify local emergency managers and other state agencies.

f. Local emergency managers will be instructed to notify other agencies within the jurisdiction as appropriate.

LEVEL II (WHO Phase 4)
Small cluster(s) with limited human-to-human transmission but spread is highly localized, suggesting that the virus is not well adapted to humans.

1. International Circulation
   a. Notification

      i. In collaboration with the Bureau of Health Director, the Director, Division of Disease Control will notify members of the BOH Pandemic Influenza Workgroup Health Team when human-to-human transmission is confirmed.

      ii. Maine Bureau of Health will notify appropriate members of the BOH IMS Team, Regional Medical Officers, Regional Epidemiologists, and as appropriate, hospitals including Regional Resource Centers of small cluster(s) with limited human-to-human transmission but spread is highly localized, suggesting that the virus is not well adapted to humans.

iii. Laboratories will be notified though the Laboratory Notification System.

iv. Bureau of Health will notify local emergency managers and other state agencies.

v. Local emergency managers will be instructed to notify other agencies within the jurisdiction as appropriate.

b. Planning

i. Members of the BOH Pandemic Influenza Response Team will convene and function as the planning and assessment section of the BOH IMS Team. The team will review the Maine Pandemic Influenza Plan and formulate scenarios and strategies to manage pandemic influenza in Maine. Additional technical advisors may be asked to participate on the BOH Pandemic Influenza Response Team as appropriate. The Bureau of Health Director, and OPHEP Medical Director will consult with the BOH IMS Team Operations Unit Leader and the will be responsible for determining which technical advisors should be included on the team.

ii. The BOH Director in collaboration with other Pandemic Influenza Response Team members and partners will review the current BGOH authority for managing large infectious disease outbreaks and propose legal changes as needed.

The BOH in collaboration with the Regional Resource Centers and partners will review local response plans, management and equipment with a view to developing surge capacity to handle 4000 additional hospital admissions, taking up 23% of hospital capacity and 25% of hospital ventilators, as well as 165,000 out-patient visits with significant impact expected on emergency rooms. Plans should include attention to pre-hospital triage, the need for additional medical personnel, personal protective equipment, pharmaceutical caches, transfer, diversion, elective surgery, early release and appropriate use of alternate care facilities. Behavioral health issues should also be addressed.

c. Inventory

i. Services/items cited to be inventoried and updated during the pre-pandemic period will be re-inventoried and assessed for readiness.

2. North American Circulation

a. Notification

i. In collaboration with the Bureau of Health Director, the OPHEP Medical Director will notify members of the BOH Pandemic Influenza Workgroup of human-to-human transmission confirmed case.

ii. Maine Bureau of Health will notify appropriate members of the BOH IMS Team, Hospitals including Regional Resource Centers, Regional Medical Officers, Regional Epidemiologists, and as appropriate, of a human-to-human transmission confirmed case.

iii. Laboratories will be notified though the Laboratory Notification System.

iv. The Bureau of Health will notify other state agencies and local emergency managers.

v. Using the HAN, predetermined local partners will be notified of human-to-human transmission confirmed case.

vi. Local emergency managers will be instructed to notify other agencies within the jurisdiction as appropriate.

b. Planning

i. Members of the BOH Pandemic Influenza Response Team will meet as a planning and assessment section. They will review the pandemic plan and formulate scenarios and strategies to manage pandemic influenza in Maine. The Bureau of Health Director, and OPHEP Medical Director, will consult with the BOH IMS Team Operations Unit Leader and the will be responsible for determining which technical advisors should be included on the team.

ii. Based on CDC guidelines, the BOH will work with Regional Resource Centers, hospitals, physicians, infection control practitioners, and community outpatient facilities to develop Maine guidelines for triage and treatment of influenza patients in outpatient, inpatient, and non-traditional settings.

iii Based on CDC Guidelines for reducing community transmission, the BOH Pandemic Influenza Response Team will develop protective action recommendations to be implemented during the pandemic.

iv. Operations, logistics, finance, and planning sections of the BOH IMS Team will be activated, as appropriate.

LEVEL III (WHO Phase 5)
Larger cluster(s) but human-to-human spread still localized, suggesting that the virus is becoming increasingly better adapted to humans, but may not yet be fully transmissible.

