Influenza Pandemic Response Plan

Framework, Methodology, And Recommendations For Pandemic Preparedness

Pennsylvania's IPRP 2005

Department of Health

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Preface

Pandemic is defined as a disease affecting or attacking the population of an extensive region, including several countries, and/or continent(s). It is further described as extensively epidemic. Before the advent of Severe Acute Respiratory Syndrome (SARS), influenza viruses were considered to be unique in their ability to cause sudden, pervasive illness in all age groups on a global scale. While the World Health Organization (WHO) and the Centers for Disease Control and Prevention (CDC) have not characterized SARS as a pandemic, its potential has been clearly established, adding a new dimension to the pandemic threat.

Three influenza "pandemics" occurred during the last century, one of which, the infamous "Spanish flu" of 1918, was responsible for more than 20 million deaths worldwide, including an estimated 450,000 in the United States. Many of those affected were healthy young adults. The development of vaccines, antiviral drugs and other medical advances has provided new tools in the fight against emerging diseases, but only provides limited impact. Existing influenza vaccine only protects against previously circulating strains of the disease. About six to nine months are required to develop a vaccine in response to a newly identified strain, a period during which the entire population is vulnerable. Experience with SARS (for which no effective treatment has been discovered) has reminded us of the speed at which disease can be spread throughout the world. It is generally acknowledged that production capacity for antiviral medications will not be adequate to meet worldwide demand. On the positive side, the available pneumococcal vaccine can reduce the incidence of some complications that can result from influenza.

The response to, and mitigation of, the health and social consequences of a pandemic will take place at both the state and local levels, with the Pennsylvania Department of Health (Department) assuming the lead for the public health response. The Influenza Pandemic Response Plan (IPRP) addresses the unique challenges that could rapidly unfold. The IPRP will be integrated into the Department's Emergency Preparedness and Response Plan.
The IPRP details the phases of a pandemic; identifies the roles and responsibilities of key public health responders for the operational components to include surveillance; medical/emergency response; vaccine/pharmaceutical procurement, distribution and administration; and communications and education. It also identifies command and control, policy, legal authorities and organizational structures that facilitate pandemic response activities. The plan is based on the influenza model but could be adapted for use in response to other pandemic situations.

List of Attachments

Abbreviations Used in This Document

BCHS	Bureau of Community Health Systems
BOE	Bureau of Epidemiology
BOL	Bureau of Laboratories
CDC	Centers for Disease Control and Prevention
CENIC	Commonwealth Emergency Network Information Center
CISM	Critical Incident Stress Management
CMHD	County and Municipal Health Departments
CPPR	Counterterrorism Planning Preparedness and Response Act
DAAC/DNCF	Division of Acute and Ambulatory Care/Division of Nursing Care Facilities
DCORT	Disaster Crisis Outreach and Referral Teams
Department	Pennsylvania Department of Health
DPCL	Disease Prevention and Control Law
DPW	Department of Public Welfare
ED	Emergency Department
EMS	Emergency Medical Services
EpiX	Epidemic Information Exchange
EPRP	Emergency Preparedness and Response Plan
FEOC	Forward Emergency Operations Center
HRSA	Health Resources Services Administration
ICP	Infection Control Practitioner
ICS	Incident Command System

Abbreviations Used in This Document (cont'd)

IDE	Infectious Disease Epidemiology
ILI	Influenza-Like Illness
IPRP	Influenza Pandemic Response Plan
ISPN	Influenza Sentinel Provider Surveillance Network
LMS	Learning Management System
NIMS	National Incident Management System
OMHSAS	Office of Mental Health and Substance Abuse Services
OTC	Over-the-Counter
PA HAN	Pennsylvania Health Alert Network
PA-NEDSS	Pennsylvania National Electronic Disease Surveillance System
PA SNS	Pennsylvania Strategic National Stockpile
PCR	Polymerase Chain Reaction
PEMA	Pennsylvania Emergency Management Agency
POD	Point of Dispensing
PPE	Personal Protective Equipment
ProMed	Program for Monitoring Diseases
RODS	Real-time Outbreak and Disease Surveillance System
SARS	Severe Acute Respiratory Syndrome
Secretary	Secretary of Health
SEOC	State Emergency Operations Center
SIIS	Statewide Immunization Information System
SNS	Strategic National Stockpile

Abbreviations Used in This Document (cont'd)

UCS/ICS	Unified Command System/Incidence Command System
VAERS	Vaccine Adverse Events Reporting System
VFC	Vaccines For Children
VIS	Vaccine Information Statements
WHO	World Health Organization

I. PURPOSE

A. The purpose of Pennsylvania's Influenza Pandemic Response Plan (IPRP) is to provide a framework, methodology and recommendations for pandemic preparedness actions at the federal, state and local levels and is intended to provide pandemic disease prevention strategies.

B. The IPRP uses the terms "Federal," "State" and "Local" as headings to distinguish between responsibilities carried out by various agencies during an influenza pandemic:

1. Federal: Activities carried out by any federal government agency that possesses a role in the planning, response or recovery phases of an influenza pandemic.
2. State: Activities carried out by the Pennsylvania Department of Health (hereinafter "the Department") during the phases of the influenza pandemic.
3. Local: Activities carried out by local health jurisdictions during the phases of the influenza pandemic.

C. For purposes of the IPRP, "local health jurisdiction" means the Department's six district Offices, the State Health Centers, and the six County and four Municipal Health Departments.

II. AUTHORITY AND RESPONSIBILITIES

A. The Governor is responsible for addressing threats to this Commonwealth and its citizens presented by disasters. Responsibilities and authority of the Governor include:

1. Declaration of disaster emergency;
2. Activation of disaster response;
3. Suspension of certain regulatory statutes;
4. Utilization and redirection of state and local government resources;
5. Requisition or utilization of any public, quasi-public or private property, if necessary to cope with the disaster; and
6. Direction and requirements for evacuations and access control to disaster areas.

B. The Department (Attachment A) is responsible for the health of the Commonwealth's entire population. The Secretary of Health (hereinafter "Secretary") has the authority to determine and employ the most efficient and practical means necessary for the prevention and control of the spread of disease. (See 71 P.S. §§ 532(a) and 1403(a)). Responsibilities and authority for the Secretary include:

1. Coordinated activation of the response and recovery aspects of any and all applicable state, county and local response plans with the Pennsylvania Emergency Management Agency (hereinafter "PEMA"); and

2. Authorization of the furnishing of aid and assistance as detailed in Attachment B.

C. Authorities relevant to Emergency Medical Services (hereinafter "EMS") are detailed in the Department's Emergency Preparedness Response Plan.

D. The Department of Public Welfare is responsible for the coordination of mental health services in the event of an emergency.

E. Specific authorities in support of Commonwealth agencies, with a role in responding to an influenza pandemic, are provided in the Commonwealth Emergency Operations Plan.

III. SITUATION AND ASSUMPTIONS

A. Background

1. Influenza, also known as "the flu," is a contagious disease that is caused by the influenza virus and most commonly attacks the respiratory tract in humans. The flu is not a cold. Flu usually comes on suddenly, starting with a sore throat, fever, headache, and profound fatigue, followed by dry cough, body aches, prostration, and possibly nausea/vomiting. There are three main types of influenza viruses: A, B, and C. Influenza Type C causes only mild disease and has not been associated with widespread outbreaks. Influenza Type A, however, causes epidemics yearly. InfluenzaType B infrequently causes widespread flu epidemics.
2. Influenza pandemic is most likely when the Influenza Type A virus makes a dramatic change (i.e., antigenic "shift"). This shift results in a new or "novel" virus to which the general population has no immunity. The appearance of a novel virus is the first step toward a pandemic. Influenza Type B viruses do not undergo shift and do not cause influenza pandemics.

B. Situation

1. The estimated morbidity and mortality during an influenza pandemic within 12-16 weeks, nationwide, and in Pennsylvania is as shown below:

	United States	Pennsylvania
Require Outpatient Care	50 million	1.6 million
Hospitalizations	2 million	37,800
Deaths	500,000	9,100

2. To some extent, everyone will be affected by an influenza pandemic.
3. It will take six to eight months after the novel virus is identified and begins to spread among humans before a specific vaccine would likely be available for distribution.
4. The Department will depend on local, community, state, and federal services to provide the public health response necessary for, and appropriate response to, annual influenza epidemics.
5. Federal, state and local collaboration will be essential to appropriately respond to the next pandemic.
6. Regardless of the availability of a vaccine that protects against the influenza pandemic strain, pneumococcal vaccine will reduce the risk of complications that can result from influenza infections.

C. Assumptions

1. An influenza pandemic is inevitable and will probably give little warning. To some extent, everyone will be affected by a pandemic.
2. An influenza pandemic will cause simultaneous outbreaks across the United States limiting the ability to transfer assistance from one jurisdiction to another.
3. Effective preventive and therapeutic measures, including vaccines, antiviral agents and other antibiotics, will likely be in short supply or not available. Supplies that are available will most likely be managed by the state and distributed using the Pennsylvania SNS Implementation Plan.
4. Two doses of influenza vaccine, administered 30 days apart, may be needed to develop full immunity to the novel influenza virus.
5. The Department may need to identify funds to purchase the vaccine for Pennsylvania's citizens.
6. Widespread illness in communities may increase the likelihood of significant shortages of personnel who provide other essential community services.
7. An influenza pandemic may exhaust availability of assistance from the federal government.
8. The first wave of pandemic influenza will be followed by a second wave arriving three to nine months after the first wave.

IV. CONCEPT OF OPERATIONS

A. Command and Management

1. Command and Management functions are outlined in the Command Center Manual. The purpose of this Command Center Manual is to provide management guidance to users in order to establish, operate, and evaluate the Department's response to public health threats. The Command Center Manual is intended to be a companion to the Department's "all hazard" Disaster EPRP and all associated plans.

2. The Command Center serves as the most efficient and coordinated approach for the Department to coordinate with PEMA and public health entities on all health-related emergency preparedness, response and recovery activities.

3. Command and Control are based upon three guiding principles:

   a. While PEMA coordinates the overall response, the Department has the lead role in ensuring the health of Commonwealth citizens during any emergency event.

   b. When responding to a large event, using a focused organizational structure ensures that all issues are considered and addressed in proper prospective. The Secretary is responsible for the activities of the Department. The use of the National Incident Management System (NIMS) in areas such as the Unified Command System/Incidence Command System (UCS/ICS) to organize a large multi-faceted response ensures that all issues are addressed and appropriate actions are taken.

   c. Communication and coordination are essential. Many of the activities accomplished by the Department are done in conjunction with county/municipal health departments, other state agencies, the federal government, private and public health organizations and professional associations.

