State of Alaska

PANDEMIC INFLUENZA PLAN

ANNEX C
APPENDIX 1

DRAFT

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Department of Health and Social Services
Division of Public Health
Section of Epidemiology

Glossary of Abbreviations and Acronyms

ASHNHA	**Alaska State Hospital and Nursing Home Association**
ASVL	**Alaska State Virology Lab**
CDC	**Centers for Disease Control**
CHEMS	**Community Health and Emergency Medical Service**
DHSS	**Alaska Department of Health & Social Services**
DHSS/DPH	**Alaska Department of Health & Social Services Director of Public Health**
DPH	**Division of Public Health**
DPHEOC	**Division of Public Health Emergency Operations Center**
EIT	**Epidemiology Investigation Team**
EOC	**Emergency Operations Center**
EOP	**Emergency Operations Plan**
ESC	**Epidemiology Section Chief**
HAN	**Health Alert Network**
HCP	**Health Care Providers**
IC	**Incident Commander**
ICS	**Incident Commander System**
IP	**Immunization Program**
IT	**Information Technology**
IPM	**Immunization Program Manager**
ISC	**Influenza Surveillance Coordinator**
MOA	**Municipality of Anchorage**
PHC	**Public Health Center**
PHEOP	**State Division of Public Health Emergency Operations Plan**
PHN	**Public Health Nurse**
PIO	**Public Information Officer**

PIPC	**Pandemic Influenza Planning Committee**
PPEC	**Pandemic Planning Executive Committee**
PPC	**Pandemic Planning Coordinator**
PPM	**Preparedness Program Manager**
SECC	**State (of Alaska) Emergency Coordinating Center**
SNS	**Strategic National Stockpile (formerly National Strategic Stockpile: NPS)**
SNS	**Strategic National Stockpile Program Manager**
SNS/HCSVP	**Strategic National Stockpile Hub Community Site Visit Program**
SOA	**State of Alaska**
SOE	**Section of Epidemiology**
SOPHN	**Section of Public Health Nursing/Alaska Division of Public Health/Alaska Department of Health and Social Services**
VPSO	**Village Public Safety Officer**
VS	**Vital Statistics**

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Alaska Pandemic Influenza Plan

The total number of Alaskans who were stricken by Spanish influenza between October 1918 and April 1919 is beyond the reach of any but the wildest kind of speculation.

America's Forgotten Pandemic: The influenza of 1918
Alfred W. Crosby, 1989

I. INTRODUCTION TO INFLUENZA PANDEMICS

Some time in the future, the US will face an influenza pandemic—a global epidemic caused by a strain of influenza virus that spreads rapidly and causes extraordinarily high rates of illness and death. No one can predict exactly when this will happen but scientists say it could be within five to 10 years. An influenza pandemic has a greater potential to cause rapid increases in death and illness than virtually any other natural health threat. Planning and preparedness before the next pandemic strikes—the inter-pandemic period—is critical for an effective response. Most experts believe we will have between one and six months between the time an influenza pandemic is first identified globally and the time that outbreaks begin in Alaska.

Influenza causes seasonal epidemics of disease resulting in an average of 36,000 deaths nationally each year. A pandemic—or global epidemic—occurs when there is a major change in the influenza virus so that most or all of the world's population has never been exposed previously and is thus vulnerable to the virus. Three pandemics occurred during the 20th century, the most severe of which, in 1918, caused over 500,000 U.S. deaths and more than 50 million deaths worldwide.

Recent outbreaks of human disease caused by avian influenza strains in Asia and Europe highlight the potential of new strains to be introduced into the human population. Recent studies suggest that avian strains are becoming more capable of causing severe disease in humans and that these strains have become zootic in some wild birds. If these strains reassort with human influenza viruses such that they can be effectively transmitted between people, a pandemic can occur.

Characteristics of an influenza pandemic that must be considered in preparedness and response planning include: 1.) simultaneous impacts in communities across the U.S., limiting the ability of any jurisdiction to provide support and assistance to other areas; 2.) an overwhelming burden of ill persons requiring hospitalization or outpatient medical care; 3.) likely shortages and delays in the availability of vaccines and antiviral drugs; 4.) disruption of national and community infrastructures including transportation, commerce, utilities and public safety; and 5.) global spread of infection with outbreaks throughout the world.

Vaccination is the primary strategy to reduce the impact of a pandemic but the time required currently to develop a vaccine and the limited U.S. influenza vaccine production capacity represent barriers to optimal prevention. Expanding the number of global surveillance sites and extending existing sentinel surveillance sites to perform surveillance throughout the year can lead to earlier detection of a pandemic virus or one with pandemic potential. Virus identification and the generation of seed viruses for vaccine production is a critical first step for influenza vaccine development.

Early in a pandemic, especially before vaccine is available or during a period of limited supply, use of other interventions may have a significant effect. For example, antiviral drugs are effective as therapy against susceptible influenza virus strains when used early in infection and can also prevent infection (prophylaxis). Planning by public and private health care organizations is needed to assure effective use of available drugs, whether from a national stockpile, state stockpiles or in private sector inventories.

Implementing infection control strategies to decrease the global and community spread of infection may reduce the number of people infected early in the course of the outbreak, before vaccines are available for prevention. Travel advisories and precautions, screening persons arriving from affected areas, closing schools and restricting public gatherings, and quarantine of exposed persons may be important strategies for reducing transmission. The application of these interventions will be guided by the evolving epidemiologic pattern of the pandemic and by recommendations from federal and international authorities.

II. ABOUT THE PLAN

The Alaska Pandemic Influenza Plan is a work in progress based on a set of documents prepared by the National Immunization Program, Centers for Disease Control and Prevention (CDC), and the World Health Organization (WHO). The Alaska Pandemic Influenza Plan is an annex to the DHSS/DPH all-hazards Emergency Operations Plan (EOP). Five annexes (Emergency Operations Center, Risk Communication and Public Information, Biological Emergency, Mass Prophylaxis/Immunization, and Mass Casualty) already provide general pandemic influenza planning and response information and will be referenced frequently in this document.

This draft Pandemic Influenza Plan describes a coordinated strategy to prepare for and respond to an influenza pandemic

III. PURPOSE

The purpose of the Pandemic Influenza Plan is to reduce morbidity, mortality, and the social and economic impact of a influenza pandemic in Alaska.
The plan defines the roles, responsibilities, and actions of key stakeholders before, during and after a pandemic.

IV. SITUATION AND ASSUMPTIONS

SITUATION

Maintaining basic services and infrastructure reduces influenza mortality. Most people who have access to clean water, food, fuel, nursing and medical care while they are sick will survive. Providing services to isolated populations in rural Alaska, therefore, is a crucial part of planning for pandemic influenza as it is for other emergencies.

ASSUMPTIONS

A. The identification of a novel influenza virus with sustained human-to-human spread may give warning of a pandemic weeks or months before the first cases are identified in Alaska.

B. No effective influenza vaccine will be available early in the course of the pandemic.

C. When influenza vaccine becomes available, it will be in short supply and probably will require two doses.

D. Supplies of antiviral medications that are effective against influenza will also be inadequate.

E. Infection control measures, such as: isolating the sick, screening travelers, and reducing the number of public gatherings, may help to slow the spread of influenza early in the pandemic period.

F. Collaboration with tribal health organizations will be crucial in assuring adequate medical care and supplies to remote villages.

G. Federal and State declarations of emergency will change legal and regulatory aspects of providing public health services during a pandemic.

V. ESTIMATES OF THE IMPACT OF AN INFLUENZA PANDEMIC IN ALASKA

The specific characteristics of a future pandemic virus cannot be predicted. It may affect between 20-50% of the total population. It is also unknown how pathogenic a novel virus would be, and which age groups will be affected. The level of preparedness will also influence the final death toll. Even moderate pandemics can inflict a considerable burden on the unprepared and disadvantaged. Planning to maintain health care systems will be especially crucial. Good health care will play a central role in reducing the impact, yet the pandemic itself may disrupt the supply of essential medicines and healthcare workers may fall ill.

Using CDC's Flu Aid program, the following numbers were computed for estimating attack rates during a pandemic. The CDC estimates that attack rates for pandemic influenza may be 15% to 35% of the population. Using the estimated 2003 population of 648,818, Alaska could see 97,000 to 227,000 cases of clinical illness.

Rates of outpatient visits, hospitalizations, and deaths are dependant on the age distribution of the population. At an attack rate of 25% and using CDC estimates of risk status by age, pandemic flu could result in 87,400 outpatient visits, 1,635 hospitalizations, and 325 deaths in Alaska.

VI. FEDERAL ROLES

An influenza pandemic will represent a national health emergency requiring coordination of response activities. As outlined in Homeland Security Presidential Directive 5 (http://www.fema.gov/pdf/reg-ii/hspd_5.pdf), the Department of Homeland Security has primary responsibility for coordinating domestic incident management and will coordinate all nonmedical support and response actions across all federal departments and agencies. Health and Human Services (HHS) will coordinate the overall public health and medical emergency response efforts across all federal departments and agencies. Authorities exist under the Public Health Service Act for the HHS Secretary to declare a public health emergency and to coordinate response functions. In addition, the President can declare an emergency activating the Federal Response Plan, in accordance with the Stafford Act, under which HHS has lead authority for Emergency Support Function #8 (ESF8).

HHS response activities will be coordinated in the Office of the Assistant Secretary for Public Health Emergency Preparedness in collaboration with the Office of the Assistant Secretary for Public Health and Science and will be directed through the Secretary's Command Center. The Command Center will maintain communication with HHS agency emergency operations centers and with other Departments.

HHS agencies will coordinate activities in their areas of expertise. Chartered advisory committees will provide recommendations and advice. Expert reviews and guidance also may be obtained from committees established by the National Academy of Sciences, Institute of Medicine or in other forums.