1. International Circulation
   a. Notification

i. In collaboration with the Bureau of Health Director, the OPHEP Medical Director will notify members of the BOH Pandemic Influenza Response Team of a pandemic imminent alert, indicating human-to-human spread still localized, suggesting that the virus is becoming increasingly better adapted to humans, but may not yet be fully transmissible.

ii. The Maine Bureau of Health will notify appropriate members of the BOH IMS Team, and as deemed appropriate, hospitals including Regional Medical Officers, Infection Control Practitioners, Regional Epidemiologists, and Regional Resource Centers of a pandemic imminent alert, indicating human-to-human spread still localized, suggesting that the virus is becoming increasingly better adapted to humans, but may not yet be fully transmissible.

iii. Laboratories will be notified though the Laboratory Notification System.

iv. The Bureau of Health will notify other state agencies and local emergency managers.

v. Using the HAN, predetermined state level and local partners will be notified of a pandemic imminent alert.

vi. Local emergency managers will be instructed to notify other agencies within the jurisdiction as appropriate.

b. Planning

i. Members of the BOH Pandemic Influenza Workgroup will meet as the planning and assessment section of the BOH IMS Team. They will review the pandemic plan and formulate scenarios and strategies to manage pandemic influenza in Maine. The Bureau of Health Director and OPHEP Medical Director will consult with the BOH IMS Team Operations Unit Leader and the will be responsible for determining which technical advisors should be included on the team.

ii. Based on CDC guidelines, the BOH Pandemic Influenza Workgroup will develop Maine guidelines for triage and treatment of influenza patients in outpatient, inpatient, and non-traditional settings.

iii. Based on the disease epidemiology, the BOH Pandemic Influenza Workgroup will develop protective action recommendations to be implemented during the pandemic.

iv. Operations, logistics, finance, and planning sections of the BOH IMS Team will be activated, as appropriate.

2. North America Circulation
   a. Notification

      i. In collaboration with the Bureau of Health Director and the OPHEP Medical Director, the Director, Division of Disease Control will notify members of the BOH Pandemic Influenza Response Team of a pandemic imminent alert, indicating human-to-human spread still localized, suggesting that the virus is becoming increasingly better adapted to humans, but may not yet be fully transmissible.

      ii. The Maine Bureau of Health will notify appropriate members of the BOH IMS Team, and as deemed appropriate, hospitals including Regional Resource Centers, Regional Medical Officers, Regional Epidemiologists, and infection control practitioners of a pandemic imminent alert, indicating human-to-human spread still localized, suggesting that the virus is becoming increasingly better adapted to humans, but may not yet be fully transmissible.

      iii. Laboratories will be notified though the Laboratory Notification System.

      iv. The Maine Bureau of Health will notify other state agencies and local emergency managers.

      v. Using the HAN, predetermined local partners will be notified of a pandemic imminent alert.

      vi. Local emergency managers will be instructed to notify other agencies within the jurisdiction as appropriate.

   b. Implementation

      i. In consultation with the Bureau of Heath Director and BOH IMS Operations Officer, the Bureau of Health Situation Room will be fully activated to manage needs of health, medical, and essential service agencies.

      ii. State and Local government, health care, and essential service agencies will respond to the pandemic per current emergency operations plans at the respective agencies.

<u>LEVEL IV (WHO Phase 6)</u>
Pandemic Phase: Increased and sustained transmission in the general population.

1. Notification
   a. The Bureau of Health Director and OPHEP Medical Director, in consultation with the Director, Division of Disease Control will notify the BOH Pandemic Influenza Response Team of increased and sustained transmission in the general population.

b. The Maine Bureau of Health will notify appropriate members of the BOH IMS Team, and as deemed appropriate, Regional Resource Centers, hospitals, Regional Medical Officers, Regional Epidemiologists, and infection control practitioners of increased and sustained transmission in the general population.

c. Laboratories will be notified though the Laboratory Notification System.

d. The Bureau of Health will notify other state agencies and local emergency managers.

e. Using the HAN, predetermined local partners will be notified of increased and sustained transmission in the general population.

f. Local emergency managers will be instructed to notify other agencies within the jurisdiction as appropriate.

2. Implementation

a. In consultation with the Bureau of Heath Director and BOH IMS Team Operations Unit Leader, the Bureau of Health Situation Room will be fully activated to manage needs of health, medical, and essential service agencies.

b. State and Local government, health care, and essential service agencies will respond to the pandemic per current emergency operations plans at the respective agencies.