4. The Command Center manual includes a basic plan, Command Center Position Checklists, and forms. It describes how strategic policy is determined and how it differs from emergency operations and coordination; three levels of activation of the Command Center; and infrastructure required to operate the Command Center.

B. Roles and Responsibilities

1. Federal:
   a. Coordinate national influenza pandemic response planning.
   b. Develop a national information database/exchange clearinghouse.

c. Develop generic guidelines and information templates for modification and adaptation of pandemic response planning, as needed.

2. State:
   a. Maintain data management systems, such as the National Electronic Disease Surveillance System (NEDSS), the Real-time Outbreak and Disease Surveillance System (RODS) and the Statewide Immunization Information System (SIIS) to implement the IPRP.
   b. Incorporate the IPRP with the Commonwealth's and the Department's existing emergency response plans.
   c. Review and exercise the IPRP on an annual basis.
   d. Develop and maintain legal documents for volunteer resources, quarantine, etc.
   e. Coordinate agreements with the State Police.
   f. Develop a plan to close and reopen schools, businesses and other public places/events.
   g. Prepare to activate operations for a pandemic appropriate for the occurring infectious disease.

3. Local:

   a. Coordinate security provisions for vaccine, human resources and clinic locations.
   b. Identify local administrative and medical decision makers.
   c. Develop local preparedness plans that correspond to statewide plans.
   d. Identify local surveillance teams.
   e. Meet with local stakeholders and review major elements of local emergency response preparedness.
   f. Modify local Points of Dispensing (PODs) to account for updates on recommended target groups, projected vaccine supply and available human resources.
   g. Secure written agreements from hospitals, pharmacies and other identified community properties that will be utilized to establish storage, security and transport for bulk amounts of vaccines/antivirals.
   h. Elicit written commitments from agencies and institutions that will provide volunteers.
   i. Maintain a current plan for local surveillance, medical/emergency response, vaccine/ antiviral administration and communications.
   j. Develop a plan utilizing communication templates, in languages common for the area, to educate the public.
   k. Communicate with schools, businesses and other venue for potential closures.
   l. Develop collaborations with adjoining counties/districts/states.
   m. Conduct local and county exercises/drills annually for an emergency influenza pandemic response.

V. INFLUENZA PANDEMIC RESPONSE ACTIONS

Influenza pandemic response activities are delineated by periods within the following components: **Pandemic Influenza Surveillance, Laboratory Diagnostics, Emergency Response, Community Disease Control and Prevention, Distribution of Vaccines and Antivirals, Public Health Communications and Workforce Support**. For each component, the pandemic phases are categorized as Interpandemic Period, Pandemic Alert Period, Pandemic Period and Post- Pandemic Period.

Interpandemic Period	**Phase 1**: No new influenza virus subtypes have been detected in humans. An influenza virus subtype that has caused human infection may be present in animals. If present in animals, the risk of human infection or disease is considered to be low.
	Phase 2: No new influenza virus subtypes have been detected in humans. However, a circulating animal influenza virus subtype poses a substantial risk of human disease.
Pandemic Alert Period	**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.
	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.
	Phase 5: Larger cluster(s), but human-to-human spread still localized; virus increasingly better adapted to humans, but not yet fully transmissible.
Pandemic Period and Next wave(s)	**Phase 6**: Increased and sustained transmission in general population.
Post-Pandemic Period	Return to interpandemic period and evaluation/assessment.

If a novel influenza virus would be detected at any time in the United States and/or Pennsylvania, the Interpandemic and Alert Activities could be heightened to a Pandemic Response mode. Command and Management would be activated along with federal, state and local activities for surveillance, emergency response, vaccine/antiviral administration and communications.

VI. PANDEMIC INFLUENZA SURVEILLANCE

A. Influenza viruses have constantly changing antigenic properties. Surveillance for a pandemic must include 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. The goals of influenza surveillance are to detect the earliest appearance of a novel influenza virus and to describe the epidemiological features of the new virus circulation in Pennsylvania.

B. The Department, through its Bureaus of Epidemiology (BOE), Bureau of Laboratories (BOL) and Community Health Systems (BCHS), will: (Attachment C)

1. Ascertain the possible existence of cases of an illness or health condition caused by epidemic or pandemic disease or novel and highly fatal infectious influenza virus that poses a substantial risk of a significant number of human fatalities or incidents of permanent or long-term disability.
2. Ensure that appropriate testing, and identification of, virus isolates are performed in a timely manner.
3. Investigate all such cases for sources of infection and ensure that they are subject to proper control measures.
4. Define the epidemiology of the disease or health condition.
5. Identify exposed individuals and develop information relating to the source and spread of the disease or health condition.

C. The BOE currently engages in a number of influenza surveillance activities. There are four main sources of information that are used for influenza surveillance:

1. Influenza Sentinel Provider Surveillance Data:
   Outpatient influenza-like-illness (ILI) are collected through the US Influenza Sentinel Provider Surveillance Network (ISPN), a collaborative effort between the Centers for Disease Control and Prevention (CDC), state and local health jurisdictions and health care providers. Pennsylvania participates in the ISPN program. The enrolled providers regularly report the total number of patients seen and the number of those patients with ILI by age group on a weekly basis from week 40 to week 20 of the following year (roughly from October to May). The minimum goal for each state is one provider for every 250,000 residents.

   BOE downloads data from the Influenza Sentinel Surveillance program on a weekly basis. These data are analyzed for provider participation and trends in the percentage of total visits attributed to ILI. This information, along with

information from PA-NEDSS, is put into a report, which is disseminated to front-line public health staff every week.

A BOE physician, after reviewing the week's influenza data from all sources, reports a weekly "flu code" to CDC. This flu code characterizes Pennsylvania's flu activity as no activity, sporadic, local, regional, or widespread.

2. Influenza Reports to PA-NEDSS:
   PA-NEDSS receives reports of laboratory tests positive for influenza from laboratories (including BOL), hospitals, and physicians throughout the state. The PA-NEDSS database is scanned on a weekly basis for influenza test results and a report is created that plots trends in influenza incidence, gives breakdowns by geographic area and influenza type (A or B), and identifies deaths due to influenza by age, etc.

3. RODS Data:
   BOE uses RODS as its primary syndromic surveillance system. The RODS system collects emergency department (ED) registration data (primarily chief complaint information) in real time from participating hospitals in the Commonwealth. RODS uses the chief complaint to categorize visits into syndromes such as *constitutional* and *gastrointestinal.* RODS also collects point-of-sale data for over-the-counter (OTC) medications from pharmacies and grocery stores, representing about 70% of market share in Pennsylvania. Medication sales are grouped according to product code into categories such as *cough/cold* and *antidiarrheal*. Results can be viewed by RODS users via a secure website 24/7/365. The website is updated every two minutes. Aberration detection algorithms are run on the emergency room data every four hours, and on the OTC data daily. If an unusual increase in any of the categories is noted, e-mail alerts are sent to selected public health staff.

4. Reports of Influenza Outbreaks:
   BOE receives reports of outbreaks of influenza from institutions and other sources. A summary of the outbreak is prepared and emailed to other public health staff via the Early Notification group list. The number of outbreaks reported is considered in the determination of the weekly "flu code."

INTERPANDEMIC PERIOD (PHASES 1 AND 2) – KEY ACTIONS

Phase 1*: No new influenza virus subtypes have been detected in humans. An influenza virus subtype that has caused human infection may be present in animals. If present in animals, the risk of human infection or disease is considered to be low.*

Phase 2*: No new influenza virus subtypes have been detected in humans. However, a circulating animal influenza virus subtype poses a substantial risk of human disease.*

1. Federal:
   a. Coordinate national and international surveillance.
   b. The World Health Organization (WHO) and/or CDC will issue a Novel Alert when a new strain of influenza is detected in at least one human somewhere in the world, or a virus is transmitted from another species.
   c. Issue international travel alerts and advisories when/where a novel strain is identified.
   d. Coordinate national and international surveillance.

2. State:
   a. Maintain and expand routine sentinel surveillance system through the Influenza Sentinel Surveillance Network Coordinator from October to May:
      (i) Monitor sentinel provider data weekly for completeness and/or errors.
      (ii) Provide feedback and maintain contact with sentinel providers weekly to encourage reporting and follow-up on unusual reports.
      (iii) Contribute to state pandemic planning issues and activities.
      (iv) Maintain a strong working relationship with the PA BOL.
      (v) Encourage sentinel providers to submit specimens for viral culture to the state laboratory.
      (vi) Conduct a weekly assessment of overall influenza activity level in the state during the normal flu season and report the data to the CDC.
   b. Conduct passive surveillance of respiratory specimens sent to the BOL for viral isolation, identification of influenza, type and subtype.
   c. Conduct passive surveillance of influenza reports in PA-NEDSS to determine, reported weekly to CDC.
   d. Conduct syndromic surveillance for ILI using RODS and other early event detection system, including evaluation of point-of-sale data for OTC medications for cough/cold codes.
   e. Continue current epidemiological surveillance methods for outbreak investigation.
   f. Investigate deaths and severe illness (encephalopathy) in children less than 18 years of age.
   g. Investigate reports of influenza outbreaks in institutions.
   h. Distribute electronic information Health Alerts through the Pennsylvania Health Alert Network (PA HAN) to sentinel surveillance physicians, hospital emergency departments, infection control practitioners in hospitals, nursing homes, and other long term care facilities, District Offices, County/Municipal Health Departments (CMHDs), and identified central offices to heighten awareness of an unusual or new influenza strain that has been identified, in addition to continuous monitoring of routine influenza activity.
   i. If a novel virus alert occurs, the BOE will:
      (i) Expand virologic and disease-based surveillance to year-round surveillance. This could be accomplished by:
         (a) Asking all current sentinel providers to monitor ILI year-round.
         (b) Asking a subset of current sentinel providers to monitor ILI year-round.
         (c) Recruiting additional providers to monitor ILI year-round.

(ii) Recommend viral testing and case investigation for ILI outside of "typical" influenza season.

(iii) Submit isolates to BOL for subtyping on cases of ILI that occur outside of the peak of ILI activity.

(iv) In some situations, if the novel influenza virus is a highly pathogenic avian strain, such as with the H5N1 influenza virus in Asia, local hospital laboratories should not attempt viral isolation because of the potential risk that the strain could spread. Specimens should be sent to the PA BOL where isolation and subtyping would be done under more stringent bio-containment conditions. Influenza infection can be diagnosed locally using antigen detection, immunofluorescence, or polymerase chain reaction (PCR). Guidance will be provided by CDC appropriate to each specific novel virus alert.

(v) Monitor ILI in persons traveling from geographic areas in which novel strains have been isolated.