VII. STATE ROLES

States are individually responsible for coordination of the pandemic influenza response within and between their jurisdictions. Specific State of Alaska Division of Public Health responsibilities include:

- Identification of public and private sector partners needed for effective planning and response.
- Development of key components of pandemic influenza preparedness plan: surveillance, distribution of vaccine and antivirals, and communications.
- Integration of pandemic influenza planning with other planning activities conducted under CDC and Health Resources and Services' Administration (HRSA) bioterrorism preparedness cooperative agreements with states.
- Coordination with local areas to ensure development of local plans as called for by the state plan and to provide resources, such as templates to assist in the planning process.
- Coordination with the Municipality of Anchorage Department of Health and Human Services in planning pandemic services and activities.
- Coordination with the Department of Environmental Conservation (DEC) for animal health issues related to pandemic influenza.
- Coordination with tribal health organizations to ensure equitable delivery of medications, vaccine, and other health services to Alaska Natives.
- Development of data management systems needed to implement components of the plan.
- Assistance to local areas and the Alaska State Hospital and Nursing Home Association Preparedness Program in exercising plans.
- Coordination with the adjoining jurisdictions of British Columbia, Yukon Territory, and Washington State.

VIII. PHASES OF AN INFLUENZA PANDEMIC

The Alaska Pandemic Influenza Plan is divided into three phases: pre-pandemic, pandemic and post-pandemic. (Attachment 1)

IX. ESSENTIAL COMPONENTS TO RESPONDING TO AN INFLUENZA PANDEMIC

A. Command, Control and Management Procedures
B. Surveillance
C. Vaccine Delivery
D. Antivirals
E. Risk Communication
F. Emergency Response

A. COMMAND, CONTROL AND MANAGEMENT PROCEDURES

Background and Issues

Existing command and control system structures will be applied to pandemic influenza. (See EOP Annex A). The Alaska Pandemic Influenza Plan delineates operational priorities and key personnel delineated in the plan such as: 1.) making public health and health care decisions related to the response to pandemic influenza; 2.) preparing and maintaining the state plan; 3.) making major policy decisions; 4.) ensuring coordination among affected units; 5.) maintaining lists of key partners; and 6.)mobilizing additional resources.

PRE-PANDEMIC PHASE ACTIVITIES

Responsibility/Task	Person/Section/Responsible
Appoint a Pandemic Influenza Planning Coordinator within the Section of Epidemiology	ESC
Establish the Pandemic Influenza Executive Committee.	PPC
Develop the State of Alaska Pandemic Influenza Plan as an annex to the Division of Public Health's All Hazards EOP.	PIPC, PPM
Review the State of Alaska Pandemic Influenza Plan annually in coordination with DPH and the SOA/EOP.	PPEC
Identify crucial gaps in infrastructure and resources, laws and/or statutes, which, if not corrected in advance, may interfere with an effective response.	ESC
Develop and maintain lists, including contact information, of partners, resources, and facilities.	SOE
Develop an approach to informing key government officials, legislators, and various stakeholders of the need to address and resolve these gaps in advance of the pandemic.	ESC, PPM
Coordinate planning activities with bordering jurisdictions (Canada and Washington State) and unique populations (e.g., international travelers, guest workers, new immigrant populations, and certain religious enclaves) in collaboration with federal authorities.	PPC, PPM
Review, exercise, and modify the plan in collaboration with partners on a periodic basis.	SNS/HCSVP, PPEC, PPC

Novel influenza virus identified

Responsibility/Task	Person/Section/Responsible
Meet with appropriate partners and stakeholders and review major elements of the plan and evaluate level of preparedness.	SNS/HCSVP, PPC
Modify the plan as needed on an urgent basis.	EOC, PPM
Coordinate with other states and federal agencies and bordering jurisdictions.	PPC, PPM
Confirm availability of facilities for mass immunizations/prophylaxis and medical care.	SNS/HCSVP, IP, PPM
Document expenses of pandemic response.	PPM, local PHC

Human-to-human transmission confirmed

Responsibility/Task	Person/Section/Responsible
Convene Executive Committee and meet with partners and stakeholders to review plan.	DHSS/DPH, ESC
Activate enhanced surveillance.	ISC, local PHC
Activate communications plan.	ESC, DHSS/PIO (refer to EOP Annex B)
Begin vaccine and antiviral distribution based upon CDC and SOE recommendations.	Local PHC, IP, SOE, (refer to EOP Annex F)
Notify key government officials and legislators of the need for additional monetary resources (if not already available).	DHSS/DPH, ESC
Arrange for usage of the appropriate facilities.	PPM, Local PHC, (refer to EOP Annex F)
Document expenses of pandemic response.	PPM, Local PHC

PANDEMIC PHASE ACTIVITIES

Confirmation of onset of a pandemic:

The State of Alaska Director of Public Health will declare when it is time to activate plans for the pandemic phase. Plans will need to be adapted to reflect circumstances and situations as they arise.

Responsibility/Task	Person/Section/Responsible
Convene Executive Committee; meet with partners and stakeholders to review and fully activate plan.	DHSS/DPH, SCE
Collaborate with the Alaska Native Tribal Health Consortium to address cultural and logistical issues associated with pandemic.	PPM, SOE, PPC, PPEC
Coordinate activities with neighboring jurisdictions	PPM, SOE
Interface plan with appropriate counterparts at the national level.	PPM, SOE
Document expenses of pandemic response.	PPM, SOE
Coordinate Pandemic Plan with EOC activities.	PPM, SOE

B. SURVEILLANCE

Background and issues

Key questions to be answered by surveillance during a pandemic include:

- Where is disease activity increasing or decreasing?
- Has the novel virus arrived?
- How many persons are estimated to be infected, hospitalized, or dead?
- Is the pandemic causing more serious disease than an annual influenza epidemic?
- Which population groups are most severely affected?

There are four main national surveillance components:

1. *Virologic surveillance:* The reporting of number of clinical specimens tested for influenza and results by virus type.

2. *Surveillance for Influenza-like Illness (ILI):* See description of ILI Surveillance below.

3. *Surveillance for influenza and pneumonia deaths:* 122 U.S. cities report percentage of flu-related and pneumonia deaths.

4. *Influenza activity levels:* Weekly reporting by states includes: no activity, sporadic, local, regional, and widespread.

Influenza Surveillance in Alaska

Viral Culture Sentinel Program With CDC

The Alaska State Virology Laboratory (ASVL) participates in the US WHO collaborating laboratories influenza virus surveillance program. ASVL isolates and subtypes influenza viruses year-round and reports these data weekly to CDC. There are 15 health care providers distributed throughout the State of Alaska that function as sentinel viral culture influenza providers. Sentinel providers are mailed influenza viral culture testing kits and instructions at the beginning of June—for summer surveillance and a different set of providers are provided kits in October—for the traditional influenza season. Guidance to all providers is given via the service manual, phone calls, weekly reports to HCP's, and bulletins. The ASVL accepts viral cultures from any HCP free of charge in the State of Alaska.

Influenza-like Illness (ILI) Surveillance

An influenza sentinel provider conducts surveillance for ILI in collaboration with the state health department and the Centers for Disease Control and Prevention (CDC). During the influenza season, sentinel providers report the total number of patient visits each week and number of patient visits for influenza-like illness by age group (0-4 years, 5-24 years, 25-64 years, = 65 years). These data are transmitted once a week to a central data repository at CDC via the Internet, a touch-tone telephone, or fax. Efforts to put an ILI surveillance system in Alaska began in 2002 with a goal to recruit a minimum of 10 ILI providers throughout the state. There are currently 12 ILI surveillance providers distributed throughout the State of Alaska.

School Absenteeism Surveillance

Absenteeism data is collected from the Anchorage School district. Each week, the school district sends the Section of Epidemiology a copy of the school districts absenteeism and identifies those schools that have 7.5% or greater absenteeism for the week. Absenteeism data in other states has been shown to be a good predictor of the level of influenza in a given area.

Influenza Activity as Assessed by State and Territorial Epidemiologists

Each week during the traditional influenza season (Oct–May) all states review their weekly morbidity data of influenza reports and the geographic locations they come from to determine if there is any influenza activity and how many regions of the state are affected. This is then reported electronically to the CDC as: no activity, sporadic, local, regional, or widespread.

Influenza –Associated Pediatric Death Reporting

Beginning October, 2004 influenza associated pediatric mortality was added to the list of nationally notifiable diseases. A state bulletin was sent out in November, 2004 requesting Alaska providers to report any pediatric death associated with influenza. All pediatric deaths with respiratory illness will have specimens obtained for influenza testing and the Alaska State Public Health Laboratory (ASPHL) will notify the influenza coordinator in Epidemiology.

PRE-PANDEMIC PHASE ACTIVITIES

Responsibility/Task	Person/Section Responsible
Monitor influenza isolates and subtype influenza viruses year-round and report these data weekly to CDC.	ASVL
Monitor sentinel provider data weekly for completeness and/or errors.	ISC
Provides feedback and maintains contact with sentinel providers to encourage reporting and follow-up on unusual reports.	ISC
Contributes to state pandemic planning issues and activities.	PPM, SOE, ASHNHA, SNS/HCSVP
Establishes and maintains strong working relationships with the state laboratory.	SOE
Encourages sentinel providers to submit specimens for viral culture to the state laboratory.	SOE, ISC
Assesses overall influenza activity level in the state and reports that data to CDC by noon each Tuesday.	SOE, ISC
Updates the influenza web pages weekly that reflect the current influenza activity for the State.	ISC
Develop and pilot a system to count or estimate numbers of influenza-related deaths in the State of Alaska.	VS, SOE
Develop and pilot a system to monitor hospitalized influenza-related admissions.	ASHNHA, SOE
Collaborate with the ASHNHA to develop measures to identify age-specific attack rates, morbidity and mortality, and unusual clinical syndromes.	SOE
Establish surveillance of absenteeism in the Fairbanks and Juneau public school systems.	ISC
Maintain communication with the state veterinarian regarding any animal or poultry health issues.	SOE

Novel influenza virus identified

Responsibility/Task	Person/Section Responsible
Increase case detection among persons who recently traveled to the outbreak area and who present with clinical illness possibly caused by influenza including pneumonia, acute respiratory distress syndrome, or other severe respiratory illness.	Hospitals, SOE
Appropriate specimens should be collected to diagnose influenza infection. *	HCP's, hospitals, PHC's
Promote local diagnosis of influenza infection using antigen detection, immunofluorescence, or Polymerase Chain Reaction (PCR). CDC will provide guidance appropriate to each specific novel virus alert.	SOE
Ensure that all inter-pandemic influenza surveillance activities are underway regardless of the time of year and that all participating laboratories and sentinel providers are reporting data to CDC each week.	ISC
Subtype all influenza A viruses identified in clinical specimens and report any influenza A viruses that cannot be subtyped to CDC immediately.	ASVL
Obtain instructions and reagents from CDC (when available) to detect and identify the novel strain.	ASVL, SOE
Recruit and enroll additional sentinel providers, if necessary, to reach the minimum of 10 regularly reporting from different geographic areas of the State.	ISC
Institute recommendations from CDC for any additional surveillance activities that should be undertaken given the specific circumstances.	ISC, SOE
Review contingency plans for further enhancing influenza surveillance if efficient person-to-person transmission of the novel virus is confirmed.	ISC, SOE

*In some situations, if the novel influenza virus is a highly pathogenic avian strain, such as with the 2004, H5N1 influenza virus in Asia, hospitals should contact ASVL or SOE for specific instructions regarding specimen collection.