LEVEL V Post-Pandemic
Indices of influenza activity have returned to pre-pandemic levels

1. Notification

a. The Bureau of Health Director and OPHEP Medical Director, in consultation with the Director, Division of Disease Control will notify the BOH Pandemic Influenza Response Team of Post-Pandemic Phase.

b. Maine Bureau of Health will notify appropriate members of the BOH IMS Team, and as deemed appropriate, Infection Control Practitioners, Regional Resource Centers, Regional Medical Officers, and Regional Epidemiologists, of Post-Pandemic Phase.

c. Laboratories will be notified though the Laboratory Notification System.

d. The Bureau of Health will notify other state agencies and local emergency managers.

e. Using the HAN, predetermined local partners will be notified of Post-Pandemic Phase

f. Local emergency managers will be instructed to notify other agencies within the jurisdiction as appropriate.

2. Implementation

a. Staffing of the Bureau of Health Situation Room will be reduced to reflect the diminishing response requirement.

b. State and Local government, healthcare, and essential service agencies will respond to the recovery per current Emergency Operating Procedures at the respective agency.

3. Evaluation

a. The Bureau of Health will assess the impact, response, and control of the pandemic.

c. The Bureau of Health will summarize the pandemic response and record lessons learned for future pandemic situations.

XI. Communications: Hardware, Software, Procedures and Content

Communication response to pandemic influenza is adapted from the Maine Bureau of Health, Public Health Emergency Risk Communication Plan.

A. Identification and Notification of Key Individuals – Horizontal Communications

1. The Bureau of Health Director and OPHEP Medical Director, in consultation with the Director, Division of Disease Control will notify the BOH Pandemic Influenza Response Team and identify additional staff as deemed appropriate.

2. The Bureau of Health Director, in consultation with the OPHEP Medical Director and BOH IMS Team Operations Unit Leader will develop and coordinate communication with health care professionals following protocol described in the Maine Bureau of Health, Public Health Emergency Risk Communication Plan.

3. The BOH IMS Team Information Unit will identify and notify appropriate state and local officials/contacts and public health staff to coordinate general public messages and pandemic response.

4. The BOH IMS Team Information Unit will identify and notify federal and other state agencies, appropriate organizations and response team as designated in the Maine Pandemic Influenza Plan (e.g., Red Cross, CDC, FDA), as necessary.

5 The BOH IMS Team Information Unit will provide information on the status of the response to local officials and notify local providers of recommendations to protect their client populations.

<u>Pre-pandemic (WHO Phase 1,2)</u>
No new influenza virus subtypes have been detected in humans. An influenza virus subtype that has caused human infection may be present in animals, or a circulating animal influenza poses a substantial risk of human disease.

1. Public Information and Media Communications:

   a. Issue Identification:
   The BOH IMS Team Information Unit Leader, in consultation with Bureau of Health Administration and Division of Disease Control staff, will follow procedures outlined in the Maine Bureau of Health, Public Health Emergency Risk Communications Plan. Included will be the identification of health issues and concerns that will or may need to be addressed for health care professionals regarding pandemic influenza.

   b. Targeting Communication:
   The BOH IMS Team Information Unit Leader in consultation with the Bureau of Health Director and Division of Disease Control staff, will identify affected target audiences for messages dealing with issues and concerns regarding pandemic influenza.

   c. Message Development:
   The BOH IMS Team Information Unit Leader will develop audience-appropriate messages addressing identified issues and concerns. Whenever available, messaging templates should be utilized.

      i. Messages will address, but are not limited to: vaccine supply, antiviral use, infection control, reducing disease transmission, and maintenance of essential services.

      ii. Identification of strategies for message delivery identifies appropriate channels, vehicles and strategies for dissemination of messages including Internet postings. Refer to Maine Bureau of Health Emergency Public Health Risk Communication Plan.

      iii. The Bureau of Health Director will appoint a media spokesperson , who will serve as the media spokesperson on specific technical and policy issues, based on the type and magnitude of the emergency.

      iv. Develop prepared media products including pre-scripted news releases, fact sheets, talking points, and other vehicles - in advance of pandemic influenza. CDC will also be preparing materials that may be used as resources.

         aa. Materials will focus on previously identified issues and concerns, and incorporate messages that have been developed to address those concerns.

      v. The BOH IMS Information Team will identify and prepare necessary logistical support on media relations and other emergency communications activities, including:

         aa. Venues for the holding of news conferences, media briefings and other communications-related activities.

bb. Computers, phones, fax machines, Internet and modem connections, HAN and other necessary hardware/software or systems.