(vi) Monitor ILI in poultry and swine workers.

(vii) Implement the PA Avian Influenza Poultry Work Protection Plan. (Attachment D)

(viii) Monitor ILI in military personnel at the various military bases in PA.

(ix) Monitor bulletins from CDC regarding virologic, epidemiologic and clinical findings associated with new variants isolated within or outside the United States.

(x) PA BOL will obtain appropriate reagents from CDC to detect and identify the novel strain.

(xi) Request submission of specimens from laboratory directors, Infection Control Practitioners (ICPs), physicians, emergency rooms, and urgent care centers for viral culture from patients presenting with ILI or unusually severe symptoms, especially those with a recent travel history to or from the region of novel virus circulation.

(xii) Evaluate personnel and other resources needed to complete mass disease investigations. (Attachment E)

2. Local: The Department's District Offices, State Health Centers and CMHDs will:
   a. Be alert for unusual communicable diseases reported in local communities and discuss these with the Division of Infectious Disease Epidemiology (IDE).
   b. Investigate/report any communicable diseases suspicious for the novel influenza virus, place in PA-NEDSS and contact IDE. Be prepared to trace contacts, if necessary.
   c. Identify and recruit sentinel surveillance physicians when requested.
   d. Distribute specimen testing kits and instructions to participating sentinel surveillance physicians.
   e. Be alert for unusual communicable diseases reported by PA HAN, PA-NEDSS, and conference calls.
   f. Develop and/or review enhanced plans for local surveillance, control, and containment of a localized outbreak of a pandemic strain. (This includes planning for increased staff requirements for interview, cultures and contact tracing.)

g. Identify key staff and ensure proficiency in disease investigation on an annual basis.
h. Review annually and maintain schedules for disease investigation deployment.

PANDEMIC ALERT PERIOD (PHASES 3, 4 AND 5) – KEY ACTIONS

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.*

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.*

Phase 5*: Larger cluster(s), but human-to-human spread still localized; virus increasingly better adapted to humans, but not yet fully transmissible.*

1. Federal:
   a. Provide protocols for screening travelers arriving in the U.S.
   b. Share information from quarantine stations with state and local health jurisdictions.
   c. Investigate all early cases either originating in the U.S. or that are imported into the country.
   d. Increase laboratory testing of influenza by using rapid antigen detection tests for persons with compatible clinical syndromes, particularly among those who may have had recent exposure at the site of the outbreak.
   e. Provide guidelines to assist with triage of specimens for testing and for choosing which isolates to send to CDC.
   f. Monitor for potential antiviral resistance.

2. State: If the Department is notified by CDC of human infection, with or without human-to-human transmission, the Department will:
   a. Fully activate the Epidemiology Response Plan.
   b. Define a case definition specific to the jurisdictions and situations where cases are occurring and work with individual hospitals to report those cases.
   c. Recommend levels of infection control measures needed for hospitals directly impacted; facilitate testing by BOL or with local hospital laboratories for preliminary testing of suspicious disease specimens. Increase capacity at the state laboratory for specimens.
   d. Identify demographic characteristics of cases and prioritize disease investigation.
   e. Provide 24/7 consultations for epidemiological investigation of disease outbreaks to the areas most affected or in danger of large numbers of mortality.
   f. Activate current surveillance methods for influenza if outside of the regular influenza season:
      (i) Virologic surveillance.
      (ii) Disease-based surveillance.
      (iii) Outbreak investigations.
      (iv) Case investigations of pediatric deaths associated with influenza.

g. ILI surveillance in hospital emergency room by utilizing RODS.
h. If a novel virus is identified in a Pennsylvania resident, work with the local health jurisdiction to conduct an epidemiological investigation to determine possible sources of exposure.
i. Perform active surveillance for ILI in travelers returning to Pennsylvania from areas where novel virus has been isolated or confirmed in humans and present with clinical illness possibly caused by influenza including pneumonia, acute respiratory distress syndrome, or other severe respiratory illness. Appropriate specimens should be collected to diagnose influenza infection.
j. Perform active surveillance in conjunction with the Department of Defense for ILI in military personnel returning from areas where novel virus has been isolated or confirmed in humans.
k. Monitor school absenteeism due to ILI with the Division of School Health, PA Department of Education and local health jurisdictions.
l. In some situations, if the novel influenza virus is a highly pathogenic avian strain, such as with the H5N1 influenza virus in Asia, local hospital laboratories should not attempt viral isolation because of the potential risk that the strain could spread. Specimens should be sent to the PA BOL where isolation and subtyping would be done under more stringent biocontainment conditions. Influenza infection can be diagnosed locally using antigen detection, immunofluorescence, or PCR. Guidance will be provided by CDC appropriate to each specific novel virus alert.
m. In collaboration with the CDC and other groups at the national level, consider special studies in concert with local public health officials and clinicians to:
   (i) Document outbreaks of influenza in different population groups.
   (ii) Determine age-specific attack rates, morbidity and mortality.
   (iii) Describe unusual clinical syndromes (as well as risk factors for these syndromes and appropriate treatment).
   (iv) Describe unusual pathologic features associated with fatal cases.

PANDEMIC PERIOD (PHASE 6) – KEY ACTIONS

***Phase 6**: Increased and sustained transmission in general population.*

1. Federal:
   a. Implement all relevant elements of national pandemic plan, including coordination of response and implementation of specific interventions.
   b. Assess and publicize the current and cumulative national impact.
   c. Provide guidance to state and local authorities in all sectors on implementation and evaluation of proposed interventions.
   d. Implement in full pandemic contingency plans.
   e. If resources permit, collect available data on effectiveness and safety of clinical interventions and share these with states and local public health authorities.
   f. Monitor and assess national impact (morbidity, mortality, workplace absenteeism, regions affected, risk groups affected, health-care worker availability, essential

worker availability, health-care supplies, bed occupancy/availability, admission pressures, use of alternative health facilities, mortuary capacity, etc.).

g. Assess uptake and impact of: treatments and countermeasures, including vaccine/antiviral efficacy and safety and emergence of antiviral resistance, nonpharmaceutical interventions, etc.
h. As disease activity intensifies and becomes more widespread, adjust surveillance (e.g., reduce virological surveillance, discontinue case management database) and adjust case definition to reflect increasing certainty of clinical diagnoses in absence of virological confirmation; switch to aggregate data collection on morbidity, mortality.
i. Maintain sufficient virological surveillance to detect antigenic drift.
j. Monitor geographical spread of disease from point(s) of introduction/first detection.
k. Use enhanced surveillance and case management database to identify initial cases/contacts and track initial geographical spread.
l. Monitor for possible changes in epidemiology, clinical presentation and virological features.

2. State:
   a. Fully activate the Epidemiology Response Plan.
   b. Define a case definition specific to the jurisdictions and situations where cases are occurring and work with individual hospitals to report those cases.
   c. Recommend levels of infection control measures needed for hospitals directly impacted; facilitate testing by BOL or with local hospital laboratories for preliminary testing of suspicious disease specimens; increase capacity at the state laboratory for specimens.
   e. Identify demographic characteristics and prioritize disease investigation.
   f. Positive cases will require community wide interventions. If an effective vaccine is available, this will become the Department's priority. The other specific interventions recommended, until vaccination is fully implemented, will be based upon the best epidemiology as it becomes available, but could include a range of interventions ranging from hand and respiratory hygiene to avoidance of all face-to-face contact, post-exposure prophylaxis for close contacts, including providing medications and medical care, home isolation and quarantine, including the provision of food, medicine, and Personal Protective Equipment (PPE) for non-hospital caregivers..
   g. Provide 24/7 consultations for epidemiological investigation of disease outbreaks to the areas most affected or in danger of large numbers of mortality.
   h. Current systems of ILI surveillance and lab testing will likely be overwhelmed.
   i. As disease activity intensifies and becomes more widespread, adjust surveillance (e.g., reduce virological surveillance, discontinue case management database) and adjust case definition to reflect increasing certainty of clinical diagnoses in absence of virological confirmation; switch to aggregate data collection on morbidity, mortality.

j. If sentinel providers are unable to keep a record of the number of patients seen, have them estimate a level of ILI in their practice on a weekly basis (50-100 cases, 100-200 cases, etc.).
k. Age-specific attack rates can be extrapolated from the types of providers submitting information (pediatric providers versus internal medicine providers, for example).
l. The BOE will coordinate expanded targeted surveillance statewide; utilize RODS for syndromic surveillance and to identify areas with greatest activity.
m. Virologic surveillance will be conducted in consultation with the BOE and the BOL.
n. PA-NEDSS will be utilized with obtaining inpatient data to establish age-specific attack rate, morbidity and mortality.

Second Wave

1. State:
   a. After the first pandemic wave ends, surveillance methods utilized during the phases before the pandemic wave can be reactivated:
      - Virologic surveillance.
      - Disease-based surveillance.
      - Outbreak investigations.
      - Case investigations of pediatric deaths associated with influenza.
      - Syndromic surveillance in hospital EDs.
   b. Maintaining this level of surveillance will help to determine the onset of a subsequent pandemic wave.
   c. Encourage sentinel providers to continue monitoring for ILI even if the first pandemic wave ends outside of normal influenza season.
   d. Continue to monitor ILI across the state through the Sentinel Surveillance Network.
   e. Prepare hospitals, providers and health departments for the possibility of a second wave
   f. If a second pandemic wave occurs, the surveillance efforts will be focused on those activities listed under the "Pandemic Period" above.
   g. Continue communication with local emergency preparedness organizations regarding potential for a second wave, and to report resumption of local community disease outbreak activity.
   h. Communicate with the CDC and other professional organizations, as needed, to keep abreast of the potential second wave.

2. Local:
   a. Fully activate local Epidemiological Response Plan.
   b. Utilize the Infectious Disease Epidemiology Contact List.
   c. Increase case detection among persons who recently traveled to the outbreak area and present with clinical illness possibly caused by influenza, including pneumonia, acute respiratory distress syndrome, or other severe respiratory illness.

d. Prioritize testing selected patients to determine geographic distribution as determined at the state/federal level.
e. Prioritize communication and information to reach the greatest number of the medical community via PA HAN, PA-NEDSS and other resources.
f. Issue guidance for self-quarantine and self-isolation policies to health care providers, using all available communication methods.
g. Implement and enforce nonvoluntary quarantine and isolation if deemed necessary for the public good after consultation with the IDE and the Office of Legal Counsel.
h. Maintain continuous communication with Departments' partners regarding resource needs, quarantine sites, alternative medical treatment locations, vaccination sites, and infection control guidance.
i. Be prepared to support post-exposure prophylaxis for close contacts, including providing medications and medical care, home isolation and quarantine, including medicine and PPE for non-hospital caregivers.
j. Activate the Epidemiological Response Plan for second wave pandemic.
k. Prioritize testing of selected patients for second wave pandemic.
l. Provide local guidance for self-quarantine and self-isolation policies to health care providers and the general public.