Human-to-human transmission confirmed

Background and Issues

Whether to consider the use of isolation and quarantine in an influenza pandemic may depend, in part on the transmission rate of the pandemic virus, the susceptibility of the population, the geographic distribution of the influenza-infected persons and the severity of illness associated with infection. All of these parameters may change in the course of a pandemic and would require frequent re-evaluation as a pandemic progressed. **(See National Pandemic Influenza Plan Annex 8–Strategies to Limit Transmission)**

Responsibility/Task	Person/Section Responsible
Collaborate with the CDC, Arctic Investigations Program to assess the need to screen travelers arriving in Alaska from affected countries.	SOE
Investigate the epidemiology of all early cases either originating in Alaska or that are imported into Alaska.	SOE
Encourage diagnosis of influenza at hospitals and emergency departments for persons with compatible clinical syndromes, particularly among those who may have had recent exposure at the site of an outbreak.	SOE
Educate HCP's on appropriate infection control guidelines for specimen collection.	SOE
Initiate Public Health Laboratory surge capacity plan. CDC will provide guidelines to assist with triage of specimens for testing and for choosing which isolates to send to CDC.	ASVL
Report influenza culture results daily to CDC.	ASVL
Assess the completeness and timeliness of reports from all participating laboratories and sentinel providers and contact non-reporters to improve their performance as necessary.	SOE
Investigate outbreaks and increases in ILIs, including those detected through the influenza sentinel provider surveillance system.	SOE

See http://www.cdc.gov/flu/professionals/infectioncontrol/ for general influenza infection control recommendations.

PANDEMIC PHASE ACTIVITIES

Confirmation of onset of a pandemic

Responsibility/Task	Person/Section Responsible
Monitor vaccine effectiveness once vaccine becomes available.	SOE, IP
Monitor health impacts including deaths and hospitalizations of influenza inpatients and hospital staff.	SOE
Assess community impacts by measuring absenteeism in key industries or sectors.	SOE
Assess the quality of surveillance and make recommendations for improvement during the period between pandemic waves and post pandemic.	SOE

POST-PANDEMIC PHASE ACTIVITIES

Responsibility/Task	Person/Section Responsible
Collect additional hospital utilization and other administrative data to assess severity of pandemic and disseminate summary reports.	ASHNA, SOE
Prepare summary report on surveillance initiatives and evaluate their success.	SOE
Resume regular surveillance activities.	ISC
Review and revise surveillance system.	ISC

C. VACCINE DELIVERY

Background and issues

Vaccine will serve as the central preventive strategy during the next pandemic. Unlike annual production of influenza vaccine, wherein strains are selected in the spring, leading to vaccine distribution in the late summer, a pandemic strain could be detected at any time. Current manufacturing procedures require six to eight months before large amounts of vaccine are available for distribution.

Contrasts between delivery of pandemic vaccine and the annual influenza vaccine include the following:

- The target population will be expanded, possibly to include the entire U.S. population.
- Because of the six to eight month production period to produce a vaccine, it should be anticipated that demand for vaccine will be greater than the supply early in the course of the pandemic.
- It is also possible that no vaccine will be available.

Once vaccine is available it will need to be distributed as quickly as possible. Immunologic responses following initial vaccination of serologically negative individuals is poor and represents a priming of the immune system, so the emergence of a pandemic strain with new hemagglutinin and or neuraminidase antigens will likely require a second (booster) dose of vaccine two to four weeks later.

Because a final decision regarding the degree of federal vaccine purchase in an epidemic may not be made until pandemic vaccine is being produced, plans for delivery and administration of vaccine should address the different possible scenarios including complete federal purchase and distribution to states, partial federal purchase with distribution to states, and minimal federal purchase (similar to the annual influenza vaccination program). Currently influenza vaccine is primarily administered through the private sector.

Given the magnitude of the vaccination effort in a pandemic, plans need to encompass the private and public sectors. Coordination with and education of the private sector needs to be an important aspect of planning. Because a relative shortage of vaccine should be anticipated especially early in the pandemic, prioritizing of persons receiving the initial doses of vaccine will be necessary. As information about the impact of the novel virus becomes available, recommendations will be formulated at the national level, which may need to be adapted at the state level depending on local factors.

Educating the public and the healthcare community about the rationale for priority groups, once priority groups have been determined, will be an important aspect of public education. The need to ration vaccine will require substantial public education and adequate security measures.

Eventually, sufficient vaccine will be available for mass vaccination of the population. Given the magnitude of the vaccination effort, detailed planning needs to occur at the local as well as at the state level. A central aspect of planning will be determining how public and private sectors will work together to manage this effort and accomplish this goal

Monitoring of vaccine adverse events will be necessary and could to some extent build upon the infrastructure now in place as a result of the smallpox vaccination program. In contrast to traditional VAERS (Vaccine Adverse Event Reporting System) process where providers report directly to the VAERS contractor at the national level with subsequent feedback to the state, Alaska may wish to be

more directly involved in the reporting and any needed investigations. At a minimum the state immunization program manager or state adverse events coordinator (state VAERS contact) should be involved in planning around vaccination, and states should review their existing infrastructure and consider how their program could be enhanced.

During the inter-pandemic period, efforts to increase pneumococcal polysaccharide vaccination that can reduce the incidence of invasive pneumococcal disease secondary to influenza should be emphasized. Because large-scale pneumococcal vaccination may not be feasible once a pandemic alert has occurred, the inter-pandemic period is the ideal time to deliver this preventive measure.

See State of Alaska EOP Annex F—Mass Prophylaxis Planning Guide for procedures of setting up mass vaccination clinics and Attachment 2—CDC Guidelines for Large Scale Influenza Vaccination Clinic Planning, 2004-05.

PRE-PANDEMIC PHASE ACTIVITIES

Responsibility/Task	Person/Section Responsible
Enhance influenza vaccination coverage levels in traditional high-risk groups.	IP, Local PHC
Enhance pneumococcal vaccination coverage levels in traditional high-risk groups to reduce the incidence and severity of secondary bacterial pneumonia.	IP, Local PHC
Define the process by which review and modification of the national recommendations for vaccine priority groups will occur in Alaska.	DHSS/DPH, ESC, IPM
Consider Alaska state-specific modifications or refinements of priority groups, depending on local circumstances. *	DHSS/DPH, ESC
Determine size of priority groups and develop a plan for vaccinating them.	IP (See Annex F/EOP)
Develop a plan for providing vaccine to priority groups in the event of a severe shortage of available vaccine.	IPM, ESC, Local PHC
Specifically define, “frontline healthcare workers” as one of the priority groups for vaccine (should include village CHAP’s)	IPM

*For example, there may be specific groups of persons in the state whose absence, due to influenza illness, could affect public safety, security, or result in the disruption of essential community services. Examples of such unique, special-skill groups might include bush pilots, oil pipeline workers, air traffic controllers at major airports, and workers who operate major telecommunications or electrical grids, ferry workers, or VPSO’s.

PRE-PANDEMIC PHASE ACTIVITIES (cont.)

Responsibility/Task	Person/Section Responsible
Review and update the Mass Immunization Prophylaxis Annex F/EOP.	PPM, IPM, SNS/HCSVP
Ensure that appropriate legal authorities are in place that will allow for implementation of major elements of the proposed distribution plan. *	SCE, IPM
Ensure that contingency plans have been considered for emergency distribution of unlicensed vaccines using emergency IND (investigational new drug) provisions. Such provisions call for strict inventory control and record keeping, along with completion of a signed consent form.	SCE, IP
Coordinate the state proposed vaccine distribution plan with the MOA Community Health Services, and the Alaska Native Tribal Health Consortium.	IP
Engage hospitals and PHC (and/or state adverse events coordinator) in planning around monitoring and investigation of adverse events.	SOE, IPM
Revamp and revise the existing vaccine data management IT system that was developed for the smallpox plan to track vaccine supply, distribution, and to track administration of two doses of vaccine (if recommended).	IPM, PPC, IT
Review, exercise, and modify vaccine distribution plans as needed on a periodic basis.	IP, SNS/HCSVP

* Examples: Will state law allow non-licensed volunteers to administer influenza vaccine? Does state law allow for "mandatory" vaccination of certain groups, if vaccination of such groups is viewed by state public health officials as being essential for public safety?