2. Communication with Health Care Professionals

a. Issue Identification:
The BOH IMS Team Information Unit Leader in consultation with Bureau of Health Administration and Division of Disease Control staff, will follow procedures outlined in the Maine Bureau of Health, Public Health Emergency Risk Communications Plan. Included will be the identification of health issues and concerns that will or may need to be addressed for health care professionals regarding pandemic influenza.

b. Targeting of Communications:
The BOH IMS Team Information Unit Leader in consultation with the Bureau of Health Director and Division of Disease Control staff, will identify affected target audiences and communication channels for messages regarding pandemic influenza.

c. Message Development:
The BOH IMS Team Information Unit Leader will develop audience-appropriate messages addressing identified issues and concerns. Whenever available, messaging templates should be utilized.

d. Web-based communications systems will be utilized to communicate with Bureau of Health staff, regional staff and health care professionals. Staff and health care professionals will be informed about access to web-based communications via HAN.

LEVEL I (WHO Phase 3)
Human infection(s) with a new subtype, but no human-to-human spread, or at most rare instances of spread to a close contact.

1. Communication efforts will continue as described above in the Pre-Pandemic Phase.

LEVEL II (WHO Phase 4)
Small cluster(s) with limited human-to-human transmission but spread is highly localized, suggesting that the virus is not well adapted to humans.

1. Once the BOH IMS Team is activated, The BOH IMS Team Information Unit Leader in consultation with the Bureau of Health Director and Division of Disease Control staff will coordinate Maine BOH participation in the Public Information Center. Maine BOH activities will proceed as outlined in the Maine Bureau of Health Public Health Emergency Risk Communication Plan.

2. Public Information and Media Communications in the Absence of BOH IMS Team activation:

a. Coordination of Informational Activities:
The BOH IMS Team Information Unit Leader in consultation with Bureau of Health Administration and Division of Disease Control staff, will coordinate release of information about the emergency, either through formal vehicles (news releases, fact sheets, briefing papers) or through informal contact with the media (*e.g., ad hoc* response to inquiries from media).

i. BOH IMS Team Information Unit staff in consultation with Bureau of Health Administration will coordinate the overall response to the media, including scheduling of news conferences and media briefings, on a regular or as-needed basis.

ii. Only appropriately designated staff or management spokespersons will be responsible for communicating with and through the media.

iii. BOH IMS Information Team staff in consultation with Bureau of Health Administration will serve as media spokespersons when necessary or appropriate.

b. Control of Media Access:
BOH IMS Team Information Unit staff in consultation with Bureau of Health Administration will coordinate media access to Maine Bureau of Health staff, and to field activities relating to the disaster or emergency, in order to ensure consistency of messages and avoid disruption of response activities as appropriate. If necessary, media access will be restricted to regularly scheduled media briefings.

c. Issue Tracking / Coordination of Communications Response:
BOH IMS Team Information Unit staff will coordinate tracking of unanticipated issues and concerns that may arise during the course of an emergency, and coordinate the development and dissemination of targeted response messages. Issue tracking will include tracking of rumors and misinformation relating to the emergency, development of response messages, and selection of vehicles for delivering an appropriately targeted response.

d. Briefing of Information / Communications staff:
Bureau of Health Administration will provide briefings and updates to BOH IMS Team Information Unit staff, as necessary, so that current information about the emergency is available for dissemination to the media, public, and Bureau of Health staff.

e. Message Coordination:
Coordinate information activities with other State and local agencies and organizations involved in the emergency response, including but not limited to public health.

f. BOH IMS Team Information Unit staff in consultation with Bureau of Health Administration will ensure consistency of health-related messages disseminated
by, and through, other agencies and organizations involved in the emergency response.

i. BOH IMS Team Information Unit staff in consultation with Bureau of Health Administration will ensure effective communication between and among agencies and organizations regarding the timing and content of information released to the media.

g. Communications Resources:
The BOH IMS Team Finance & Administration Information Unit staff will ensure availability of appropriate resources for communications activities, including equipment, facilities and venues for media events, in the event of an influenza pandemic.

3. Communication with Health Care Professionals:
BOH IMS Information Team staff will be responsible to communicate pandemic response updates and recommendations to targeted health care professionals.

LEVEL III (WHO Phase 5)
Larger cluster(s) but human-to-human spread still localized, suggesting that the virus is becoming increasingly better adapted to humans, but may not yet be fully transmissible.

1. Communication efforts will continue as described above in the human transmission of novel influenza virus confirmed.

LEVEL IV (WHO Phase 6)
Pandemic Phase: Increased and sustained transmission in the general population.

1. Communication efforts will continue as described above in the human transmission of novel influenza virus confirmed.

LEVEL V Post-Pandemic
Indices of influenza activity have returned to pre-pandemic levels

1. Communication efforts will continue as described above in the human transmission of novel influenza virus confirmed.