POST-PANDEMIC PERIOD – KEY ACTIONS

Return to interpandemic period and evaluation/assessment.

1. Federal:
   a. Coordinate national and international surveillance in preparation of second wave pandemic.
   b. Assess the need to continue screening travelers arriving in the U.S.
   c. Investigate all additional cases, either originating in the U.S. or that are imported into the country.
   d. Continue the increased laboratory testing for influenza, including the use of rapid antigen detection tests, particularly for those who may have had recent exposure at the site of the outbreak.
   e. Continue to provide guidelines to assist with triage of specimens for testing and for choosing which isolates to send to CDC.
   f. Resume routine national and international surveillance when pandemic ends.

2. State
   a. Return to routine influenza surveillance system outlined in the Interpandemic Period.
   b. Review and analyze epidemiological data obtained during the influenza pandemic, including:
      - Age-specific mortality, morbidity and attack rates.
      - Vaccine efficacy.
      - Antiviral efficacy.
      - Community containment measures.

c. Continue enhanced epidemiological investigation of disease outbreaks.
d. Continue providing technical assistance to local health jurisdictions.
e. Coordinate targeted and tailored surveillance, as needed, based upon the needs of the community.
f. Monitor international events and follow-up of information provided by the Epidemic Information Exchange (EpiX), Program for Monitoring Diseases (ProMed), and CDC.
g. Continue communication through the PA HAN and Epi-X with public and private health partners.
h. Maintain readiness of the Epidemiological Response Plan; reactivate when needed.
i. Communicate state and national disease information with local health jurisdictions and neighboring states.
j. Continue testing selected patients to determine geographic distribution of remaining disease.
k. Assess resources and re-stock supplies and equipment.
l. Continue epidemiological and laboratory surveillance on a routine basis when the pandemic has ended.
m. Monitor bulletins from the CDC and the WHO regarding virologic, epidemiological and clinical findings associated with new variants isolated within and outside of the United States on a routine basis.
n. Distribute electronic health information through the PA HAN regarding any new or unusual influenza strains.
o. Reinforce utilization of PA-NEDSS for disease reporting within the private medical community.
p. Maintain routine assessment for syndromic surveillance using RODS and/or the National Retail Data Monitor (if available).
q. Evaluate lessons learned worldwide, nationally, and in Pennsylvania.
r. Evaluate individual and economic costs of the pandemic.
s. Examine and revise emergency Epidemiological Response Plan as a result of lessons learned.
t. Resume routine surveillance and normal work schedule.

3. <u>Local:</u>
   a. Maintain continuous communication with local partners regarding resource needs, quarantine sites, alternative medical treatment locations, vaccination sites, and infection control guidance.
   b. Resume local surveillance activities at the end of the pandemic.

VII. LABORATORY DIAGNOSTICS

A. The Department's BOL provides the framework, methodology and recommendations for actions at the Public Health laboratory testing level. The BOL is responsible for accurate and timely testing of clinical specimens for the detection of influenza, providing results to clients, and communicating with the CDC on matters of technical testing. (Attachment F)

B. The BOL maintains local emergency response plans to assure operational integrity by addressing:

1. Increased workload for individual staff during an emergency response;
2. Reduced staffing resulting from effects of the emergency situation; and
3. Cross training and redirection from routine responsibilities.

C. The following position with the BOL will have key responsibilities throughout a Pandemic:

1. Director, Bureau of Laboratories who will coordinate all phases of the laboratory response.
2. Director, Division of Laboratory Improvement, who will be responsible for logistics, communications and the laboratory command center.
3. Administrative Officer who will be responsible for facility management and procurement of testing supplies and reagents.
4. Director, Division of Clinical Microbiology who will be responsible for the technical aspects of testing.
5. Director, Division of Chemistry and Toxicology who will provide management oversight to any ongoing routine operations.
6. BOL Employees who will perform duties as assigned.

INTERPANDEMIC PERIOD (PHASES 1 AND 2) – KEY ACTIONS

Phase 1*: No new influenza virus subtypes have been detected in humans. An influenza virus subtype that has caused human infection may be present in animals. If present in animals, the risk of human infection or disease is considered to be low.*

Phase 2*: No new influenza virus subtypes have been detected in humans. However, a circulating animal influenza virus subtype poses a substantial risk of human disease.*

1. State
   a. Complete laboratory testing and report results on an annual basis.
   b. Distribute specimen testing kits and instructions for data entry to participating sentinel surveillance physicians on an annual basis.
   c. Monitor bulletins from the CDC, PA HAN, and the WHO regarding virologic, epidemiological and clinical findings associated with new variants isolated within and outside of the United States.

d. Identify key staff and ensure proficiency in disease influenza testing on an annual basis.
e. Review process for obtaining new test reagents, validate methodology, and order additional supplies on an annual basis.

2. Local

a. Recruit local sentinel surveillance providers on an annual basis.
b. Communicate with local sentinel surveillance providers for timely and regular reporting on a weekly basis.

PANDEMIC ALERT PERIOD (PHASES 3, 4 AND 5) – KEY ACTIONS

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.*

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.*

Phase 5*: Larger cluster(s), but human-to-human spread still localized; virus increasingly better adapted to humans, but not yet fully transmissible.*

1. State

a. Based on novel strain global activity, increase testing of selected patient test specimens to detect emergence of the novel strain of disease in Pennsylvania.
b. Obtain appropriate new test reagents and validate testing methodology when available.
c. Update staff about the new influenza strain or other newly identified pathogen and train additional staff for surge capacity in the event of a global pandemic.
d. In the event of an imminent disease in the United States/Pennsylvania, implement increased testing to detect emergence of the new strain in Pennsylvania.
e. Monitor international events and follow-up of information provided by EpiX, ProMed, and the CDC.
f. Increase, as needed, communication through the PA HAN with public and private health partners.
g. Review surge capacity plans and work with other health laboratories to prepare for an increase in their sick patient capacity resulting from influenza stricken individuals.
h. Maintain BOL staffing availability for the State Emergency Operations when needed.
i. Review the protocols of the BOL and Department Command Center on an annual basis.
j. Keep current emergency staffing lists and phone tree.

2. Local

a. Communicate with infection control practitioners in hospitals, nursing homes, and other long-term care facilities and provide guidance to facilitate testing by Bureau of Laboratories or, with local hospital laboratories, for preliminary testing of suspicious disease specimens.

b. Review expansion plans for local surveillance of the emergence of a pandemic strain on an annual basis.

PANDEMIC PERIOD (PHASE 6) – KEY ACTIONS

***Phase 6**: Increased and sustained transmission in general population.*

1. State
   a. Activate the BOL's Command Center.
   b. Increase laboratory testing of influenza by using rapid antigen detection tests, for persons with compatible clinical syndromes, particularly among those who may have had recent exposure at the site of the outbreak.
   c. Obtain updated guidelines to assist with triage of specimens for testing and for choosing which isolates to send to CDC.
   d. Communicate with the CDC and other professional organizations on a daily basis to keep abreast of the novel strain disease nuances
   e. Track international events and follow-up of information provided by EpiX, ProMed and the CDC.
   f. Continue the increased laboratory testing for influenza, including the use of rapid antigen detection tests, particularly for those who may have had recent exposure at the site of the outbreak.
   g. Continue providing technical assistance to local health jurisdictions.
   h. Monitor international events and follow-up of information provided by EpiX, ProMed, and CDC.
   i. Continue testing selected patients to determine geographic distribution of remaining disease.
   j. Assess resources and re-stock supplies and equipment.
   k. Communicate with the CDC and other professional organizations on a daily basis to keep abreast of the potential second wave.
   l. Prepare for resurgence.
   m. Address shortfalls in supplies and personnel
   n. De-activate BOL Command Center at Pandemic end.

2. **Local**
   a. Continue enhanced epidemiological investigation of disease outbreaks.

POST-PANDEMIC PERIOD – KEY ACTIONS

1. State
   a. Continue laboratory surveillance on a routine basis when the pandemic has ended.
   b. Monitor bulletins from the CDC and the WHO regarding virologic, epidemiological and clinical findings associated with new variants isolated within and outside of the United States on a routine basis.
   c. Evaluate lessons learned worldwide, nationally, and in Pennsylvania.
   d. Evaluate individual and economic costs of the pandemic.

e. Examine and revise emergency Epidemiological Response Plan as a result of lessons learned.
f. Resume routine surveillance and normal work schedule.
g. Evaluate effectiveness of plans.
h. Modify BOL-IPRP and begin planning and training protocols for future pandemic response.

2. Local
   a. Attend a statewide meeting of stakeholders to discuss all the Pandemic actions and plans utilized during the Pandemic for their input of needed revisions.

VIII. EMERGENCY RESPONSE

An influenza pandemic will pose unique challenges. These challenges include:

- Medical services and health care workers who will be overwhelmed.
- Health care workers may not be able to provide essential care to all patients in need.
- First responders, such as health care personnel, police, firefighters and emergency medical technicians, may be more impacted by influenza than the general public. (Attachment G)
- Community services will be impacted due to widespread absenteeism in the workforce.
- Food distribution, home meal deliveries, childcare services, garbage collection and other critical services will be affected or unavailable.

INTERPANDEMIC PERIOD (PHASES 1 AND 2) – KEY ACTIONS

***Phase 1**: No new influenza virus subtypes have been detected in humans. An influenza virus subtype that has caused human infection may be present in animals. If present in animals, the risk of human infection or disease is considered to be low.*

***Phase 2**: No new influenza virus subtypes have been detected in humans. However, a circulating animal influenza virus subtype poses a substantial risk of human disease.*

1. Federal:
   a. Develop recommendation guidelines and information templates that can be adapted and used, as needed, at state and local levels.
   b. Develop pandemic planning training modules and tabletop exercise templates for state and local use.