Novel influenza virus identified

Responsibility/Task	Person/Section Responsible
Meet with appropriate partners and stakeholders and review major elements of the vaccine distribution plan.	IPM, SNS/HCSVP
Modify the plan as needed to account for updates, if any, on recommended target groups; projected vaccine supply and human resources available.	IPM

Human-to-human transmission confirmed

Responsibility/Task	Person/Section Responsible
Coordinate planned activities with Washington State, British Columbia, and the Yukon Territory.	IPM, PPC
Conduct training for relevant agencies and partner groups regarding vaccine delivery protocols and procedures.	IP, SNS/HCSVP

PANDEMIC PHASE ACTIVITIES

Responsibility/Task	Person/Section Responsible
Activate the EOP/Alaska Mass Immunization/Prophylaxis —Annex F.	PPM, DHSS/DPH, ESC

POST-PANDEMIC PHASE ACTIVITIES

Responsibility/Task	Person/Section Responsible
Work with health authorities to evaluate impact of vaccine use before and during the pandemic.	SOE, IP
Evaluate mass prophylaxis plan and general vaccine delivery mechanisms.	PPM, SNS/HCSVP, IP
Document lessons learned and revise plans as needed for future use.	IPM

D. ANTIVIRALS

Background and issues

Because vaccine will likely not be available when the novel virus first affects communities, antivirals may play an important role for the control and prevention of influenza, especially—but not only—during the period before vaccine is available. Existing production capacity for influenza antiviral drugs is less than would be needed to provide prophylaxis or treatment for the entire population and the current supply of antivirals in the Strategic National Stockpile is limited.

See Annex 7 of the Draft National Pandemic Influenza Plan for specific information and fact sheets on antiviral use.

PRE-PANDEMIC PHASE ACTIVITIES

Responsibility/Task	Person/Section Responsible
Determine under what circumstances the State of Alaska would purchase and stockpile antivirals.	ESC, IPM, PPM
Define process through which national recommendations for priority groups will be reviewed and modified for Alaska.	ESC, IPM
Quantify high priority populations for prophylaxis, and develop drug distribution contingency plans for the different possible scenarios.	SOE, IP, Local PHC
Quantify high priority populations for therapy, and develop drug distribution contingency plans for the different possible scenarios.	IPM, SOE, Local PHC
Plan for education and notification of the medical community and of the public around appropriate prescribing information.	SOE, SOA Pharmacist
Coordinate antiviral distribution activities with Washington State, British Columbia, and the Yukon Territory and other northwestern states.	SOE, IP
Review workman's compensation laws as they apply to health care workers and other essential workers who have taken antivirals for prophylaxis.	IPM, ESC
Develop a plan for recall of unused antivirals from health care centers.	IPM, SOA Pharmacist
Develop data management system to track antiviral supplies, distribution, and use.	IPM, IT, SOE
Evaluate factors such as cost of antivirals, shelf life, and available proper storage facilities.	SOE, SOA Pharmacist

Novel influenza virus identified

Responsibility/Task	Person/Section Responsible
Meet with appropriate partners and stakeholders and review major elements of the antivirals plan.	SOE, IPM
Modify plan as needed to account for updates, if any, on recommended target groups and projected drug supply.	SOE, IPM
Notify the medical community of the status of the plan and antiviral availability.	SOE, HAN
Disseminate antiviral use guidelines to the medical community.	SOE, HAN
Conduct training for public health staff involved in antiviral distribution protocols and procedures.	SOE, IP, Local PHC

Human-to-human transmission confirmed

Responsibility/Task	Person/Section Responsible
Ensure that the human resources and logistics are in place to begin drug distribution and administration in Alaska, taking into account the need for added staff due to illness.	SOE, IP
Coordinate planned activities with Washington State, British Columbia, and the Yukon Territory and other northwestern states.	PPC, IPM
Coordinate with regional and local tribal health and public health centers throughout the state.	IPM, SOE

PANDEMIC PHASE ACTIVITIES

Responsibility/Task	Person/Section Responsible
Fully activate antiviral drug distribution plan.	ESC, SOE, SOA Pharmacist
Continue coordination with bordering jurisdictions and local tribal health and public health centers.	IPM, SOE
Implement data management system for antiviral distribution, use, and supply (if applicable).	SOE, SOA Pharmacist, IT

POST-PANDEMIC PHASE ACTIVITIES

Responsibility/Task	Person/Section Responsible
Recall any unused antivirals.	SOA Pharmacist
Work with health authorities to evaluate impact of antiviral use before and during the pandemic.	SOE
Document lessons learned and revise plans as needed for future use.	IPM, SOE, SOA Pharmacist

E. RISK COMMUNICATION

Background and issues

Through CDC's Bioterrorism Preparedness and Response cooperative agreement, states are asked to implement a plan for connectivity of key stakeholders involved in public health detection and response among hospital emergency departments, state and local public health officials, law enforcement, and other key participants. The communication system developed will be used for any type of public health emergency, including pandemic influenza.

Key planning activities relate to preparation of materials, and identification of channels of communication. CDC will make a number of materials available before and during influenza pandemic, including:

- Basic communication materials (such as question and answer sheets and fact sheets) on influenza, influenza vaccine, antiviral agents, and other relevant topics in various languages. General preventive measures such as "do's and don'ts" for the general public.
- Information and guidelines for health care providers. (http://www.epi.hss.state.ak.us/id/influenzafluinfo.htm)
- Training modules (Web-based, printed, and video)
- Presentations, slide sets, videos, documentaries
- Symposia on surveillance, treatment, and prophylaxis

Because of anticipated shortages of both vaccine and antivirals, planning around messages informing the population about availability and addressing the rationale for priority groups and measures to be taken until such are available will be critical.

Other important topics include:

- Basic information about influenza (including symptoms and transmission).
- Information about the course of the pandemic (contagiousness, geographic spread, case counts).
- Information about which symptoms should prompt seeking medical assistance and which symptoms should be managed at home.
- Information about school and business closures and suspended public meetings.
- Information about travel restrictions and quarantine laws.

Credible and trained spokespersons should be identified. Key stakeholders should also be identified and selected for their perceived credibility among and their ability to reach their constituency. Timely sharing of new information with all communication partners will be important both in terms of actively engaging then and in terms of ensuring that consistent messages are sent by all agencies/partners involved. Responses to anticipated media questions should be prepared. Identify credible tribal individuals to assist in conveying these messages to their regional tribal constituents.

See The National Pandemic Influenza Plan Annex 9–Communications and Education for influenza specific messages and Alaska EOP, Annex B–Risk Communication

PRE-PANDEMIC PHASE ACTIVITIES

Responsibility/Task	Person/Section Responsible
Identify and train spokesperson (and backup) to the media and to the public. Plan responses to anticipated questions.	SOE, DPH
Develop materials and messages for local public health centers and CHAPs.	SOE
Identify most effective communication channels for reaching different communities.	PIO, SOE
Utilize tribal councils in villages to information in town meetings; broadcasting over the radio, etc.	SOE with ANTHC
Review and revise the CDC's basic fact sheets on influenza and translate into the major languages of Alaska.	SOE
Establish an influenza hot line and create a website to respond to the public's pandemic inquiries.	SOE, IT
Develop a webpage with Alaska's local village health clinic locations, phone numbers and clinic hours, and with links to PHC's, and other tribal agencies.	SOE, IT, Local PHC
Plan for coordination of messages between state and local public health officials, and all involved partners.	DHSS/PIO, Local PHC
Educate public health officials, politicians, and the media about what information will and will not be available during a pandemic.	SOE
Review CDC materials and adapt and revise as needed.	SOE /PIO

Novel influenza virus identified

Responsibility/Task	Person/Section Responsible
Review materials and revise as needed.	SOE
Prepare spokespersons.	DHSS/PIO, SOE

Human-to-human transmission confirmed

Responsibility/Task	Person/Section Responsible
Review major elements of the plan with partners and stakeholder.	PPEC
Disseminate information to public, partners and the media on ongoing basis.	SOE, DHSS/PIO
Monitor media coverage and address misinformation.	ESC, DHSS/PIO
Coordinate with bordering jurisdictions.	SOE

PANDEMIC PHASE ACTIVITIES

Responsibility/Task	Person/Section Responsible
Review and modify messages and materials as needed.	DHSS/PIO, SOE
Continue to monitor media coverage and address misinformation.	SOE
Continue to disseminate credible information as it becomes available to the public and all partners.	SOE/HAN
Coordinate with bordering jurisdictions.	SOE

POST-PANDEMIC PHASE ACTIVITIES

Responsibility/Task	Person/Section Responsible
Notify the public when pandemic is considered officially over.	SOE
Inform the public about the health impact of the pandemic at the State level.	SOE
Review and revise communication plans.	SOE, DHSS/PIO

F. EMERGENCY RESPONSE

Background and issues

Emergency response, including maintenance of critical services and surge capacity issues in the health care system, is addressed in the CDC and HRSA cooperative agreements, and pandemic plans should not duplicate that planning process. Pandemic planners should collaborate with the above planning groups to ensure that they consider pandemic influenza as one of the scenarios they plan for and address issues specific to pandemic influenza.

Pandemic planners should discuss all pandemic issues related to emergency response with these other planners rather than assume they have been dealt with. Pandemic influenza differs from most bioterrorism threats in the magnitude and duration of its impact including the likelihood of second and later waves of disease.

One of the greatest concerns is the limited surge capacity that currently exists in the health care system with the lack of ready availability of additional staffing due to the nursing and other health care professional shortage. Identification of sources of back-up personnel is of paramount importance, given the increased demands on the system posed by the pandemic with concurrent reduction in the work force due to illness, absenteeism, family responsibilities, and exhaustion. Additional emphasis on augmenting volunteer lists may be warranted.

In addition to human resources, material resources will be strained as well, and a process for allocation of scarce resources should be defined. Bioterrorism planners, e.g., SNS Hub Site Visit Team, will identify overflow locations which may be used for inpatient or outpatient care. Establishing health care facilities in nontraditional sites is a significant task that requires that numerous issues be addressed including staffing, equipment, infection control, and legal issues. Pandemic planners will need to determine specific needs that such buildings and facilities may have with respect to treatment of influenza (such as in relation to ventilators and instituting proper infection control). Advance planning protocols to triage to overflow locations (see Mass Casualty Plan Annex G) will ensure a smoother process. In addition, home health care may play an important role, given the potentially high number of ill persons.

An influenza pandemic may pose significant threats to the human infrastructure responsible for critical community services due to widespread absenteeism and exhaustion in the workforce. Examples of such services (and personnel) in the non-health sector might include highly specialized workers in the public safety, utility, transportation and food service industries, and will likely vary from jurisdiction to jurisdiction. State and local officials should carefully consider which services (and key personnel within relevant firms or organizations) are "essential" (that is, which services, if interrupted, and which workers, if absent, would pose a serious threat to public safety or would significantly interfere with the ongoing response to the pandemic).