2. State:
   a. Develop Emergency Response plans with adjoining states for collaboration of public services, health care personnel, and security services. Meet with key state planners to review and revise, at a minimum, on an annual basis.
   b. Provide technical assistance to CMHDs on maintaining current plans for care of mass casualties.
   c. Provide guidance to CMHDs, community emergency response organizations and health care providers to sustain critical business and health care functions during a pandemic.
   d. Work with acute and long-term care facilities to review their infection control, surveillance and influenza pandemic response strategies during annual facility contacts.
   e. Maintain the 24/7 electronic Learning Management System (LMS) for training, education, announcements and conferencing with public and private health care providers across the Commonwealth, to ensure information provided is the most up-to-date version.

f. Provide guidance and training to CMHDs and community health care providers for influenza pandemic response preparations for special health care needs groups, culturally diverse groups, non-English-speaking groups, poor and minority populations, and senior citizens confined to their homes.
g. Develop language for a Governor's Declaration of Emergency, permitting temporary exceptions to EMS regulations and protocols.
h. Review capacity plans and work with actual health care facilities to prepare for an increase in the sick patient capacity resulting from influenza stricken individuals.
m. During Department's state licensing inspections of health care facilities, verify that each health care facility has a public health preparedness plan for "all hazards" including pandemic influenza, and verify that the health care facility participates in community or regional public health planning exercises.
n. Maintain the Facility Resource Emergency Database to monitor surge capacity for bed availability, ventilators and other equipment.
k. Establish ongoing communications with PEMA for notification of a novel influenza virus.
o. Maintain Department staffing availability for the State Emergency Operations Center (SEOC), when needed.
p. Review the protocols and test the activation of the Department Command Center on an annual basis.
q. Provide Regional EMS Councils with current information about an impending pandemic.

3. Local:
   a. Develop and coordinate emergency response plans with adjoining counties.
   b. Review existing jurisdictional response linkages to prepare deployment of community groups and services to respond to a mass disease outbreak on an annual basis. If needed, reestablish linkages.
   c. Provide education and training to community emergency response groups for response to a mass disease outbreak on an annual basis.
   d. Identify specific community locations, services, and individuals to utilize for emergency response to an influenza pandemic. Review and update annually. (Attachment H)
   e. Develop emergency staffing lists and update on a quarterly basis.
   f. Provide up-to-date information for staff answering the toll-free health line.
   g. Provide current disease outbreak education and training to local public health professionals, infectious disease specialists, emergency department personnel, and other health care providers.
   h. Provide updated infection control materials to EMS practitioners. Review and update on an annual basis. (Attachment I)
   i. Provide guidance to ambulance services regarding alternative work schedules and surge capacity.

PANDEMIC ALERT PERIOD (PHASES 3, 4 AND 5) – KEY ACTIONS

***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.*

***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.*

***Phase 5**: Larger cluster(s), but human-to-human spread still localized; virus increasingly better adapted to humans, but not yet fully transmissible.*

1. State:
   a. Provide current CDC-produced novel disease education and training to public health professionals, infectious disease specialists, emergency department personnel, and other health care providers for response to a pandemic disease outbreak in their jurisdictions.
   b. Update emergency staffing protocols.
   c. Activate the PA SNS Implementation Plan
   d. Prepare directions/standing orders for pandemic response actions based on CDC recommendations.
   e. Provide education and training to community emergency response groups for mass disease outbreak response using LMS. LMS has 24/7 access for courses, resources, announcements, conferencing, and can target special groups for specific training.
   f. Coordinate with the Offices of Communications and EMS, the BOE, BCHS, and the Bureau of Communicable Disease to research, design, produce, and distribute public education materials.
   g. Notify essential personnel, via Virtual Alert, that the Department's Command Center may be activated if the novel disease outbreak enters Pennsylvania. (Attachment J)
   h. Assess the framework and preparedness of Division of Acute and Ambulatory Care/Division of Nursing Care Facilities (DAAC/DNCF) to respond to regulatory issues presented by influenza pandemic, by determining how to interpret or impose regulations during a pandemic and permit facilities to respond to extraordinary conditions while protecting patient health and safety.
   i. Review emergency preparedness response plan to integrate and maintain critical business functions in the event of a pandemic.
   j. Assess acute care facilities' ability to expand their sick patient capacity and to provide appropriate medical care for influenza stricken individuals.
   k. Review pandemic plans by hospitals and nursing care facilities to ensure that they meet the needs of a pandemic and report results of this review in accordance with the Bureau of Facility Licensure and Certification requirements. (Attachment K)
   l. Support effective implementation of disease and syndromic surveillance in hospitals and nursing care facilities through ongoing efforts to inform facilities of the implementation of the system and encourage participation. Participation will also be assessed during routine survey activities.

m. Calculate distribution percentage of vaccine or anti-viral medications needed by the District Offices and CMHDs in anticipation of limited supplies during a pandemic (based on population weighted by high-risk factors).
n. Compile a current, unduplicated list of providers using information from managed care organizations to facilitate information dissemination and to serve as a provider contact list. This information will be forwarded to the BOE for inclusion in the PA HAN.

2. Local:
   a. Review the District Offices' and CMHDs' existing jurisdictional response linkages and reestablish linkages, if needed, to prepare deployment of community groups, services, actions for a mass disease outbreak, and vaccination/pharmaceutical administration delivery program.
   b. Identify (designated District Office and CMHD staff) specific community locations, services, and individuals to utilize for emergency clinics, vaccination sites, and shelters for disease contacts in accordance with the PA SNS Implementation Plan. Distribute copies of the PA SNS Implementation Plan as needed.
   c. Ensure that staff answering the toll-free health line has current information.
   d. Alert hospitals and nursing care facilities to review their infection control, surveillance and emergency preparedness functions during regular facility contacts, Plans of Correction and Event Reporting System messages, and written, email, and faxed communications.
   e. Support effective implementation of disease and syndromic surveillance in hospitals and nursing care facilities through ongoing efforts to inform facilities of the implementation of the system and encourage participation. Participation will also be assessed during routine survey activities.

PANDEMIC PERIOD (PHASE 6) – KEY ACTIONS

***Phase 6**: Increased and sustained transmission in general population.*

1. Federal:
   a. Activate the Federal Emergency Management Agency.

2. State:
   a. Activate the Department's Command Center.
   b. Activate the Department's Emergency Preparedness Liaison Team at SEOC, Forward EOC, or any other identified location established for emergency operations.
   c. Reinforce quarantine and isolation policies to health care providers.

   d. Direct the Regional EMS Council to implement their Catastrophic Casualty Plans.
   e. Coordinate availability of EMS services and practitioners to provide emergency response.
   f. Issue guidance on quarantine and isolation policies as it impacts delivery of EMS.

g. Request PEMA to activate a Governor's Declaration of Emergency permitting exceptions to EMS Regulations/Protocols to allow EMS providers to assist in vaccination of the general public, if requested, and if they can be diverted from other EMS duties/responsibilities.
h. Review the framework and preparedness of regulatory issues to respond to a pandemic while protecting patient health and safety.

3. Local:
   a. Activate partnerships with community resources regarding quarantine sites, alternative medical treatment locations, PODs, and infection control guidance.
   b. Notify regional EMS Councils regarding infection control precautions specific to the outbreak for EMS practitioners, their vehicles, and equipment.
   c. Coordinate mutual aid with surrounding jurisdictions using existing system protocols.

POST-PANDEMIC PERIOD – KEY ACTIONS

Return to interpandemic period and evaluation/assessment

1. State:
   a. Prepare for resurgence.
   b. Address shortfalls in supplies and personnel.
   c. Restore essential functions and return to the Influenza Pandemic Response phase.
   d. Evaluate effectiveness of the implemented plans and revise, as needed, as a result of lessons learned and stakeholder suggestions.
   e. Adjust protocols and response plans in anticipation of second wave.
   f. Support restocking ambulances through Regional EMS Councils with medications, supplies, and equipment as funding becomes available.
   g. Communicate with Regional EMS Councils regarding planning for possible second wave.
   h. Coordinate potential mutual aid with adjoining state EMS systems, in-state jurisdictions, and 911 centers.
   i. Coordinate with PEMA to ready the Regional Incident Support Teams, if required, during second wave.
   j. Conduct a statewide meeting of stakeholders to discuss all the pandemic actions and plans utilized during the outbreak for their input of needed revisions.
   k. Evaluate all emergency response plans utilized during the pandemic.
   l. Modify IPRP and begin planning and training protocols for future pandemic response.
   m. Determine social and economic costs of the outbreak.
   n. De-activate Department Command Center.

2. Local:
   a. Collect outbreak-associated costs of staff and supplies.
   b. Reinforce the need for EMS workers to continue adherence to enhanced infection control measures.
   c. Resume routine medical and response activities.

Health Care Planning

The Department will provide guidance to health care partners for developing plans to respond to an influenza pandemic.

A DETAILED PLAN IS CURRENTLY UNDER DEVELOPMENT

IX. COMMUNITY DISEASE CONTROL AND PREVENTION

Isolation and Quarantine/Community Containment

INTERPANDEMIC PERIOD (PHASES 1 AND 2) – KEY ACTIONS

Phase 1*: No new influenza virus subtypes have been detected in humans. An influenza virus subtype that has caused human infection may be present in animals. If present in animals, the risk of human infection or disease is considered to be low.*

Phase 2*: No new influenza virus subtypes have been detected in humans. However, a circulating animal influenza virus subtype poses a substantial risk of human disease.*

1. State
   a. Review statutory powers for isolation and quarantine measures.
   b. Develop legal documents to carry out isolation and quarantine procedures.
   c. Discuss with partners how to address issues of children or other family members of the case or contact left without caregivers available to take care of the family members in case of the need for isolation or quarantine of a sole caregiver.
   d. Discuss with partners methods of transportation to the quarantine/isolation facilities for cases and contacts if isolation and quarantine become necessary.
   e. Consult with local health jurisdictions regarding isolation and quarantine measures to ensure coordination of actions.

PANDEMIC ALERT PERIOD (PHASES 3, 4 AND 5) – KEY ACTIONS

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.*

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.*

Phase 5*: Larger cluster(s), but human-to-human spread still localized; virus increasingly better adapted to humans, but not yet fully transmissible.*

1. State
   a. Review types of alternative facilities available for quarantine and isolation, taking into consideration the following requirements:
      (i) Separate rooms for cases.
      (ii) Independent ventilation for each room.
      (iii) Access control to each room.
      (iv) Availability of potable water, bathroom and shower facilities.
      (v) Capacity for providing basic needs to patients.
      (vi) Rooms and corridors easily disinfected.