See

- **New Jersey Dept of H&SS/Influenza Surge Capacity Guidance for General Hospitals**
- **Alaska EOP Annex G – Mass Casualty and Fatality Plan**
- **Template for Local Infectious Disease Emergency Planning and Response**

PRE-PANDEMIC PHASE ACTIVITIES

Responsibility/Task	Person/Section Responsible
Ensure that specific challenges posed to emergency response plans by an influenza pandemic are addressed in emergency response plans.	PPM, PPC
Develop surge capacity guidance for general hospitals.	SOE, ASHNHA, EOP
Meet with bioterrorism and other emergency planners.	PPC, SOE, PPM
Review pertinent legal authorities: quarantine laws and how they apply in a public health emergency; laws and procedures for closing businesses or schools and suspending public meetings during a declared state of emergency; medical volunteer licensure, liability, and compensation laws for in-state, out of state, and returning retired and non-medical volunteers.	ESC, PPM, DHSS
Coordinate activities with SNS/HCSVP to develop local pandemic influenza response.	PPC

Novel influenza virus identified

Responsibility/Task	Person/Section Responsible
Meet with appropriate partners to review major elements of the health sector and essential non-health-sector response plan.	PPM, SOE, CHEMS

Human-to-human transmission confirmed

Responsibility/Task	Person/Section Responsible
Meet with appropriate partners to review major elements of the health sector and essential non-health-sector response plan.	PPM, SOE, CHEMS

PANDEMIC PHASE ACTIVITIES

Responsibility/Task	Person/Section Responsible
Implement generic elements of all hazard response plans and the specific plans for identified pandemic influenza issues, including continuous collection of data concerning medical and material supplies and their allocation to rapidly identify changing patterns of need and modify or redirect policy.	DHSS/DPH, DPHEOC, CHEMS

POST-PANDEMIC PHASE ACTIVITIES

Responsibility/Task	Person/Section Responsible
Demobilize pandemic emergency services.	DPHEOC
Assess effectiveness of emergency response; recommend improvements for future and revise the Alaska Pandemic Influenza Annex as needed.	CHEMS, PPC

See Alaska EOP Annex G – Mass Casualty and Fatality Plan.

X. INTERGRATION OF STATE AND LOCAL COMMUNITY RESPONSE PLANS

Coordination between state and local pandemic plans is critical to assure effective implementation of response activities and delivery of quality medical care in the context of increased demand for services. The following checklist can be used to help local emergency planners identify areas that need to be addressed in the development of a community pandemic influenza plan.

A. Command, Control and Management Procedures	**Completion Date/ Person Responsible**
❑ Develop a local pandemic influenza preparedness plan that links with existing emergency plans.	
❑ Identify who will be the local administrative decision makers during the pandemic.	
❑ Meet with local stakeholders and review major elements of the local pandemic influenza plan.	
❑ Decide when the pandemic plan is implemented and assure local emergency plans are implemented during the influenza pandemic.	
❑ Develop and implement a local mass vaccination plan based on the state's EOP Mass Prophylaxis Annex F.	
❑ Develop a plan to close and re-open schools, businesses, and other public events, if necessary.	
❑ Develop a plan to educate the public prior to the onset of the pandemic.	
❑ Coordinate activities with bordering jurisdictions.	
B. Surveillance	
❑ Support state surveillance activities including Sentinel Clinician Surveillance and Laboratory Surveillance and any enhanced surveillance activities that may be requested during a pandemic.	
❑ Monitor local hospital census.	
❑ Monitor local death rates.	
❑ Monitor absentee rates in schools.	
❑ Keep the SOE informed of all surveillance activities.	
C. Vaccine Delivery	
❑ Identify locations for mass clinic sites.	
❑ Continue to emphasize annual influenza vaccine and the use of pneumococcal vaccine during the pre-pandemic phase.	
❑ Coordinate activities with bordering jurisdictions.	
❑ Identify priority groups for vaccination based on state recommendations.	
❑ Use current population estimates to quantify the number of persons in priority groups for vaccination.	
❑ Utilize state standing orders for influenza vaccination.	
❑ Improve current influenza and pneumococcal vaccination programs.	
❑ Assure the security of influenza vaccine during storage and delivery when available.	
❑ Develop, practice and, if needed, implement a mass-vaccination plan in conjunction with the state EOP.	

D. Antivirals	Completion Date/ Person Responsible
❑ Identify high risk groups in the community that antivirals will likely be needed for if vaccine is not available.	
❑ Coordinate the delivery of antivirals to high risk individuals in the community based on state recommendations.	
E. Risk Communication	
❑ Develop a communication plan in conjunction with local emergency management coordinators and have the hospital or the primary local healthcare facilities in the area to coordinate with the state risk communication plan.	
❑ Coordinate communication plans with HRSA recommendations. The public (and the media) will be contacting healthcare providers and hospitals for medical information.	
❑ Develop a 24/7 contact list for staff.	
❑ Develop a list of local media contact names and numbers and methodology to quickly send them information.	
❑ Develop an internal plan on how to distribute information passed on from DHSS/SOE to appropriate local healthcare staff.	
❑ Establish a local information hotline and develop a plan to staff the call center.	
❑ Conduct daily briefing with spokespersons and clinic leaders to determine new information to be relayed to public. This information should also be relayed to the SOE for state communications.	
❑ Develop a method to post current information on an appropriate website.	
❑ Develop plans for communicating with special populations in the local area (AK Native languages, Filipino, Spanish, Russian, etc.)	
❑ Designate spokespeople for local media. Identify a primary spokesperson and backups in conjunction with local emergency management. Spokesperson may be an elected official, medical personnel or public relations person.	
F. Emergency Response	
❑ Develop and maintain an inventory of emergency medical personnel and supplies.	
❑ Identify local surge capacity sites.	
❑ Local public health centers in consultation with local emergency managers should develop and coordinate a local Emergency Operations Plan (EOP) to include plans for pandemic influenza.	
❑ Participate, if requested, in mass casualty/fatality disaster exercises.	
❑ Assure local registrars have development of plans for filing and issuing death certificates in a mass fatality situation.	
❑ Activate the hospital public health emergency plan in conjunction with the Division of Public Health.	
❑ Identify essential services within the jurisdiction and develop a local plan to assure as little as possible interruption of these services. Services may include fire protection, water, sewer, home healthcare, and delivery of food to those in need.	

See Worksheets 1–15

XI. REFERENCES

Alaska Department of Health and Social Services Public Health Preparedness Office. Alaska Public Health Emergency Operations Plan - Draft. (2004). (Annex A, Annex B, Annex C, Annex F, Annex G)

Association of State and Territorial Health Officials. (2002). Preparedness Planning for State Health Officials.

British Columbia Pandemic Influenza Preparedness Plan. December 2004.

Centers for Disease Control and Prevention. (2004). CDC Guidelines for Large Scale Influenza Vaccination Clinic Planning, 2004-2005.

Centers for Disease Control and Prevention. (2005). Updated Infection Control Measures for the Prevention and Control of Influenza in Health-Care Facilities Guidelines and Recommendations (pp.1-4).

Department of Health and Family Services, Bureau of Communicable Diseases. Wisconsin Pandemic Influenza Preparedness Plan. (2004).

Department of Health and Human Services, National Vaccine Program Office. (2004) Pandemic Influenza Preparedness Plan, (Annex's 7, 8, 9).

Massachusetts Comprehensive Emergency Management Plan. (2003) Draft 5.3, Template for Local Infectious Disease Emergency Planning and Response, MATown, Massachusetts.

New Jersey Department of Health and Senior Services. (2004). Influenza Surge Capacity Guidance for General Hospitals.

World Health Organization. (2004). WHO Consultation on Priority Public Health Interventions Before and During an Influenza Pandemic.

XII. Pandemic Influenza Website References and Recommended Reading

Pandemic Plans

HHS National Pandemic Influenza Response and Preparedness Plan
http://www.hhs.gov/nvpo/pandemicplan/index.html

Canadian Pandemic Influenza Plan
http://www.phac-aspc.gc.ca/cpip-pclcpi/index.html

BC Pandemic Influenza Preparedness Plan
http://www.bccdc.org/content.php?item=150

WHO Influenza Web Site:
http://www.who.int/csr/disease/influenza/en/

WHO Checklist for Pandemic Preparedness Planning:
http://www.who.int/csr/resources/publications/influenza/en/FluCheck5.pdf

Wisconsin Pandemic Influenza Preparedness
http://www.ci.mil.wi.us/display/displayFile.asp?docid+739&filename=/User/mbrues/WI_Pandemic_Influenza_Plan_NIMS%5B1%5D825.pdf

Influenza and Infection Control

Updated Infection Control Measures for the Prevention and Control of Influenza
Infection Control Recommendations for Health Care Facilities:
http://www.cdc.gov/flu/professionals/infectioncontrol/

Control of influenza outbreaks in institutions:
http://www.cdc.gov/flu/professionals/infectioncontrol/institutions.htm

Preventing the spread of influenza in child care facilities
http://www.cdc.gov/flu/professionals/infectioncontrol/childcaresettings.htm

Guidance on the Prevention and Control of Influenza in the Peri- and Postpartum Settings
http://www.cdc.gov/flu/professionals/infectioncontrol/peri-post-settings.htm

Guidance on the Use of Masks

Guidance on the Use of Masks to Control Influenza Transmission
http://www.cdc.gov/flu/professionals/infectioncontrol/maskguidance.htm

Respiratory Hygiene

Respiratory Protection Program:
http://www.health.state.mn.us/divs/idepc/dtopics/infectioncontrol/rpp/index.html

Avian Influenza

Avian Influenza
http://www.cdc.gov/flu/avian/index.htm

Avian Influenza Update:
http://www.cdc.gov/flu/avian/professional/han020405.htm

Alaska Information

Health Care Facilities Licensing and Capacity Information:
http://health.hss.state.ak.us/dhcs/PDF/HFLC-FacilityList-02-03.pdf

Current influenza activity in the State of Alaska:
http://www.epi.hss.state.ak.us/id/influenza/influenza.jsp

- Recommended Reading

  - Crosby AW. *America's Forgotten Pandemic: The Influenza of 1918*. Cambridge: Cambridge University Press, 1989.
  - Kolata, G. *Flu: The Story of the Great Influenza Pandemic of 1918 and the Search for the Virus that Caused It*. New York: Farrar, Straus and Giroux, 1999.