(vii) Facilities for collecting and disposing of waste materials.
(viii) Facilities for collecting and laundering items.
(ix) Ease of access for deliver of supplies.
(x) Legal/property considerations.
(xi) Ability to support appropriate infection control measures.
(xii) Availability of food services and supplies.
(xii) Ability to provide an environment that supports the social and psychological well-being of patients.
(xiii) Ability to support appropriate medical care.
(xiv) Access to communication systems that allow for dependable communication within and outside the facility (telephone).

b. Manage cases and contacts through either active or passive monitoring and without any restriction of movement, unless they develop symptoms of disease. Consideration would be given to quarantine of contacts with high-risk exposures even in the absence of symptoms.
c. Advise contacts of an influenza case to:
   (i) Remain vigilant for fever or respiratory symptoms for 6 days after exposure. Temperature readings should be taken and recorded twice a day.
   (ii) Seek health care if symptoms (cough, fever, shortness of breath) become severe.
   (iii) Inform a health care provider in advance of going to a clinic or hospital that the contact has been exposed to influenza and is now symptomatic.
d. For active monitoring, communicate with cases and contacts and make certain prescribed disease control measures are being followed.
e. Quarantine may be used for persons in close contact with a case, or who are household members of a contact.
f. Provide community information about influenza, its spread, and how to prevent transmission.
g. Promote practices of "respiratory hygiene" as a means for the general public to protect itself.
h. Issue an order that persons stay in their homes, or take certain sanitary precautions (through print and broadcast media).
i. Consult with the CDC and local health jurisdictions and determine, based on the extent of the outbreak, the type of influenza, and the availability of resources, whether to institute quarantine and isolation procedures of contacts and cases.
j. If the case is in the care of a provider, and the provider is able to take infectious disease precautions, remain in contact with the provider.
k. Proceed under the Disease Prevention and Control Law (DPCL) to order isolation of the case or quarantine of the contacts**.**
l. Petition a court for isolation or quarantine under the DPCL if the individual is noncompliant.
m. Consult with the Governor and request that the Governor proceed under the Counterterrorism Planning, Preparedness and Response Act (CPPR) to immediately isolate the case and/or quarantine the contacts for a designated period.

(i) If further isolation or quarantine is needed, to file a petition to extend the quarantine and/or isolation with a court within 24 hours or the next court business day

(ii) The court must hold a hearing on the petition not more than 72 hours after the filing of the petition to determine whether continued isolation or quarantine is necessary.

(iii) If the court determines further isolation or quarantine is warranted, the court shall order the isolation or quarantine and fix the time and duration, but in no event for more than 30 days.

(iv) After 30 days, petition the court to review the quarantine or isolation period to determine if further isolation or quarantine is warranted.

(v) Make reports to the court during the extended isolation or quarantine period.

n. Consult with the Governor and request that the Governor isolate or quarantine a group of people if that is the recommended disease control measure.

o. Quarantine or isolate a person or group of persons in their homes, if the situation warrants it, depending upon whether there were immunosuppressed persons also inhabiting the home, or whether monitoring in an alternate, non-hospital facility were necessary.

(i) The home should be assessed to determine whether 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.

(a) A primary care giver, if available, to assist the patient with basic needs.

(b) For a case, there should be a separate bedroom that will be occupied only by the influenza case and with a door that can be kept closed at all times.

(c) For a case, should be a separate bathroom that is designated for use only by the influenza case.

(d) Access to educational materials about influenza and quarantine.

(e) Ability to monitor one's own symptoms, or have them monitored regularly by a parent, guardian or caregiver.

(f) Basic utilities (water, electricity, functional plumbing/septic system, garbage collection, and heating and air conditioning) as appropriate.

(g) Mechanisms for communication, including telephone (for monitoring by health staff, reporting symptoms, and accessing support services) and a computer if possible.

(h) Access to food and food preparation.

(i) Access to health care providers, health care centers, and ambulance personnel.

(j) Access to supplies such as thermometers, fever logs, phone numbers for reporting symptoms or accessing services, emergency numbers, etc.

(k) Availability of mental health/psychological support services.

(ii) Relocate household members who are not providing care if possible.
   (a) If relocation is not possible, there should be consideration given to relocating the case to another site within the community.
   (b) If relocation is not possible, then interactions between the influenza case and the household members should be minimized. Persons at risk for serious influenza complications (underlying heart or lung disease, diabetes mellitus, the elderly) should have no contact with the case.
   (c) All persons in contact with the influenza case should be educated regarding appropriate infection control practices, including hand hygiene and environmental decontamination. See http://www.cdc.gov/handhygiene/ for more details.
   (d) Influenza cases 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 case is unable to wear a surgical mask, then household members should don a surgical mask when interacting with the case.

(iii) Monitor the person or group of persons in isolation or quarantine and make certain disease control measures prescribed by the Department were followed.

(iv) Seek assistance from partners to ensure that the person or group of persons remain in isolation or quarantine.

(v) Provide the disease control measures for the contacts in quarantine, including whether the quarantine should be a modified quarantine.

p. Isolate and quarantine cases and contacts in alternative facilities in the community if there is a surge of influenza cases which overwhelms existing capacity to carry out home isolation, or if home isolation is not feasible for certain patients.

q. Isolate and quarantine cases and contacts in health care facilities if recommended by CDC and if capacity allows.

r. Follow CDC guidelines for isolation/quarantine in a facility:
   (i) When possible, place patients with documented or suspected influenza in a private room.
   (ii) When the number of patients with influenza exceeds the available private rooms, try to place influenza cases together in multi-bed rooms or wards.
   (iii) When patients with and without influenza must be placed in a room together, try to avoid including uninfected patients most susceptible to influenza complications.
   (iv) 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 heath care personnel, who have been vaccinated and/or are taking antiviral medications for prophylaxis, if medications are available and appropriate.
   (v) 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 there.

2. Local
   a. Collaborate to monitor cases or contacts in each local health jurisdiction.
   b. Collaborate to move cases and contacts to quarantine and isolation facilities.
   c. Collaborate to identify alternative quarantine/isolation facilities within each jurisdiction.
   d. Provide assistance in isolating and quarantining cases and contacts within each jurisdiction.

PANDEMIC PERIOD (PHASE 6) – KEY ACTIONS

***Phase 6**: Increased and sustained transmission in general population.*

1. State
   a. Consult with the CDC and local health jurisdictions and determine, based on the extent of the outbreak, the type of influenza, and the availability of resources, whether to institute quarantine and isolation procedures of contacts and cases.
   b. Issue an order that persons stay in their homes, or take certain sanitary precautions (through print and broadcast media).
   c. If the case is in the care of a provider, and the provider is able to take infectious disease precautions, remain in contact with the provider.
   d. Consult with the Governor and request that the Governor proceed under the Counterterrorism Planning, Preparedness and Response Act (CPPR) to immediately isolate the case and/or quarantine the contacts for a designated period.
      (i) If further isolation or quarantine is needed, to file a petition to extend the quarantine and/or isolation with a court within 24 hours or the next court business day
      (ii) The court must hold a hearing on the petition not more than 72 hours after the filing of the petition to determine whether continued isolation or quarantine is necessary.
      (iii) If the court determines further isolation or quarantine is warranted, the court shall order the isolation or quarantine and fix the time and duration, but in no event for more than 30 days.
      (iv) After 30 days, petition the court to review the quarantine or isolation period to determine if further isolation or quarantine is warranted.
      (v) Make reports to the court during the extended isolation or quarantine period.
   e. Consult with the Governor and request that the Governor isolate or quarantine a group of people if that is the recommended disease control measure.
   f. Quarantine or isolate a person or group of persons in their homes, if the situation warrants it, depending upon whether there were immunosuppressed persons also inhabiting the home, or whether monitoring in an alternate, non-hospital facility were necessary.
      (i) The home should be assessed to determine whether 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.
         (a) A primary care giver, if available, to assist the patient with basic needs.

(b) For a case, there should be a separate bedroom that will be occupied only by the influenza case and with a door that can be kept closed at all times.

(c) For a case, should be a separate bathroom that is designated for use only by the influenza case.

(d) Access to educational materials about influenza and quarantine.

(e) Ability to monitor one's own symptoms, or have them monitored regularly by a parent, guardian or caregiver.

(f) Basic utilities (water, electricity, functional plumbing/septic system, garbage collection, and heating and air conditioning) as appropriate.

(g) Mechanisms for communication, including telephone (for monitoring by health staff, reporting symptoms, and accessing support services) and a computer if possible.

(h) Access to food and food preparation.

(i) Access to health care providers, health care centers, and ambulance personnel.

(j) Access to supplies such as thermometers, fever logs, phone numbers for reporting symptoms or accessing services, emergency numbers, etc.

(k) Availability of mental health/psychological support services.

(i) Relocate household members who are not providing care if possible.

(a) If relocation is not possible, there should be consideration given to relocating the case to another site within the community.

(b) If relocation is not possible, then interactions between the influenza case and the household members should be minimized. Persons at risk for serious influenza complications (underlying heart or lung disease, diabetes mellitus, the elderly) should have no contact with the case.

(c) All persons in contact with the influenza case should be educated regarding appropriate infection control practices, including hand hygiene and environmental decontamination. See http://www.cdc.gov/handhygiene/ for more details.

(d) Influenza cases 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 case is unable to wear a surgical mask, then household members should don a surgical mask when interacting with the case.

(ii) Monitor the person or group of persons in isolation or quarantine and make certain disease control measures prescribed by the Department were followed.

(iii) Seek assistance from PEMA and other partners for security to ensure that the person or group of persons remain in isolation or quarantine.

(iv) Provide the disease control measures for the contacts in quarantine, including whether the quarantine should be a modified quarantine.

g. Isolate and quarantine cases and contacts in alternative facilities in the community if there is a surge of influenza cases which overwhelms existing capacity to carry out home isolation, or if home isolation is not feasible for certain patients.
h. Isolate and quarantine cases and contacts in health care facilities if recommended by CDC and if capacity allows.
i. Follow CDC guidelines for isolation/quarantine in a facility:
    (i) When possible, place patients with documented or suspected influenza in a private room.
    (ii) When the number of patients with influenza exceeds the available private rooms, try to place influenza cases together in multi-bed rooms or wards.
    (iii) When patients with and without influenza must be placed in a room together, try to avoid including uninfected patients most susceptible to influenza complications.
    (iv) 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 heath care personnel, who have been vaccinated and/or are taking antiviral medications for prophylaxis, if medications are available and appropriate.
    (v) 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 there.
j. Consider quarantining asymptomatic contacts as a means of interrupting disease transmission.
k. Consider quarantining persons who are household members of a contact.
l. Recommend in conjunction with PEMA that the Governor take (with compensation) private, quasi public, and public property necessary to cope with the disaster emergency, for example, schools, hospitals, suitable for use as alternative sites.
m. Recommend, in conjunction with PEMA that the Governor limit egress and ingress into the disaster emergency area.
n. Recommend, in conjunction with PEMA, that the Governor restrict travel within the disaster emergency area.
o. Suspend public gatherings.
p. Monitor fever in public places.
q. Cancel public events.
r. Close non-essential government functions.
s. Close public buildings and public spaces.

2. <u>Local</u>
    a. Collaborate to monitor cases or contacts in each local health jurisdiction.
    b. Collaborate to move cases and contacts to quarantine and isolation facilities.
    c. Collaborate to identify alternative quarantine/isolation facilities within each jurisdiction.
    d. Provide assistance in isolating and quarantining cases and contacts within each jurisdiction.

Travel Management

The Department provides recommendations for state and local partners on travel-related containment strategies that can be used during different phases of an influenza pandemic. These strategies include:

- Improve readiness to implement travel-related disease containment measures.
- Provide public health information to travelers who visit counties where influenza strains can infect humans or human strains with pandemic potential have been reported.
- Evaluate and manage arriving ill passengers who might be infected with influenza strains or human strains with pandemic potential.
- Minimize travel-related disease transmission using a range of containment strategies.
- Evaluate the need to implement or terminate travel-related containment measures as the pandemic evolves.

A DETAILED PLAN IS CURRENTLY UNDER DEVELOPMENT

X. DISTRIBUTION OF VACCINES AND ANTIVIRALS

A. Vaccines

Influenza vaccine and influenza vaccinations have long been considered the foundation for influenza prevention and control. During a typical influenza season, vaccine strains are selected by early spring when licensed vaccine manufacturers in the United States begin the manufacturing process. However, it takes six to nine months to manufacture an influenza vaccine that will necessitate the use of other methods of illness prevention in the interim from disease outbreak until available vaccine.

B. Antivirals

There are several antiviral agents currently available for prophylaxis or treatment of Influenza Type A. Currently, national experts are assessing the use of antivirals during an influenza pandemic.

INTERPANDEMIC PERIOD (PHASES 1 AND 2) – KEY ACTIONS

Phase 1*: No new influenza virus subtypes have been detected in humans. An influenza virus subtype that has caused human infection may be present in animals. If present in animals, the risk of human infection or disease is considered to be low.*

Phase 2*: No new influenza virus subtypes have been detected in humans. However, a circulating animal influenza virus subtype poses a substantial risk of human disease.*

1. Federal:
   a. Monitor trends in occurrences and unexpected events from vaccinated populations.
   b. Evaluate scientific logic for vaccination and/or use of antivirals.
   c. Facilitate vaccine research and development.
   d. Assess and enhance vaccine and antiviral capacity.
   e. Devise a suitable liability program for vaccine manufacturers and persons administering the vaccine.
   f. Develop reference strains and reagents for vaccines.
   g. Work toward decreasing the time for vaccine and antiviral production and licensure.
   h. Evaluate vaccine and antiviral safety.
   i. Develop a national vaccine adverse events report system.
   j. Determine priority populations to receive vaccine and/or antivirals.
   k. Coordinate national vaccine and/or antiviral supplies.

2. State:
   a. Provide doses of the influenza vaccine to public and private providers, including Vaccines For Children (VFC) providers for children and adults on a regular basis.
   b. Monitor and track vaccine usage, handling and storage on a regular basis.

c. Monitor and track reported adverse events through the Vaccine Adverse Events Reporting System (VAERS).
d. Maintain a database of influenza sites within local communities.
e. Educate providers that the Vaccine Information Statements (VIS) must be provided with influenza and pneumococcal immunizations.
f. Promote influenza and pneumococcal immunizations on an annual basis.
g. Communicate and establish linkages with key individuals from the CDC and neighboring states to monitor available vaccine.
h. Establish backup refrigerated storage facility for large inventory of vaccines/antivirals.
i. Monitor vaccine development and potential mode of distribution.
j. Provide guidance for local health jurisdictions to have appropriate refrigeration storage.
k. Confirm consistency of local vaccination plans with the PA SNS Implementation Plan.
l. Establish partnerships with statewide organizations for collaborative responses during mass vaccination clinics.
m. Review the PA SNS Implementation Plan protocols for needed revisions on an annual basis.
n. Train Department staff on current vaccine/antiviral administration on an annual basis.
o. Update vaccine/antiviral distribution protocols according to the PA SNS Implementation Plan.
p. Calculate potential vaccine needs based on priority vaccine distribution. (Attachment L)
r. Calculate potential antiviral needs based on priority antiviral listing. (Attachment M)
r. Prioritize for use and procedure to access antivirals. (Attachment M)

3. Local:
   a. Promote influenza and pneumococcal immunizations according to state recommendations.
   b. Provide annual influenza immunizations to persons within their jurisdiction.
   c. Maintain community volunteer lists to identify medical professionals in communities for staffing mass vaccination sites. Partners to include Red Cross, school nurses and hospitals.

PANDEMIC ALERT PERIOD (PHASES 3, 4 AND 5) – KEY ACTIONS

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.*

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.*

Phase 5*: Larger cluster(s), but human-to-human spread still localized; virus increasingly better adapted to humans, but not yet fully transmissible.*

1. State:
   a. Review and update the POD Plan on an annual basis. (Attachment H)
   b. Train staff regarding the current VAERS, or a specific Pandemic VAERS, system on an annual basis.

2. Local:
   a. Develop a communication diagram based on chain of command based on the Department's Incident Command Structure. (Attachment H)
   b. Identify emergency response team members by position and contact information. Update on an annual basis.
   c. Prepare protocols for increased workloads and/or personnel shortages and update annually.
   d. Develop routine workplace strategies to continue routine work in the event staff is deployed for mass vaccination clinics.
   e. Identify sites to reserve refrigeration space for reception of bulk vaccine/antiviral supplies.
   f. Procure supplies and equipment for mass immunization/antiviral distribution clinics according to needs. (Attachment H)
   g. Identify appropriate staff resources and logistics to be in place to begin vaccination. (Attachment H)
   h. Identify specific community locations, services, and individuals to utilize for emergency clinics, vaccinations sites, and shelter for disease contacts.

PANDEMIC PERIOD (PHASE 6) – KEY ACTIONS

***Phase 6**: Increased and sustained transmission in general population.*

1. Federal:
   a. Provide recommendations for priority population vaccinations/treatment with available vaccines/antivirals.
   b. Allocate available vaccines/antivirals nationally.
   c. Provide protocols for administering an unlicensed vaccine.
   d. Activate a national electronic vaccine tracking system.
   e. Provide expert medical consultation regarding vaccine indications, contraindications and side effects.
   f. Provide information to major national media systems.
   g. Provide daily communications with states regarding vaccine supplies and availability.

2. State:
   a. Activate the PA SNS Implementation Plan for receiving bulk supplies of vaccines/antivirals and for distribution for the mass vaccination clinics. (Attachment H)
   b. Distribution of bulk amounts of vaccines/antivirals will be coordinated in conjunction with Tab H of PA SNS Implementation Plan.

c. Implement Pennsylvania's POD Plan. (Attachment H)
d. Using SIIS, track and monitor inventory of vaccine and pharmaceuticals procured and distributed.
e. Monitor vaccine supply information and communicate with the CDC on a daily basis regarding disease trends and vaccine availability.
f. Establish, as needed, conference calls with internal and external partners, as well as bordering states, to discuss available supplies of vaccines/antivirals.
g. Activate VAERS through SIIS.
h. Provide standing orders for recommended vaccines/antivirals.
i. Activate the surge vaccines/antivirals storage site (if needed).
j. Activate the PA SNS Implementation Plan to access other federal supply resources to augment state supplies of vaccines/antivirals (if needed).

3. Local:
   a. Activate local partnerships for vaccination resources.
   b. Provide "Just-in-time" onsite training and education for staff and volunteers to implement vaccine administration in mass vaccine clinics.
   c. Activate plan for individuals who are contraindicated to receive vaccines/antivirals. (Attachment H)
   d. Assign staff that has access to SIIS responsibility for tracking vaccine distribution, administration, inventory, adverse events and recall for a second dose.
   e. Activate the PA SNS Implementation Plan, including distribution, administration, monitoring of vaccine distribution and administration, and tracking of dose, appropriate storage and handling, and safety monitoring. (Attachment H)
   f. Coordinate security and transportation of staff, vaccines/antivirals and supplies.
   g. Provide daily information to staff answering the toll-free health lines regarding available vaccines/antivirals and where clinics sites are located.
   h. Activate local storage depots for vaccines/antivirals.
   i. Conduct training for relevant agencies and partner groups regarding vaccine delivery protocols and procedures.
   j. Coordinate vaccine administration activities with bordering jurisdictions.
   k. Coordinate the vaccine distribution plan with bordering jurisdictions.

POST-PANDEMIC PERIOD – KEY ACTIONS

Return to interpandemic period and evaluation/assessment

1. Federal:
   a. Monitor trends in occurrences and unexpected events from vaccinated populations.
   b. Evaluate the results of vaccinations and/or antivirals.
   c. Evaluate and report on the national cost and outcomes of the influenza pandemic.

2. State:
    a. Inventory vaccines/antivirals left from pandemic and request/order additional supplies to prepare for a Second Wave.
    b. Evaluate/modify POD protocols and procedures, as needed, to better facilitate Second Wave vaccinations.
    c. Review inventories of vaccines/antivirals distributed in response to pandemic influenza and prepare to redistribute to areas that experience a Second Wave resurgence of the disease.
    d. Review all VAERS reports and evaluate to determine any patterns of reactions specific to vaccine/antiviral lot numbers, populations, or geographic area.
    e. Continue to provide vaccines/antivirals to those groups still in need and provide routine influenza immunizations.
    f. Resume routine promotion of pneumococcal and influenza vaccine immunizations.
    g. Return to routine vaccine tracking and monitoring.
    h. Determine costs and geographical quantities of vaccines/antivirals distributed and administered.
    i. Evaluate community resources and recommend revisions for local emergency response plans from lessons learned.
    j. Determine social, economic, and professional staffing costs of the pandemic.

3. Local:
    a. Evaluate PODs and revise plans and protocols from lessons learned.
    b. Close PODs that were not sufficiently utilized and establish sites that better serve the population during the Second Wave.
    c. Inventory available professional and nonprofessional staff and develop schedules to work the Second Wave vaccination clinics.
    d. Re-establish routine influenza and pneumococcal vaccination activities.
    e. Work with local and community agencies to re-establish partnerships for emergency response.

Clinical Guidelines

The Department provides clinical procedures for the initial screening, assessment and management of patients with suspected novel influenza during the Interpandemic and Pandemic Alert Periods and for patients with suspected pandemic influenza during the Pandemic Period. Those activities include:

- Educate local health care providers about novel and pandemic influenza.
- Provide or facilitate testing and investigation of suspected influenza cases.
- Conduct follow-up of suspected novel influenza cases.
- Update providers regularly as the influenza pandemic unfolds.
- Provide or facilitate testing and investigation of pandemic influenza cases.
- Work with the CDC to investigate and report special pandemic situations.