Training Videos

Training on Emergency Management and the Incident Command System (ICS) The Federal Emergency Management Agency (FEMA) offers on-line courses in the ICS and other aspects of emergency planning and response at:

http://training.fema.gov/EMIweb

Attachment 1: # PANDEMIC PHASES

Alaska Pandemic Influenza Phases	WHO Pandemic Phases	Definition
Pre-Pandemic	**Pre-Pandemic (or Inter-Pandemic)** (WHO Phase 0, Level 0)	No indications of any novel virus subtype have been reported outside the United States.
	Novel Virus Strain identified in one or more human cases (WHO Phase 0, Levels 1,2)	Novel virus detected in one or more humans within or outside the United States. Little or no immunity in the general population. Potential, but not inevitable, precursor to a pandemic.
	Human-to-Human Transmission Confirmed (WHO Phase 0, Level 3)	Novel virus demonstrates sustained person-to-person transmission (within or outside the US) with at least one outbreak lasting over a minimum 2-week period in one country, or identification of the novel virus in several countries.
Pandemic	**Pandemic–Confirmation of Onset** (WHO Phase 1) WHO declaration of a pandemic	Novel virus causing unusually high rates of morbidity and/or mortality in multiple, widespread geographic areas; international declaration of pandemic made by WHO.
	First Detection of the Virus in the United States	Localized outbreaks
	Outbreaks in Multiple Geographic Areas (WHO Phase 2)	Localized outbreaks are followed by further spread with involvement of multiple geographic areas in the US resulting in the first peak of morbidity and mortality.
	End of First Wave (WHO Phase 3)	End of first wave when influenza activity has stopped or reversed in initially affected areas in the US.
	Second (or later) Wave (WHO Phase 4)	After a period of inactivity, a second severe wave of outbreaks caused by the new virus would be expected to occur within 3-9 months of the initial epidemic in many countries.
Post-Pandemic	**Post-Pandemic** (WHO Phase 5)	Return of the seasonal "epidemic" cycle in the US. The CDC declares the end of the pandemic in the US.

CDC GUIDELINES FOR LARGE-SCALE INFLUENZA VACCINATION CLINIC PLANNING, 2004-05

On October 5, 2004, CDC was notified by Chiron Corporation that none of its influenza vaccine (Fluvirin®) would be available for distribution in the United States for the 2004–05 influenza season. This action reduced by approximately one half the expected supply of trivalent inactivated vaccine (flu shot) available in the United States for the 2004–05 influenza season.

Approximately 58 million doses of inactivated influenza vaccine (Fluzone®, manufactured by Aventis Pasteur, Inc) are expected to be available in the United States this season. In addition, approximately 3 million doses of live attenuated influenza vaccine (FluMist ®) manufactured by MedImmune will be available this season. The combined total of 61 million doses of influenza vaccine is in contrast to 83 million doses distributed in 2003 and 100 million doses that were anticipated for 2004. Vaccine will be distributed into December, 2004 and perhaps later.

Because of this urgent situation, CDC, in coordination with its Advisory Committee for Immunization Practices (ACIP), issued interim recommendations for prioritizing available trivalent inactivated influenza vaccine during the 2004–05 season. Eight priority groups have been identified with all being of equal importance:

- all children aged 6–23 months;
- adults aged 65 years and older;
- persons aged 2–64 years with underlying chronic medical conditions;
- all women who will be pregnant during the influenza season;
- residents of nursing homes and long-term care facilities;
- children aged 6 months–18 years on chronic aspirin therapy;
- health-care workers involved in direct patient care; and
- out-of-home caregivers and household contacts of children aged <6 months.

To facilitate the most efficient and safe delivery of available vaccine to the priority groups, these guidelines have been developed to assist with planning large-scale influenza vaccination clinics by public and private vaccination groups. Ideally, plans from private and public groups should be shared to identify best practices, avoid unnecessary overlapping of services, and maximize the effective and efficient delivery of influenza vaccinations.

Department of Health and Human Services
Centers for Disease Control and Prevention

CDC
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PLANNING CONSIDERATIONS FOR LARGE-SCALE VACCINATION CLINICS

This document provides general guidance to help ensure smooth operations at large-scale vaccination clinics under 8 major headings:

1. Leadership roles
2. Human resource needs
3. Vaccination clinic location
4. Clinic lay-out and specifications
5. Crowd management outside of the clinic
6. Crowd management inside of the clinic
7. Clinic security
8. Clinic advertising

LEADERSHIP ROLES:

- Designate local clinic leaders for overall vaccination campaign operations, and leaders for communications systems from both the public and private sectors
- Designate a clinic manager and a team leader each for supplies, logistics, medical personnel, support functions and their respective backups

HUMAN RESOURCE NEEDS:

- Secure staff to fill the positions of greeters-educators, priority client screeners, registration personnel, medical screeners, form/payment collectors, clinic flow controllers, vaccination assistants, vaccination administrators, security and emergency medical personnel
- Meet the language needs of the community using multi-lingual staff
- Prepare staff members to know and execute their responsibilities and be able to correctly answer questions from clients
- Cross-train staff members, if possible, to enable flexibility in meeting needs at various stations as demands fluctuate
- Make provisions for surge capacity staffing, particularly at clinic opening time, where pre-scheduling will not be done or large numbers of unscheduled clients are anticipated
- Request surge capacity staff from out-of-area city/county agencies and health departments, local private nursing agencies, local nursing associations, local law enforcement, local medical community, health care worker and pharmacy students, volunteer groups and personnel working at the retail stores/corporations that might be used as the clinic sites
- Ensure staff well-being by scheduling times for rests and snacks in a designated area

VACCINATION CLINIC LOCATION:

- Seek out school gyms, churches, auditoriums, theaters or other large covered public spaces accessible to the elderly and persons with disabilities
- Ensure proximity to population centers and mass transit, ample parking, separate entry and exit doors, adequate lighting and heating, functional and accessible restrooms, and adequate space for all clinic functions such as screening, registration, vaccine storage, vaccination, and staff breaks
- Select a facility with space for reasonably large and well-delineated covered gathering areas outside and inside of the clinic

CLINIC LAY-OUT AND SPECIFICATIONS:

- Set up for unidirectional client flow from an external gathering area → eligibility screening area (multiple stations) → clinic entrance → facility waiting area(s) → registration/question and answer/form completion area (multiple stations) → medical screening/treatment area (as needed) → Medicare and other payment area (multiple stations) → vaccination area (multiple stations) → exit at a location distant from the entrance
- Use liberal amounts of rope, stands and signs in multiple languages, as needed, in outside waiting area(s) and inside clinic to delineate routes for clients to follow from station to station
- Provide seating for clients at each vaccination station and one or more vaccination stations with surrounding screens where over-clothed clients can discreetly bare their arms for vaccination
- Section off private area(s) where clients who experience acute adverse events after vaccination or who have medical problems can be evaluated and treated
- Ensure the presence of an onsite emergency medical kit and a designated trained physician, emergency medical technician (EMT), pharmacist, or nurse certified in basic cardiopulmonary resuscitation who can administer treatment for allergic reactions and address urgent medical problems

CROWD MANAGEMENT OUTSIDE OF THE CLINIC:

- Schedule staff to arrive 1 to 2 hours before clinic opening time to welcome and screen clients even if pre-scheduling is being used
- Arrange accommodations for special-needs clients (e.g., persons with disabilities, very advanced age or fragility) for expedited access into the clinic
- Direct arriving clients into several lines and use numerous signs and announcements to clarify who falls into high-risk groups

- Communicate the number of vaccine doses available at the clinic to the clients
- Instruct clients to assess their eligibility to receive vaccination by reviewing the CDC, or similar, self-screening form and vaccine information statement (VIS); provide language translation services where necessary
- Update clients on their estimated waiting times to be screened
- Inform waiting clients that high-risk populations only will be served and a client numbering system will be in use
- Schedule at least 2 screeners per line to reduce crowd size and waiting times by rapidly identifying and retaining high-risk clients and dispersing non-priority individuals
- Distribute sequentially numbered tickets, VIS or other forms in appropriate languages that permit entry into the clinic to high-risk clients only
- Provide high-risk clients who cannot be served for lack of vaccine an up-to-date listing of alternative clinics providing vaccinations

CROWD MANAGEMENT INSIDE OF THE CLINIC:

- Vaccinate clients in the order of their numbered tickets
- Arrange accommodations for special-needs clients (e.g., persons with disabilities, very advanced age or fragility) to receive expedited vaccination – consider a dedicated vaccination line
- Communicate clinic updates and wait times for vaccination so that clients are free to leave and return to be vaccinated
- Provide entertainment materials, TV and/or refreshments if wait times are anticipated to be long
- Assist clients in completing required forms (e.g., consent forms and/or vaccination cards) by having sufficient registration staff available
- Utilize runners to keep staff stocked with ample supplies so that they can remain at their stations
- Maintain a steady flow of clients through the clinic so that vaccinators are never without a client at their stations; redirect clients who create bottlenecks
- Fill syringes with vaccine at the time of vaccination only – prepare just enough vaccine to meet the clinic's ongoing needs if providers insist upon pre-filling syringes; never pre-fill before clinic opening hours
- Discard any vaccine-filled syringes remaining after the clinic closes
- Provide adequate facilities (e.g., waiting areas, restrooms, water) to meet the needs of the clients

CLINIC SECURITY:

- Require all staff to wear identification cards color coded for their job functions
- Consider using uniformed presence to act as security and assist in managing crowds
- Employ security personnel to monitor the mood of waiting crowds and communicate deteriorating situations to the clinic manager
- Secure the vaccine and protect clinic staff and their valuables
- Recruit local volunteers familiar to clinic customers since they may be especially effective in diffusing crowd-related tension