A DETAILED PLAN IS CURRENTLY UNDER DEVELOPMENT

XI. PUBLIC HEALTH COMMUNICATIONS

During an emergency situation, accurate, consistent and timely messages are key to notify and educate the public, to notify and facilitate movement of emergency staff to their assigned duties and stations and in the implementation of the IPRP as intended.

INTERPANDEMIC PERIOD (PHASES 1 AND 2) – KEY ACTIONS

Phase 1*: No new influenza virus subtypes have been detected in humans. An influenza virus subtype that has caused human infection may be present in animals. If present in animals, the risk of human infection or disease is considered to be low.*

Phase 2*: No new influenza virus subtypes have been detected in humans. However, a circulating animal influenza virus subtype poses a substantial risk of human disease.*

1. Federal:
   a. Provide information on seasonal influenza, new influenza virus subtypes and risk of new viruses to humans

2. State:
   a. Maintain routine communication activities, news conferences, and public education campaigns regarding influenza and other health concerns.
   b. Monitor information updates from WHO and CDC regarding influenza and new influenza subtypes.
   c. Designate, train and exercise Public Information Officer support staff at District Offices and CMHDs. (Attachment N)
   d. Conduct annual review of the Department Crisis Communication Plan, protocols, and resources and update as required.

3. Local:
   a. Maintain routine communication activities and public outreach efforts regarding flu and other health concerns.
   b. Conduct annual review of local crisis communication plans, protocols and resources and update as required.

PANDEMIC ALERT PERIOD (PHASES 3, 4 AND 5) – KEY ACTIONS

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.*

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.*

Phase 5*: Larger cluster(s), but human-to-human spread still localized, virus increasingly better adapted to humans, but not yet fully transmissible.*

1. Federal:
   a. Provide information on novel diseases that could become a pandemic in the U.S.
   b. Provide information on what is known and not known about a national outbreak and the public health response.
   c. Assist with the coordination of messages among international, federal, state and local health officials about a pandemic and protective actions through CDC's Emergency Communication System.

2. State:
   a. Designate an official spokesperson(s) to provide accurate and consistent news media updates for pandemic activities. (Attachment N)
   b. Develop and disseminate clear, accurate and credible influenza, novel viruses and other disease-related information specifically for the general public, special populations and news media. (Attachment O)
   c. BOE, BOL and BCHS will provide credible and continuing information, education and updates specifically for providers, responders and other stakeholders. (Attachment O)
   d. Follow CDC guidelines for public information campaigns and effective media relations; modify as necessary for use in Pennsylvania.
   e. Monitor information updates from the WHO and the CDC. Develop and/or adapt CDC-provided education materials specific to the influenza, novel viruses and other disease information for the public, special populations, news media, providers, responders and other stakeholders.
   f. Provide key public information and messages regarding the novel virus and required public protective actions in multi-lingual and accessible formats.
   g. Maintain regular communication and provide updates to Public Information Officer support staff.
   h. Review Department Crisis Communication Plan. Brief Office of Communications and public information support staff on preparing for plan activation.
   i. Review procedures for activating and utilizing the Commonwealth Emergency News and Information Center (CENIC) to provide statewide coordination and dissemination of public information. (Attachment O)
   j. Prepare and implement letters of agreement with other Commonwealth agencies so that communications systems can be shared.
   k. Collaborate with the Bureau of Information Technology to expand and post updated pandemic information on the Department website.
   l. Provide training and informational resources to District Office hotline staff and CMHDs on pandemic communication procedures, handling high volume calls, scripted responses for answering pandemic-related public inquiries, FAQs and other relevant information.
   m. Provide education and informational resources to 911 staff regarding Department pandemic procedures and other specifics related to influenza and novel viruses.
   n. Address rumor control by establishing central sources of public information including: website, 1-877-PA-HEALTH, or special hotline. Prepare these resources for surge of public information requests.

o. The Department will make available NIMS and ICS procedure education and training programs for providers, responders and other stakeholders.

3. Local:
   a. Identify specific communication channels and needs in the local area.
   b. District Offices and CMHDs, in coordination with the Department, will assist in developing and disseminating clear, accurate and credible influenza, novel viruses and other disease-related information for the general public, special populations and news media in the local area.
   c. District Offices and CMHDs, in coordination with the Department, will provide credible and continuing pandemic information and updates specifically for providers, responders and other stakeholders.
   d. Review and exercise local crisis communication plans.

PANDEMIC PERIOD (PHASE 6) – KEY ACTIONS

***Phase 6**: Increased and sustained transmission in general population.*

1. Federal:
   a. Provide information on national pandemic status and public protective actions.
   b. Provide on-site public information and community outreach assistance at state or local government established Joint Information Center.
   c. Assist with the coordination of messages among international, federal, state and local health officials about a pandemic and protective actions.

2. State:
   a. Activate Department Crisis Communication Plan.
   b. Develop and disseminate clear, accurate and credible influenza, novel viruses and other disease-related information specifically for the general public, special populations and news media. (Attachment O)
   c. BOE, BOL and BCHS will provide credible and continuing information, education and updates specifically for providers, responders and other stakeholders. (Attachment O)
   d. Activate the CENIC, if required. Mobilize personnel for the CENIC, as required. (Attachment O)
   e. Activate and assign Public Information Officer support staff to respond to surge of public information needs at District Offices, vaccination clinics or other established sites, as required. (Attachment N)
   f. Monitor information updates from the WHO and the CDC. Develop and/or adapt CDC-provided education materials specific to the influenza, novel viruses and other disease information for the public, special populations, news media, providers, responders and other stakeholders.
   g. Provide emergency information and other relevant media materials in multi-lingual and other accessible formats for persons with special needs, as required.
   h. Publicize special rumor control telephone number and web address for public, special populations, news media, providers, responders and stakeholders.

i. Post regular pandemic updates on Department website and provide updated information to public inquiry hotline staff.
j. Coordinate and update information with national, state and local partners, including CDC, neighboring states, local health jurisdictions, city government, legislators, local police, fire, emergency management, EMS, and hospitals.

3. Local:
   a. Provide staff and resources to address a surge of local public information needs and news media inquiries during a pandemic.
   b. Provide staffing and activate procedures to handle high volume of calls to 1-877-PA-HEALTH or special hotline regarding the pandemic.
   c. Coordinate public information about the local status of an outbreak and protective actions with Department and local partners.
   d. Assist state with dissemination of educational materials during an outbreak to the public, special populations, news media, providers, responders, and stakeholders.
   e. Direct public, special populations, news media, providers, responders and stakeholders to established public information resources, such as the Department website or hotline.

POST-PANDEMIC PERIOD – KEY ACTIONS

Return to interpandemic period and evaluation/assessment.

1. Federal:
   a. Provide information on national pandemic status and recovery.
   b. Assist with the coordination of messages among international, federal, state and local health officials about a pandemic and protective actions.

2. State:
   a. Deactivate CENIC and Department Crisis Communication Plan.
   b. Review public information staffing needs and communication procedures.
   c. Deactivate public information support staff or reassign as required.
   d. Develop and disseminate messages and information to the general public, special populations, news media, providers, responders, and other stakeholders on the status of the pandemic, recovery and the potential for a second wave. (Attachment O)
   e. Coordinate public information and communication with national, state and local partners, including the CDC, local health jurisdictions, city government, legislators, local police, fire, emergency management, EMS, and hospitals.
   f. Maintain a consistent source of public information and provide updates available on a centralized website and hotline.
   g. Evaluate best practices and areas for improvement through after-action review of communication activities, media coverage and public perceptions.
   h. Determine media costs as a result of the pandemic.

3. Local:
   a. Assist Department with developing and disseminating coordinated public information about the local status of the pandemic, recovery and protective actions for the public, special populations, news media, providers, responders and other stakeholders.
   b. Continue to direct public and providers to established public information resources, such as a website or hotline.
   c. Continue to provide staff and resources to address local public information needs during pandemic recovery.

XII. WORFORCE SUPPORT

1. The Department, through its Office of Public Health Preparedness and Bureau of Drug and Alcohol Programs, has provided to the Pennsylvania Department of Public Welfare, Office of Mental Health and Substance Abuse Services (DPW-OMHSAS), funds from the CDC and Health Resources Services Administration (HRSA) grant to help the Commonwealth build capacity to respond to the psychosocial consequences related to bioterrorism or other public health emergencies.

2. The OMHSAS in its responsibility to develop a mental health response to disaster utilizes the guidelines set by the Substance Abuse and Mental Health Services Administration publication, *Mental Health All-Hazards Disaster Planning Guidance.*

3. Since September 11, 2001, the OMHSAS has been building capacity to respond to the psychosocial needs of those impacted by bioterrorism or other public health emergencies by training people from a number of groups. Those groups include county mental health/mental retardation offices, state hospital staff, fire and police personnel, emergency room staff, emergency medical services staff, single county authority drug and alcohol abuse prevention and treatment staff, state police and others. This training provides Disaster Crisis Outreach and Referral Teams (DCORT) procedures and Critical Incident Stress Management (CISM) curricula. DCORT and CISM training, as well as Disaster Psychiatry training, are only a few of the OMHSAS initiatives funded by the CDC/HRSA grants.

4. The focus of this training and intervention is to train how to help victims, including first responders, deal with the trauma directly associated with an emergency or disaster by providing immediate support and making appropriate referrals for continuing services.

    a. DCORT, formerly called Mental Health Response Teams, are trained to provide psychological first aid to persons affected by disaster, natural or manmade. DCORT is called out through a disaster incident command structure and may deal with persons affected by flood and fires or a criminal event. They are not necessarily at the site of a disaster but may be assigned to a location near a disaster site. As an example, DCORT may help persons who are arriving at Disaster Relief Centers to help people deal with stress.

    b. CISM teams are generally peers, such as police or fire fighters, who help first responders deal with stress related to their jobs. As an example, a CISM team was dispatched to the site of a multi vehicle crash site to help ambulance and police personnel cope with the events. The OMHSAS has trained DCORT members and others in the emergency response community, in Critical Incident Stress Management. Those trained in CISM are certified and may volunteer to be part of the CISM team deployment that occurs through a

Memorandum of Understanding between Department of Health and the Pennsylvania Emergency Health Services Council, which maintains a database of CISM-trained volunteers.

c. The OMHSAS continues to provide best practice disaster response training to Pennsylvania psychiatrists in order to build capacity to respond to those Pennsylvanians, including first responders and their families.

d. The OMHSAS sponsors tabletop exercises to include partnering agencies that are working to enhance capacity to respond to psychosocial needs of Pennsylvanians, including first responders and others.