CLINIC ADVERTISING:

- Use multi-lingual and multimedia channels to widely post clinic purpose, dates, locations, times, and priority populations served
- Provide instructions on how to set up appointments via telephone, in person, or other systems if pre-scheduling will be used
- Know how much vaccine is available for a scheduled clinic and how to reallocate vaccine through centralized or individual clinic efforts to meet the acute needs of other providers
- Recognize that scheduling may be overwhelmed and therefore not be maintainable or able to meet clients' needs during a time of severe vaccine shortage; direct clients to other facilities as required

High-Volume Influenza Vaccination Clinic

1 Screening Area

HIGH-RISK

NOT HIGH-RISK

EXIT

Screeners Outside Clinic Area

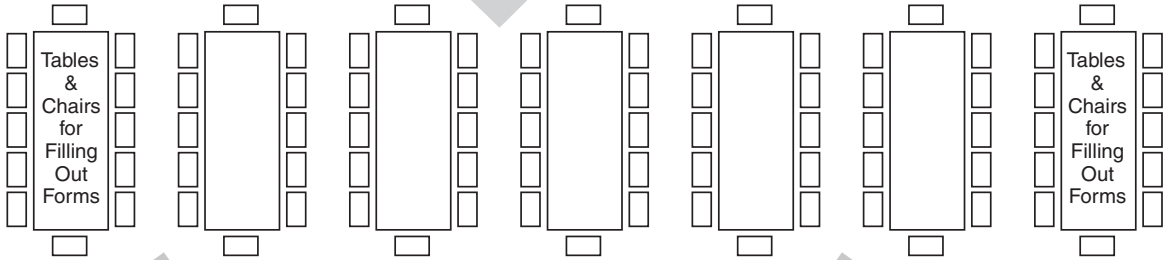
CLINIC ENTRANCE

Staff Greet and Guide Clients

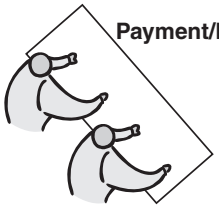
2 Client Waiting Area (Education and Communication)

3 Registration and Form Completion Area — Multiple Stations

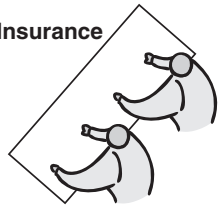
Medical and Other Staff to Answer Questions



4 Payment/Medicare/Insurance Station(s)



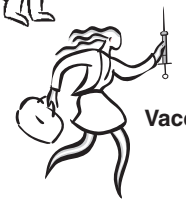
4 Payment/Medicare/Insurance Station(s)



5 Staff Directs Clients to Vaccination Lines

6 Staff Directs Clients to Vaccination Tables

7 Vaccinators and Assistants at Each Station



Runners to Keep Vaccinators and Assistants Supplied

8 Staff Directs Vaccinated Clients to Exit

CLINIC EXIT

REFERENCES:

These vaccination clinic planning considerations are a compilation of concepts and practices from many sources – published, unpublished and personal communication.

Published sources:

- Interim Influenza Vaccination Recommendations, 2004-05 Influenza Season http://www.cdc.gov/mmwr/preview/mmwrhtml/mm5339a6.htm
- Prevention and Control of Influenza: Recommendations of the Advisory Committee on Immunization Practices (ACIP) http://www.cdc.gov/mmwr/preview/mmwrhtml/rr5306a1.htm
- General Guidelines for Smallpox Vaccination Clinics: www.bt.cdc.gov/agent/smallpox/response-plan/files/annex-2.pdf
- Guidelines for Large Scale Vaccination Clinics**:** www.bt.cdc.gov/agent/smallpox/response-plan/files/annex-3.pdf
- Pandemic Influenza Response and Preparedness Plan www.hhs.gov/nvpo/pandemicplan/index.htm
- Vaccination Ventures: Explanation and Outcomes of Mass Smallpox Vaccination exercises. San Francisco Department of Public Health www.dph.sf.ca.us./Reports/June17Drill/FnlJune17Rpt.pdf

Unpublished draft document sources:

- Outbreak Control and Vaccination Campaign Management; Meningitis and Special Pathogens Branch, NCIS, CDC
- Community-based Mass Prophylaxis: A Planning Guide for Public Health Preparedness; Department of Public Health, Weill Medical College of Cornell University
- General Guidelines for Pandemic Influenza Vaccination Clinics; Health Services Research and Evaluation Branch, NIP, CDC
- Pandemic Influenza: Clinic Preparation Checklists; Health Services Research and Evaluation Branch, NIP, CDC
- State and county health pandemic influenza preparedness plans; selected states
- State, county and city after action reports on exercises of mass prophylaxis and immunization plans; selected states

Personal Communication:

- National Influenza Vaccine Summit; Community Vaccinators Working Group members

GUIDELINES AND RECOMMENDATIONS

Updated Infection Control Measures for the Prevention and Control of Influenza in Health-Care Facilities

January 20, 2005

Introduction

Influenza is a cause of respiratory illness that may require outpatient health-care visits and hospitalization. During the influenza season, outbreaks of health care-associated influenza affect both patients and personnel in long-term care facilities and hospitals. Although influenza vaccination of health-care personnel and long-term care facility residents can help prevent outbreaks, this year's shortfall in vaccine production may require increased reliance on other measures to prevent transmission. This document provides updated guidance for prevention and control of influenza transmission in health-care facilities. In addition, it provides electronic links to interim recommendations specific for the 2004-05 influenza season.

Transmission

Human influenza is transmitted from person-to-person primarily via virus-laden large droplets (particles >5 µm in diameter) that are generated when infected persons cough or sneeze; these large droplets can then be directly deposited onto the mucosal surfaces of the upper respiratory tracts of susceptible persons who are near (e.g., within 3 feet) the droplet source. Transmission may also occur through direct and indirect contact with respiratory secretions. Transmission from environmental surfaces has not been demonstrated by epidemiologic studies.

Prevention and Control Measures

Strategies for the prevention and control of influenza in health-care facilities include the following: influenza immunization for persons at high risk for complications, immunization for health-care personnel, respiratory hygiene/cough etiquette programs, Standard Precautions and Droplet Precautions, and restriction of ill visitors and personnel.

Vaccination

Health-care personnel and persons at high risk for complications of influenza should be encouraged to receive influenza vaccination according to current national recommendations (www.cdc.gov/flu/protect/whoshouldget.htm).

- Vaccination is the primary measure to prevent infection or development of illness from influenza, and thereby limit transmission of influenza, and prevent complications from influenza.
- Inactivated influenza vaccine or live attenuated influenza vaccine may be used to vaccinate most health care personnel.
  - **Inactivated vaccine** may be used by all health-care personnel and is preferred for vaccinating health-care personnel who have close contact with severely immunosuppressed persons (e.g., patients with hematopoietic stem cell transplants) during those periods in which the immunosuppressed person requires care in a protective environment.
  - **Live attenuated vaccine (LAIV)** may be given to health-care personnel younger than 50 years of age who do not have contraindications to receiving the nasal vaccine. These health-care personnel include those who take care of immunocompromised patients who do not require care in a protective environment. If health-care personnel who care for severely

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immunocompromised patients in protected environments receive LAIV, then they should not care for these patients for 7 days following immunization.

Infection Control Measures

In addition to influenza vaccination, the following infection control measures are recommended to prevent person-to-person transmission of influenza and to control influenza outbreaks in health-care facilities:

1. **Respiratory Hygiene/Cough Etiquette Programs**
   (www.cdc.gov/flu/professionals/infectioncontrol/resphygiene.htm)
   Respiratory hygiene/cough etiquette should be implemented at the first point of contact with a potentially infected person to prevent the transmission of all respiratory tract infections in health-care settings. Respiratory hygiene/cough etiquette programs include:
   - Posting visual alerts instructing patients and persons who accompany them to inform health-care personnel if they have symptoms of respiratory infection.
   - Providing tissues or masks to patients and visitors who are coughing or sneezing so that they can cover their nose and mouth.
   - Ensuring that supplies for hand washing are available where sinks are located; providing dispensers of alcohol-based hand rubs.
   - Encouraging coughing persons to sit at least 3 feet away from others, if possible.

2. **Standard Precautions** (www.cdc.gov/ncidod/hip/isolat/std_prec_excerpt.htm)
   During the care of any patient with symptoms of a respiratory infection, health-care personnel should adhere to Standard Precautions:
   - Wear gloves if hand contact with respiratory secretions or potentially contaminated surfaces is anticipated.
   - Wear a gown if soiling of clothes with a patient's respiratory secretions is anticipated.
   - Change gloves and gowns after each patient encounter and perform hand hygiene.
   - Decontaminate hands before and after touching the patient, after touching the patient's environment, or after touching the patient's respiratory secretions, whether or not gloves are worn.
   - When hands are visibly soiled or contaminated with respiratory secretions, wash hands with soap (either plain or antimicrobial) and water.
   - If hands are not visibly soiled, use an alcohol-based hand rub for routinely decontaminating hands in clinical situations. Alternatively, wash hands with soap (either plain or antimicrobial) and water.

3. **Droplet Precautions** (www.cdc.gov/ncidod/hip/isolat/droplet_prec_excerpt.htm)
   In addition to Standard Precautions, health-care workers should adhere to Droplet Precautions during the care of a patient with suspected or confirmed influenza:
   - Place patient into a private room. If a private room is not available, place (cohort) suspected influenza patients with other patients suspected of having influenza; cohort confirmed influenza patients with other patients confirmed to have influenza.
   - Wear a surgical or procedure mask upon entering the patient's room or when working within 3 feet of the patient. Remove the mask when leaving the patient's room and dispose of the mask in a waste container.
   - If patient movement or transport is necessary, have the patient wear a surgical or procedure mask, if possible.

4. **Antiviral Prophylaxis** (www.cdc.gov/flu/professionals/treatment/0405antiviralguide.htm)
   Antiviral prophylaxis may be given to patients, residents, and health-care personnel in accordance with current recommendations.

5. Restrictions for Ill Visitors and Health-care Personnel

If there is no or only sporadic influenza activity occurring in the surrounding community:

- Discourage persons with symptoms of a respiratory infection from visiting patients. Inform the public about restricted visitation through educational activities.
- Evaluate health-care personnel with influenza-like illness and perform rapid influenza tests (www.cdc.gov/flu/professionals/labdiagnosis.htm) to confirm the causative agent is influenza; determine whether they should be removed from duties that involve direct patient contact, especially those who work in certain patient-care areas (e.g., intensive care units [ICUs], nurseries, organ-transplant [protective environment]) units, and long-term care facilities. If excluded, they should not provide patient care for 5 days after the onset of symptoms.

If widespread influenza activity is in the surrounding community:

- Confirm that influenza is the cause of the outbreak by performing rapid or other influenza tests (www.cdc.gov/flu/professionals/labdiagnosis.htm) on a subset of ill persons.
- Actively communicate to the public at large (e.g., via public service announcements) and visitors (e.g., via posted notices) not to visit for 5 days following the onset of a respiratory illness.
- In high-risk areas (e.g., ICUs, nurseries, and organ-transplant [especially protective environment] units, and long-term care facilities), actively screen unvaccinated health-care personnel for symptoms of respiratory infection and exclude those with symptoms for 5 days following the onset of symptoms.

Control of Influenza Outbreaks in Health-care Settings

(www.cdc.gov/ncidod/hip/infect/flu_acute.htm)

When influenza outbreaks occur in health-care settings, additional measures should be taken to limit transmission. These include:

- Identify influenza virus as the causative agent early in the outbreak by performing rapid influenza virus testing (www.cdc.gov/flu/professionals/labdiagnosis.htm) of patients with recent onset of symptoms suggestive of influenza. In addition, obtain viral cultures from a subset of patients to determine the infecting virus type and subtype.
- Implement droplet precautions (www.cdc.gov/ncidod/hip/isolat/droplet_prec_excerpt.htm) for all patients with suspected or confirmed influenza.
- Separate suspected or confirmed influenza patients from asymptomatic patients.
- Restrict staff movement from areas with outbreaks to other units and buildings.
- If available, administer the current season's influenza vaccine to unvaccinated patients, residents, and health-care personnel. Follow current vaccination recommendations (www.cdc.gov/flu/protect/whoshouldget.htm) for nasal and intramuscular influenza vaccines.
- Administer influenza antiviral prophylaxis and treatment (www.cdc.gov/flu/professionals/treatment/0405antiviralguide.htm) to patients, residents, and health-care personnel according to current recommendations.
- Consider antiviral prophylaxis for all health-care personnel, regardless of their vaccination status, if the outbreak is caused by a variant of influenza virus that is not well matched by the vaccine.
- Curtail or eliminate elective medical and surgical admissions and restrict cardiovascular and pulmonary surgery to emergency cases only, when influenza outbreaks, especially those characterized by high attack rates and severe illness, occur in the community or acute care facility.

Prevention and Control of Influenza in Peri- and Postpartum Settings

(www.cdc.gov/flu/professionals/infectioncontrol/peri-post-settings.htm)

Pregnant women are at increased risk of hospitalization from influenza complications. Recommendations for preventing influenza transmission between hospitalized infected mothers and their infants have been developed for clinicians and public health officials.

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Additional Resources

The following resources provide information about preventing the spread of influenza in health-care facilities:

Guidance Documents

- Questions and Answers About Detection and Control of Influenza Infection in Acute Care Facilities (www.cdc.gov/ncidod/hip/infect/flu_acute.htm)
- Respiratory Hygiene/Cough Etiquette (www.cdc.gov/flu/professionals/infectioncontrol/resphygiene.htm)
- Isolation Guideline (www.cdc.gov/ncidod/hip/isolat/isolat.htm)
  - Standard Precautions excerpt (www.cdc.gov/ncidod/hip/isolat/std_prec_excerpt.htm)
  - Droplet Precautions excerpt (www.cdc.gov/ncidod/hip/isolat/droplet_prec_excerpt.htm)
- Pneumonia Guideline, Influenza excerpt (www.cdc.gov/ncidod/hip/infect/flu_pneu_excerpt.htm)
- Infection Control in Healthcare Personnel, Influenza excerpt (www.cdc.gov/ncidod/hip/guide/infectcont98.htm)
- Prevention and Control of Influenza in the Peri- and Postpartum Settings (www.cdc.gov/flu/professionals/infectioncontrol/peri-post-settings.htm)
- Preventing Opportunistic Infections in HCST/Bone Marrow Transplant Recipients (www.cdc.gov/ncidod/hip/guide/marrow.htm)
- Settings Where High-Risk Persons and Their Contacts May Be Targeted For Vaccination (www.cdc.gov/flu/professionals/infectioncontrol/settings.htm)
- Healthcare Infection Control Practices Advisory Committee (HICPAC) Publications (www.cdc.gov/ncidod/hip/guide/guide.htm)
- Bradley SF. Prevention of influenza in long-term-care facilities. Long-Term-Care Committee of the Society for Healthcare Epidemiology of America. Infect Control Hosp Epidemiol 1999;20:629-37.

Educational Materials

- Cover Your Cough materials (www.cdc.gov/flu/protect/covercough.htm)
- Speak-up™ Campaign (www.cdc.gov/ncidod/hip/speakup.htm)
- Poster: Notice to Patients to Report Flu Symptoms (www.cdc.gov/ncidod/hip/infect/respiratoryposter.pdf)
- Poster: Healthy Habits (www.cdc.gov/flu/professionals/flugallery/posters.htm#healthyhabits)
- Information about personal protective equipment (www.cdc.gov/ncidod/hip/ppe)

INFECTIOUS DISEASE EMERGENCY PLAN TEMPLATE

WORKSHEETS

Worksheet 1: Leadership Roles

POSITION	NAME / DEPARTMENT / AGENCY	TELEPHONE Work/home
Chief Executive		
Health Director		
Local Infectious Disease Coordinator		
Public Health Nurse(s)		
Emergency Management Coordinators		
Hospital/ Health Center Disaster Coordinators		
Emergency Medical Services		
PIO (Public Information Officer (Designee)		
Animal Control Officer		
Animal Inspector		
Volunteer Resources		
Police Department		
Fire Department		
Public Utilities		

POSITION	NAME / DEPARTMENT / AGENCY	TELEPHONE Work/home
Public Works Dept.		
Schools		
Council on Aging		
(Other)		

Worksheet 2: Media Listings

MEDIA ORGANIZATIONS	CONTACT	TELEPHONE	LOCATION
Newspaper			
Newspaper			
Newspaper			
TV Station			
TV Station			
TV Station			
Radio Station			
Radio Station			
Radio Station			

Worksheet 3: Communication with Special Populations

As part of its infectious disease planning, local health centers should identify groups in their communities that will require special efforts to ensure that they receive all the information necessary to protect them during an infectious disease emergency. Outreach conducted during the pre-emergency period will ensure that channels are in place to facilitate communication with special groups during a real emergency. Special groups include non-English speaking populations, hearing or sight impaired, homeless, homebound, etc.

POPULATIONS	AGENCY	CONTACT	TELEPHONE
Example: Elderly **Example: Homeless** **Example: Non-English Speaking**	• **Council on Aging** **Community Shelters** **Community-based Organizations**		

Worksheet 4: Estimating Potential Impact of Pandemic in Community

CDC has developed software to assist local pandemic planners in establishing estimates of the potential impact of the next pandemic in their community. This software may be downloaded from www2.cdc.gov/od/fluaid/default.htm.

CDC Estimates of Percent of Population Affected by the Next Pandemic	Number Affected in Example (Pop. 6,000,000)	Number Affected in Your Community (Pop._____)
Up to 37% of pop. Will become ill with flu	2,220,000	
Up to 17% of pop. Will require out-patient visits	1,020,000	
Up to 0.4% of pop. Will require hospitalization	26,000	
Up to 0.1% of pop. Will die of flu-related causes	6,000	

Worksheet 5: Hospital /Health Center Infrastructure

HOSPITAL/HEALTH CENTER	MUNICIPALITY	CONTACT PERSON	TELEPHONE

Worksheet 6: Ambulance Services

MUNICIPALITY COVERED	AMBULANCE SERVICE	ALS CAPABILITY?	TELEPHONE

Worksheet 7: Back-Up Nursing Staff (VNA's, School nurses, Clinical Temporary Agencies, Corporate nurses, volunteers.)

NAME	AGENCY/ ORGANIZATION	TELEPHONE

Worksheet 8: Funeral Homes

FACILITY	CONTACT	TELEPHONE	# BODIES ABLE TO HOLD

Worksheet 9: Back- up Emergency Facilities (hotels, college dormitories, municipal buildings, churches, sports facilities, etc.)

FACILITY	FACILITY DIRECTOR	TELEPHONE

Worksheet 10: Pharmacies

PHARMACY	ADDRESS	TELEPHONE	PHARMACY MANAGER

Worksheet 11: Schools

SCHOOL	ADDRESS	TELEPHONE	PRINCIPAL	# STUDENTS ENROLLED

Worksheet 12: Child Care Centers

CHILD CARE CENTER	ADDRESS	TELEPHONE	DIRECTOR	# CHILDREN ENROLLED

Worksheet 13: Special Needs Facilities (long term care facilities, group homes, jails and prisons, etc)

During a communicable infectious disease emergency, facilities that house populations with special needs may experience severe staffing shortages due to illness among employees. Contingency plans should be established to meet the needs of special populations during periods of high absenteeism on the part of their caregivers.

FACILITY	POPULATION	CONTACT	TELEPHONE

Worksheet 14: Veterinarians/ Veterinary Laboratories

VETERINARY PRACTICE/LAB	CONTACT	TELEPHONE

Worksheet 15: Social Service Organizations (Big Brother/Big Sister, Covenant House Any Baby Can, ABCD, Parenting Coalition, etc.)

NAME	ORGANIZATION	TELEPHONE